

ABSTRACT

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The purpose of this thesis is to examine what the normative, effective social Intranet solution is for Tellabs Mobile Routing business unit in terms of sharing knowledge more openly and effectively, fostering innovation, and improving team spirit and positive employee experience. Additionally, these aspects are researched from the intra- and inter-organizational points of view.

The research is based on previous literature and empirical interviews. Based on these two items, an eight-fold recommendation proposal was created to change the current Intranet to become an effective social Intranet.

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Tämä ProGradu-tutkielma käsittelee sosiaalisen Intranetin ratkaisua, joka sisältää tarvittavat ominaisuudet ja kyvykkyydet parantaa Mobile Routing liiketoimintayksikön tiedonjakamista, innovointia ja yhteishenkeä. Näitä näkökulmia tarkastellaan sekä organisaation sisäisestä näkökulmasta, että organisaation ulkoisesta näkökulmasta.

Tutkimus perustuu aiemman kirjallisuuden sekä empiiristen haastattelujen pohjalle. Näiden perusteella kehitettiin 8-osainen parannusehdotus muuttaa nykyinen intranet tehokkaaksi sosiaalisesti intranetiksi.

PREFACE

After completing the thesis writing, people often acknowledge that they would have never been able to imagine the hard work required to accomplish it. I cannot say the same. I knew upfront that this task was almost a mission impossible for me with all the millions of other things going on in my life. And that was probably the reason why it took so long for me to finally collect my courage and take the bull by the horns. Giving up wasn't an option for me.

Now, I can finally put a smile on my face and say: "I've completed the thesis". I could literally jump for joy. That said, I'd like to thank my supervisors, Sami Saarenketo and Tuuli Sarvilinna. Without your insightful perspectives and advice I wouldn't have been able to finish this. Thank you. I appreciate it highly.

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TABLE OF CONTENTS

1 INTRODUCTION	6
1.1 Background of the Study	6
1.2 Objectives and Research Questions	8
1.3 Delimitations	10
1.4 Definitions and Concepts	10
1.5 Theoretical Frame of Reference	12
1.6 Research Method and Collection of Data	13
1.7 Structure of the Study	14
2 EFFECTIVE SOCIAL INTRANET	16
2.1 Usability	18
2.2 Effectiveness of Social Intranet	22
2.3 Social Intranet Tools	23
2.4 Target Audiences and Online Roles	30
2.5 Team Spirit and Positive Employee Experience	33
2.6 Social Intranet Trends	37
3 KNOWLEDGE SHARING AND INNOVATION	39
3.1 Benefits to Share Knowledge	43
3.2 Factors Influencing Employees' Knowledge Sharing	46
3.3 Methods to Share Knowledge	50
3.4 Innovation and Motives to Share Innovative Thinking	53
3.5 Internal Competition	56
3.6 Functionality and Tools to Bolster Innovation	59
4 RESEARCH DESIGN AND EMPIRICAL ANALYSIS	62
4.1 Case Company Introduction and Structure	62
4.2 Research Methodology	66
4.2.1 Research Interviews and Interviewee Profiles	68
4.2.2 Research Questionnaire Themes	71
4.2.3 Research Reliability and Validity	73
4.3 Effective Social Intranet for the Case Company	77
4.3.1 Current Status of the Intranet	78
4.4 Knowledge Sharing in Social Intranet	79
4.5 Innovation in Social Intranet	82
4.6 Team Spirit in Social Intranet	85
5 CONCLUSIONS AND FURTHER DISCUSSION	89
5.1 Recommendations for the Case Company Social Intranet	90
5.2 Direction for Future Research	93
APPENDICES	95
Appendix 1: Interview form	95
REFERENCES	103

1 INTRODUCTION

1.1 Background of the Study

Everyone knows Facebook. In fact only in October 2012, one billion active users used the site for social networking. On the other hand, some people have already given up on Facebook as the trendsetters consider it as old school.

Is Twitter then the coolest social networking place to hang around? No. Even Twitter is not enough. The latest buzz among the early teenagers is to establish social networking pages for specific dolls, which are photographed in various places; their feelings are described and shared with friends, and so on. In a way, these dolls provide “alter egos” for the early teenagers.

Social media is more popular than ever before. For some reason social Intranets are not enjoying the same success. In addition to serving business purposes, social Intranets are used exactly for the same social networking purposes – “to make the world more open and connected, discover what is going on in the world, and to share and express what matters to them” (Facebook mission, 2012).

Nearly all modern companies have Intranets in place (Radick, 2011, p. 18), and most commonly the Intranets are used as the main internal communication vehicle within the company. Therefore, these communication channels should not be left in the background. They should be developed hand in hand with the organization (Martini & al., 2009, p. 295).

An effective social Intranet brings huge benefits to the company and its employees (Lai, 2001; Juholin, 1999; Lehmuskallio, 2006; Mockler and Gartenfeld, 2009; Selkänaho, 2012; Radick, 2011). The employees

become more productive (Holtz, 2008, p. 14), work coherently as a team towards a common goal, share information and knowledge more generously with each other, and are inspired to innovate more openly within a trusted work environment.

What is the secret formula for the effective social Intranet? Mockler and Gartenfeld (2009, p. 16-17) among other researchers (Ahmed, 1998; Brinkmann, 2011; De Clercq et al., 2011; Kamasak and Bulutlar, 2010) acknowledge that the effective social Intranet offers employees more transparent knowledge sharing.

With improved knowledge sharing and openness, the company signals to its employees, that “we are all one unified team working towards a common goal” and that “we can all trust each other”. When you combine the more transparent company culture, and the effective social Intranet networking tools (Duperrin, 2011) with humans’ inherent social tendency, the team spirit will be improved (Hamson, 1998, p. 31).

A safe working environment, where an employee has room to try and fail, knowledge is shared and discussed openly, and the employee can trust his/her colleagues, employees have more confidence to learn from each other and innovate (Connell and Voola, 2007; Ardichvili et al., 2003; Barachini, 2009; Bartol and Srivastava, 2002).

One successful social Intranet example comes from Alcatel-Lucent. The company wanted to improve the employees’ direct communication with each other regardless of the organization, time zone or job title. Alcatel-Lucent installed a social networking platform to foster better communications among its global employees. The company’s goal was to become more transparent, open and agile. Later, Alcatel-Lucent has expanded the usage of this platform to foster innovation, and within a short period of time more than 200 employees submitted new ideas on how to improve the company’s products and solutions. (Callahan, 2012)

1.2 Objectives and Research Questions

There can never be one “perfect” Intranet. Every organization has a unique environment made up of its staff, culture, business processes and purposes, technology, size, resources, and a dozen other factors. A really successful Intranet is a perfect fit for the organization it serves, and for this reason, every Intranet should be unique.

To be truly effective, Intranets need to address four fundamental purposes according to Robertson (2007 and 2008). In 2007, Robertson described these fundamental purposes to be the first three, but a year later (2008) Robertson added one more purpose to the list: collaboration. The fundamental purposes are:

- **Content:** An effective Intranet provides content, which makes a difference.
- **Communication:** It communicates clearly to the target audience.
- **Activity:** It provides employees with tools to take care of daily operations smoothly.
- **Collaboration:** An effective social Intranet provides a platform to collaborate regardless of the organizations’ structures, work profiles, or geographical location.

Companies must implement all four fundamental aspects of the Intranet to succeed in the social Intranet project. And the importance of the effective social Intranet is emphasized especially for large, global companies, where organizations are decentralized geographically.

The purpose of this research is to examine how the scientific literature discusses social Intranet in terms of knowledge sharing, innovation, and team spirit. Based on the theoretical frame of reference presented in this

thesis, an empirical study has been conducted by interviewing employees in the case company.

When combining the theoretical and the empirical knowledge, the goal is to provide recommendations on the normative, effective social Intranet solution for a global company in terms of: sharing knowledge more openly and effectively, fostering innovation, and improving team spirit and positive employee experience.

Research Questions

The main research question in this study is:

How to build an effective social Intranet for intra- and inter-organizational needs for a global company?

Answering this question, the aspiration is to provide concrete recommendations of characteristics and capabilities of an effective social Intranet for the case company from intra- and inter-organizational communication aspects. The goal is to advance the current Intranet platform to become an effective social Intranet platform.

The main research question is split into three sub-questions:

1. What tools and features does an effective social Intranet provide for knowledge sharing?
2. How can social Intranet increase innovation?
3. How can social Intranet improve team spirit and positive employee experience?

With these sub-questions, the aim is to provide concrete recommendations to the case company to improve the current Intranet site targeted to these areas of expertise. The sub-questions will be researched from both intra- and inter-organizational aspects.

1.3 Delimitations

This thesis will focus on the effective social Intranet from knowledge sharing, innovation and team spirit point of view, and all other aspects of social Intranet will be delimited outside the research scope.

In addition, the goal of this research is to study social Intranet as a communication vehicle as a stand-alone communication channel. Therefore, all other internal communication vehicles are delimited outside the research scope.

1.4 Definitions and Concepts

The aspects of horizontal and vertical collaboration, organizational learning, improved search ability, and so forth, have been presented in the Intranet literature over the last decade or so (Duane and Finnegan, 2003; Stenmark, 2003; Curry and Stancich 2000; Damsgaard and Scheepers, 2000).

Building on the relevant literature, the present research referring to social online communications, such as social networking, social technologies, social software, social media, social Internet, social Intranet, and Web 2.0, are targeted to describe social, two-way interaction and communication regardless of time zones, location and profile of the user.

Web 2.0

In the early days of World Wide Web development, the Web 1.0 was developed to enable communication between computers in a horizontal manner. Web 2.0 is a concept that Tim O'Reilly developed and presented at a Web 2.0 conference back in 2004. O'Reilly defines Web 2.0 in a following way: *"Web 2.0 is the network as platform, spanning all connected devices; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated*

service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an “architecture of participation,” and going beyond the page metaphor of Web 1.0 to deliver rich user experiences.” (O’Reilly, 2005)

Enterprise 2.0

Another relevant concept to this thesis is Enterprise 2.0, which was coined by McAfee in 2006. Enterprise 2.0 concept applied the Web 2.0 concept to corporate environments. In his later work, McAfee (2009, p. 73) gave the following definition: “*Enterprise 2.0 is the use of emergent social software platforms by organizations in pursuit of their goals.*”

Social Intranet

Synthesizing the literature on Intranets, Web 2.0 and Enterprise 2.0, this thesis uses the term social Intranet. The aspiration for this choice of words is to acknowledge the constant need to update the concept of Intranet while emphasizing the trends of Web 2.0 concept.

Knowledge sharing

This thesis examines social Intranet from knowledge sharing, innovation, and team spirit point of views. *Knowledge sharing refers to the transmission of knowledge between people. Strictly speaking, only information can be transmitted; information is knowledge for the sender and receiver if they comprehend its content and significance.* (van Aalst, 2009, p. 260-261)

Innovation

Côté (2002, p. 60) defines innovation as “*rejecting the status quo and proving there is a better way of doing thing*”. Ahmed (1998, p. 30) defines innovation as *holistic in nature, covering the entire range of activities*

necessary to provide value to customers and a satisfactory return on business.

1.5 Theoretical Frame of Reference

The theoretical frame of reference illustrated in Figure 1 describes the effective social Intranet from inside-out perspective. First, the effective social Intranet consists of three main elements – knowledge sharing, innovation, and team spirit. These are considered as valuable functionalities of the effective social Intranet. The arrows in the Figure 1 illustrate that each of these functionalities impact the other two.

The outermost area of the circle lists some of the capabilities and tools provided by the effective social Intranet. The goal of this list is not to provide a complete list, but rather describe the most known and most popular capabilities and tools.

In addition, some capabilities and tools listed next to certain functionality could also belong to other functionality. The social Intranet is not black and white; there are some areas of grey, too. As an example, customization, which is listed next to team spirit, could also fall under knowledge sharing or innovation.

The same effective social Intranet frame applies for both intra- and inter-organizational target groups in general. It may be that the tools, some of which are listed on the outermost area of the circle, will differ between these two target audiences.



Figure 1: Theoretical Frame of Reference

1.6 Research Method and Collection of Data

The previous scientific and other literature enables to build a theoretical frame of reference. The theoretical frame of reference will then be a foundation for the empirical research part.

The theoretical part was followed by empirical research with the research method of a single case study (one case company) and theme interviews. The research method of the single case company research was chosen because of the following reasons:

1. In order to explore the specific research topic in more detail, as it is seen by the case company representatives, there was no reason to involve any other, external parties to the research.

2. Due to the empirical delimitations, it made sense to focus on case company's points of view on developing the social Intranet platform from the current version to the next level.

Case study research is one of the most popular qualitative research methods in the area of business (Koskinen et al., 2005, p. 154). It means the type of research, which focuses on a single or maximum of few cases, which are selected with certain criteria, and produces detailed information on those (Saarela-Kinnunen and Eskola, 2010, p. 190). Case studies provide a foundation for new hypotheses and investigates sometimes even in a very critical manner established conceptions, theories, and attitudes (Koskinen et al., 2005, p. 154-155).

The empirical research was based on qualitative theme interviews, which were conducted as individual interviews. Hirsjärvi et al. (1998, p. 161) highlight that the qualitative research methods bring the best out of diversity in the research and especially in the collection of data.

In order to be able to build the normative, effective social Intranet for the global case company keeping in mind both intra- and inter-organizational target audiences, the qualitative interviews were considered the best suited research method especially when focusing on the three areas of interest: knowledge sharing, innovation, and team spirit.

1.7 Structure of the Study

This study is divided into five chapters. The first one describes the main structure of the thesis, background, and the research questions. In addition, the theoretical frame of reference is illustrated. The second chapter talks about the characteristics of an effective social Intranet, followed by a discussion on team spirit and social Intranet trends. Knowledge sharing and innovation insights are covered in the chapter 3. The following chapter, number 4, introduces the research design and

empirical analysis of the thesis. In this chapter, the theoretical part of the thesis, which are discussed in previous chapters, are put into use. The chapter 6 concludes the thesis and proposes further discussions on the research topic.

2 EFFECTIVE SOCIAL INTRANET

The majority of previous literature on social networking focuses on social media instead of social Intranet (Nielsen, 2009 and 2012; White, 2002; Urbach et al., 2010; Tojib, 2008). The rich and diverse ecology of external social media sites probably feeds this line of research. Fortunately, some generic research on social media can be applied to social Intranets, too. For example, the goal of “create highly interactive platforms, via which individuals and communities share, co-create, discuss, and modify user-generated content” (Kietzmann et al., 2011, p. 241) applies for both external and internal social media sites. Only the target audiences differ.

In fact, the seven functional blocks of social media – presented in a form of a honeycomb in Figure 2 – by Kietzmann et al. (2011, p. 243) summarizes well the main functionalities: identity, conversations, sharing, presence, relationships, reputation, and groups. These building blocks are neither mutually exclusive, nor do they all have to be present in a social media activity. The same ecosystem can be applied to social Intranet, too.

The *identity* block represents the extent to which users reveal their identities in social networking environment. In the social Intranet context, this can include name, age, gender, title, location, and any other professional information that portrays user in a certain way.

The *conversations* represent the extent to which users communicate with each others in a social media setting. In the social Intranet context, this can include blogs and conversations in chat rooms or discussion boards.

The *sharing* represents the extent to which users exchange, distribute, and receive content. In the social Intranet context, this can contain document libraries, photos, videos, and audios.

The *presence* represents the extent to which users can know if other users are accessible. In the social Intranet context, this can mean updating status or location information via Intranet site.

The *relationships* represent the extent to which users can be related to each other. In the social Intranet context, this can include information, which tells to others that the individuals belong to the same team, are friends, or form some kind of professional alliance or community, which leads them to cooperate, share information, meet up, and interact.

The *reputation* represents the extent to which users can identify the standing of others, including themselves, in a social media setting. In the social Intranet context, this can contain information on how trustworthy the individual is. Naturally, the high status within the organization already brings certain trustworthiness without any contribution from others. In some cases, the trustworthiness needs to be “earned”. This means that other users can “rate” or “like” this individual’s comments or information shared in the Intranet.

The *groups* represent the extent to which users can form communities, and sub-communities. In the social Intranet context, this can contain project or team walls, discussion rooms, and work areas. Selkäinenaho (2012) would add on this list also teamwork areas and discussions for customer-specific projects.

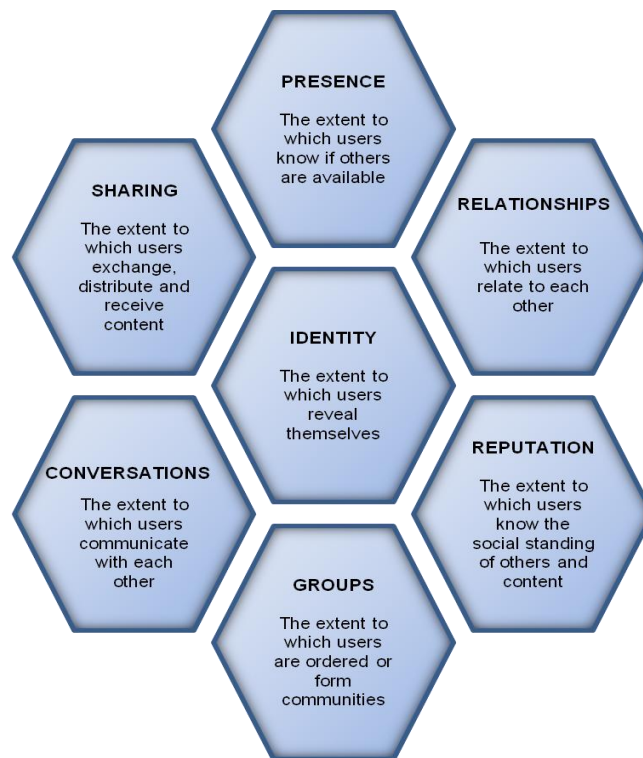


Figure 2: Social media functionality by Kietzmann et al. (2011, p. 243)

The same social media ecosystem building blocks can be easily applied both for external and internal social media. It is important to remember that the employees of a company are always users of other external social media sites both in business and in pleasure. Why would they expect anything less from the social Intranet? The same functionality expectations are valid.

2.1 Usability

Krug (2006) has chosen probably the most convenient name for his Internet design book: “Don’t force me to think”. That title summarizes well how the social Intranet should be designed to improve usability. In his book, Krug (2006, p. 21-22) reminds that most users usually glance through the pages, and click on the link which seems interesting to them. Therefore it is essential that the social Intranet should act as a portal, a “single point of access”, with front-end integration of information, communication, knowledge sharing, applications, and business processes

within corporations (Urbach et al., 2010, p. 184). It should be easy to use, convenient to access, useful, and confidential (Tojib, 2008, p. 665).

With these basic defaults in mind, the users should adopt the Intranet and realize what the Intranet can provide them with on their daily activities (Juholin, 2006, p. 265). Useful information should be added on a regular basis keeping an eye on not overwhelming the users.

Interestingly, Edenius and Borgenson (2003, p. 126 and 133) highlight that it would be important for organization leaders and managers to follow the development of the Intranet on a regular basis, and as needed ensure that the Intranet has all the operational preconditions even though it may be challenging sometimes due to Intranet's nature with constant changes. If the Intranet is updated on a regular basis with fresh, useful content the employees internalize the benefits of the Intranet and learn to use it as a primary point of access (Alexander et al., 2009, p. 34).

Intranet design

Both Nielsen (2000, p. 266) and Krug (2006, p. 38-47) encourage Intranets to be designed based on the usability, simplicity, and clarity in mind. Unnecessary guidelines, instructions, rules and froth should be eliminated. Quality content is the essential item, which attracts users. Also, all kind of time-wasting items in the social Intranet, such as asking unnecessary information, and flattery decrease usability and scare the users away. Krug also reminds (2006, p. 96) that the Intranet site should have some sort of lure to attract users to visit to site in addition to regular content.

Nielsen (2000, p. 280) highlights the importance of consistency in Intranet design. When the Intranet pages are designed with consistent structure in terms of templates, navigation, links, and information structure, it is remarkably easier for a user to find information more quickly.

It may be useful for intra-organization purposes to design the Intranet site based on the organizational model and use organization-specific terminology (Nielsen, 2000, p. 266). However, this can create challenges for intra-organizational audiences especially if the organizations and the terminology used differ greatly from each other.

Usability tests

The usability tests ensure that the social Intranet site is performing the functions, which it was initially designed to do. There are various usability tests available as generic tools to improve user-friendliness. Both Nielsen (2000, p. 290) and Krug (2006, p. 133-138) encourage Intranet administrators to run at least one usability test before launching the site, and also regularly when the site is up and running.

Only with quantitative data or qualitative information, the Intranet administrators can be sure that the site is doing exactly what it is suppose to be doing. With regular usability tests, administrators are able to report back to the management of the organization that the Intranet goals have been achieved, or if any corrective actions need to be taken. In addition, with regular testing administrators are able to compare the test results.

Commonly, websites are designed for an average user. In a global organization of 400 employees, who exactly is the average user? Even though the web designer can draw some conclusions based on the majority of the employees in the organization, the average user does still not exist (Krug, 2006, p. 128). Each and every user has own expectations, requirements, and needs. Besides, those expectations, requirements, and needs may change over time. To prevent incorrect assumptions to be made in the Intranet design, it would be valuable to perform usability tests on a regular basis.

Another interesting bridge between external and internal social media can be seen in measuring success. The Interactive Advertising Bureau

Finland, IAB Finland has provided a recommendation to measurement guidelines on social media marketing (November 1, 2012). These same guidelines can be applied also to social Intranets with the expectation that the administrators are able to extract information on the users and visits on the Intranet.

Audience engagement

The audience engagement measures how well the target audience has been activated around the content. Therefore in the formula, the activities from the audience (likes, comments, sharing, and producing content) are measured. If needed, in this formula certain type of activity can be weighted more heavily than the others.

$$\text{Audience engagement (\%)} = \frac{\text{likes + comments + sharing + content production}}{\text{displays}}$$

Amplification

The amplification measures the amount new users, who have joined the social online community via specific content, which was shared. In addition to seeing how many people have joined via shared content, it would be also interesting to evaluate what kind of content is the most popular for certain audience.

$$\text{Amplification} = \frac{\text{number of new users who have joined via shared content}}{\text{number of authors who have shared that specific content}}$$

Ability to Reach with Discussions

The ability to reach audience in discussion area measures the participation percentage, who proactively contributes to discussions.

$$\text{Reach of discussions} = \frac{\text{number of conversationalists}}{\text{number of unique visits}}$$

When measuring the information on the social Intranet, it would be essential to compare the results only to previous results of the same social Intranet site. Comparing to other internal or external sites wouldn't tell the truth as the sites – and their usage and users – differ greatly. As an example, comparing Facebook measurement results to Twitter wouldn't tell the truth, and it would be impossible to decide any development needs based on that. The two sites are very diverse.

2.2 Effectiveness of Social Intranet

Companies are constantly looking for ways to improve efficiency in all aspects of their operations. New information is created as a result of cooperation. It takes interaction, common information creation, and common tools to increase efficiency (Ojala and Pöysti, 2008). Selkänaho (2012) remarks that social Intranet networking elements make Intranet use and therefore working in general more efficient.

Puro (2004, p. 132-135) also believes that more open communication model will open up more opportunities for the company to increase effectiveness. In the new social communication model with the flattened organization structures, employees are able to distribute and communicate their ideas more readily, and be part of the decision-making process (Leea and Kimb, 2008, p. 192).

On the other hand, it can also generate risks, such as an information bloat, and that the available information is more fragmented (Goodridge, 2001). To be able to prevent these risks, the company must make sure the change in corporate culture goes throughout the organization.

New information is created constantly, and the content providers are able to bring the information available in front of more people, more effectively, more easily, and faster than ever before with the new social Intranet tools.

How can an employee increase the efficiency by absorbing more information in a shorter period of time?

According to Kietzmann et al. (2011) and Rosenbaum (2011) employees have become finders and filters. The amount of information what the employees are expected to absorb is enormous. There is simply too much information available. Therefore, the solution lies in curation. To increase efficiency, a company needs a thoughtful filter – a curator – to pick up the most important information pieces to the wider audience. The curator must also publish the filtered information in an easily absorbed manner to conclude his/her work. As an example, the curator could pick up three most important things for the week, and publish the information on the homepage of Intranet or somewhere else, where it is available in a short and snappy manner.

With the trusted curator filtering the information, the employees could focus on other things instead of spending their time on searching for certain information. In order for this to work, the curator must be a trusted information source in the organization. It could be that in a large organization, there would be more curators to serve the information needs of their own team.

2.3 Social Intranet Tools

The tools for social Intranet are lagging slightly behind the development of other, external social media tools (Selkäinaho, 2012). There is a plenty of research on social Intranet tools (Leea and Kimb, 2009; Korteso and Kurvinen, 2011; Ojala and Pöysti, 2008; Nielsen, 2000; Boué, 2008; Luukka, 2011).

A company called Intranet Connections, located in the USA, provides one of the most extensive social Intranet functionality lists. The company provides Intranet functionalities to their customers, and therefore their list

is probably one of the most advanced and recent ones in terms of what their customers are looking for:

Social employee directory

In the social employee directory employees can connect and network with each other through employee walls, real-time chat, skill-find, employee tagging, in/out status updates, subscription alerts, and personalized widget pages.

Employee organization chart

With the employee organization chart, everyone can see the organizational relationships for all employees. Only one click gets the user into an employee's profile where he/she can post on their wall, chat, call, or view their profile information.

Social networking and message walls

Within the social employee directory, the user would have a Facebook-like message walls for employees to post questions, seek advice, have conversations, and tap the collective knowledge. To help with social governance, each employee wall has an area for guidelines to be posted by the intranet administrator. The user can pick and choose who can participate in the walls, so he/she might want to start out small with a focus group, or use the message walls to push out management messages to staff.

Follow colleagues

Just like in Twitter, the user can follow the colleagues, team members, managers and employees that the user works with. By following a colleague, the user will receive an aggregated feed of their message wall activity, including their wall posts and the conversations they are contributing to. The colleagues' view also offers quick information about the user's closest co-workers, including immediate access to call, email, chat and view their status updates and activities.

Employee status updates and in/out tracking

With status updates, the employees can see at a glance what everyone is working on, where they are at, if they are out of the office, attending a conference, or are on vacation. Employees can mark themselves as out of office and set a return date and time. They can also set future away dates for upcoming vacations, corporate travel, or private time.

Community sites

Community sites are individual pages dedicated to communities, teams, and projects. These sites have their own landing pages with widgets where the user can add opinion polls, surveys, live chat, embedded videos, community news.

Instant chat

Employees can use the instant chat to launch an internal messaging window.

Employee birthdays and anniversaries

Employees can view upcoming birthdays of colleagues and anniversaries through their personal workspace.

Employee personalized workspace

A personalized area of the employee directory where one can personalize the Intranet experience. The user can follow colleagues, set personal alerts and content subscriptions. The user can have an own page for creating personal widgets and create bookmarks to the frequently used documents and content.

Blogs

Blogging on the social intranet is a great social format to share and communicate the corporate message and goals (Kortesuo and Kurvinen, 2011; Numminen, 2005). The user can create blogs for departments,

projects, management, executives, and employees. A good blogger uses efficient tools to provide more content to his/her blog. Especially on organizational blogs, Korteso and Kurvinen (2011, p. 172-175) encourage bloggers to focus on one business area, and have several individual bloggers to provide fresh ideas and content on the same topic area. One example that Korteso and Kurvinen provide is Microsoft. Microsoft writes regular blogs at Kauppalehti website (Tech Café) and at Tietoviikko website (Microsoft Areena), where Microsoft subject matter experts, Microsoft's partners, and other experts write their thoughts.

Topic discussions

The topic forums are for employees to participate in conversations, discussions, and best practices. Employees can subscribe to topic threads to stay on top of the input being shared.

Photo albums

The photo album is a place where employees can find company logos and branding images, or share event photos, project site photos.

Idea share

The social intranet can encourage employees to brainstorming and give them the opportunity to share ideas for new products, increased productivity, or streamlining procedures.

Nominate employees

Every employee appreciates being recognized by his/her peers, and with this social Intranet application the user can nominate the fellow co-workers and give them public kudos for a job well done.

Share news

With more decentralized social Intranet management, the users would be able to share their own news; who got a promotion, who is retiring, who

just had a baby. If needed, one can moderate news entries and set them up for pre-approval prior to publication.

Knowledge bases

The user can create knowledge bases to store frequently asked questions (FAQs), how-to's and open it up for employees to comment and answer, sharing their knowledge in an area that is collaborative and searchable.

Company store

Social Intranet enables to set up a shop for the company t-shirts and other promotional items.

Recipes and buy & sell

Even though the social Intranet is targeted for business items, there is always a need for greater engagement and non-business content in the social Intranet. This tool enables sharing recipes and participating in an employee buy and sell can initially draw employees to the Intranet when it is first launched.

Comments and ratings

All content on the Intranet can enable employee commenting and ratings. Authors will automatically be notified of comment and rating entries. Comments and ratings contribute to the overall health of the Intranet and enable to gauge popularity. An effective rating system can also improve the user's ability to find the most viewed content.

Content and employee tagging

Global tagging is available widely for Internet and Intranet platforms. Tags will group people and content-based on similarities. For example, the user may choose to tag employees "First Aid" who are trained in first aid. Or the user could use a tag based on a project, a customer, or common interest such as "Town Halls". Employees and content tagged with commonality make it easier to find what (or who) the user needs.

Wikis

A wiki is a tool for collaboratively writing, organizing, and sharing information, but they also change fundamentally the culture of how the information is authored in most organizations. Wikis lower the barrier of cooperation (Fichter, 2008, p 56-57). A great example of wikis is a Wikipedia.

Video sharing

A social Intranet platform enables the publication and distribution of video materials.

RSS

According to Wikipedia (2012) RSS (Rich Site Summary) is a family of web feed formats used to publish frequently updated works — such as blog entries, news headlines, audio, and video — in a standardized format. An RSS document (which is called a "feed", "web feed" or "channel") includes full or summarized text, plus metadata such as publishing dates and authorship.

Podcasts

According Wikipedia (2012) a podcast is a type of digital media consisting of an episodic series of for example audio, video, or pdf files subscribed to and downloaded through web syndication or streamed online to a computer or mobile device.

Mashups

According to Wikipedia (2012) a mashup is a web page or web application that uses and combines data, presentation or functionality from two or more sources to create new services. The term implies easy and fast integration to open application programming interfaces (API), and data sources to produce enriched results that were not necessarily the original reason for producing the raw source data.

The main characteristics of a mashup are combination, visualization, and aggregation. It is important to make existing data more useful, for personal and professional use. To be able to permanently access the data of other services, mashups are generally client applications or hosted online.

Fun items

Not all social Intranet tools and applications are business-critical and may not even have anything to do with business items. A social Intranet combines both business and leisure time item or “fun items” to increase usability and improve user experience. Hathi (2007, p. 9) gives an example in one company, which implemented an air guitar contest when the company signed a sponsorship agreement with Hard Rock Café.

Search functionality is essential

Regardless of the number of social Intranet tools, the most critical item is search functionality. Jakob Nielsen (2000, p. 279-280) highlights the importance of search functionality, news items, and navigation structure in the Intranet. He encourages choosing the search functionality after a usability test rather than picking a search-in-a-box functionality (2000, p. 289).

Even though Nielsen (2009) highlights the importance of social networking tools, he also reminds that for social Intranet, content is the uppermost, the tool itself is nothing on its own; the value comes from the strength of its content. An empty wiki can be a lonely place and also a hard sell to users. But when users encounter an environment seeded with content that they can build upon, they'll quickly realize a tool's value.

A uniform finding across all of our case studies is that organizations are successful with social media and collaboration technologies only when the tools are designed to solve an identified business need. Different

companies have different priorities and use different forms of internal communication; not every company needs every tool. (Nielsen, 2012)

2.4 Target Audiences and Online Roles

The aspiration of social Intranet is to connect people in the organization regardless of what their professional title is, which revolutionizes the internal communication (Selkäinaho, 2012). Therefore, social Intranet provides a good communication vehicle for employees on all organizational levels to have a direct connection with managers and executives. For example, blog postings, as well as providing comments and insights enable a two-way connection between an employee and an executive. Another example would be a discussion wall or a “chat room” tool, where whoever with access to that social Intranet, could take part in the discussion. The social Intranet offers a great opportunity to bring out the professional knowledge and skill set, which one could previously only contribute in face-to-face meetings, e-mail conversations and phone dialogues. In the best case, sharing information via social Intranet could boost one’s career to a new level.

In the social Intranet community, it is important that employees are able to identify the people they are discussing with or who provide the information. In other words, anonymity, nicknames and the use of alias, which are often used in external social media communities, are not an option in the case of the social Intranet.

All online posts, discussions, and comments are communicated with the person’s own name. This keeps a lid on profanities and encourages constructive contributions (Nielsen, 2009). According to Juholin (2006, p. 267), the social Intranet provides a virtual working environment, which is an efficient vehicle for the company executives to use in their communications.

In the online world – similarly to the real world – people are different in personalities, and they have different roles. Some people are more talkative than others. There is no single all-classifying categorization available for the roles in online community, but many researchers have introduced their own role split. Some of these researches are listed in Table 1.

Table 1: Social online roles (Combs Turner and Fisher, 2006, p. 3)

Author	Roles
Kim (2000)	Visitors, Novices, Regulars, Leaders, Elders
Golden & Donath (2004)	Newbie, Celebrity, Lurker, Flamer, Troll, Ranter
Brush et al. (2005)	Key contributor, Low volume replier, Questioner, Reader, Disengaged observer
Turner et al. (2005)	Answer person, Questioner, Troll, Spammer, Binary poster, Flame warrior, Conversationalist
Waters and Gasson (2005)	Initiator, Contributor, Facilitator, Knowledge-elicitor, Vicarious-acknowledger, Complicator, Closer, Passive-learner

Based on the identified roles, there seems to be roughly three main groups despite the names of the roles:

Leaders or main contributors

These individuals are the heart of the social Intranet. They keep the content up and running, and discussions on-going for the parts they are able to.

Regular or irregular contributors, who provide content and take part in the discussion

These individuals provide content to social Intranet either regularly or irregularly, but they still contribute to the online community. It may be that

these individuals take on different roles, such as questioner, ranter, flamer or answer person, but still they take part in the discussion.

Readers or passive learners

These individuals won't take proactive role in social Intranet. They may visit the Intranet irregularly when looking for information. They read the postings, and discussions what their peers have contributed, but they are not interested in voicing their own insights or points of view.

Not all users are equally proactive in the social Intranet. According to Alexander et al. (2009, p. 33), a rule of 1-9-90 exists, which shows the different levels of participation. This rule is explained in Figure 3.

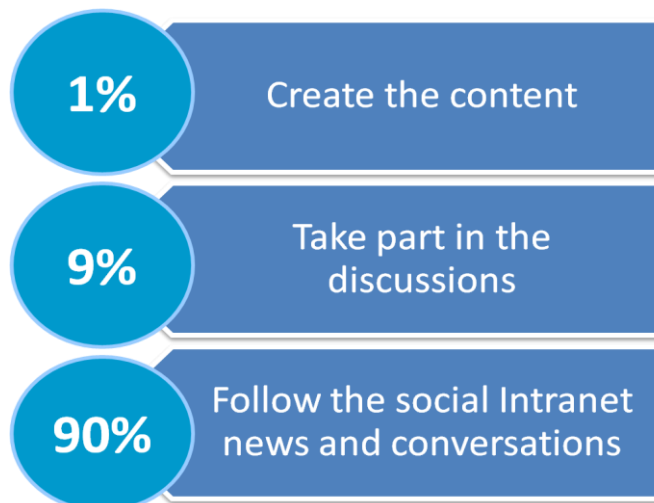


Figure 3: The rule 1-9-90 of Internet usability by Alexander et al. (2009, p. 33)

Puro (2004, p. 125) challenges the audience to break this rule and take part into the conversations more proactively. The proactive participation of the audience is a pertinent success factor for the social Intranet. On the other hand, Nielsen (2009) acknowledged that in some cases, even a few active contributors can add substantial value to the rest of the organization. In these case studies, this was often the case for tagging or rating systems, which considerably improved the quality of results prioritization for the notoriously ailing Intranet search functionality. In these

cases, even if only a few employees tag a page with a given keyword, it's likely that the page will produce a good search result for that query in your organization's context.

The role an individual plays in the online world may be dependent on the personality of the individual, cultural background, professional role or title in the organization, or skills to contribute to the online community. These factors must be taken into consideration according to Nielsen (2000, p. 292) especially in a multicultural working environment.

To get the most out of the social Intranet, it would be essential to get everybody involved with the online community. First, employees should have the skills to contribute with training and on-going support in a case the user experiences challenges when contributing (Nielsen, 2009). Second, the leaders of that organization must encourage employees to contribute and lead with example to make a difference (Kilpi, 2006, p. 85).

Finally, the company culture must support this communicational change. If people are strongly committed to the "knowledge is power" principle and don't want to share, then sharing technologies will obviously fail. It can be unnerving for traditionalist executives to see employees freely discussing company strategies. But loosening control of information on the Intranet is a way to control a much bigger risk: that employee will spill the beans on Internet-wide social media. When people have internal media at their disposal, they'll post their questions and comments there, as opposed to going outside. (Nielsen, 2009)

2.5 Team Spirit and Positive Employee Experience

Work teams are often compared to sport teams (Hamson, 1998, p. 32). Each team consists of individuals. In a team, individuals have to depend or rely on each other. Responsibilities are shared, but also each performance

contributes to the result of the other. To be able to perform as a team there are four important elements:

1. The balance of the team with individual roles and shared respect.
2. There should be shared vision, or strategy, of what the result of each performance should be.
3. Good preparation with all players knowing their role and responsibility.
4. Getting the best out of each individual is integral. The combination of players is more than a sum.

Instead of having the coach shouting instructions and game plan next to the field, in business world a leader provides guidance, instructions, and a game plan to the personnel nowadays via social Intranet.

If the communication vehicles have changed over time, so have the organizations. The present work organizations are more and more decentralized geographically and organizationally, yet inter-connected with online community and working towards a common goal (Humala, 2007, p. 15). It may be that project teams are established only for a short period of time, and the project team members won't work together for years after the current project.

To accomplish the ambitious goal of increasing team spirit, it is essential to understand what motivates online members to participate in large companies (DiMicco et al., 2008). The research revealed three motivators:

1. Personal satisfaction on a social level
2. Benefits in career development
3. Opportunity to campaign for their ideas and projects

Based on these results and the fact that humans are inherently social, it is obvious that employees are interested in participating and providing feedback. Effective social Intranet tools combined with trusted and transparent company culture provides employees a virtual community where to share knowledge, innovate, and have fun.

In fact, Rashid et al. (2006, p. 958) conducted a very interesting research on how the value of contribution increases the amount a contribution in the future. For example, if a user comments or rates certain new software features using social Intranet, and those features will be developed, that would encourage the user to contribute also in the future.

When the company shares information more openly or in other words, the information is available for everyone in the organization if needed, and the social Intranet offers also a vehicle for interactive discussion within the organization, the employees automatically embrace similar, more open communication style. In addition, leading by example is always a very powerful way to get things happen (Kilpi, 2006, p. 85). It motivates, raises team spirit, and encourages employees to participate when employees from all organizational levels participate proactively in the discussion and knowledge sharing.

Other ways to encourage employees to participate in discussion is to reward proactive members with a prize, “stars” to member’s profile, or even monetary rewards (Nielsen, 2006). One other type of rewarding is what Amazon has implemented, publishing a list of top reviewers (Harper et al., 2007, p. 148).

With this type of rewarding and motivating, employees can achieve all three motivators (DiMicco et al., 2008) on why to participate in social Intranet discussion. They receive personal satisfaction on a social level by receiving public rewarding; potentially even benefits in career development – naturally depending on the topic, which the user volunteered. But surely,

the user can campaign for his/her ideas and projects, and receive even public acknowledge on it.

The social Intranet can have a major influence on team collaboration. Hathi (2007, p. 9) provides an example of discussion forums to be used for sharing information on current deals and affairs to enable collaboration. Another example in the same article is that British American Tobacco created a discussion topic for Football World Cup Tournament 2006 to bring together all football fans within the company.

McCarty (2008, p. 28-33) provides an example of how IBM uses social Intranet to embrace collaboration. IBM has a strong “typing culture”, which means that employees in all organization levels are happy to express themselves in writing. The blogging culture exploded at IBM with social Intranet. The company created in close cooperation with the most active bloggers at IBM a set of blog guidelines, and after publishing them, the new blogging platform was ready to be launched internally. After three (3) years, IBM has more than 25 000 registered blogs and employees even at the top of the organization write blogs voluntarily. IBM also run an internal campaign on “How do you make innovation matter to your client” and asked employees to respond to the question by creating an employee video instead of writing a response.

Another social Intranet item, which IBM implemented to improve collaboration was wikis. At IBM, for example software development group can use a wiki to share software production schedules, information on debugging, and completed modules. Currently, the company has more than 20 000 wikis with more than 100 000 users. In addition to this, IBM has also implemented internal Wikipedia called w3 Wiki Central. On this page, IBM personnel are able to use widgets, which are small enhancements to regular wikis. The widgets include a “polling widget”, where group members can vote on various options, for example the size of a data file during software development. Another widget is a “rating

widget”, which enables individuals to rate several different development suggestions. (McCarty, 2008, p. 32)

Keeping employees around the world motivated and engaged requires technology and strategy to ensure meaningful communication and employees’ buy-in (Chiasson and Berger, 2006, p. 55; Zumas, 2012, p. 7). Natale et al. (1995, p. 7) also claim that the key to success in a corporate organization is to empower the employees. Therefore, it is important to ask for feedback from the users on a regular basis with proper feedback systems, and make sure the improvements proposed are also implemented (White, 2002, p. 45).

With regular usability tests and feedback surveys, the administrators are able to develop the social Intranet platform for the changing needs of the personnel. With continuous development it is possible to introduce more useful tools and applications to the site, which could be used not only on the business related items, but also for fun.

2.6 Social Intranet Trends

Social Intranet – just like social media in general – develops rapidly. Even though the list of future trends may expire relatively quickly, there are some future trend visions available. Schade et al. (2010, p. 4-8) claim that in the future, CEO blogs and video blogs will become more popular. In addition, Intranet will be implemented more commonly to mobile devices and tablets. The success of mobile Intranet depends heavily on the user-experience of the employee. Personalization is already available in the Intranets now, but it will become even more popular going forward. The Intranet design will be more decentralized, while more people will become involved with designing their own team areas within the social Intranet site. On the other hand, usability methods will be also used more often in the Intranet design. As everything comes down to the quality of the content, search functionality is the main area, which will be invested and developed

heavily. Finally and very interestingly, since the Intranet is used often as a single internal communication vehicle, in the future, social Intranet will also be used as emergency communication vehicle.

Mockler and Gartenfeld (2009, p. 23-25) add on the future trend list that integration of information sources will become more popular. The Intranets will become as single “one-stop shopping” pages. In addition, there will be more emphasis on mission-critical applications and information delivered via Intranet. Just like related to any other social media vehicle, also social Intranet will be developed further with higher security standards, smartphone applications, and lightning-fast connections.

3 KNOWLEDGE SHARING AND INNOVATION

“Individuals don’t offer knowledge for free”, claims Barachini (2009, p. 98). He argued that there is a need for employees to socialize and cooperate, but they can do that without volunteering useful knowledge. As organizations become multi-functional corporations, which develop multiple products, and are geographically decentralized the need for cooperation increases – and especially in social media. Companies have dynamic structures, which are rearranged on a regular basis depending on projects and alliances. Social Intranet is the most effective way to share information and knowledge over organizational and geographic limits.

Organizational interoperability is therefore in key role for companies to make the resources (sites, people, products, and software) to communicate and work together (Rauffet et al., 2010, p. 397). It ultimately comes down to the fact that companies must succeed, and knowledge sharing, which creates new innovations, is essential for the success of the companies.

Knowledge sharing, even if employees need to be encouraged to do it, is widely researched area (Scott, 1998; Ardichvili et al., 2003; Paroutis and Al Saleh, 2009; Benbya et al., 2004; Luring and Selmer, 2012; Han and Anantatmula, 2007) from various points of view. From social media point of view, the research on knowledge sharing exists widely before and after the biggest revolution of social media – when Facebook was created. The foundation remains the same throughout the research despite the fact when it was created, but naturally there are some differences, too.

Knowledge sharing as a process

Most commonly, knowledge sharing is defined as a process. Youngjin et al. (2007, p. 322-323) define knowledge sharing as a “*process of creating a mutual stock of knowledge among individuals or groups – the knowledge that someone in the organization already knows – through direct or*

indirect interaction". According to researchers, knowledge sharing takes place through company's structures, people and processes. It's everywhere within the company.

If we examine more thoroughly this point of view, knowledge sharing is done consciously and unconsciously via company culture and structure, employees in their actions and communication, and finally in company processes, where best practices are documented and used on a daily basis. Even though knowledge sharing is often considered limited only to employees, it is important to remember that the leadership team leads by example also in terms of knowledge sharing.

In addition to people aspect, also company's structures and culture play a major role in knowledge sharing. The more open and transparent company culture, which is enriched with effective tools and motivation and encouragement from the leadership team, is a corner stone for knowledge sharing. Finally, company's processes, which have been developed over time and which will continue to develop and improve also in the future, document valuable information on best practices within the company. The employees, the leadership team and the company's structures have all internally influenced the processes to develop and share knowledge forward.

Stenmark (2002, p. 1) reminds that things don't happen by themselves. The ability to share and transfer knowledge within an organization and among its members is a fundamental knowledge management process can be greatly facilitated by the use of information technology in the form of e-mails, documents or web pages. And social Intranet is in a key role in this.

The social Intranet should attract employees to proactively use it not only as a place to look for information, but as a place to collaborate, keeping in mind that Intranet provides an organization-wide tool (Stenmark, 2002, p.

43-44). Based on the research, Stenmark proposes a model – as shown in Figure 4 – where the Intranet as a knowledge management environment is seen from three different perspectives: information, awareness, and communication.

Information perspective

The information perspective is the most common view of the Intranet. When Intranet users say they cannot find the information they are looking for, the most obvious reason they give is the Intranet's poor structure. However, it may have been that the information doesn't even exist on the Intranet. It is important to remember that if the users found the information; they may have not shared it or exchanged ideas with their colleagues, and that means that the end result wasn't a success from the knowledge sharing point of view.

Awareness perspective

The awareness perspective exploits links and connections to find other members in the organization. To maintain the awareness perspective, and to avoid drowning in the information overload, new tools should be developed. These tools could, for example, assist people by alerting when new and relevant information is added on the Intranet. The awareness perspective can also enable establishing communities of practice in terms of making Intranet users aware of colleagues sharing their needs and interests.

Communication perspective

Finally, the communication perspective enables employees to collectively share the available information when they use various forms of channels for conversations and negotiations. The company can offer its employees means for working together and engaging in dialogue with workflow and routine functionality, informal collaboration such as chat rooms and whiteboards, and shared project areas. Ultimately, the company's focus is to transform this knowledge to organizational benefit.

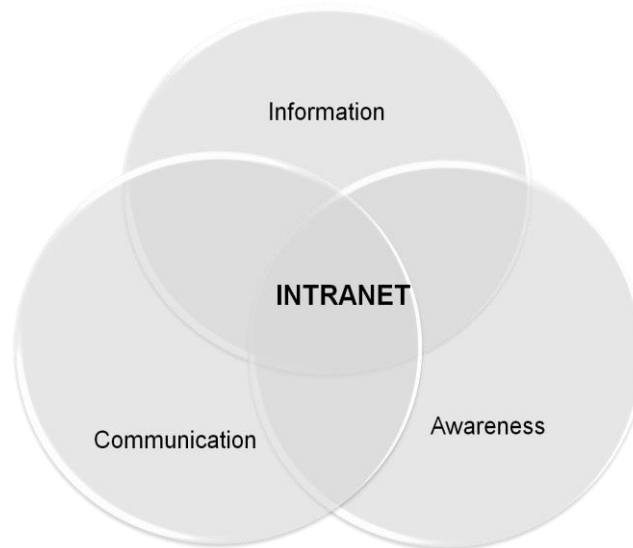


Figure 4: Three perspectives of the Intranet (Stenmark, 2002, p. 44)

If collaboration and the use of social Intranet increase knowledge sharing, then the companies should assure that the social Intranet is a safe place for employees to stop by and share information – for business and for pleasure. Amurgis (2007, p. 8) provides an interesting example from American Electric Power (AEP) company, where the company added new interactive features into its Intranet to encourage collaboration. With increased collaboration, the company changed the profile of the Intranet to include:

- A weekly multiple-choice poll, enabling employees to quickly register their opinions on company or societal issues.
- A weekly discussion with carefully-chosen topic of broad appeal, soliciting employee perspectives and ideas, in full text.
- An online “thank you” card application for employees to thank their colleague – privately or publicly – for a job well done.
- An online marketplace where employees can sell cars, furniture, and other items to one another.

Knowledge sharing plays a major role in company's success. And social Intranet provides tools to enable not only more effective knowledge sharing, but also the foundation for social interaction between colleagues to strengthen the relationships, build trust, and share knowledge.

3.1 Benefits to Share Knowledge

As a social practice, knowledge sharing is an accomplishment, especially in competitive environments; people are not naturally inclined to share what they know unless doing so is likely to enhance their own social position (van Aalst, 2009, p. 261).

The drivers to share knowledge are obviously individual. One point of view is to take a look at the research from DiMicco et al. (2008), where the research team listed three motivators to participate in social Intranet discussions within a large company. The motivators are: personal satisfaction on a social level, benefits in career development, and opportunity to campaign for their ideas and projects. Sharing knowledge in the social Intranet and receiving payback - whether if it's social recognition, career progress, or an opportunity to promote the project or idea internally - is win-win situation for the employee, but also for the company.

Previously, labor and capital were the primary determinants of company's profits, but increasingly know-how is the profit engine today. Although knowledge sharing makes intuitive sense, it represents a paradigm shift in the sources of competitive advantage within the company. (Mohr et al., 2005, p. 112)

On the other hand, companies are ready to do almost whatever it takes to achieve and retain that competitive advantage. Even if it requires tearing down of walls and barriers between departments, functions, and

individuals, both inside and outside the company, in order to better share and use information (Mohr et al., 2005, p. 112).

In the end of the day, knowledge sharing is crucial to organizations' success (Kamasak and Bulutlar, 2009, p. 307). When organizations share resources and information openly with other participants, they will generally seek to reduce opportunistic behavior through the mutual understanding and goodwill of parties. Trust has become a central concept in knowledge sharing and collaboration within a company. (Connell and Voola, 2007, p. 54)

Trust is a double-edged sword. Employees are more willing to share knowledge in a trusted, safe environment. They don't want to be humiliated, embarrassed, or out down in front their colleagues. Frankly, who would want that anywhere, but especially in the working environment it is imperative to remain respected and trust-worthy.

On the other hand, employees are more willing to rely on the information and knowledge coming from a trusted person. As an example, it makes a huge difference if the author of a blog on future trends of mobile technologies is a technology expert or a communications manager. In addition to professional title, also the individual needs to be considered trusted and credible.

Benefits to the company

The knowledge creation and the ability to apply knowledge are the most important sources of the sustainable competitive advantage in a company. According to Zhang et al. (2008, p. 226) knowledge transfer and sharing among employees could lead to faster responses to customer requirement at a lower cost in operations.

Lauring and Selmer (2012, p. 89) highlight that knowledge creation and sharing within organizations seem to be increasingly vital tasks for leading

knowledge-intensive organizations. These processes are argued to lead to better performance because of enhanced cohesion, decision-making, and coordination. Hence, organizations which can fully benefit from the collective knowledge and expertise could be expected to be more efficient, effective, and creative.

Schotter and Bontis (2009, p. 151) argue that companies can achieve a direct impact on its performance when building a capability, which means combining the knowledge with operational utilization. There can be many different types of capabilities, such as research and development capabilities, innovations, process and technologies capabilities. In all these, knowledge is combined with a specific operational utilization to change the competitive benefit into action.

In a nutshell, according to researchers, knowledge sharing takes place through company's structures, people and processes. This means, that the benefits of sharing knowledge can also be achieved in all of these aspects. A company can better re-structure its operations and organizations to improve knowledge sharing - the competitive advantage - and provide better service to its customers.

The employees at all levels of the organization will have better skills and knowledge to serve the company and its customers. Talented employees, who are willing to learn new things and pass the knowledge forward in the organization, ensure better future opportunities for the company and for themselves. Finally, more efficient and streamlined processes, which exploit the best practices of the company, ensure that right things are done at the right time and the risk of errors and mistakes are minimized.

Benefits to employees

Knowledge between employees is complementary, so knowledge transfer and sharing is beneficial to employees' knowledge richness and growth. To learn and acquire knowledge, individuals should interact and share

knowledge with each other. This way, individuals improve their capacity to define a situation or a problem, and apply their knowledge to solving problems. (Kamasak and Bulutlar, 2009, p. 307)

All these are very useful capabilities to have in the current work, but also for future career opportunities. Especially in the knowledge-intensive business areas, it is imperative to be able to prove that an employee has developed his/her skill set on a regular basis.

By encouraging the high-potential knowledge employees to share their core knowledge voluntarily and to drive low-potential knowledge employees to participate in knowledge sharing to obtain an additional utility, both the employees and the organization can achieve a win-win situation (Zhang et al., 2008, p. 231). With the common interest to share knowledge, the social Intranet with the right tools can help both the company and its employees.

3.2 Factors Influencing Employees' Knowledge Sharing

Even though social media as a research topic is relatively new, numerous studies have been published on knowledge sharing via social media. For example, Ardichvili et al. (2003) and Paroutis and Al Saleh (2009, p. 57-60) conducted a research on determinants influencing employees' knowledge sharing when using Web 2.0 technologies. They identified four key determinants of knowledge sharing. These are considered as either barriers or motives for the employees to adopt social media tools for knowledge sharing:

History

The established way of working can become a barrier to adopt new tools. Therefore, it is important to remove barriers in order to support organizational knowledge sharing. According to this research, the biggest hurdle of knowledge sharing in social media communities is not to create a

technically correct platform for knowledge sharing, but rather to remove barriers for individuals to participate (Ardichvili et al., 2003).

Outcome expectations

Expected consequences of the use of Web 2.0 technologies influences people's willingness to share knowledge. Positively perceived expectations such as effective communication or personal knowledge management encourage employees to share their knowledge (Barachini, 2009). On the other hand, skeptically and negatively perceived expectations prevent the employees from sharing knowledge. If social media tools are included as communication and knowledge sharing tools, the employees should expect to achieve clear benefits of using them. Otherwise, the employees are not motivated to contribute.

Organizational/management support

Managerial support plays a major role in encouraging employees to use social media for knowledge sharing. Managerial support can include various forms of encouragement, such as promoting the benefits of social media tools, providing training, and rewarding from proactive participation.

Paroutis and Al Saleh (2009, p. 60-61) also highlight the importance of leadership. Without a clear and constant support from the managers and leaders, employees are not motivated to use social media tools.

When the respondents considered their knowledge for the good of the entire organization and company, they were motivated to contribute to the community. Some managers expressed that it was time for them to start sharing their expertise by mentoring new employees and participate more proactively in the community. In addition, the respondents felt that the company culture supported and encouraged knowledge sharing. Finally, the research also uncovered that some individuals shared knowledge also for personal motives – they were able to establish themselves as experts in the community. (Ardichvili et al., 2003, p. 69-71)

In addition to strong leadership support and information sharing company culture, Benbya et al. (2004, p. 217-218) also bring up linking knowledge and business processes together to enable successful knowledge sharing. Without an overall, comprehensive approach to knowledge sharing, the company will challenge to succeed in it.

Trust

The information quality and accuracy influences significantly employees' willingness to share the information. If the individuals suspect that the social media tools are not reliable sources of information, or that others might misuse the information, they probably will refuse to contribute.

The research of Ardichvili et al. (2003, p. 69-71) concluded that the respondents were concerned about posting irrelevant or faulty information that would lead to letting down the community. Some respondents mentioned a lack of clear organizational communication guidelines on what can be post and what not. The respondents also expressed their concerns about the possibility for colleagues to misuse the posted information. Additionally, there were also concerns that the communities didn't provide a source for reliable and objective information.

Rewarding

In addition to these four motives, rewarding is in a key role to affect knowledge sharing (Benbya et al., 2004; Zhang and Sundaresan, 2010; Lauring and Selmer, 2012). According to the research, it is imperative to learn from previous failures and reward employees to share knowledge with immaterial incentives. They also propose the use of rewarding systems.

Bartol and Srivastava (2002, p. 64-74) discuss various monetary rewarding systems in their article, both for individuals, teams and work units. The findings of their research is that the managers should first make

sure the basic guidelines for the effective use of reward systems, such as clear goals, rewards of value, sufficient employee self-efficacy, are implemented before providing monetary rewards.

Han and Anantatmula (2007, p. 431) researched the factors impacting knowledge sharing in a large IT organization. They created a table with four categories, under which they listed the significant factors influencing knowledge sharing as illustrated in Table 2.

Table 2: Significant factors affecting knowledge sharing by Han and Anatatmula (2007, p. 431)

Organizational Factors	Technology Factors	Learning Factors	Leadership Factors
Frequent emphasis on knowledge sharing	Availability	Amount of training received	Frequent encouragement by managers
Feeling no loss of power by sharing knowledge	Easy access to technologies		Manager's willingness to help employees in knowledge sharing
High level of trust			Verbal praise as reward
Frequent interaction with colleagues			Encouragement as reward
			Career promotion as reward

In the same research, the previous social interaction with colleagues came up as important driver. The respondents expressed that they would share knowledge more openly and willingly with the colleagues who have helped

them in the past. Consequently, if employees had previously experienced reluctance or refusal of help, it was unlikely that they will be willing to share their knowledge with colleagues. This means that team spirit also has a great influence on knowledge sharing.

3.3 Methods to Share Knowledge

Knowledge-sharing practices can make organizations more effective, but they need to be cultivated (van Aalst, 2009, p. 261). As mentioned earlier in this study, knowledge sharing exists in company's people, structures, and processes. Therefore, these aspects also determine the methods to share knowledge.

In terms of company processes and people sharing knowledge, Benbya et al. (2004, p. 204) researched the effectiveness of knowledge management systems and company portals from knowledge sharing point of view. They researched the effectiveness of knowledge management systems, which include content management tools, knowledge sharing tools, knowledge search and retrieval systems, and portal, which include both knowledge management and sharing tools in addition to other functionality. The research team concluded that the most efficient way of sharing knowledge is a corporate portal, which combines a comprehensive selection of functionality as indicated in Figure 5.

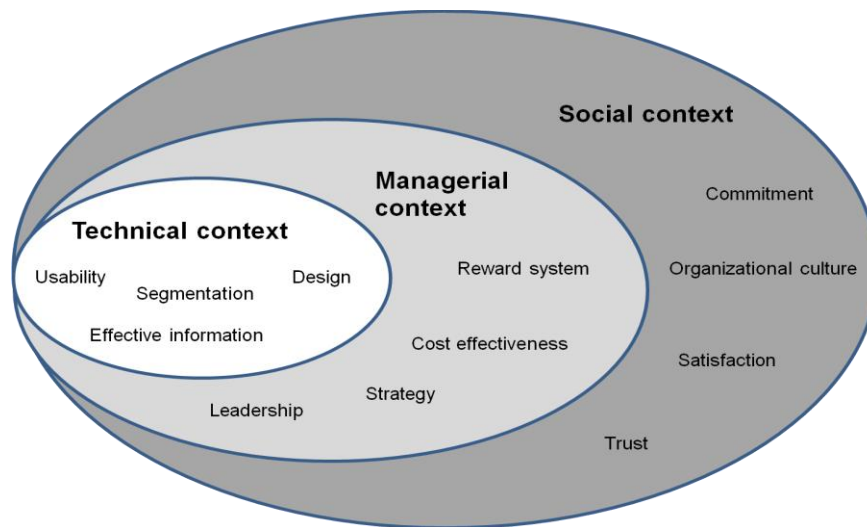


Figure 5: Optimal implementation of corporate portal by Benbya et al. (2004, p. 215)

From company structure point of view, Suppiah and Sandhu (2010, p. 465-472) researched different organizational cultures and how they impact the knowledge sharing behavior of employees. The researchers share the organizational cultures into four different categories:

1. **Clan:** A friendly place to work where people share a lot about themselves. Typical characteristics for clan organization are teamwork, employee involvement programs, high employee commitment to organization and colleagues, and high corporate commitment to employee.
2. **Adhocracy:** Organizations are typically generally organic and not mechanistic, characterized by a dynamic, entrepreneurial and creative workplace. Employees are empowered and risk taking encouraged. Effective leadership is visionary, innovative, and risk-oriented.
3. **Market:** The major focus is to conduct transactions with other stakeholders to create competitive advantage. Competitiveness and productivity form the foundation for the market-driven culture.

Willing is everything and competitiveness is expected to trickle down to the individual level. Knowledge becomes a proxy for power and this destabilizes knowledge sharing especially tacit knowledge.

4. **Hierarchy:** Hierarchy culture is characterized by formalized and multiple hierarchical structures, and standardized procedures. There is minimal or no discretionary powers vested in employees. Emphasis is on rule reinforcement and the long-term concerns of the organization are stability and predictability. This culture nurtures the use of standard operating procedures and best practices, and has multiple layers of vertical (position) and horizontal (work units) silos operating relatively in isolation. The structures and power relationships act as barriers to tacit knowledge sharing in these cultures.

As shown in Figure 6, the clan and adhocracy culture types have positive influence on knowledge sharing, whereas the market and hierarchy culture types negatively influence tacit knowledge sharing. (Suppiah and Sandhu, 2010, p. 472)

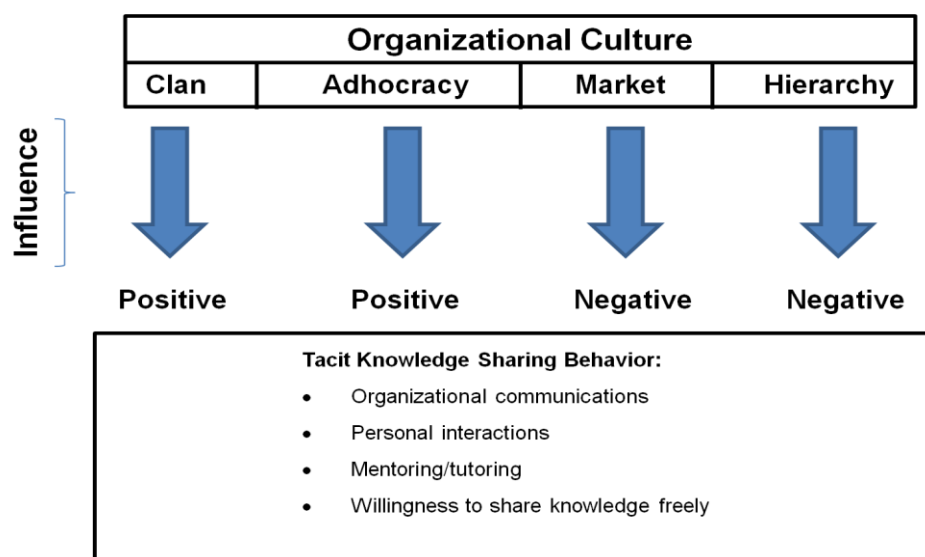


Figure 6: Tacit knowledge sharing in different organizational cultures by Suppiah and Sandhu (2010, p. 466)

An effective social Intranet can help a great deal in knowledge sharing, but as knowledge is shared in all parts of the company – people, processes and structure – also the company culture and leaders must support knowledge sharing. When the social Intranet is advanced to include more functionalities and capabilities, it will bring more value to knowledge sharing.

3.4 Innovation and Motives to Share Innovative Thinking

Two individuals will never share exactly the same values, beliefs, observations, and viewpoints. Therefore, the knowledge that results from individual experiences and values, and reflects personal interests, can hardly be integrated.

Côté (2002, p. 60) defines innovation as “rejecting the status quo and proving there is a better way of doing thing”. Ahmed (1998, p. 30) defines innovation as an environment, a culture, that exists in a company and drives value creation.

Employees have a lot of motives to innovate. According to Juholin (2008, p. 51) there are dream employees, who always want to learn new things. Ojala and Pöysti (2008, p. 15) identify that subject matter experts of all ages are happy to pass the knowledge on in the organization when they are encouraged to do so. This encouragement can be achieved through providing tools and forums for employees to brainstorm, or rewarding employees. Juholin (2008) and Bracar and Lah (2011, p. 8)

It is possible that people working in the same department have more values, beliefs and problems in common, and hence knowledge sharing within a department may more easily be captured, and have an exploitative impact on innovative thinking. Knowledge sharing outside the department has no impact on any kind of innovation. (Kamasak and Bulutlar, 2009, p. 314)

Intraneurship

Innovativeness is often related to entrepreneurial company culture. Eyton (1996, p. 61-62) lists characteristics for entrepreneurial company, which also suit for characteristics for an innovative organization:

- innovation encouraged by senior management
- failure was not career-ending
- task forces developed creative ideas
- global thinking
- problems viewed as opportunities
- nothing was impossible
- corporate structure encourages innovation and creativity
- no limits to opportunities
- risk-taking was encouraged
- people and skills were carefully selected
- action-oriented environment
- the company is prepared to go back to basics
- feeling of excitement and challenge prevailed

Brinkmann (2011, p. 196) calls it smartly “intrapreneurship”, which means corporate entrepreneurship, and focuses on quickening the entrepreneurship within an established corporation and improving operations innovation.

According to Dobni (2008, p. 541) an innovation culture is build on intention, infrastructure, market orientation (influence), and implementation context. Innovation proposes investing in research and development and in people, creating a better environment for innovations, and helping communities stimulate innovation. Social Intranet plays a major role in bolstering innovation.

Leadership style

Soriano and Martinez (2007, p. 1104) and Panuwatwanich et al. (2008, p. 411) highlight that leadership style impacts the innovativeness within an organization. There are several ways the leaders of the organization could promote innovativeness. The starting point is that they create and communicate exciting visions of the future to the employees. The leaders also seek out and promote new ideas, techniques, or innovative approaches in problem solving instead of leaving that in the hands of employees only. Keeping up with the operational side of business, leaders could spend more time mentoring team members, engage team members to share resources through the entire work process, and encourage team members to develop their own ideas. Finally, it would be ideal for leaders to consult with team members on decision-making.

As it comes across in all of the points mentioned above in the leadership behavior, it is important for leaders to socialize with employees (Kirkman, 2012, p. 143). By participating social networks, key decision-makers gain access to novel information that can be used for innovations.

Idea Zone by Cisco

One example of innovative tools is Cisco's Idea Zone, in which all employees at Cisco can document their ideas. Cisco as a corporation will then manage the ideas according to a strict process: all ideas are dealt with, and a committee will choose twenty most promising ideas for continued consideration annually. Cisco will also prepare a business plan for all these twenty ideas and evaluates the ideas based on the numerical plan. Finally, the committee will choose final five ideas, which will be taken into use. All ideas are available in the social media tool, and people can rate the ideas by giving points to various ideas. To encourage the idea submissions, Cisco provides monetary rewards for all ideas, and there is a grand prize of \$250 000 for the best idea. (Ojala and Pöysti, 2008, p. 70-71)

As can be seen from the theory and also the example from Cisco, social Intranet can make a huge difference in boosting innovation within a company. With the right tools and proactive participation from the personnel, the social Intranet can provide an efficient platform to bring concrete results for the company and for the individual employees.

3.5 Internal Competition

Success is not about discipline — it is about teamwork. Without teamwork, people don't cooperate, collaborate, or innovate. On the other hand, a group of people working together is not a team. The difference between groups and teams is that groups are committed to an ideal, goal or person; teams are committed to each other. (Eaton, 2009, p. 80)

Internal competition is often seen as an inability to define a clear strategic direction, a result of massive duplication of effort and financial resources. There are also important benefits to internal competition, as long as it is kept under control.

According to Birkinshaw (2001, p. 21), there are three benefits in internal competition: First, it creates flexibility for instance in a case of rapid technological change. Rather than “putting all eggs into one basket”, it may be wise to split the technological knowledge and keep more options open. Second, it challenges the status quo by forcing employees to come up with innovative thinking even though customers and partners would not be able to provide future-looking ideas and are happy with the current environment. Finally, it motivates greater effort as it is human nature to work hard when faced with a competitive threat.

Naturally, costs and benefits would have to be carefully managed in terms of internal competition. Every internal competition case must be carefully evaluated with the costs and benefits related to it before making a decision

(Birkinshaw, 2001, p. 23). There is fine line between a healthy internal competition and an opportunistic behavior.

Tagliatelli and Mattarelli (2006, p. 314) researched the innovation in knowledge sharing flow between professional groups in healthcare industry. They discovered that performing daily activities side-by-side and holding common values within the organization, the individuals are more willing to transfer knowledge to members of different professional groups. Knowledge flows between different professional groups do not occur homogenously. It requires individuals in the organization, who act as “brokers” for exchanging knowledge. These individuals play a major role in knowledge sharing between the groups, and therefore also improve the creation of innovations within the company.

Innovations are a result of either a company reacting to external market forces or – according to Taylor (2010, p. 38) – internal competition may also play a larger role in innovation than has been considered before. Generally, a conflict in the organization is considered a negative friction in strategy and decision-making. A dynamic process of internal competition can also act as an impetus for knowledge to be obtained and transferred. And one example could be adopting new technologies before the external market has provided any evidence of superiority or customer demand. The competitive process, which is often full of conflict, provides a viewpoint for potentially positive benefits of internal politics. The researchers highlight that the innovation process within the company must be identified and documented in order to harness the benefits of internal competition.

Ortt and van der Duin (2008, p. 534) argue that company’s innovation contextual framework should meet the following requirements:

- contain multiple levels of detail in order to enable strategic and operational decisions to be made

- adopt a systematic approach in which the various contextual factors are interrelated and which addresses complementary innovation processes simultaneously
- enable more flexible processes, for example “trial and error”, and in addition acknowledge that often a linear innovation process is much too simple view on innovation

The research of Clercq et al. (2011, p. 691 - 694) investigated company's ability to leverage cross-functional collaboration into product innovativeness. The research shows that product innovativeness does not only depend on the formal decisions with respect to structural features of the organization, but also intangible elements that capture company's social fabric. In other words, effective knowledge exchange between functional departments and the capability to convert intra-organizational collaboration into product innovativeness depends on:

- organization's structural context: decision-autonomy and shared responsibility
- social fabric: social interaction, trust and goal congruence

Decision autonomy and cross-functional interactions improve new, innovative initiatives in the company. Therefore, the researchers highlight that organizations that want to innovate should award sufficient autonomy to functional departments. In contrast, strongly centralized decision-making is likely to reduce the innovativeness. Also, the positive interaction effect between cross-functional collaboration and shared responsibility should be rewarded in the organizations. In practice, managers play a major role in this by encouraging informal interactions across functional boundaries, breeding trust between colleagues, and promoting the cooperation towards a common goal. (Clercq et al., 2011, p. 693)

According to Clercq et al. (2011, p. 693) it is important to provide a selection criteria for company's innovative aspirations in order for individuals to absorb it and contribute to it.

3.6 Functionality and Tools to Bolster Innovation

Current working environment require effective virtual community and communication between colleagues without forcing peers to be face-to-face (Ojala and Pöysti, 2008, p. 18). Social media and especially – social Intranet in internal communication – provides the tools to provide the effective communication platform.

Ojala and Pöysti (2008, p. 31) provide a list of tools, which improve communication, and therefore can also improve innovation. The tools are split into two categories: internal and external tools.

Internal tools

- information sharing to personnel (for example blogs and video blogs)
- eliminating the amount of e-mails (for example moving to chat boards)
- content and knowledge management and sharing (for example document libraries)
- identifying experts (for example information on role and responsibilities on Intranet)
- sales and marketing support
- improve internal innovation (for example innovation contests)
- including personnel to build company's strategy
- producing project reports and other materials together (for example version and lifecycle management of documents)
- RSS functionality on following news
- developing and improving know-how (for example wikis and learning platforms)

External tools

- constant communications and two-way dialogue with customers (for example external blogs and feedback functionality)
- including customers into discussions and innovation (for example executive innovation virtual forums and discussion forums)
- managing documentation and guidelines provided by customers (for example wikis targeted to customers and partners)
- marketing functionalities, which are encouraged by the community members (for example identifying most influential members in the community and asking feedback from them)

As can be seen from the list above, the tools to improve innovation are a combination of serious-minded business tools and light-minded fun items. With that recipe, the users are more eager to visit the social Intranet site and volunteer knowledge and brainstorm innovations.

The important aspect regarding social media enabling innovation, Ojala and Pöysti (2008, p. 52) highlight that when social media tools are used instead of e-mails or face-to-face communication, the knowledge is accumulated into the social media database. This encourages innovation and new ideas – even after some time, when another employee will find the discussion or posting.

The other main aspect is that sharing knowledge and participating discussions should not increase the amount of work for an individual. Social media tools should be used instead of exchanging e-mails, not in addition to. As an example, with virtual white boards, the idea is to share experiences, provide answers to recurrent questions, and brainstorm, manage and evaluate new ideas instead of writing these into several e-mails. Anyone in the company, whether this person is in intra- or inter-organization, can innovate with social media tools. (Ojala and Pöysti, 2008, p. 53)

Most old-fashioned tools, such as manuals, guidelines, memos, and reports are moved to social media tools, such as wikis, where a lot of people – internal and external – can participate and provide content. This opens up a channel for innovativeness.

Choosing the right tools is challenging. Ojala and Pöysti (2008, p. 97) encourage companies to integrate tools for innovation as part of the company's social Intranet tool, not as a separate functionality. Therefore, a unified portal with all the functionality, such as proper search, links to other tools (calendar, e-mail, and project databases), integrated into it would be ideal.

Juholin (2008, p. 63) agrees with Ojala and Pöysti, and encourages companies to invest in portals and especially discussion forums, which promote open and two-way communication within an organization. There are different types of forums available – white boards for working teams, project forums, peer forums, official forums for meetings, social forums for more casual discussion, and so on. Humala (2007, p. 11) on the other hand, reminds that web discussion with anonymity makes brainstorming and providing criticism towards the organization easier for employees.

4 RESEARCH DESIGN AND EMPIRICAL ANALYSIS

4.1 Case Company Introduction and Structure

Tellabs Inc.

Tellabs, listed in NASDAQ, develops telecommunication solutions, and serves telecom service providers, independent operating companies, MSO/cable companies, enterprises and government agencies with networks in more than ninety countries around the world.

Tellabs was established in 1976 in Chicago, Illinois by Michael J. Birck. Currently, the company employs about 2 600 employees globally, and about 1 500 Tellabs employees are located outside the United States.

Tellabs' corporate and North America headquarters is located in Naperville (Chicago), Illinois, USA. Europe, Middle East and Africa (EMEA) region headquarters is located in High Wycombe, UK (London area), Asia Pacific headquarters is located in Singapore, and Latin America and Caribbean region headquarters is located in São Paulo, Brazil.

Tellabs is a medium-sized telecommunications company that can innovate more quickly than giants. On the other hand, with experienced engineers, established customer relationships and a solid financial foundation, Tellabs gets ahead of start-ups in the industry.

Tellabs' customers

Tellabs has strong relationships with telecom service providers worldwide including: Alestra México (Mexico), Astelit (Ukraine), AT&T (United States), Bharti Airtel (India), China Unicom (China), Clearwire (United States & Spain), General Dynamics (United States), Globe Telecom (Philippines), Korea Telecom (Korea), MegaFon (Russia), MTS (Russia), NetCom (Norway), NTT Communications (Japan), Optimum Lightpath (United States), Orange (multiple EMEA locations), Swisscom

(Switzerland), Telecom Italia (Italy), Telefónica (multiple Latin America locations), Telmex Chile (Chile), Telstra (Australia), TIME dotcom (Malaysia), tw telecom (United States), Vodacom SA (South Africa), Vodafone (multiple EMEA locations), Verizon and Verizon Business (United States), VMS MobiFone (Vietnam).

Tellabs' organizational structure

Tellabs has a global organizational structure, which is illustrated in the Figure 7. The highest level in the organization is split into five different organizations: Finance, Global Sales and Services, Global Products, Global Operations, and Legal and Human Resources.

In the case of the Mobile Routing business unit, the main communication interfaces within Tellabs are in the Sales and Services and Global Products organizations. First, Mobile Routing business unit works very closely with the other business units inside the Global Products organization: Optical, Access, and Management Systems Organization. Second, within the Global Sales and Services organization, there are five units, which work in extremely close relationship with the Mobile Routing business unit: Europe, Middle East and Africa (EMEA) Sales, Latin America Sales, Asia Sales, North America Sales, and Professional Services.

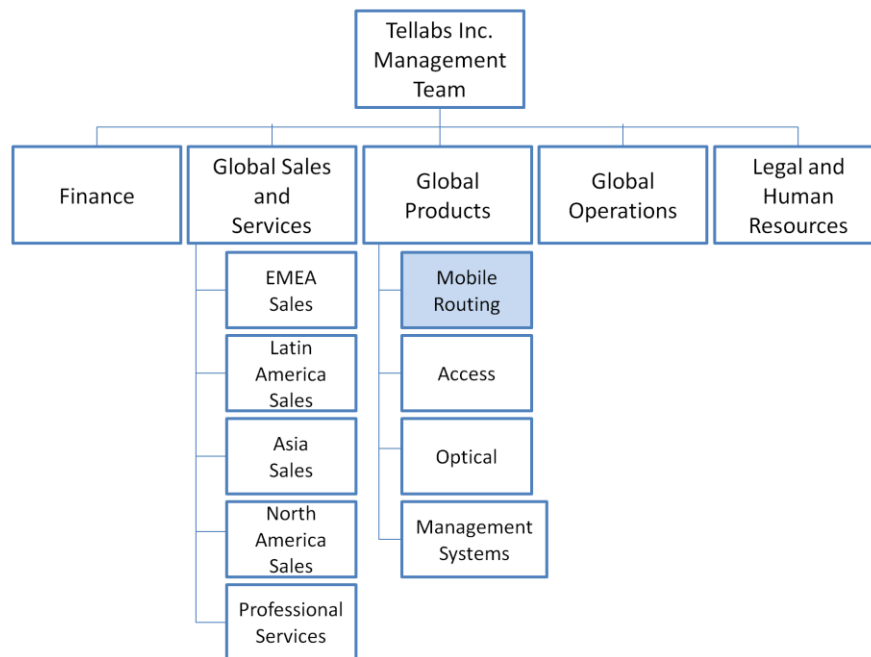


Figure 7: Tellabs organizational structure

With the organizational structure at Tellabs, the cooperation between various business units, sales regions and services organization is crucial to enable best possible customer service on a global basis. Improving efficient communication in terms of sharing relevant content in a timely manner, providing customer feedback back to the research and development organizations, and bolstering team spirit and innovation is constantly a challenge within the Mobile Routing business unit, and also beyond the Mobile Routing business unit organizational boundaries.

The Figure 8 illustrates the communication interfaces within Tellabs for the Mobile Routing business unit. As can be seen, the Mobile Routing business unit needs to communicate on a regular basis proactively with eight different target audiences, which all have their own priorities and needs for information.



Figure 8: Communication interfaces within Tellabs for the Mobile Routing business unit

The Mobile Routing business unit employs over 400 employees globally with the main locations in Espoo in Finland, Santa Clara in the USA, and Naperville in the USA. The majority of the Mobile Routing personnel are focused on research and development. In addition, the business unit also includes directly customer-facing organizations, such as product marketing and market management.

Tellabs' product portfolio

The Mobile Routing business unit is the largest business unit within Tellabs. It develops Tellabs' mobile and business solutions, and specifically the following systems:

- Tellabs® 8600 Smart Routers
- Tellabs® 8800 Smart Routers
- Tellabs® 9200 Smart Routers
- Tellabs® 8100 Managed Access System

In external marketing communication, Tellabs promotes its systems bundled in a concept of a solution. One solution contains multiple systems. The systems developed in the Mobile Routing business unit are the heart of Tellabs® Mobile Backhaul Solutions. Additionally, regardless of the word mobile in the business unit's name, the systems developed in the Mobile Routing business unit play a role also in the fixed Business Services Solutions.

The Tellabs Mobile Backhaul and Business Services Solutions include in addition to Mobile Routing systems, a network management system called the Tellabs® 8000 Intelligent Network Manager. This is a key competitive differentiator to Tellabs against competitors in the mobile and wireline markets. Even though the Tellabs® 8000 Intelligent Network Manager is a key component of both solutions, it is developed in a separate business unit within Tellabs. In order to provide seamless and coherent solutions to Tellabs' customers beyond the organizational boundaries, the cooperation and communication are in key role.

4.2 Research Methodology

The Intranet communication has been researched to some degree (Damsgaard and Scheepers, 2000; Duane and Finnegan, 2003), but not recently. Both of these researches represent the time before the social media revolution, which also created Facebook. Also, the role Intranet plays in the everyday life of the employees, has not been researched in large scale.

The empirical part of this research studied the Intranet's role. The goal was to identify how the effective social Intranet can improve knowledge sharing, bolster innovation, and improve team spirit for intra- and inter-organizational target audiences.

The interviews were theme interviews on the research topics. In this research, the goal was to exploit the opportunities the qualitative research offers by enabling to bring up the diversity of the reality (Hirsjärvi et al., 1998, p. 161). The interviewees had the opportunity to express their innovative ideas, and feedback openly, and in a diverse manner. Therefore, as stated by Hirsjärvi et al. (1998), this research followed the typical characteristics of the qualitative research:

1. A research is by nature collecting information comprehensively, and information is collected in natural environment.
2. In qualitative research, human interaction is appreciated as a method to collect information, and therefore the researcher trusts his/her observations based on the interviews.
3. The inductive analysis is used in the research. This means that the basis for the research is not to test a theory or hypotheses, but rather review the data in a diverse and detail manner.
4. It is recommended to use methods, which bring out insights and opinions of the interviewees.
5. The sample for the research is selected purposefully, not based on random selection.
6. The research plan is shaped up as the research progresses.
7. All cases are considered as unique cases, and therefore the data is interpret accordingly.

The empirical part of this research follows these characters of the qualitative research. And the research results should be considered keeping these characteristics in mind.

Empirical delimitations

The empirical part of the research is limited to cover only the internal audiences at Tellabs: the Mobile Routing staff as an intra-organizational audience and selected target audiences within Tellabs as inter-organizational audience.

From an internal communication aspect, the empirical research will focus solely on social Intranet platform. No other internal communication vehicles will be included into this research.

Lastly, even though there are various Intranet platforms, such as Confluence, Liferay, Alfresco, Drupal, Oracle Webcenter Suite, and web publishing systems, such as EPIServer, Crasmanager, Innofactor Prime, Joomla and Wordpress, available in the market, the proposals of this research are limited to include only Microsoft Sharepoint. The reason for this is that Tellabs has already implemented Sharepoint as the only Intranet platform on a corporate level.

4.2.1 Research Interviews and Interviewee Profiles

The empirical research was conducted by interviewing Tellabs' employees receive candid feedback from employees from different teams and geographic locations within the Mobile Routing business unit on the current Intranet, and also on the future capabilities. Similar qualitative interviews were conducted with the employees of selected target organizations in the Management Systems Organization, Sales, and Professional Services. The selection of the organizations was done based on the communication interfaces of the Mobile Routing Business unit.

Intra-organizational interviews

There were in total of eight interviews conducted within the Mobile Routing business unit from the following locations: Espoo, Finland (three interviews), Santa Clara, USA (three interviews), and Naperville, USA (two interviews). The interviews within the Mobile Routing business unit provide intra-organizational point of view for the research results. The organizational split within the Mobile Routing business unit is following:

Finland: one interviewee from research and development organization, one interviewee from product marketing team, one interviewee from program management office

Santa Clara: three interviewees from research and development organization

Naperville: one interviewee from market management team, and one interviewee from product planning and lifecycle management team

Inter-organizational interviews

Additionally, there were in total of seven empirical interviews conducted with selected target audiences within Tellabs to provide the inter-organizational point of view for the research. The target organizations were selected to fit the close cooperation focus with the Mobile Routing business unit, and therefore the organizations included into the interviews are:

Sales: two interviewees (one account manager and one sales support engineer)

Management Systems Organization (MSO): three interviewees (one marketing manager, one group manager and one staff engineer)

Professional Services: two interviewees (one group manager and one project manager)

The Table 3 presents the profiles of the interviewees including the organization, and all the basic information asked in the interview form.

Table 3: Interviewee profiles and basic information

Inter- vie- wee	Role	Organization	Team	Location	Sex	Uses the Mo- bile Ro- ut- ing Intra- net	Regular inter- action with the Mobile Routing organiza- tion
P1	Staff Product Manager	Mobile Routing	Product Marketing	Finland	Fe- male	Yes	Yes
P2	Manager, Engineering	Mobile Routing	Tellabs 8600 Research & Develop- ment	Finland	Male	Yes	Yes
P3	Senior Manager, Engineering	Mobile Routing	Program Managem- ent Office	Finland	Male	Yes	Yes
P4	Staff Engineer	Mobile Routing	Tellabs 8800 Research & Develop- ment	Santa Clara, USA	Male	Yes	Yes
P5	Staff Engineer	Mobile Routing	Tellabs 9200 Research & Develop- ment	Santa Clara, USA	Male	Yes	Yes
P6	Staff Engineer	Mobile Routing	Tellabs 9200 Research & Develop- ment	Santa Clara, USA	Male	Yes	Yes
P7	Staff Product Manager	Mobile Routing	Market Managem- ent	Napervill- e, USA	Male	Yes	Yes
P8	Group Product Manager	Mobile Routing	Product Planning and Lifecycle Managem- ent	Napervill- e, USA	Male	Yes	Yes
P9	Senior Sales Support Engineer	Sales	Partner Sales	Finland	Male	No	As needed
P10	Account Manager	Sales	Europe Sales	Sweden	Male	No	As needed
P11	Marketing Manager	Management Systems Organization	-	Napervill- e, USA	Male	Yes	Yes
P12	Staff Engineer	Management Systems Organization	-	Finland	Male	Yes	Yes
P13	Group Manager	Management Systems Organization	-	Finland	Male	No	Yes
P14	Group Manager	Professional Services	-	Finland	Male	No	As needed
P15	Project Manager	Professional Services	-	Finland	Male	No	As needed

All interviews were conducted either in person or by phone in November 2012. The in person and phone interviews were considered as the most efficient and useful way to conduct the interviews. The interviewees have good opportunities to express themselves more openly and emancipated. Also, in person and phone interviews enable the interviewer to make observations on the interviewee.

4.2.2 Research Questionnaire Themes

The starting point for the research was that the current Intranet, which was used nearly by all interviewees (illustrated in Table 3, in the column “Uses the Mobile Routing Intranet”), needs to be enhanced to include more social Intranet capabilities to improve knowledge sharing, innovation, and team spirit. The current Mobile Routing Intranet has been in use since July 2012. It doesn’t provide the tools to perform social those functionalities. The fact that the majority of interviewees have been using the Mobile Routing Intranet provides fruitful foundation to brainstorm future needs knowing the current design and infrastructure. On the other hand, the employees who haven’t used the current Intranet before, all from inter-organizational teams, provides an opportunity to think and innovate “outside the box”, not limited to the current site structure or design.

Interview situations

According to Hirsjärvi et al. (1998), it is typical for theme interviews that the themes are known prior to the interview situation, however, the individual questions and their order can change from one interviewee to another. In the case of interviews conducted in this research, all the questions were asked in exactly the same order and form, which are documented in Appendix 1. It may be that an interviewee wanted to add something on a previous question after he/she had already started answering the following question, but in those cases the interviewer simply added the answer next to the question it was intended to.

All interviews were conducted as individual interviews, so the interview situation was similar to all participants. All the interviews, whether conducted by phone or in person, lasted approximately the same time. The shortest lasted for 15 minutes, and the longest lasted for 30 minutes.

Interview questions

The structure of the interview form was divided into three main themes to reflect the research areas:

- 1) Knowledge sharing (for both intra- and inter-organizational perspectives)
- 2) Innovation (for both intra- and inter-organizational perspectives)
- 3) Team spirit (for both intra- and inter-organizational perspectives)

The research questions on the knowledge sharing part examined what kind of information the interviewees have been looking for from the Intranet, what information is missing, and lastly, what social Intranet functionality they would find beneficial in sharing information.

The innovation research questions investigated if social Intranet could be used for innovation within the business unit and outside organizational boundaries, and what social Intranet capabilities would foster innovation.

The team spirit and breaking down silos part of the questionnaire focused on what characteristics in general in the behaviour would improve team spirit, and with what capabilities this could be achieved.

Finally, the last research question was an open question for feedback, comments, ideas, and so on. The interview form can be found in Appendix 1.

4.2.3 Research's Reliability and Validity

The reliability of the research is based on the expectation to receive same research results when conducting the research time after time. This comes from quantitative research methods, and unfortunately applying the same reliability expectation to qualitative research is weak. Therefore, in the qualitative research, the best way to measure the reliability is to observe how transparently the researcher communicates the research process, including preparations, information collection, and analysis (Stenbacka, 2001, p. 552).

Hirsjärvi et al. (1998) points out that the reliability in the qualitative interview research is weakened by the fact that the interviewees may want to provide socially correct answers.

In this research, the reliability was improved by conducting the research with anonymity. This motivated the interviewees to openly express their feedback and ideas.

The goal of the empirical part of the research was to receive feedback from the users on the current capabilities and usability, and their requirements and needs for the next-generation social Intranet platform.

The research sample is limited, although it represents all geographic locations and teams within the Mobile Routing business unit. Also, the inter-organizational interviewees were selected from the organizations, which already currently are in close cooperation with the Mobile Routing business unit.

The gender distribution in this research was heavily dominated by males. There was only one female interviewed and 14 males. The gender split is illustrated in Figure 9.

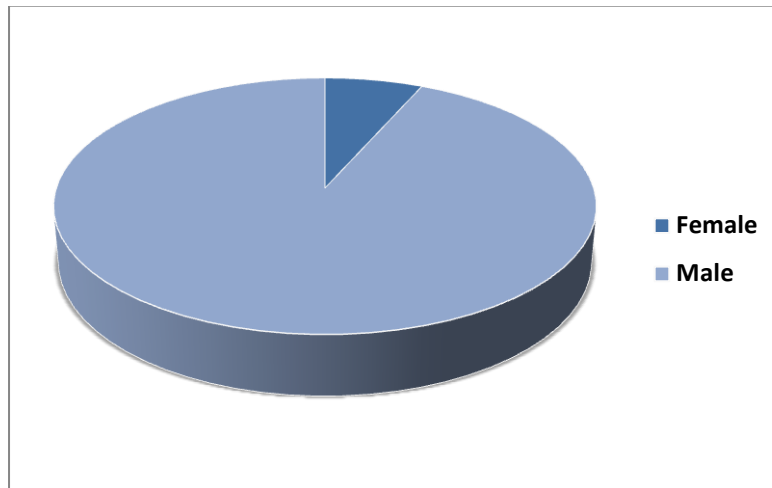


Figure 9: Gender split in the research

Even though the gender distribution is heavily dominated by males, it represents well the gender split with the telecommunications industry and in the case company.

In this study, the main research question focuses both on intra- and inter-organizational target audiences. Therefore, in the Figure 10, the distributions of intra- and inter-organizational interviews are presented. The sample represents both target audiences in a balanced manner: there were eight intra-organizational interviews, and seven inter-organizational interviews.

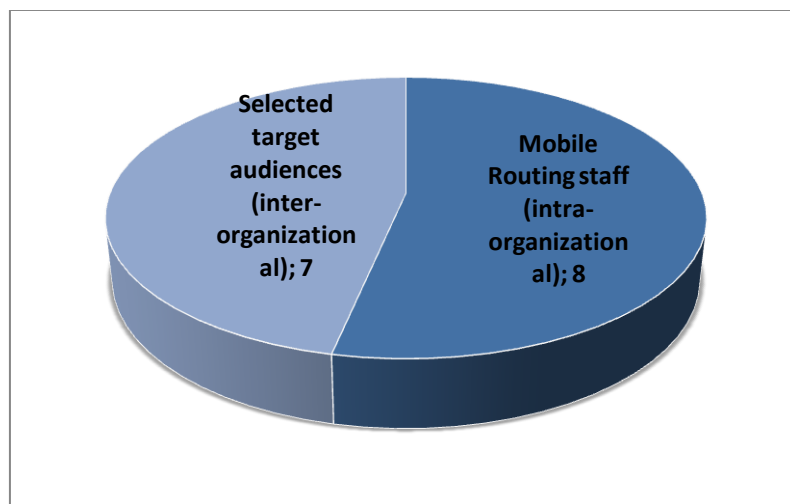


Figure 10: Intra- and inter-organizational distribution in the research

When evaluating the representative sample of the teams interviewed within the Mobile Routing business unit, the split includes all major teams. The teams for each interviewee are listed in Table 3 (Team information) and illustrated also in the Figure 11. The seven teams include evenly: Product Marketing, Tellabs 9200 research and development, Tellabs 8800 research and development, Tellabs 8600 research and development, Market Management, Planning and Lifecycle Management, and Program Management Office. The detail information on the intra-organizational interviews can be found in Table 3.

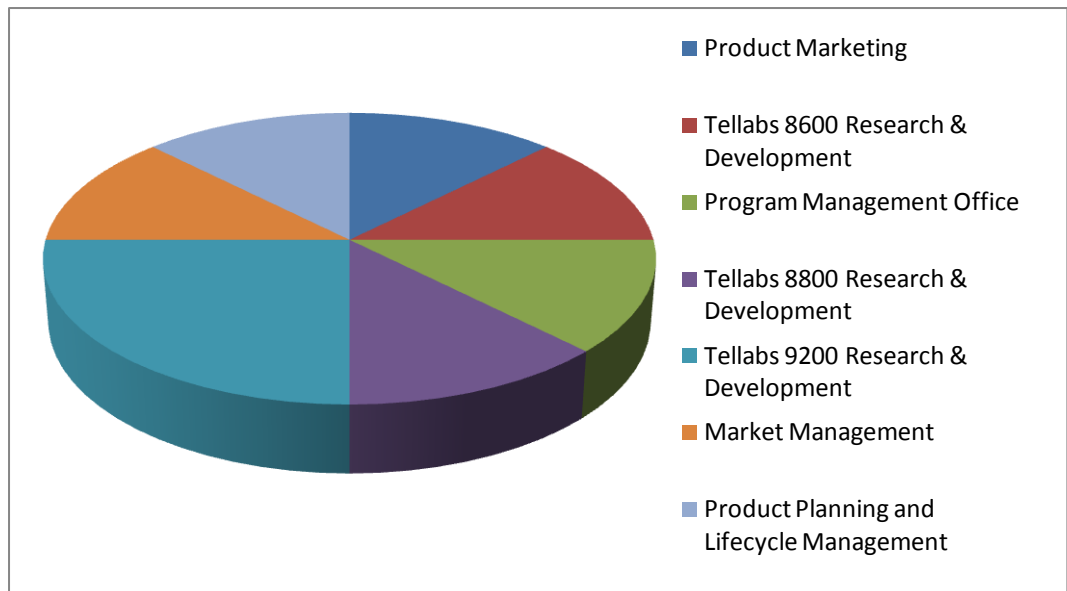


Figure 11: The intra-organizational interview split in the research

When evaluating the inter-organizational interviews, and which organizations were selected into the research, and how many representatives there are from different organizations, the Figure 12 shows the distribution, which is relatively even. There were three interviews conducted with the Management Systems Organizations, and two with Sales, and finally two with Professional Services. The reason for this organizational split is that the Mobile Routing business unit and Management Systems Organization work very closely on all customer

projects. The detail information on the inter-organizational interviews can be found in Table 3.

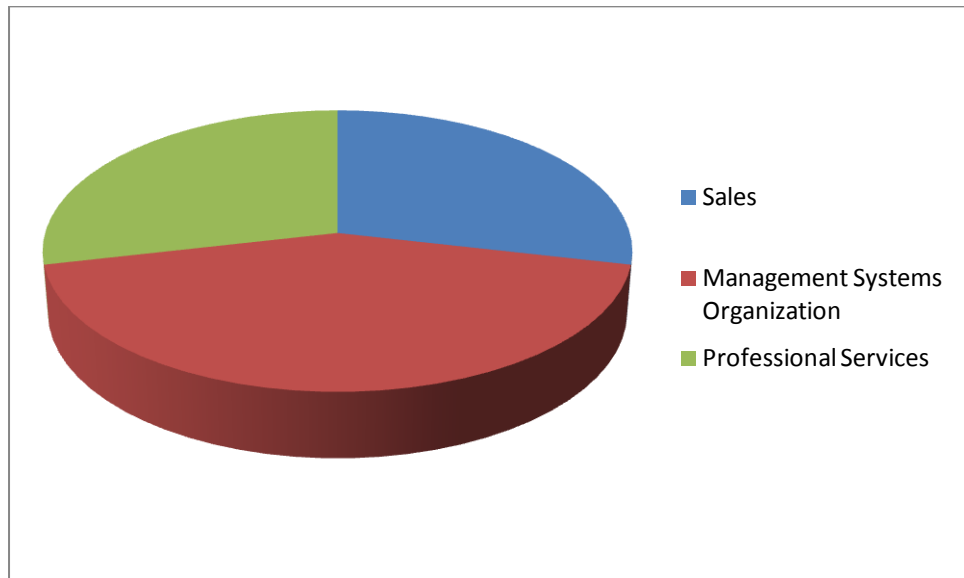


Figure 12: The inter-organizational interview split in the research

From geographical point of view, not all Tellabs locations can be covered with a sample of 15 employees. On the other hand, the geographic split is well represented in the intra-organizational interviews. There is a bigger gap in intra-organizational interviews from sales point of view. Tellabs' sales organization is a global, and to receive a representative sample, it should have included more interviewees from all sales territories. Figure 13 shows the geographical distribution of this research.

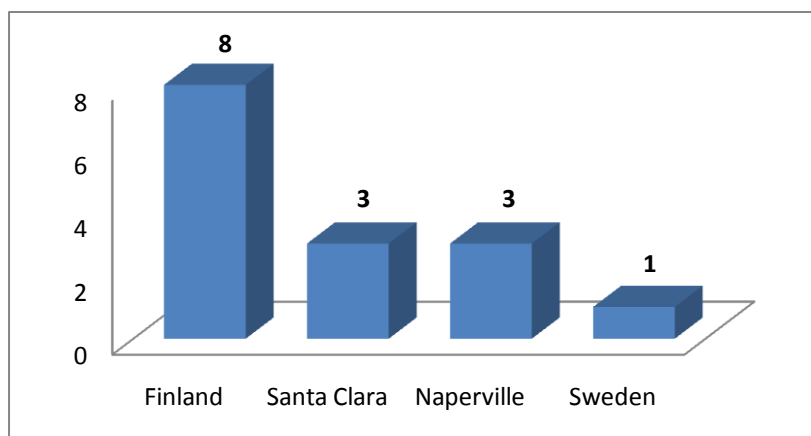


Figure 13: Geographical distribution of the research

All interviews were done by one person, so taking down the responses from all interviewees were done in a consistent manner. The validity of the research is based on selected, but versatile theoretical literature, and empirical interviews, which were conducted in a consistent and careful manner.

4.3 Effective Social Intranet for the Case Company

The interfaces and roles of the effective social Intranet for the case company are illustrated in Figure 14. There are various target audiences within the Mobile Routing business unit (intra-organizational audience) and in other selected organizations (inter-organizational audience) involved, and the effective social Intranet should address the needs of knowledge sharing, innovation, and team spirit for all these audiences in an optimal way.

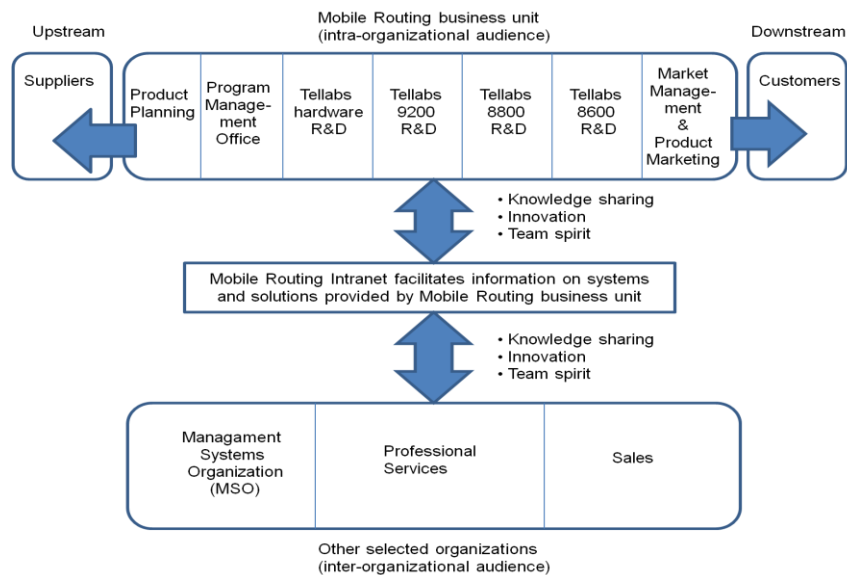


Figure 14: The interfaces and roles of the effective social Intranet for the case company

Naturally, the information shared via the effective social Intranet will also be used upwards towards suppliers, and upwards to customers. The

current social Intranet platform should be developed to a next level in order to achieve the communication needs.

4.3.1 Current Status of the Intranet

The current Mobile Routing Intranet was established in July 2012. All Mobile Routing personnel have access to the Intranet automatically. In addition, there are also some individuals who have an access to the site from other Tellabs' organizations. They have requested the access proactively.

The current Intranet was designed with minimal effort, and therefore the functionalities are also very limited. The site includes currently the document repository function with diverse navigation structure. It also includes Mobile Routing blogs, which are published at the site and send by e-mail to all Mobile Routing employees on a weekly basis. Finally, the homepage features news, but unfortunately there are limited amount of news available, which complicates refreshing the homepage. In all together, the current Intranet is old-fashioned, pretty static, semi-centralized in terms of administrating, and lacking all social Intranet features.

Due to the fact that the Mobile Routing business unit is a truly global, the role of the Intranet is even more important. From inter-organizational point of view, also all other organizations interacting with the Mobile Routing organization are spread around the world.

The importance of the Intranet becomes even more crucial as the communication on a global level within the Mobile Routing business unit is currently handled via e-mails, Intranet site, town hall meetings (informative meetings with LiveMeeting software), in-person meetings, conference calls and video conferencing. The Intranet provides a single communication vehicle, which is capable of quick, mass communication. And if Shade et

al. (2010) are right, Intranets will also be used for emergency communication. In Mobile Routing's case, the Intranet would be a critical communication vehicle.

There has been no usability testing done for the current Intranet, except this research. And as recommended in the theoretical part of this study, usability tests and feedback should be collected from the users in a regular manner to be able to develop the site.

The current Intranet was built on Sharepoint software. It is the only corporate-wide Intranet tool at the case company. Therefore, as goal is to improve the current Intranet site to develop on the next level, the goal would be to keep the current Sharepoint software and make fundamental changes to provide more user-friendly and content-rich Intranet to the users.

4.4 Knowledge Sharing in Social Intranet

With the limitations and opportunities, documented in previous chapters, in mind this research investigated the information the users have been looking for from the Intranet, what information is missing, and what capabilities would bring the current Intranet to the social Intranet era. Naturally all this was researched from the perspectives of knowledge sharing, innovation, and team spirit like stated in the research sub-questions.

There was no difference between the intra- and inter-organizational interviewees in answering the question on what kind of material they have been looking for from the current Mobile Routing Intranet. All respondents had been looking for: product marketing presentations, program status and updates, competitive information and analysis, weekly blogs, organization charts, and technical information on products (such as product specifications, features, and scrum team information).

Naturally, the five inter-organizational respondents, who haven't used the current Intranet before, were not able to provide answers on this question. Instead, they answered the question by describing the information they would require most likely from the Mobile Routing team in order to better do their own job. The answers from these five interviewees were along the same lines with the other interviewees: product presentations, program status and updates, and technical information on products (such as product specifications, and features).

Content gaps

None of the respondents identified any major information gaps in the document repository on the Intranet; however the respondent P4 from the Mobile Routing team mentioned that currently there is very limited information available on the Tellabs® 8800 Smart Routers.

From the content point of view, the major criticism was identified on usability matters. The interviewees P1, P2, P3, P6, and P7 from Mobile Routing team complained about the poor search functionality and lack of consistency in information structure for different systems and different areas of the Intranet. P11 from the Management Systems Organization criticized the lack of contact details for the authors.

The P1 respondent from Mobile Routing team expressed that very commonly she faces technical challenges when uploading the content on the Intranet. Additionally, P9 respondent from the Sales organization highlighted that concept-level information available is extremely limited after receiving an access to the Intranet right before the interview.

Social Intranet functionalities

When focusing on the functionalities of social Intranet, and which social Intranet capabilities would have a positive impact on knowledge sharing,

all the respondents echoed exactly the same proposals for new functionalities:

- short videos – especially on marketing purposes (P2, P3, P4, P5, P6, P7, P8, P9, P10, P11)
- Facebook-style, spontaneous discussion on knowledge sharing (P2, P3, P5, P7, P11, P14, P15)
- short, snappy news feed, status updates, program gate news, which everyone would be able to publish (all respondents)
- chat/discussion group (all respondents)
- wikis (all respondents)

Analysis on knowledge sharing

The current content on the Intranet seems to work nicely in general for the target audiences. There needs to be more improvement effort on chat/discussion boards, Facebook-style spontaneous discussion space, short videos, wikis, and news feed section in the homepage of the Intranet.

There are additional challenges in making sure that the audiences are able to find the information easily, and the promotion of fresh content would be available on the homepage. In other words, the usage level of the Intranet needs to be increased to ensure that people would find the social Intranet and all its capabilities and content.

Additionally, the content targeted for a large audience should be presented in short, snappy and easy to digest at a glance style. Also, it would be beneficial for anyone in the organization to publish and promote knowledge easily, for example, uploading a short description and a link to the content on the homepage or to a certain, highlighted area of the page, where the content is currently available.

One new idea, taken from another communication vehicle at the case company, is to start promote the Mobile Routing News on a regular basis by e-mail. P9 from the Sales organization specifically mentioned the daily news e-mails, where all the main news at the case company in Finland were listed and e-mailed to everyone. According to P9: *“I always have my e-mail open, and it is so easy to see with one glance what is going on instead of navigating to some specific website.”*

The social Intranet can help knowledge sharing for providing tools to help employees to share their insights and information, but also from company structure point of view, where social Intranet increases the knowledge sharing aspect in the company culture. The only aspect, which is missing at the moment as per theoretical part of this research, is the process aspect. If developed to improve that aspect also, the company processes could be shared via social Intranet, and potentially even requested feedback and improvement ideas from the target audiences.

4.5 Innovation in Social Intranet

The innovation aspect of the social Intranet is best to examine separately for intra- and inter-organizational target audiences as there were some differences between these two groups.

Intra-organizational responses

From intra-organizational point of view, the respondents from the Mobile Routing team shared all the opinion that social Intranet could play a major role in fostering innovation. Especially within the business unit, information on customer challenges, product release content, timetables, competitors, and so on should be shared more openly, which then could increase innovation. The entire team mentioned if not all, but at least some of these details in their responses.

Interestingly, the majority of respondents remarked that the company culture still doesn't fully support the open communication environment to innovate via social Intranet. The Intranet should urge on sharing information, and brainstorm on innovative solutions. However, currently not too many people take part in the discussion or comment on blog postings, so the respondents expressed their concerns on getting everyone to participate – at least in the discussion. Especially P2, P3, and P6 highlighted this important fact. By company culture, the respondents referred to the company culture of the entire case company, not only on the business unit's company culture. They acknowledged that the business unit is on the right path to increase innovation, but the case company doesn't support the initiatives enough.

Interestingly, respondent P4, who works in the Tellabs 8800 research and development organization in Mobile Routing business unit, made a comment that even the Optical business unit could potentially benefit from sharing a social Intranet with the Mobile Routing business unit.

All intra-organizational respondents identified discussion groups and chat rooms as the most appropriate vehicle for innovation. Respondents P1, P2, P3, P5, and P7 proposed to have weekly discussion topics on certain themes, for example synchronization, or directly on innovation. P3 added that these discussion topics should be started by an administrator as there is clearly a lack of attendance otherwise. Also, customer-specific innovation topics were proposed.

Inter-organizational responses

On the inter-organizational point of view, all respondents felt that sharing information openly on the Intranet would foster innovation. Here, the inter-organizational team agrees with the intra-organizational team.

Now, both target audiences felt that company culture plays a major role in fostering innovation. The difference between the two target audiences was

that intra-organizational target audience considered that their business unit was making an effort to increase innovation. However, for the respondents from inter-organizational target audience, the effort was simply on the Mobile Routing side, not within their own organizations. In other words, they saw that the Mobile Routing business unit was making a one-sided effort to improve things, without any help or commitment from other organizations. Despite that, the respondents in the inter-organizational target audience were eager to get involved with the activities in the Mobile Routing business unit.

All inter-organizational respondents mentioned that the customer requirements often reach over organizational limits, and it may be that one piece of information from the Mobile Routing organization could spark an innovation within Services, Sales, or Management Systems Organization as these organizations often share common customers.

All inter-organizational respondents mentioned also the discussion groups and chat rooms as the main vehicle to increase innovativeness. The respondent P11 and P13 identified another capability to increase innovation: “submit an idea” box or “suggestion box”. These respondents also remarked that the ideas submitted need to be followed through and reported back to the personnel. Naturally, a reward of some kind would increase the interest. Potentially, there could be also a contest on innovation. P11, P13, P14, P15 from the Management Systems Organization and Professional Services highlighted the importance of rewarding system in place for innovation.

Analysis on innovation

The proposal would be to establish an idea wall, a discussion group or innovation forum, where employees can openly share their ideas, and especially discuss on various matters. In the beginning, it would make sense to encourage the participation by starting weekly discussion on versatile topics around the Mobile Routing innovations. It is worth noticing

for that the discussion topics need to be forward-looking and innovative for a research and development organization.

Creating discussion groups and suggestion boxes would be an easy opportunity to provide a tool for personnel to submit their proposals. In addition, Sharepoint offers functionality to send an e-mail to a discussion board without actually going into the social Intranet and submitting your ideas and/or comments like that.

For employees, who are not comfortable participating into the discussion on chat rooms, it would be beneficial to create a suggestion box with a reward for each submission, which will be taken forward. Follow-up and reporting mechanisms need to be created in order to follow through the entire lifecycle of suggestions.

Also, the possibility to introduce various rewarding systems (monetary and non-monetary) should be investigated in more detail. It may be that due to the global nature of the organization, the best option would be to introduce a system, which supports local rewarding instead of centralized rewarding system.

4.6 Team Spirit in Social Intranet

One of the main challenges for the Mobile Routing business unit is the decentralized organization structure. All intra-organizational respondents felt that social Intranet plays a major role in improving team spirit and breaking down organizational silos.

Social Intranet is the only global communication vehicle targeted to the entire personnel with the Mobile Routing business unit. All other internal communication vehicles are limited to geographically, project-based, or organizationally. Therefore, the role of the global social Intranet is even more important.

Intra-organizational responses

To encourage the intra-organizational team spirit, it was proposed by the Mobile Routing respondents (P1, P2, P3, P5, and P7) to share success stories on solving customer challenges in the social Intranet.

P2, P3, P4, and P8 highlighted the importance of the motivation and encouragement provided by the leadership team. However, they also made a comment that the current leader of the organization is doing a great job in leading by example. And related to his way of leading by example, all these respondents mentioned the weekly Mobile Routing blogs, and how important it is to keep them up and running. The blogs were highly valued, and the fact that the blogs are distributed by e-mail was considered as a huge bonus.

The respondent P2, P4, P5, and P6 within the Mobile Routing business unit and working in research and development felt that team rooms for project-based or project-based discussions should be established. That may not increase the team spirit on a general level, but it would make a huge deal in boosting team spirit on a project level.

Interestingly – not surprisingly though - the biggest challenge on raising the team spirit within the Mobile Routing team was the lack of attendance. All intra-organizational respondents felt the same way. The respondents P1, P2, P5 and P8 expressed their concerns that people were too busy with their own work, and didn't have enough time to communicate with each other on a global basis. Therefore, it was considered absolutely crucial to show positive impacts that proactive attendance has on team spirit and more open communication.

The respondent P1 desired to see more fun items on the Intranet. She felt that the case company has a lot of different websites and tools in place in

general, but all the fun items, which the users could do just to take a break from the regular work, are badly needed.

Inter-organizational responses

On inter-organizational aspects, all the respondents felt strongly that enabling other organizations to see the Mobile Routing Intranet discussions and content would already, as a starting point, increase the team spirit and break down silos. According to respondents P9, P11, P15, especially in a case of common customer project, sharing information would be beneficial.

Since the other organizations are not regular users of the Mobile Routing communication tools, it was highly encouraged to put more effort on the search functionality to ease the identifying of information and the relevant discussions. The respondent P11 and P12, who already use the Intranet, felt that the search should be improved. The other respondents within the inter-organizational target audience claimed that the primary way of looking for content in a website is the search, and therefore an effective search would help the usability remarkably.

The respondents P9 and P14 mentioned that they still miss the “flea market” functionality, which was featured in the old Finland Intranet. They continued that functionality like that or something else, which is also targeted for fun, should be implemented.

Analysis on team spirit

Team spirit is not solely dependent on more effective social Intranet. The respondents felt that fun things are needed badly. Nowadays, everyone is so focused on business-critical items, and fun items are easily forgot. Fun items could be anything – the most important thing is that everyone in the team is able to participate. As an example, the social Intranet could feature weekly games, quizzes, and competitions.

The social Intranet proposal for improving team spirit with the new capabilities would be first to continue publishing the weekly blogs, and encourage people to comment on those. Second, it would be ideal to have one common discussion platform for employees to discuss on anything they want. Truly more open communication on successes, failures, quick news, and so on would be appreciated. The discussion could be informal, more Facebook-style discussion with short opinions, comments and proposals – without the official, corporate tone of voice.

Sharepoint enables different types of quizzes and surveys. With a re-design of the Mobile Routing Intranet homepage and establishing Sharepoint's InfoPath functionality into it, the business unit could start a new tradition of a weekly question.

5 CONCLUSIONS AND FURTHER DISCUSSION

The aim of this study was to create a normative model for an effective social Intranet for a global company, which supports knowledge sharing, innovation, and team spirit. The theoretical literature specifically on this topic is limited, and therefore the literature framework needed to be summarized from various, related topics to provide an extensive literature review.

The aim for the theoretical part of this study wasn't to provide one ideal model for the social Intranet. The wide theoretical information on the various aspects of social Intranet served as a basis for the empirical part of the study.

On the empirical side, the aim of this study was to examine what the normative, effective social Intranet solution is for Tellabs Mobile Routing business unit in terms of:

- sharing knowledge more openly and effectively
- fostering innovation
- improving team spirit and positive employee experience

Even though an effective social Intranet can't guarantee increased knowledge sharing, enhanced innovation, or improved team spirit, it can enable all of these. Specifically for the normative, effective social Intranet solution for the Mobile Routing business unit, empirical interviews were in key role.

In this thesis, I presented eight recommendations to the current Mobile Routing Intranet to change it to social Intranet, which serves the aspects of knowledge sharing, innovation, and team spirit. The recommendations include focus on usability, search functionality, homepage redesign, and user training. In addition, fun things should be implemented to attract the users to the Intranet, and discussion groups.

5.1 Recommendations for the Case Company Social Intranet

Based on the theoretical and empirical research, eight improvement recommendations are made for the Mobile Routing social Intranet:

1. Usability

Weekly tips

The respondents had experienced two different types of challenges: Technical challenges when uploading the content and uncertainty of where to find certain information

On top of these in some cases, it may be that the employees are not too familiar with Sharepoint as a tool and how it works, which may cause some hesitation to using it. Therefore, it would be useful to publish weekly tips on the Intranet homepage on Sharepoint usability, content, or functionality and encourage employees to look for certain content available, new functionalities, and other items worth noticing for. These tips should be located in a consistent manner in a centralized location on the Intranet.

Consistent structure

Consistent structure would make it easier for the user to navigate within the site, and find information. The current Mobile Routing Intranet has inherited some content and sites from previous organizations, and it would be rather time-consuming to start changing the structure, but on the other hand, based on the user feedback, it is absolutely worth doing for. Surely, there is also a lot of old and outdated content in this heritage, so it would be useful for both the users and the content owners to review it thoroughly and update it.

Contact details for the authors

The Mobile Routing Intranet contains a lot of different pages and sites, which then break into several different areas. It would be more user-friendly to publish contact details for the author, for example in the bottom of the page.

2. Search

Proper search functionality was identified as crucial by all respondents and it also was highlighted in the previous literature. Therefore, it is imperative to improve the current search functionality. It would be ideal to add Sharepoint's search server, FAST search server (McKenna et al., 2011, p. 498), and query server to the current infrastructure, in addition to supplement better keywords and metadata to documents, and implement RSS functionality on the Intranet. The most important thing is to make sure the user experience is pleasant to make sure the user will visit the site again. Also, it would be helpful to provide extensive contact details for whom to contact when the user faces challenges on the search page.

3. Blogs

The existing Mobile Routing blogs, which are published online on the Mobile Routing Intranet and distributed also by e-mail to target audiences, were highly appreciated and especially the e-mailers were thanked. Therefore, it would make sense to continue producing the weekly blogs in a same fashion as before and make sure the blogs will be developed as the organizations develops.

4. Fun items

It would be ideal to implement a weekly poll, in which the questions could differ between business and casual topics. This would increase the usage of the Intranet site as promoted in the previous literature. Also, a discussion group should be established with casual topics to raise the team spirit, and finally, contest could be created on certain themes for

example on a quarterly basis with rewards. A contest could be related to business items, but implemented with a sense of humour.

5. Homepage

The existing Mobile Routing Intranet homepage requires a re-design in terms of usability. Nielsen and Krug highlighted the importance to make more effort on changing the homepage to serve users better.

The current homepage could be changed to become more user-friendly for example from the news feed point of view. Also, it would be ideal to be able to implement a functionality to highlight latest documents, functionality, or any other item important for everyone to notice for. News tip functionality could also be implemented on the homepage.

6. Discussion groups

Discussion groups for innovation and team spirit are both needed. It may well be that the employees are not too eager to start discussions, and therefore a reward of a small item could be considered at least in the beginning. Another opportunity to inspire discussion would be for administrators to start weekly discussions. It would be outstanding if the leaders and managers in the organization would have time to contribute in the discussions. That would show great example for other employees.

7. Training

Once the first improvements are implemented on the social Intranet, it would be worth considering for arranging onsite training for people who are not comfortable using the site on their own in the beginning. Training could be also arranged for content providers. Depending on the content of the training, it could be an option to produce short videos on how to do certain tasks in the Intranet.

8. Suggestion box and regular user surveys

A suggestion box could be implemented to provide a vehicle for users around the world to submit their ideas, improvement proposals, and complaints. The suggestion submissions could be related to anything on the Mobile Routing items, not limited to Intranet.

As recommended by the “Intranet gurus” – Nielsen and Krug – regular user surveys should be performed to be able to serve the target audience as well as possible. Due to the lack of resources in administrating the Intranet, a quarterly user survey would be achievable and doable.

Finally, it would be recommended to investigate further the possibility to get more user statistics on the Intranet downloads, views, and visits.

5.2 Direction for Future Research

Next level of the case company Intranet

Now that the research has been done for the next level (or phase 2) of the Mobile Routing social Intranet, it would be interesting to renew this research in a couple of years. Based on that research results, the social Intranet site could be developed again on a new level if required to serve the users in a best possible way.

Social Intranet and their impact on everyday work

When going through the previous literature, it was obvious that there is very limited number of research available on social Intranets and their impact on certain activities within the company. Naturally, social media is far more widely researched. It would be recommended to have more research conducted on especially the aspect of what impact the social Intranet has on certain everyday activities within a company (for example knowledge sharing, innovation, and team spirit). And the differences in various types of companies would be interesting to research.

The impact of cultural differences to social Intranet usage

In a global company, it would be also interesting to examine how the cultural differences impact the use of social Intranet: are local languages needed, are there any differences in the use of Intranet, and so on.

Mobile Intranet

Finally, one of the social Intranet trends is to expand Intranets on smartphones and other mobile devices. It would be engrossing to investigate the usage and the impact mobile Intranets have; whether they are used in a similar manner, and how they impact employees' behavior and expectations.

APPENDIX 1: Interview form

Interview form**Information on interviewee**

Name:

Organization:

Do you currently use the Mobile Routing Intranet?

Do you have regular meetings/calls/interaction with the Mobile Routing team [for intra-organizational interviewees]?

Information sharing

What kind of information are you looking for from the Mobile Routing Intranet? /

What kind of information would you be looking for from the Mobile Routing Intranet [interviewees, who have not used the current Mobile Routing Intranet]?

What kind of information is missing currently from the Mobile Routing Intranet [for interviewees, who have used the Intranet]?

What functionality or features would be valuable to you (blogs, wikis, videos, etc.)?

Innovation

Would sharing information more openly within the Mobile Routing increase innovation?

Would sharing information outside business unit boundaries increase innovation?

What other social Intranet activities/functions, etc. foster innovation?

Team spirit and breaking down silos

What activities/functions would increase team spirit?

What activities/functions would break down silos?

Any other comments/ideas/feedback/proposals?

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