”Too busy rowing to start the engine”
Motivation and barriers to knowledge sharing through social technologies at HULib

Veera Ristikartano
The life cycle of social technologies can be short. New tools emerge on weekly basis, promising individuals and organizations enhancing ways to share and develop ideas, to collaborate regardless of the locations or the organizational borders, and to build digital identities online. Many organizations seem to have hard time keeping up with the pace of the change. Tools that raise the interest can already be forgotten by the critical mass of stakeholders by the time they have been integrated in the core processes of the organization.

In this thesis the aim is to get to the root causes of the social technologies implementation being a challenge in the target organization, Helsinki University Library. The initial motivation for the work is to develop the communication practices of the library by unleashing the potential invested in both its employees and the social technology available. The ultimate goal of this action research project is to offer the target organization suggestion how to ease the implementation process, and how to pave the way for the future technologies.

The thesis work begins with outlining the research question and the phenomena of social media at work related context. After introducing the chosen research methodology and the target organization, both the quantitative data collected by a web survey in January 2013 and the qualitative data gathered interviewing the employees in February – March 2013 are discussed in context of current research literature. The aim is to understand how the different social technologies are currently used in the organization, and what motivates staff members and on the other hand hinders employees from sharing their knowledge through these channels.

The recognized issues are discussed in context of employees’ ICT skills, training opportunities offered, as well as the features of the tools. The research results however reveal that the motivation to share knowledge through the social technologies at hand is not just about the use of tools but about the knowledge sharing culture of the working community. Thus the results are discussed further in relation to communication practices, leadership and communication culture.

As of 2013, the struggle at HULib is still mostly with tools that have been around for a decade or more, e.g. blogs and wikis. With the suggestions in the summary chapter of the thesis the aim is to look ahead. Social media challenges not just ways of working but the organizational structures and cultures as well. This may help to explain why adopting the social technologies to be integrated part of the working processes in the library has been such a challenge. The continually emerging new tools and culture created by their users are challenging the community further.
# Table of Contents

1 Introduction .............................................................................................................................. 1

2 Enhancing Knowledge Sharing Through Social Technologies............................................. 3  
   2.1 Evolution of the Research Problem .................................................................................. 3  
   2.2 Aim of the Thesis ........................................................................................................... 4  
   2.3 Social Technologies at Work ............................................................................................ 5  
      2.3.1 Weblogs .................................................................................................................. 7  
      2.3.2 Wikis ....................................................................................................................... 8  
      2.3.3 Yammer – ”The Social Network for Organizations” ............................................. 9  
   2.4 Benefits of Social Technologies at Work ........................................................................ 9  
   2.5 Risks and Challenges in Working with Social Technologies ........................................... 11  

3 Organizational Communication ............................................................................................... 13  
   3.1 Changing Spectrum of Organizational Communication ............................................... 13  
   3.2 Organizational Culture ..................................................................................................... 15  
   3.3 Management and Leadership Communication ................................................................ 18  
   3.4 Communication and Organizational Trust ...................................................................... 19  
   3.5 Knowledge Sharing ........................................................................................................ 21  
      3.5.1 Knowledge Sharing and Organizational Culture .................................................... 21  
   3.6 Motivational Factors for Sharing Knowledge .................................................................. 22  
      3.6.1 Leadership Role on Knowledge Sharing Behavior ................................................... 24  
      3.6.2 Motivational Factors for Using Social Technology .................................................. 25  
   3.7 Social Technologies and Employee Diversity .................................................................. 26  

4 Organization in Focus .............................................................................................................. 28  
   4.1 Helsinki University Library .............................................................................................. 28  
      4.1.1 Communicating Series of Organizational Changes ................................................. 28  
      4.1.2 Library Communication Functions ......................................................................... 30  
      4.1.3 Library Staff ............................................................................................................. 32  
      4.1.4 Foundations of Professional Culture Challenged ...................................................... 34  
   4.2 Social Technologies at University of Helsinki ................................................................. 36  
      4.2.1 Training and Support for Social Technologies .......................................................... 38  

5 Conducting the Research: Methodology and Data ................................................................. 40  
   5.1 Action Research Approach ............................................................................................... 40  
   5.2 Methodological Approaches ............................................................................................ 42
5.3 Gathering Data ......................................................................................................................... 43
  5.3.1 Survey ............................................................................................................................. 43
  5.3.2 Survey Questions .............................................................................................................. 44
  5.3.3 Survey Turnout .................................................................................................................. 45
  5.3.4 Interviews .......................................................................................................................... 46
5.4 Reliability, Validity, and Limitations ....................................................................................... 47

6 Discussing the findings .................................................................................................................. 50
  6.1 Tools Used by the Library Staff ............................................................................................ 50
  6.2 Tools Used for Various Communicative Functions ............................................................... 55
  6.3 Motivational Factors for Knowledge Sharing at HULib ...................................................... 65
    6.3.1 Surveying Attitudes ......................................................................................................... 66
    6.3.2 Opportunities and Possibilities Recognized .................................................................. 68
  6.4 Barriers to the Use .................................................................................................................. 72
    6.4.1 ICT Skills ........................................................................................................................ 74
    6.4.2 Need for Collaborative Training ..................................................................................... 75
    6.4.3 Features of the Tools ....................................................................................................... 78
    6.4.4 Communication Practices in the Library ....................................................................... 79
    6.4.5 Communication Roles .................................................................................................... 82
    6.4.6 Management, Leadership, and Organizational Culture .................................................. 84
    6.4.7 Communication Culture ................................................................................................. 87
  6.5 Research Limitations and Ideas for Further Research ........................................................... 90

7 Summary and Suggestions for HULib ....................................................................................... 92
  7.1 Comprehensive, Collaborative Training for ICT ................................................................. 93
  7.2 Making Sense of the Internal Communication Practices ..................................................... 94
  7.3 Encouraging Management to Embrace Social Technology .................................................. 95
  7.4 Leading Towards Further Change ....................................................................................... 96
8 References ................................................................................................................................. 98
9 Appendix ................................................................................................................................... 103
1 Introduction

The life cycle of social media tools is short. New digital tools seem to emerge on weekly basis. Many of them never receive enough critical mass to make any difference, while some are used by enthusiasts but forgotten after a new product appears, adding value by new features or better user experience. Then there are tools like Facebook that seem to have managed to shape the entire concept of digital interaction and marketing, by offering several stakeholders added value of the data generated by its users – the consumers. By the law of digital inevitability Facebook, too, is likely to be replaced in the future by one or more new technologies that we, the basic users, are unable to imagine at the moment. This is the future of social media: we will continue to use it and usage may even increase, but the technologies themselves will recede into the background. We will still be using social media but which tools we use will matter less and what we accomplish with the technology will matter more.

Social media has proven to be a challenge to many organizations. Social media is easily enough regarded as an interesting data source promising great rewards for an organization, yet it can also be seen to pose equal risks. From the information governance point of view there are compliance issues and data privacy breaches to consider. From the communication and marketing point of view social media is often feared to leave doors wide open to brand damage to walk in. Still, ignoring, blocking or creating a too strict social media policy may put any organization at a competitive disadvantage.

As of 2013 social media already rivals email in volume in many areas as an increasingly preferred communication method for customers. This user-driven preference is not something organizations can control or overlook. While market and generational behavior largely dictate the flow of information, social media is something the organizations need to be able to adapt to. At the moment the increase in social activity is mostly down to smartphone and other mobile users, but many of the customer care processes are still planned for customers that are to visit the premises or to use a desktop for remote access.

If an organization really wants to get results from social technologies, it should begin with creating a process. The process is based on setting a goal, and then aligning the
resources and activities that the organization thinks will help you accomplish that goal. Even non-profit organizations like libraries are to take into the consideration the ROI of social media; that is return on investment: what is actually accomplished by the number of hours worked in planning, implementing, and educating the staff to be active users that are able to generate and maintain interaction. By actively using the social technologies, and also by learning from other organizations with wider experience it is possible for the organization to create best practices for monitoring, analytics, engagement, reporting, and organizational collaboration.

Helsinki University Library, HULib, is no different from any ex-government organization with a long train of tradition and industry practices that have formed themselves over the decades. Social media challenges not just ways of working but the organizational structures and cultures as well. These phenomena may help to explain why adopting the social technologies to be integrated part of the working processes in the library has been such a challenge.

In this thesis the aim is to get to the root causes of the social technologies implementation being difficult in the target organization. The work begins with outlining the research question and the phenomena of social media. After introducing the chosen research methodology and the target organization, the data are discussed in context of current research literature. As of 2013, the struggle at HULib is still mostly with tools that have been around for a decade or more, e.g. blogs and wikis, but the suggestions in the summary chapter of the thesis aim to look ahead. The continually emerging new tools and culture created by their users – the library customers and increasing number of staff members – are challenging the community further.
2 Enhancing Knowledge Sharing Through Social Technologies

In this chapter the aim is to introduce the research question this thesis work is based on. The focus of the thesis is connected to the rise of social media and how the social technologies have gradually entered the working life. The phenomena of social media and social technologies are thus discussed in historical context.

2.1 Evolution of the Research Problem

The initial idea for this thesis was born from the frustration emerging in the daily communication routines of Helsinki University Library. For the technologically orientated communication professionals, one of the key phenomena to be tackled with is the barriers the library staff encounters when trying to adopt new tools and technologies available and actively offered by the university IT and educational technology professionals. As using the tools seem challenging to many employees, it is difficult to plan and implement the integration of the technologies to the core processes of the library work.

The original research question in the draft plan of the thesis was formulated along the lines: **Why is the social technology the employer has acquired and is relatively actively supporting, not in fact widely adopted and used by the library employees?** The aim of the study at the time was to identify the motivational factors and the barriers that affect the employees’ willingness to try out and adopt new digital channels such as wikis, blogs, and social networking tools (Facebook, Yammer etc.) in their work context.

The challenges in adoption of social technology in the workplace are not exclusively about the technology, but about what people are ready to do with the tools available. It is about knowledge exchange and sense of community. People have a natural need to connect, communicate and collaborate with each other. Thus the social technology could be seen as a huge opportunity at every workplace. (Jue & al., 2010, 191-192) The actual usage, however, depends of the employees' willingness to share knowledge through these social platforms. This shift in the reasoning for the research question also meant that the focus of the literature review (see chapter 3.4) for this thesis took a
turn from the adoption of technologies towards the knowledge sharing theories. This viewing angle raised a need to understand the power of organization culture(s).

Many research findings indicate that social-oriented organizational culture (i.e. open communication, top management support, stimulus to develop new ideas, and reward systems in inducing knowledge sharing) is likely to benefit and have compatible beliefs about promoting knowledge sharing. This view is shared by Vilma Vuori and Jussi Okkonen, whose article (2012a) was encountered early on in the research process, and eventually served as a starting point when developing the research setting and formulating the actual research questions for the thesis.

Taking the organization’s knowledge sharing culture as a starting point, the following three research questions were formulated:

Q1. What motivates the employees to share knowledge through social technology?

Q2. What impedes the employees to share the knowledge through social technology?

Q3. Do(es) the organizational culture(s) of Helsinki University Library set barriers for knowledge sharing?

These motivational factors of participating and barriers for adopting and using digital technology are crucial to the penetration of any new technology supported working process in the organization. They also play a significant role in the creation of open knowledge sharing culture in the working community.

2.2 Aim of the Thesis

The present case employs the process of action research (see methodologies in chapter 5.1) to study and analyze the motivational factors and, in turn, the barriers to the use of social technology for knowledge sharing purposes within the personnel of Helsinki University Library. The aim of the thesis is to identify the key issues that affect the adoption and the use of such tools as wikis, blogs and Yammer social networking tool provided and supported by the university at the library’s working community. The data
to understand the phenomena related to the use of the social technology was collected by a survey targeted at the library staff and by interviewing a few key informants on the themes. (See chapter 5.3)

The issues of adopting and using social technology will touch the complex phenomena of knowledge sharing and management in the workplace context. The identified issues, on both individual and organizational level will be discussed in the light of improving communications, change management, and organizational culture. The focus of this study is on the internal employee communication processes of an expert organization going through significant changes both in the operation environment and in the organizational structure. The other key communication processes, e.g. with different stakeholder groups are discussed whenever appropriate.

As its end product this thesis hopes to be able to produce a set of development proposals and suggestions that would ease the use of social technology within the library. The main aim is especially to improve the employee communications in the library, and thus the point-of-view of the thesis is on the internal communication processes. It should be noted, however, that the seamless utilization of the same tools could also greatly benefit the library communication functions towards the other key stakeholders: the researcher and student communities of the university.

2.3 Social Technologies at Work

Social media has been one of the key neologisms in the first decades of 2000s. Social media refers to the means of interactions among people in which they create, share, and exchange information and ideas in virtual communities and networks. Andreas Kaplan and Michael Haenlein (2010, 61) define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content". Furthermore, Kietzmann and Hermkens (2011, 241) point out that social media depend on mobile and web-based technologies to create highly interactive platforms through which individuals and communities share, co-create, discuss, and modify user-generated content.
It introduces substantial and pervasive changes to communication between organizations, communities and individuals.

Social media can be seen an umbrella term for any software that enables social connection (Jue & al., 2010, 7). The phenomenon of social technologies enabling online communities has developed in stride with the web itself. These social technologies offer the users – both individuals and organizations – various tools to communicate and create knowledge. The practice of people collaborating on ideas and information online towards a common goal has been seen in various forms including newsgroups, e-mail, mailing lists, online forums, web-based application development tools, instant messaging, and web portals.

Kaplan and Haenlein (2009) identify the core phenomenon of all social media being the user generated content (UGC) that allows collaboration. Collaborative projects enable the joint and simultaneous creation of content by many end-users and are, in this sense, probably the most democratic manifestation of UGC. Within collaborative projects, one can differentiate between wikis - that is, websites which allow users to add, remove, and change text-based content - and social bookmarking application which enable the group-based collection and rating of internet links or media content.

Since the early 2000s, two social technologies enabling online communities have gained considerable attention: wikis and blogs (web logs). The latter part of the first decade of the 2000s introduced the social networking website Facebook to the general public, and dozens of social media platforms have emerged since. These include, among dozens of others, the microblogging service Twitter, the video-sharing website YouTube, the location-based social networking websites like Foursquare, the online photo-sharing and social networking service Instagram, the pinboard-style photo sharing website Pinterest, and one of the latest addition to the list: the microblogging platform and social networking website Tumblr.

Ideally an organization can foster innovation by bringing ideas to the surface throughout its departments and functions. Until someone figures out a way to automate creativity, organizations are going to need workers who can think fast and respond appropriately to the increasingly complex challenges of the current working life. Previously,
employees who were not close to the project may not have been aware that they could contribute to the effort. Social media tools such as forums, social networking profiles, and wikis enable these individuals to offer their ideas and experiences when the project team signals the need of assistance. Groups with like interest can quickly emerge and then disband when no longer needed. The collaboration can also include groups and individuals who were previously left out. The use of various social media can help organizations and companies include external partners and customers in creating new opportunities. (Jue & al., 2010, 8.)

This thesis work concentrates on the social technologies available for use at the University of Helsinki, mainly the blogging platform called WordPress, wiki software called Confluence and social networking tool Yammer. These tools, or software solutions, are referred to as ‘social technologies’ or ‘social tools’ in the thesis, where as ‘social collaboration’ refers to the action taken by their users. ‘Social media’ should be understood as the umbrella term covering all the human interaction powered by social technologies, including the constantly emerging new phenomena associated with it. The large variety of the social technologies, as well as the relatively brief history and the fast development of these tools are significant factors when discussing the motivation and the barriers to the adoption and the use of such technology.

2.3.1 Weblogs

A blog (short for the term ‘web log’) is a discussion or informational site published on the World Wide Web and consisting of individual entries called posts. There hardly is a purely technical definition of a blog. Any website can function as a blog, though most blogs have some similar traits and features: Usually blogs are displayed as a sequential posts sorted by date, the most recent on top. (Wikipedia, 2013.) A majority is interactive, allowing visitors to leave comments, and it is this interactivity that distinguishes blogs from other websites. Most blogs are primarily textual, but can combine text, images, videos, and links to other blogs, web pages, and other content and media related to its topic. (See e.g. Thomas & Barlow, 2011.)

Blogs started out mostly as the online journals of hobbyists and fans. Blog was an easy way for people to socialize online and share what might have previously only been ex-
pressed in personal circles. The ability of readers to leave comments in an interactive format is a major contribution to the popularity of many blogs. The rapid growth of blogs was first felt in the politics and social debate.

In the early days of the web in the 1990s the original blogs were updated manually, often linked from a central home page or archive. During these early years, a few different blogging platforms cropped up to ease the way for the non-programming content providers. LiveJournal is the most recognizable of the early sites. Then, in 1999, the platform that would later become Blogger was started by Evan Williams and Meg Hourihan at Pyra Labs. (Chapman, 2011.) Blogger, acquired by Google in 2003, is largely responsible for bringing blogging into the mainstream.

The development has since seen the rise of many popular blogging tools, most of them free of charge, including WordPress, Movable Type, and TypePad among others. In Finland a platform called Vuodatus.net provided a popular base for many of the pre-mainstream blogs in the early 2000s. The key characteristic for all the popular blogging platforms is that they offer an easy-to-use web-publishing tool that requires no prior knowledge of the html, maintaining databases or the structure of the web. This is also characteristic for the WordPress blogging platform currently in use at University of Helsinki. Later in the 2000s the new emerging blogging tools combined many of characteristics of micro-blogging platforms such as Twitter that allow for a more traditional type of blogging experience, while also allowing for the social networking features like following other bloggers. (Chapman, 2011.)

2.3.2 Wikis

A wiki is a website which allows its users to add, modify, or delete its content via a web browser usually using a simplified markup language or a rich-text editor. Wikis are powered by wiki software. Wikis support hyperlinks and have simple text syntax for creating new pages and cross-links between internal pages on the fly. The first ever wiki site was created for the Portland Pattern Repository in 1995, while the most popular wiki so far is probably Wikipedia, the user generated content encyclopedia. (Wikipedia, 2013.)
Wiki is unusual among group communication mechanisms in that it allows the organization of contributions and content to be edited in addition to the content itself. Like many simple concepts, open editing has had some profound and subtle effects on wiki usage. Allowing any user to create and edit any page in a Web site is exciting in that it could encourage democratic use of the web and promotes content composition by non-technical users. (Brown, 2007.)

2.3.3 Yammer – ”The Social Network for Organizations”

Yammer is a social networking platform containing familiar features of the popular consumer products like Facebook and Twitter. On Yammer the user can connect to other users, form and join groups, follow themes with hash tags, and look for discussion, and contribute in them with own comments.

The key characteristic of Yammer is that is designed for organizational collaboration. In order to join an organization's Yammer network, the user must have a working email address from the organization's own domain. One can also create external networks to allow non-employees, such as suppliers and customers, to communicate with the organization. The platform allows knowledge exchange, file sharing, and group discussion in both closed and open arenas. Yammer, acquired by Microsoft in 2012, provides apps for mobile use on all major operating systems.

2.4 Benefits of Social Technologies at Work

Many social technologies enabling collaboration can help to improve employee-to-employee communication in any organization. Personal publishing tools that offer functions for commenting and otherwise participating can remove barriers to more open conversation — in theory at least. According to Strategic Communication Management’s Technology Update (2009) social technology can help the organization especially by

1. Improving internal dialogue and awareness,

2. Reducing isolation for remote workers, and
3. Creating competitive advantage with real-time updates and information.

In case of Helsinki University Library these three benefits would easily fit into the communication needs of an organization in transition (see 4.1.1). In the merged library there’s a huge need to raise the awareness of the functions and practices of the different library units, previously unknown to most employees. As the workers are dispersed in several locations, and some of them are even working as the sole library professional within the surrounding scientific community, the need to reduce isolation for remote workers can also be identified. With the rapidly growing amount of digital content, there is a need for real-time updates and information regarding the content platforms and availability (such as system downtime, trial periods for new content etc.), not to mention all the sudden and unpredictable things that can take place during the daily routines of any library location.

Based on his meta-analysis of the literature and previous studies, Trevor Nesbit (2011, 67) has defined the key benefits of usage of social media at the workplace. Social technologies can help an organization by

1. Increasing the engagement of staff.
2. Enhancing the effectiveness of communication.
3. Enhancing the timeliness of communication.
4. Increasing the number of people involved in information communication.
5. Enhancing employee retention (where the social networks are within an organization). And
6. The ease of use due to interactivity, user friendliness, and employees being familiar with the use of the tools in the personal lives.

Social media applications can empower employees to collaborate and contribute to intra-organizational information flows in a more informal manner. Vuori and Okkonen (2012b) suggest that the collaborative setting provided by social media applications enables sharing of different insights in the organization: combining mutual insights as well as discussing conflicting insights helps to form a more multifaceted and truthful understanding on issues. Most important point they state is that the collaborative setting allows participants to give their insights during the process, and therefore during
the process new issues, if needed, can be set on agenda. This helps giving the employees a feeling of being heard, and thus might raise both the level of engagement and workplace well-being.

Another point-of-view is seeing social technology as a tool for employee listening in the organization. This from employee to the executive level approach can provide valuable insight into what employees are really thinking and feeling about their workplace. Communicators who use employee listening skillfully can transform communication from simply telling employees what is happening to influencing them to understand their individual roles in helping their employers succeed. (McCasland, 2009, 38.) This may help the employees to focus on working productively toward achieving organizational goals.

Employee listening can be a great tool for improving engagement when the organization can demonstrate that changes are taking place because the organization heard what employees said and took action. (McCasland, 2009, 38) While not all feedback will be used, demonstrating that some of it was the basis for change can help build trust, commitment, and thus better engagement among employees.

2.5 Risks and Challenges in Working with Social Technologies

Social technology is readily available for most organizations to use. However, only handful of organization so far can boast to have successfully integrated social technologies into the core processes of the organization. This is probably because the emergence of social networking strategies as common behavior is as new, particularly as a lever within organizations, that an understanding of the way it becomes part of an organization’s operation is still taking shape. (Jue & al., 2010, 134-135.) While opening the conversation and bringing in the element of democracy (both in regard of the employees as well as the other stakeholder groups of an organization), the new transparency brought on by the social technologies challenge the hierarchical organization structures and the control over the message and the voice of the organization.
Trevor Nesbit (2011, 68) also acknowledges several risk factors and challenges related to the use of social media at the workplace. These include:

1. Implementation that is the key issue.
2. Security, control and trust are significant issues.
3. The divulging of confidential information to the wrong people is a potential issue.
4. The inappropriate use of social media tools may put the organization at legal risk.
5. The organization being unaware of the use of social media tools within the organization.
6. The use of social media tools may not fit the organizational culture.
7. The perceived time wasting of employees using social media within the organization.

Many of these phenomena will be discussed further in contexts of the research data gathered among the HULiB staff in chapter 6, as many of these barriers can be identified in the target organization.

To be successful, internal social media initiatives in organizations should focus on developing emotional capital. Social media could and should be used to build positive feelings of authenticity, pride, attachment and fun among employees. (Huy & Shipilov, 2012.) The reason social media tools work well within one company and are ineffective in another can often be tracked down to the individual characteristics of the organization and its culture. It may also be difficult to build and maintain a strong internal organizational brand if the key messages are not reinforced consistently in employee communication (McCasland, 2009, 39).
3 Organizational Communication

In this chapter the aim is to offer the context for the terminology essential for this thesis work. The key concepts of organizational communication, organizational culture, management and leadership communication, and the phenomenon of knowledge sharing are discussed in the context of research literature.

3.1 Changing Spectrum of Organizational Communication

Among the communication professionals the organizational communication has traditionally been seen to refer to the internal communication functions of an organization. On the other hand, organizational communication may refer to the any communication the organization is having with any of its stakeholders. (Barker & Angelopulo, 2006, 14-15, 25) Organizations communicating to its stakeholders have been described in a number of partially overlapping concepts. Organizational communication (organisaatioviestintä in Finnish), PR, corporate communication, communication management, management communication, reputation management and corporate branding all deal with the complex phenomena of an organization reaching out towards the individuals and groups it couldn’t function without. (See for example Barker & Angelopulo, 2006; Juholin, 2006; Åberg, 2000.)

The classic study of organizational communication rooted in speech communication and communication theory has been widely criticized for limiting to one-way, instrumental, and top-down understanding of the communication. The classic models have identified the message, the channels and the separate sender and receiver for the message. Since the 1960’s the developing study of organizational communication has drawn its perspective from the studies of management, sociology, psychology, and information studies. It has taken a broader view of including, not only talking, writing, and rhetoric of persuasion but also the idea of interaction as the core of organizational communication. (Barker & Angelopulo, 2006; Åberg, 2000.)

In Finland the most widely known and discussed idea of organizational communication has been Leif Åberg’s model of total communication (kokonaisviestintäajattelu), in which communication is seen as objectives-oriented resource for the entire working
community. (See for example Juholin, 2006; Åberg, 2000.) This organizational communication model has also been criticized to plant the employee in the old patterns and habits. The model also lacks a focus on customer service (Juholin, 2007). Furthermore, Åberg’s model does not take into account the knowledge and the know-how of the employees or the development of this potential (Joensuu, 2006).

The changing perception of the organizational communication has also reflected upon the way communication professionals’ role is seen the organizations. The work orientation of the communication professionals has traditionally been described through Dozier’s typology of managers and technicians, including both the planning level and the craftsman-like execution of the communication tasks. Barker and Angelopulo (2006, 49), however, see the communication professionals as generalists with a need for wide variety of skills, including the strategic understanding of the organization’s operations. This is because a successful organization regards the organizational communication functions as integral part of the strategic management and leadership. The communications tasks that require special craftsman-like skills can on the other hand be easily outsourced.

The Finnish term *työyhteisöviestintä* has gradually been establishing itself in the use of communication professionals to describe the diverse field of organizational communication. It reflects this broader understanding of the organizational communication’s aims and objectives. In her *New Agenda Model of Communication* Elisa Juholin (2007) identifies the six plus one dimensions of organizational communication as follows:

1. Sharing and discussion of the big issues of the organization and its operational environment,
2. Receiving and sharing topical information and strengthening partnership for change,
3. Creation of a common atmosphere,
4. Participation and influence in the work community,
5. Doing and learning together, and
6. Managing and reflecting upon reputation.

All this can be done by the seventh (7) dimension: Identifying and utilizing new communication forums. This is where organizations could and should recognize the possibilities the online communities and other social technologies have to offer.
When organizational communication is regarded as an integral part of the leadership as well as an objective-oriented resource for the organization, it leads to even broader understanding of the communication functions. When the focus of communication is shifted from the top-down models towards creating a work-orientated community, the communication tasks fall into being part of every employee’s daily tasks. The communication needed in a knowledge organization is multi-directional and multi-faceted, and every employee should both understand the communication tasks as a part of his / her job description, and be equipped with adequate skills and tools to execute these tasks. (Juholin, 2007.)

3.2 Organizational Culture

Communication is not an isolated function, unaffected by the overall climate in which it occurs. Rather, it determines, and is determined by, the ambience of the organization, the values of its leaders and employees and the behaviors and strategies that they employ to achieve their goals. Harris (1994, 309) defines organizational culture further as “shared beliefs, values, and assumptions that guide sense making and action in organizations.”

The culture of an organization is often a difficult characteristic to define since many aspects of culture are intangible and cannot be seen. Various scholars define culture as how an organization goes about meeting its goals and missions, how an organization solves problems, or as a deeply rooted value that shapes the behavior of the individuals within the group. On practical level organizational culture can be seen as all of these things. Simply put, organizational culture is “the way we do things around here” (Martin, 2006).

Despite the difficulty in defining the concept, most authors seem to agree that organizational culture is central to the functioning of an organization. Hofstede et al. (1990) acknowledge agreement among researchers that organizational culture is holistic, soft, and difficult to change, has a historical basis, and is socially constructed. The following definition offers one perspective on the subject:
Organizational culture tends to be unique to a particular organization, composed of an objective and subjective dimension, and concerned with tradition and the nature of shared beliefs and expectations about organizational life. It is a powerful determinant of individual and group behavior. Organizational culture affects practically all aspects of organizational life from the way in which people interact with each other, perform their work and dress, to the types of decisions made in a firm, its organizational policies and procedures, and strategy considerations (Buono et al., 1985, p. 482).

Organizational culture becomes formulated when employees in different functional contexts, observe, interpret and give meanings, on the one hand, to both official messages and the administrative structure of the organization and, on the other hand, to unofficial messages that have been produced and transmitted in the organization and its environment and mediated through formal and informal communication channels. (Brown and Starkey, 1994.)

According to Juholin (1999) employees construct their own concept system (“attitudes, values, beliefs and cognitive maps”) by using these meanings, and, through this system, classify themselves, other members of the organization and human relationships. The employees’ internal processes of giving meanings are “transformed into collective negotiation through the medium of interaction”. (Juholin, 1999.) A pattern of shared values and beliefs provides employees with norms for behavior in the organization (Brown and Starkey, 1994). The metaphors, narratives and views of an organization are constructed through processes of interaction and may account for superiors’ different roles and modes of action, employees’ opportunities to influence decisions, horizontal communication and the function of communication processes in general (Juholin, 1999).

The culture of an organization covers a broad range of phenomena, extending from social structures to individual meanings and from core assumptions to visible artifacts. Simply stated Gordon (1991, 406-409) observes that an organization’s culture is a product of successfully adapting to the environment over a period of time and will, as a result, resist change. He further notes that a change in the operating environment might necessitate a change in the culture. These changes, which include new learning, can also involve the need for new people with completely different skills sets. In addition, within the organization employees build up subcultures that may work against the existing or aimed organizational culture.
Organizational values are another integral part of organizational culture. Jason Martin (2006) describes the birth and power of values in an academic library context:

> When an organization faces a crisis, its leaders must formulate a plan to alleviate the danger posed. Successfully thwarting the crisis validates the plan and it becomes a shared value of the organization. When a similar crisis arises in the future, the organization will usually reuse the plan to avert catastrophe and right the ship. After repeated success, the value becomes an underlying assumption of the organization. These underlying assumptions form the basic core of all organizational culture. They are difficult to know and understand because they are rarely articulated.

In order for a new employee to recognize the assumptions of an organization one must become immersed in the organization and its culture. Underlying assumptions manifest themselves through the perceptions, thoughts, emotions, and behaviors of members of the organization. Challenging these assumptions will easily result in defensive behavior from the community that shares and/or is dependent on the culture. If an idea is brought up that does not meet the underlying assumptions of an organization, it can easily be rejected without consideration or decent debate. According to Martin (2006) organizational culture is, thus, one of the key factors “explaining the resistance to change, the fear and other seemingly irrational behavior that can be encountered in any organization going through a period of change”.

An organizational culture is neither good nor bad per se. A culture is feasible if it reinforces organization’s mission, purpose and strategy. The culture can be either an asset or a liability for the organization. Strong cultural norms improve organization’s efficiency. In a strong organizational culture everyone understands the importance of how things are done. In a weaker culture, as defined by Edgar Henry Schein originally in the 1980’s (2006), employees feel more uncertainty over the expected behavior and the way the tasks are to be done. In a weak culture there is little alignment with organizational values, and control must be exercised through extensive procedures and bureaucracy. An effective culture must do not only be efficient, but also suited to the needs of the industry, organization, and employees. Organizational cultures, like personalities, are elusive, complex and paradoxical. Understanding culture involves understanding the difference between “formal and informal rules, and between the espoused and actual modes of operation”. An employee must perceive and follow within the hidden
cultural expectations and rules to survive and thrive in an organization. (Lai & Lee, 2007, 522.)

3.3 Management and Leadership Communication

Management in the organization is generally held to involve crafting a strategic vision to enhance organizational effectiveness. "Turning this lofty aspiration into reality means creating and sustaining a unifying sense of purpose, on the part of many people" (Tourish & Hargie, 2009, 7). Organizations can be defined as “social entities in which the behavior of individuals is shaped and directed to achieve common goals” (Hargie, 2007, 25).

Most managers know that they need the active enthusiasm and commitment of their people if they are to succeed. The managerial practice, however, is riddled with paradoxes, and many organizations fail to implement the policies that will generate precisely this kind of commitment. Employees can have hard time buying into the ideas they don’t know or understand. There is a growing body of evidence to the effect that if people are excluded from the decision making process it becomes more difficult to secure the commitment to whatever decisions have been reached by the top management team. (Tourish & Hargie, 2009, 7.) Introducing a new digital collaboration tool in the organization may be seen as an effective way to open up a channel for employees to participate in planning and decision making processes, or at least as a chance to give or receive feedback. A successful implementation of such tool, however, is a challenge that requires understanding and addressing many of the motivational factors related to the adoption and use of the social technologies.

In organizational studies, the concepts of management and leadership are usually seen as separate, overlapping, and in some respects even opposite practices. The motivation for a manager is to create well-being through stability, whereas a leader is working to create change. Managing is an authority relationship, while leading should be seen as an influence relationship, creating the motivation for the employees to change their behavior to bring forth the change in practices. (Mullins, 2011, 257.) Simply put: A good manager does things right, a good leader does right things.
Leadership can be defined as “ability to influence a group toward the achievement of goals” and in today’s dynamic world, there’s a need for leaders to challenge the status quo, to create visions of the future, and to inspire organizational members to want to achieve the visions (Robbins, 2001). In the context of organizational change, or of reacting to any major change in the operational environment, it is not efficient management but leadership that is required to steer the ship through the range of rocks.

The role of the leader is to constantly remind the employees in the organization of what is important, otherwise the organizations tend to drift into entropy and “bureaucratization of imagination” if they forget what is important (Mullins, 2011). Leadership communication can be defined as

[…] the controlled, purposeful transfer of meaning by which individuals influence a single person, a group, an organization, or a community by using the full range of their communication abilities and resources to connect positively with their audiences, overcome interferences, and create and deliver messages that guide, direct, motivate, or inspire others to action (Barret, 2010, 6).

Effective leadership communication requires the ability to anticipate the potential interruptions in the transmission of the message, appreciate the context, understand the audience, select the right medium, and craft clear messages that allow the meaning to reach the specific receiver as intended (Barret, 2010, 6). Research indicates a common theme between communication and employee satisfaction: the less the uncertainty, the greater the satisfaction. Distortions, ambiguities and incongruities all increase uncertainty and hence a negative impact on satisfaction. The less distortion that occurs in communication, the clearer the goals will be. (Appelbaum & al., 2004, 19.) The leader also understands and practices the power of appreciation. Management and leadership are closely linked in a sense that it is a one thing for a leader to propound a grand vision, but this is redundant unless the vision is managed so that it becomes a real achievement. (Mullins, 2011, 257.)

### 3.4 Communication and Organizational Trust

Evidence demonstrates a positive relationship between effective communication and worker productivity (Appelbaum & al., 2004, 19). Additionally communication plays a significant role in determining the level of employee motivation (Robbins, 2001). Con-
sequently, there is a strong case for leaders and managers to convey honest and accurate information to employees in order to ensure the company’s success. A key competency for a successful leader is thus the ability to create and sustain trust that helps the leader to form intimate alliances with the employees led. (Mullins, 2011, 286.)

While trustworthiness is a result of character and competence, trust is the actual act of believing in someone and having confidence in them. In organizational context trust refers to employees’ faith in leaders and the belief that ultimately organizational actions will benefit employees. Trust is a positive expectation that another will not – through words, actions, or decisions – act opportunistically. (Kane-Urrabazo, 2006, 190.) The key dimensions underlining trust are integrity, competence, consistency, loyalty and openness. Trust seems to be the primary attribute associated with leadership since honesty and integrity are among the six traits found to be consistently associated with leadership. (Robbins, 2001.)

In establishing trust, a manager must mean what he says. “If you say you’re going to do something, do it. If you can’t do it, think it’s more trouble than it’s worth, or don’t want to do it, don’t say you will” (Kane-Urrabazo, 2006, 190). Employees need to be able to have faith in what they are being told. Trust does not, nonetheless, only flow upward from the employees to management, but also vice versa and across the organizational units as well. The level of trust in an organization can foretell its success because it is a crucial element linked to employee performance and organizational commitment (Laschinger & al., 2000).

The true power of communication as a force to help implement and sustain a culture change is its ability to establish the trust in a climate of transparency. In order to win the staff over on all levels, however, requires comprehensive communication planning, from strategic to the tactical level of execution. Paul M. Sanchez (2011, 36) describes the process “It requires sustained activity across a spectrum of communication channels and stakeholders, from face-to-face to mass communication activity. It also demands leadership interactivity and participation throughout the organization.” Only when communication becomes genuinely two-way, open and trust building, can culture change initiatives be undertaken with a realistic hope of success.
3.5 Knowledge Sharing

What is considered knowledge, information, or data varies hugely dependent on the context and the individuals involved. Knowledge can be defined as something personal that resides within the individual, and its transfer often requires direct communication between individuals.

Knowledge encompasses the information, ideas, and expertise relevant for tasks performed by organizational members. It can be described as tacit (e.g., a demonstration or an example of how to perform a task) or explicit (e.g., guidelines or task specifications), although it may be also argued that tacit and explicit knowledge are inseparable. In contrast to data or information, knowledge “consists of insights and interpretations, is personalized and refers to specific situations. (Webster & al., 2008, 3-4.)

The act of transferring knowledge to another is a “dyadic exchange of organizational knowledge between a source and a recipient unit in which the identity of the recipient matters” (Szulanski, 1996, 28). These knowledge requests frequently take place outside the organizational supervisor – subordinate relationship, and may include fellow organizational members, close colleagues, and members of informal networks. These requests are the main ways in which tacit knowledge is shared in organizations (Martiny, 1998), and thus all the informal settings such as cafeterias, kitchens and other social facilities as well as the virtual spaces generated by social media that provide opportunities for exchanging ideas are crucial for knowledge sharing. They promote knowledge exchange, but they also spur the discovery of mutual interest that supports communities. One could argue that knowledge sharing is crucial for many organizations to succeed. (Webster & al., 2008, 4.)

3.5.1 Knowledge Sharing and Organizational Culture

Many findings indicate that social-oriented organizational culture (i.e. top management support, open communication, stimulus to develop new ideas, and reward systems in inducing knowledge sharing) is likely to have positive benefits and compatible beliefs about promoting knowledge sharing. Vuori and Okkonen (2012a, 595) further point out those simple behavioral choices affect the formation of organizational culture. For
example, keeping the doors open and thus inviting collegial interaction can be understood as an invitation to interaction. This promotes open culture and creates opportunities for knowledge sharing. According to Lin (2006, 86) organizational climate significantly influences perceived relative advantage, compatibility, and complexity of knowledge sharing.

Trust, as discussed in chapter 3.4, is essential to an organizational culture because it improves positive behavior, encourages network relations, reduces conflicts and transaction costs and improves the creation of a good working environment. Organizational trust is an important element and a key ingredient for the success of knowledge management because, if the recipient of knowledge is not persuaded that the source is capable and trustworthy, it is not likely knowledge from that individual will be accepted. (Issa & Hassad, 2008, 184.)

Furthermore, Issa & Hassad (2008, 184) argue that to achieve successful knowledge sharing, organization’s need to persuade people to eliminate the old-school thinking that they are being measured by what they know. Such thinking only perpetuates knowledge hoarding, which leads to little value-adding knowledge transfer in the organization. Employees need to trust that even the pending issues and other unfinished business can be discussed, and that simply random ideas are worth sharing.

### 3.6 Motivational Factors for Sharing Knowledge

Development of the information technology has led to greater emphasis on the knowledge and expertise of staff and the importance of creativity. A successful organization manages to create a climate for creativity in which the employees feel motivated and comfortable about sharing their ideas. An organizational climate conducive to knowledge sharing exerts a strong influence on the formation of personal level knowledge sharing behavior; it also directly affects (although less strongly) individuals' intentions to engage in knowledge sharing behaviors. (Bock & al., 2005, 99.) According to Hannon (1997) engaging employees on to share their knowledge is a three-folded challenge: First, employees may not know that may not know that the knowledge they possess might be of value to the surrounding organization. Second, in line with Ipe
even if the employee recognizes the importance of the knowledge, they may not be motivated to share it. Third, as also Ipe (2003) suggests further, even in the situations where individuals are motivated to share their knowledge, they may be lacking a medium to do so in the organization.

Even when organizations provide technological facilities and demand employees to share their knowledge, in most cases, employees are the ones who finally decide whether to share their knowledge (Constant et al., 1994). Although motivation and expertise might account for individual participation in knowledge sharing (Wang and Lai, 2006) it is not always easy to predict when and why employees share their knowledge. Thus, individual factors are among those key elements that need to be considered while studying knowledge sharing behavior (See e.g. Jarvenpaa and Staples, 2000; Bock et al., 2005; McLure Wasko and Faraj, 2005.)

Vuori and Okkonen (2012a, 594) divide these individual level motivational factors into intrinsic and extrinsic, that is, those internal and those external to an individual. Internal factor is a drive to do with something that is self-rewarding, whereas external offer some sort of reward or sanction. Intrinsic motivation is derived from the work itself. For example the feeling of being good at something while working is an example of internal motivational factor. The enjoyment of helping others can as well be seen as an intrinsic motivational factor. External factors on the other hand are indirect or instrumental. They can include, for example, getting financial or social rewards such as a promotion, a bonus or a salary increase, an expected reputational advantages or other advances in social or organizational status.

Vuori and Okkonen (2012a, 595) summarize the typical work-related motivational factors that enhance knowledge sharing as follows:

- contributing to organization’s success;
- getting incentives and rewards;
- feeling empowered;
- getting knowledge in return, i.e. reciprocity;
- boosting own reputation;
- adding value to knowledge; and
- trusting that sharing is worthwhile.
While both extrinsic and intrinsic motivational factors can contribute positively to knowledge sharing attitudes in working communities, Vuori and Okkonen (2012a) suggest that the internal factors (e.g. enjoyment in helping others) are more significant. By surfacing these motivational drivers associated with individuals' intentions to share personal level knowledge with others, and providing empirical evidence regarding the efficacy of several of these motivational drivers, it is possible to further develop the practices of knowledge sharing in the organization, and also provide input to the discussion on the desired future direction of the organizational culture.

3.6.1 Leadership Role on Knowledge Sharing Behavior

Managers and supervisors have a significant role in creating communication culture in the organization. (See also chapter 3.3) They are responsible for making sure that information flows smoothly and quickly to their direct reports. They also need to be able to put the information in the context for the employees; they need to interpret the top-down message, invite employees in dialogue, and ask all the members of their teams the right questions to make sure they know what is happening. They are also responsible to for moving the information from the front line back up to top executives. The real goal of creating this two-way exchange of information is not merely to tell employees what their executives want them to do or to inform the executives what customers and other stakeholders are saying. The ultimate goal is to engage all employees, improve their abilities to make informed decisions, and turn them into active advocates for the organization. (Whitworth, 2011, 197.)

Barling and Kelloway (1996) have suggested that transformational leadership may be a potential predictor of knowledge sharing in organizations. The best organizational communication initiatives deal honestly with organization’s strengths and weaknesses, mobilizing the communication tools for both employees and customers to freely discuss what is going on in the organization and suggest ways to make things better. (Whitworth, 2011, 2000.) In addition, leadership commitment to knowledge sharing has also been identified by Martiny (1998, 69) as a key consideration. According to her survey, uncertainty about leadership commitment to knowledge sharing was the key challenge in organizations. This support, of course, must be encouraging rather than coercive; employees can receive suggestions on what and how much to share with their colleagues, but the final decision is always up to them.
The employees constantly look for symbols of expected organizational behavior. The presence of knowledge sharing technology can be seen as such a symbol. If an organization spends a significant amount of resources on either purchasing or developing and implementing such technology, employees may interpret this as a signal of management's support for this ideal, and act accordingly (Connelly & Kelloway, 2003, 293). However, as Martinsons (1993, 21) acknowledges, if employees perceive that management is not very committed to implementing this new technology, then the initiative to promote a strong knowledge sharing culture is not likely to be successful. Perceptions about management's support for knowledge sharing are potentially necessary for the creation and maintenance of a positive knowledge sharing culture in an organization.

3.6.2 Motivational Factors for Using Social Technology

When a new digital tool or a social technology is introduced at a workplace, one of the critical factors determining the virtual community's success is its members' motivation to actively participate in community knowledge generation and sharing activities. (Archivili & al., 2003, 64.) This is a key challenge that should be both recognized and addressed, especially as many organizations' knowledge sharing initiatives are led by the IT departments and consist exclusively of the acquisition of new information technology (Davenport & al., 1992). This may be, as Connelly & Kelloway (2003, 294) suggest, because purchasing and installing a new ICT is relatively easy for an organization to accomplish; the cultural changes required are not so simple. Without matching organizational culture and the cultural assumptions embedded in an enterprise, costly implementation failures are likely to occur (Lai & Lee, 2007, 525).

Even if they are highly functional, only few of the new technologies get to be used by the employees if they have not received appropriate training and guidance. To be able to try out, adopt, and eventually implement any technology the employees need to have a sufficient level of “computer comfort”. Jarvenpaa and Staples (2000, 145) note that the path from computer comfort to use of electronic collaborative technology for sharing information is positive and statistically significant. This implies that having adequate computer skills is important to facilitate information sharing and communication in a digital environment.
Furthermore, according to Jarvenpaa and Staples (2000, 145-146) the use of any digital media for communicating and sharing knowledge was strongly associated with the beliefs that computer based information systems provide valuable information in an effective way. As the use of social technologies still strongly associates with the employees’ leisure time and recreation, these findings suggest that organizations should actively enhance the perceived value of their digital technology based information in order to increase the amount it is used and shared.

3.7 Social Technologies and Employee Diversity

It is natural that the use of social media can take many forms in organizations, and people interact with those tools in a variety of ways. As in all social interaction, some people are eager to initiate, others respond, and others stand on the sidelines to observe. As being a spectator is easy, it is not surprising that most people will be found in this group: 48 percent of Americans, 37 percent of Europeans, and 66 percent of people of East Asian origin fall into this category. (Li & Berhoff, 2008.) There are always also a segment of people who enjoy joining an organization but never attend a meeting or participate in a project. They take use of the social media as well. For those who like to respond and share, blogs, wikis and social technologies offer a natural place to collaborate, critic, and advocate.

In an organizational setting, the demographics of the staff often explain some of the usage of the social technology. Younger employees, grown up together with the web and the social media, are far more likely to be active in all areas than the older generations and continually skew the averages. Millennials, the so-called Generation Y, are likely to demand the provision of social media tools to do their jobs. Incorporating the use of social technologies into the organization’s normal workflow can serve as a catalyst for intergenerational communication, creating new vehicles to develop shared perspectives and speed the achievement of common goals. (Jue & al., 2010, 33.)

Depending on the organization’s employee population it might be risky to equate the low volume of content postings to the failure of social networking initiative. Employees of all generations are likely to participate in their own way. Among the older tradi-
tionalists, those who initiate may be few but spectators may be many. (Jue & al., 2010, 33.) Other causalities could and should be looked for in the organizational culture as well as in the practices and management of communication functions.
4 Organization in Focus

In this chapter the aim is to introduce the target organization Helsinki University Library, and draw a picture of the history of the organization that helps to explain some of the cultural traits present in the current organization. The current communication practices of the library are also discussed.

4.1 Helsinki University Library

Helsinki University Library (HULib) is the biggest university library in Finland, both in terms of the size of the collection as well as the number of customers and check-outs. Approximately 1.5 million customers use the library services annually. HULib is a co-worker for all the 4000 researchers and teachers and 35 000 students at the university. (Lammi & Sinikara, 2012.) The library has a total of 239 staff members (Kosonen & Niemi, 2013).

The new Main Library, construction completed in the summer 2012, is located in the heart of Helsinki on Fabianinkatu. The Main Library houses collection and services for the faculties of humanities, theology, law, and social sciences as well as the library’s administration and joint services. Other locations are Kumpula Campus Library serving the campus of natural sciences, Meilahti Campus Library Terkko, focused on medical and health sciences, and Viikki Campus Library located on the campus of biosciences. There are also smaller library branches by the Faculty of Behavioural Sciences and the Institute of Dentistry. (Lammi & Sinikara, 2012.)

4.1.1 Communicating Series of Organizational Changes

Helsinki University Library, HULib, is the end result of series of organizational merges. The University of Helsinki, founded already in 1828 in Helsinki to replace the former Regia academia aboensis in the former capital Turku, has a long history with the typical structure of small departmental libraries. The libraries were traditionally operating under the departmental administration and housed at the department premises. They were small entities, often employing only a few individuals. Each one of them had an organizational culture developed over the decades in close contact with the particular field of science and the department.
The digital revolution has radically been shaping the operating environment and the core functions of the entire library industry over the past 20 years. For libraries, the digital revolution with the various possibilities brought by the Internet has proven to be the greatest challenge the profession has had to face so far. Since the Gutenberg days, the librarians have been seen and respected as the guardians of the printed information treasures. The digital revolutions questions, along with many other practices considered obvious, the core value of printed information, and especially the meaning of preserving the copies of the same printed objects at several locations.

This development has created the grounds for the change in organizing the library services within the university. The small libraries with separate funding and acquisition processes haven’t been seen as a sustainable model when the price of the digital content has continuously increased while the funding of the universities has simultaneously been declining. The new forms of content also require entirely new kind of expertise from the library professionals (e.g. copyright and licensing expertise, hard core IT and UX skills). Merging the organizations and their core functions to produce consistent quality of services throughout the university community has been the trend in most western universities.

At University of Helsinki the smaller departmental libraries were first merged under the faculties or campuses serving the certain fields of sciences in 1990s and early 2000s. HULib started its operations in January 2010, after over two-year administrative planning period. The science and faculty libraries of the University of Helsinki were united under one administration. The library operates in four campus libraries. Since then Helsinki University Library has operated as an independent institute of the university. (History of HULib, 2012.)

The needs for change management and to communicate change successfully have been imperative in the library organization over this period of constant change. Where the traditional management practice sees the change communication as “timely information that is fed to the troops and provides a consistent message and clarity in meaning” (Frahm, 2011, 138), the change communication mindset sees the organizational change as the result of a series of communicative events. To be able to create change in
the merging processes, and moreover bring forth a new, coherent culture for the newborn organization, the communication efforts should be placed in creating dialogue and monitoring the background talk of change. (Frahm, 2011, 139.)

The Helsinki University Library management has relied on the fact sheets, manager road shows, and power point presentation with bullet points as methods of bringing about the organizational change. These choices represent the will of creating stability in the change situation, as they are chosen to provide information that can reassure, educate and clarify the details on any issue the employees may be unsure of. The choice also implicitly includes the idea that the message can be controlled by the management or the communication professional. (Frahm, 2011, 139.)

To be able to prepare the employees to face the constant change of digital revolution with all its implications to the library industry, the more effective approach might be communicating towards creating further change instead. (Frahm, 2011, 139) Moving towards creating a resilient workforce that looks forward to opportunities for transformation (149) is a necessity to success in the industry that is facing its greatest challenges since the advent of print. As the core elements of the everyday digital revolution, the social technologies could help bringing about the change.

4.1.2 Library Communication Functions

The Helsinki University library currently employs a four-member communication team. The team consists of a communication manager, a special communication planner with skills to deal with the development of web based solutions of the library, a web-editor and a communication officer in press officer role. The team works closely together with the University Communications and Community Relations office that provides the entire university community with support such as intranet solution, templates for web and printed materials, as well as guidelines on how to communicate in different functions.

The merged library has organized it communication functions so that the four-man communication team is organizationally located within the joint administrative services of the library (see figure 1). The joint communication team is supposed to work closely
with both the library IT professional to develop the library web services, and all the library professionals with assigned communication task in the campus units. The aim is to maintain the communication chain in all parts of the library. The point of view of this communication chain is, however, almost solely top-down. The communication team meets monthly with these library professionals to share information on the current affairs at university and the library locations. The library-wide projects such as acquiring the new info screens in library locations and the roll-out of the new intranet are discussed in these meetings. The management of the library professional with assigned communication tasks in the campus libraries is, however, within the each campus library, so the communication team’s role is mainly advisory, not managerial.

Figure 1: Communication Team within the HULib Organization

As the data gathered for this thesis also indicates (see chapter 6.4.4), the communication practices of the library have a distinct historical background. The organizational model of the current library was chosen already in 2008 by the University Consistory, and while the joint services were built to guarantee reproducible services throughout the library, the campus libraries were allowed significant independence over the way they organize their services and support functions. The digital tools and social technol-
ologies at use in the library have largely been chosen while the library units where still operating independently.

4.1.3 Library Staff

As of February 2013, Helsinki University Library was the employer of 239 library and IT professionals. 233 of the 239 employees were working under a permanent contract, only six (6) persons had a fixed-term contract. Of all the employees 36 were working part time (10-25 hours per week), while 203 were working full hours (37.25 hours per week). (Kosonen & Niemi, 2013)

Most of the staff is information specialists, librarians, and assistant librarians. In IT positions there are only 7 persons in the library’s joint services and three individuals in the campus libraries. In addition to the paid staff, there are concurrently 11 civil service men completing their military duty by working in assistant positions in the library’s customer service. (Kosonen & Niemi, 2013)

The majority of the library staff finds its place in the older age groups of the active workforce. (See figure 2 below.) Within the next ten years a third of the current employees are likely to retire. (Kosonen & Niemi, 2013)

![Figure 2: HULib Staff as of February 2013](image)

Figure 2: HULib Staff Distributed by Age Groups

The younger the age group, the more there are part-time and fixed term employees in it, as, for example, many of the former civil service men trained in the library customer service functions continue to work part-time in the library after their duty is completed.
The library staff is relatively highly educated. In the end of 2012, 123 of the staff held a master’s level degree from a scientific university. (Kosonen & Niemi, 2013.) Traditionally, a master’s degree, including or in addition to which there are a certain amount of information studies completed, has been the requirement for an applicant applying for a librarian position at Finnish universities. Since 2010 the changes in the Universities Act no longer require a master’s degree completed in a scientific university from an applicant. Some 20 members of the staff have announced to hold a degree from a university of applied sciences1. (Kosonen & Niemi, 2013.)

The library staff traditionally has held long careers with the same employer. On one hand, there are only a limited number of employers in Finland offering well-paid jobs for library professionals (the librarian’s salary at university can double the one at the municipal sector), on the other hand the job security has been strong within the university.

In the eyes of the law the universities were regarded as government offices until 2010. The entire university administrative staff (including all the individuals working in the library) was lawfully government civil servants. Those in permanent positions could expect to have long careers with the same employer should they wish to hold their positions. Many of those who had a fixed term positions, could expect them to be made permanent after a certain period of time, as the so called “chained fixed term positions” are regarded illegal. The library has managed to offer permanent contracts for 17 of its fixed-term employees in 2012 and 2013, while 20 fixed-term contracts related to the new Main Library project ended in 2012 when the building was completed. (Kosonen & Niemi, 2013.)

The changes in the Universities Act in 2010 changes the position of the employer in universities from government to private sector, and the position of staff from government civil servants to regular employees. In practice, the biggest change is the fact that as regular employees, their contracts are easier to terminate. All that is needed now is

---

1 The library has no comprehensive statistics of the degrees the employees hold. This information is based on the details given by the employees when beginning their career at the university, and the voluntary information added later on.
the so-called co-operation negotiations as in any other private company of the same size.

4.1.4 Foundations of Professional Culture Challenged

Librarians are professionals of classification and detail. They value the justified order created by fellow librarians in the tradition. Thus the library professionals are often appalled by the search algorithm driven order of folksonomy, the method of collaboratively creating and managing tags to annotate and categorize content in the Internet. Since the dawn of the profession, the librarians have been seen and respected as the guardians of the printed information treasures. The digital revolutions questions, along with many other practices considered obvious, the core value of printed information, and especially the meaning of preserving the copies of the same printed objects at several locations.

Libraries are built to acquire, organize and take care of printed objects that may or may not have value for the customers. The digital content distribution, however, is based on the user's own information (or any other content related) needs. The customer is after a certain piece of information or content, and is willing to acquire it wherever it’s available in the most convenient manner. Convenience breaks down into things such as affordability, accessibility, availability, ease of use etc. The material point is that in the internet era, there are many more sources for the same (or relevant enough) content and a fewer gatekeepers between the source and user with internet access. The web challenges the foundations of the profession, and this may have its effect on the library professionals' attitude towards many other Internet-based phenomena, including social technologies of the web.

When it comes to adopting and using digital tools at the workplace, the HULib employees have been accustomed to use certain tools locally within their library unit that previously operated as independent libraries (see also 4.1.2). The staff may also perceive the circle they are communicating with from library unit’s point of view. These shared practices are often based on shared assumptions that emerge from the similar backgrounds of employees in a certain organizational unit. (Schein, 1996, 12.) This may be one of the factors, together with the hierarchical silo-like organizational structure of
the merged library, explaining why cross-functional teamwork is considered so challenging in the organization. It can be safely stated, that instead of one strong organizational culture, there are several subcultures within Helsinki University Library affecting the communication practices and employee behavior, both internally as well as when communicating with other key stakeholders.

Helsinki University Library has inherited its strong role culture from the government office the university only recently used to be. A role culture is one of Charles Handy’s (1984, as described by Riley 2012) four types of defining an organizational culture. In a role culture people’s activities are strongly influenced by clear and detailed job descriptions and other formal signals as to what is expected of them. Employees have clearly delegated authorities within a highly defined structure that involves a lot of hierarchical bureaucracy. In a strong role culture the status of an employee is typically defined by the position the person holds and not necessarily by the individual skills or the interests of the employee. The power derives from the position and leaves only a limited scope to expert power. (Riley, 2012.) Another trait of a hierarchical role culture is a tendency to promote the hardest working employees with deep substance expertise, and not give as much of emphasis on the leadership skills of the individuals.

Whatever differences there may be in subcultures and concrete practices of the HULib units, the strong role culture is typical for entire library industry in Finland. It is a consequence of long and strong traditions on the government funded public sector that can be traced back to the bureaucratic legacy of the Russian empire. The government funded public sector has not been as avid to change in general, as its funding and conditions of operation have not been directly dependent on the organization’s performance. The situation in the university libraries may currently be changing, as the base for entire university funding is going through a radical change (4.1.3), and the effectiveness and performance measurability are given more weight also in the internal allocation of the funding (Helsinki University, 2012).

Libraries, that have traditionally been regarded as a proud profession of preservation, not pro-actively embracing the change, are facing new challenges on the financial sector. While the price for the content distributed through libraries is steadily increasing, it is not self-evident that the library budget will follow. The old managerial culture that
still reflects in the attitudes held by many library professionals, also the ones in leadership roles, is challenged, not just by social technology but also by the realities of the operational environment.

4.2 Social Technologies at University of Helsinki

University of Helsinki, the biggest university in Finland, is the employer of some 8000 researchers and other staff members. The over 4000 researchers within the university form one the largest scientific communities in the country that connects internationally to thousands of individual researchers and hundreds of institutions of research and higher education. As the international high profile of the research is one of the key emphases in university’s current strategy, the university recognizes the importance of the cross-border networking, both within the university as well as internationally. (Helsingin yliopisto, 2012.)

The introduction to social media tools at University of Helsinki happened along somewhat arbitrary lines. According to Jere Majava (2013), an online education experts employed by university’s Educational Center for ICT (short for ‘information and communication technology’), around 2005 the template-based web publishing practice that the entire university community was relying on didn’t satisfy all the users. Lacking the content management system (CMS), all the university’s web pages needed to be manually updated. The version control was a tedious and error-prone. Simultaneously the university’s intranet project, which had produced as its end-product an intranet solution called ALMA, first version of which was published in 2004, didn’t proof satisfactory in terms of flexibility and reliability. Members of the scientific community started seeking easier options to publish content online.

Many individual employees of the university already had personal experience on certain social technology platforms, so as publishing needs emerged locally, some of these familiar tools were tested by putting them into the use in projects and departments. A typical case at the time was to provide a course presence online that was not connected only to a specific educational technology platform that would have restricted access to the course material. (Majava, 2013.)
The wiki was first introduced as a by-product of the intranet renewal project: the project team needed a tool to share ideas online and picked up a certain platform. Yammer, the Facebook-like social networking tool for organizational use, was brought on during an ICT related teaching session, where the teacher logged into the new service he had just recently discovered and invited the students in the classroom to join and discuss the course issues online. Also informal blogs, set up for a research project or thesis writing, flourished. (Majava, 2013.)

Informality is characteristic of this development. The tools were adopted and introduced for local needs, regardless of the technologies provided and supported by the university and the guidelines to use them. This is typical for the diffusion of new technologies: They often enter the organizational landscape at the grassroots level and grow virally. (Thomas & Barlow, 2011, 21.) There is a need for easier – more accessible, faster or overall flexible – collaboration than is available through the official channels used in the organization. As a result the organizational awareness and oversight of social media is often “ad hoc, informal, and haphazard.” (Thomas & Barlow, 2011, 21.) As such, social media can be seen as an enabling technology instead of a driving force. Social collaboration is by no means a new phenomenon but a basic human need. What makes this particular moment in history so crucial, is the swift emergence and rapid convergence of three new technologies: social, mobile, and cloud computing. (Thomas & Barlow, 2011, 27.)

As of 2013, University of Helsinki provides its scientific community and students with variety of opportunities to organize and share content online. Traditionally the university IT department has maintained the email system and offered services like mailing lists to serve individuals, projects and university units to use. The Communications and Community Relations unit is responsible for the university intranet, ALMA platform, which has been serving the entire university since 2004 as well as the migration process to the new intranet platform, Flamma, which is currently under way. Next project of the Communication unit is to renew the public web presence of the university and acquire the urgently needed CMS. The Communications and Community Relations also maintain and control the visual identity of the university.
The university ICT and communication professionals recognize the phenomena of cloud services (e.g. Gmail, Google Drive, Dropbox) being widely used within the university even though the usage of such tools is strictly speaking forbidden on privacy and data security grounds. As the social technology and the use of cloud services first emerged at the university on the grassroots level, the university communication and IT professionals have been somewhat lagging behind in taking action. The social technologies such as blogs, interactive maps, YouTube videos and Facebook pages have been integrated to the university’s current, manually updated web presence to a limited extent.

There have been plans to implement a special Social Media Strategy for the university that would define and share the responsibility for different social media channels in the organization. Thus far, the responsibility for the maintenance and the support of both wiki and blogs stands with the Educational Centre for ICT, whereas the social networking tools like Yammer are organizationally without a home base. The fact that the Communications and Community Relations unit is using the service gives it a semi-official status. (Majava, 2013.)

4.2.1 Training and Support for Social Technologies

Helsinki University offers ICT training for its staff as well as its students and researchers who form the greater part of the customer body of the library. Of students, a certain study module is required that gives the certification of computer skills certification equivalent of European Computer Driving Licence (ECDL) program. The certification includes basics of ICT as well as information literacy (the latter taught by the library professionals) as well as individual software courses for word processing, using spreadsheets and creating presentation etc. The study module can be completed either by skills tests or by taking individual training courses. Currently no certification is required of the university staff, but there are training courses available on these basic computer skills also for the staff and the researchers.

Social technologies are not, as such, currently part of the ECDL certification, and are not taught as a part of the university study module. There are, however, individual
training courses for the tools like blogging platform, wiki, and presentation software Prezi offered during the academic year. The courses are organized by the university Human Resources Development unit, and often taught by the professionals of the Educational Center for ICT or university IT Center. They are, for the most part, free of charge for the participants. (Majava, 2013.) The university staff can take part in the course with permission by the management should their personal schedules allow. There are also manuals of varying quality available for self-study purposes.

The library itself holds no systematic ICT or technologies training program for its staff, neither is it currently planning one. Many managers, however, encourage team members to take part in the training courses whenever the employees have interest in the subject. The development of an individual employee’s ICT skills is still in principle of the employee’s own responsibility.
5 Conducting the Research: Methodology and Data

In this chapter the aim is to introduce the research approach used in this thesis work. The research process is described from the collecting the data to analyzing it by using the chosen methodology. The issues of reliability, validity and limitations of research are also discussed.

5.1 Action Research Approach

Action research is a common approach in management as it aims at improving existing practices. The purpose of the method is to solve practical problems while expanding scientific knowledge. The term action research was coined by the social psychologist Kurt Lewin in the United States in the 1940's in connection with research that aimed to promote social action through democratic decision-making and active participation of practitioners in the research process. (Gill & Johnson, 2002, 72.) His idea was to apply the theories of social psychology to practical social problems. The target of Lewin's action research was workers in agriculture who were trying to improve relations between minority groups in American society. Lewin believed that through action research advances in theory and much needed social change might simultaneously be achieved. (Myers, 2009, 57.)

It was in the field of group dynamics and human relations that Lewin's ideas initially flourished and continue to flourish today (Gill & Johnson, 2002, 78). The ideas of group dynamics and change in people's behavior link action research directly to many day-to-day situations in the workplace; where people and organizations constructed by them are involved, action research can be used to study and develop the phenomena. Today action research is a research and development approach widely used in the fields of education, social work, and service production.

Action research can be and is often seen rather as a development method than strictly scientific research method (Myers, 2009, 63). While practically often very relevant, some critics argue that action approach that aims at practice, process or product development is not an independent research method to begin with but simply an independent form of case study (Gill & Johnson, 2002, 87). Action research could be described
as problem solving in a real-life organizational setting, as it aims to create a new reality instead of trying to explain the existing one, as do more static methods as case study.

In an organizational setting the action research approach involves a planned intervention by a researcher. This often takes place in the form of a hired consultant. The effects of this intervention are monitored and evaluated with aim of discerning whether or not that action has produced the expected consequences. (Gill & Johnson, 2002, 71) The researcher works based on his or her beliefs and existing theories in order to implement a change in the organization or its current practices.

The action research process itself consists of several phases: Studying the current situation and identifying the problem, improving the situation in question by taking action and evaluating the progress made. Compared to a case study, the action research process can be seen as three-step spiral of planning, implementing, and assessing one’s research. The process forms a cycle where the process can be reflected. To help illustrate the spiraling nature of action research, one can look at Glanz’s (2003) model: (a) select a focus, (b) collect data, (c) analyze and interpret the data, (d) take action, (e) reflect, and (f) continue or modify actions – which leads to the identification of a new focus and begins the process anew. The chosen course of action can and should be changed accordingly. Susman and Evered (1978, 584-586) identify their similar cyclical process having five phases: (1) Diagnosing, (2) Action Planning, (3) Action Taking, (4) Evaluating, and (5) Specifying and Learning. All five are necessary for a comprehensive definition of action research. The infrastructure within the research, the research environment, and the researcher maintain and regulate some or all of these. According to Myers (2009, 57-58) the essence of action research process described above can be reduced to a simple two-stage process that consists of “diagnostic stage and therapeutic stage”.

As its end product this thesis hopes to be able to produce a set of development proposals and suggestions that would ease the use of social technology in the library. The development proposals will be presented to the Helsinki University Library management as soon as the thesis is submitted and assessed. The library has the power over the decision to implement, improve, or ignore the suggestions. Thus, the phases of reflection and modifying action of the research process (Glanz, 2003) are not included.
in this thesis work. The library organization, however, has the option to benefit from the entire process of the action research approach.

5.2 Methodological Approaches

The action research process in an organizational setting can adopt almost any research technique found in the sciences, social sciences, and humanities when such a technique is contextually appropriate to a collaboratively orchestrated research process. These techniques include quantitative research, qualitative research, and mixed method research. This thesis makes use of some basic quantitative analysis techniques when gathering and analyzing the survey data on the usage of the different digital tools and attitudes towards knowledge sharing. On the other hand the qualitative methodology is employed when analyzing the interview data and the answers the open question in the survey has produced. In the essence this thesis is a work of qualitative research.

The thesis employs some of the practices of narrative inquiry. Narrative inquiry is seen as a form of qualitative research that emerged in the field of management science and later also developed in the field of knowledge management. In management narrative is a common way of presenting data about the organization and organizational actors (Myers, 2009, 212) who tell a story of their working community Narrative analysis can be used to acquire a deeper understanding of the ways in which a few individuals organize and derive meaning from events. It can be particularly useful for studying the impact of social structures on an individual – such as the organization and its culture on the behavior of an employee. Stories of the employees of their experiences, knowledge sharing habits, and attitudes towards social technology draw a picture of the aspects of organizational culture.

Narrative inquiry focuses on the organization of human knowledge more than merely the collection and processing of data. It also implies that knowledge itself is considered valuable and noteworthy even when known by only one person. Narrative – whether it is personal, organizational or produced by the researcher – is a sequenced, distinct way of making sense of the world. The use of the world ‘narrative’ emphasizes the voice of the person telling the story and focuses on the uniqueness of the story. (Myers, 2009,
By interpreting the qualitative data gathered with the open survey question and interviews, it is possible to look for patterns, themes, and regularities as well as contrasts, paradoxes, and irregularities in the stories of employees. These elements help to explain the organizational culture and the realities of the current practices. This inductive, bottom-up approach where conclusion is reached from specific examples (Myers, 2009, 214), combined with the findings in the current scientific literature on the key themes of knowledge sharing, organizational culture, and management will lead to a methodologically pluralist point-of-view. (Gill & Johnson, 2002, 168-69.) It is possible for the researcher to employ a mixed set of tools – methods and techniques most useful to the problems at hand in the target organization.

5.3 Gathering Data

To identify the key elements regarding the employees’ motivational factors for using social technology and to build a perception of the organizational culture affecting the adoption of new social technologies, it is necessary to have the library staff themselves as the data source. The data gathering was planned to include both web-based survey as well as a small number of interviews with key informants. The purpose of the survey data is to form an accurate picture of the current use of the digital tools in Helsinki University Library, and to fathom the attitudes of individual staff members towards knowledge sharing and the social technologies. The interview data are used to deepen the analysis and to be able to recognize the key barriers to the use of digital tools for knowledge sharing in the workplace. The interview data also draws a picture of the organizational culture and brings forth clear suggestions to improve the current practices in the working community.

5.3.1 Survey

The survey data was collected using a web questionnaire produced by the Webropol online survey tool. Survey was conducted in Finnish, as it is the main operational language in the trilingual library. The aim was to reach as large number of the Helsinki University Library staff as possible. The link to the questionnaire was sent out via mail-
ing list containing the addresses of the entire library staff (app. 240 persons). The link was accompanied by a cover letter summarizing the aims of the questionnaire and the thesis work, concentrating on the recognized and widely accepted need to streamline the communications in the library organization, and inviting the staff to participate.

The questionnaire was available for two consecutive weeks in late January 2013, during which period two reminders were sent out via email. In theory any member of the library staff who accessed their email during the time period had a chance to participate. The personal motivation to take part in such surveys, quite frequently circulating in the organization, however, is dependent on a complex set of motivational and situational factors. Thus it had to be accepted that such a survey had to use non-random sampling.

5.3.2 Survey Questions

The purpose of the survey was, firstly, to form an accurate picture of the current use of the digital tools in Helsinki University Library. The first two questions aimed at identifying all the tools the library community used in the working context, and secondly the tools the library staff was overall familiar with. The tools listed (see appendix III) in the survey were those currently use within the university community, either officially supported by the university IT and communication functions or the ones otherwise commonly used (e.g. Google tools, Dropbox, YouTube). The respondents were also offered a chance to add tools not listed but regularly used by them in their work context.

Secondly, the survey aimed at recognizing the variety of purposes the digital tools in question are used for in the organization. The third question cross-indexed the used tools and different communication functions. These included the variety of customer care functions, the internal communication and knowledge sharing needs, as well as more personal professional purposes such as building and maintaining a professional network or personal professional brand.

The fourth question surveyed the training and manuals available. The respondents were given a chance to evaluate their personal need for training regarding different dig-
ital tools. They were also asked about their notion of the training available, and whether they were aware of all the potential support available.

The questions five through seven aimed at assessing the characteristics of the knowledge sharing culture at HULib. These questions were formulated as statements the respondents were asked to evaluate based on their personal experience. The respondents were asked whether they agreed or disagreed with the statements on evaluation scale 1-5. The statements dealt with recognized motivational factors and barriers for knowledge sharing through social technology. Based on the prior literature review, some of the known barriers to adopt and use the digital tools were also listed in the form of statements in question seven.

The next question offered the respondents an option to share their thoughts on the social technology at HULib in an open question format. The researcher invited all feedback on the adoption and use of the tools but pointed out, that especially the social technology such as blogs, wikis and Yammer were the target of the thesis. The last part of the survey, questions 9-11, included a few background variables of the respondents, e.g. sex, age group, and the library location they worked at. They were also asked to reveal whether their job description included supervisory tasks or a role as a team or working group leader.

5.3.3 Survey Turnout

One of the problems with the online questionnaires is that the actual turnout is difficult to calculate accurately. The number of the employees that actually had access to the email containing the survey link and invitation to participate cannot be counted accurately, neither is the number who in fact read the email. Hence, the response rate for the survey used in this thesis is calculated as suggested by Kaye and Johnson (1999) as follows:

\[
rr = \frac{\text{number of completed responses}}{(\text{number of completed responses} + \text{number of accessed surveys not completed})}
\]

Using this equation, the response rate was 56%. All the questions in the survey were
answered by 48 individual employees. The Webropol statistics reveal that of the 87 individuals actually opening the link to the survey in their e-mail, 49 started and completed answering the survey. One respondent gave answers to other parts of the survey (the usage of the tools etc.) but did not disclose his/her views on the knowledge sharing attitudes. Some insight on the open question was shared by 26 of the respondents. This response rate is in line with other surveys conducted in the target organization (e.g. annual job satisfaction surveys). The data, however, reflects mostly the thoughts of the employees with pro-development mind-set (see chapter 6.5). Some feedback indicated the survey was considered more laborious to complete than estimated.

5.3.4 Interviews

The most significant source of the data for this thesis was the semi-structured interviews conducted with the Helsinki University Library staff. The digital collaboration tools used at the library formed the core of the interview structure, but questions regarding the communication practices and the role of the management were also addressed. (See appendix IV for the Interview Frame) The semi-structured premise also gave room for any issue the interviewees felt were worth sharing in the situation. A preliminary analysis on the survey data helped building the interview frame.

In the interview it was possible to gather accurate information on the friction points of the organizational practices and the culture. In the end the interview sample consisted of seven (7) employees, four female and three male, in different positions across the library units. (See figure 3) In the interviews the aim was to concentrate on the communication culture of the target organization, and to have the interviewees share their view on the digital tools at use in the library.

The interviewees were chosen from amongst the employees by a versatile method. One of the objectives was to include views of the staff members from all the library locations and units in order to hear a firsthand experience of the local organization cultures. Simultaneously to have a representative sample of the different age groups of the personnel was an objective. Some of the employees gave their consent for interview already while answering the preliminary survey.
Figure 3: The interviews conducted for the thesis

<table>
<thead>
<tr>
<th>Informant Code</th>
<th>Sex</th>
<th>Age</th>
<th>Years in Industry</th>
<th>Years at UH</th>
<th>Date</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Male</td>
<td>36-45</td>
<td>8</td>
<td>8</td>
<td>4.3.2013</td>
<td>46:38</td>
</tr>
<tr>
<td>B</td>
<td>Female</td>
<td>46-55</td>
<td>17</td>
<td>17</td>
<td>25.2.2013</td>
<td>36:20</td>
</tr>
<tr>
<td>C</td>
<td>Male</td>
<td>46-55</td>
<td>16</td>
<td>16</td>
<td>25.2.2013</td>
<td>42:07</td>
</tr>
<tr>
<td>D</td>
<td>Female</td>
<td>46-55</td>
<td>29</td>
<td>16</td>
<td>28.2.2013</td>
<td>42:34</td>
</tr>
<tr>
<td>E</td>
<td>Female</td>
<td>56-</td>
<td>over 40</td>
<td>22</td>
<td>4.3.2013</td>
<td>58:15</td>
</tr>
<tr>
<td>F</td>
<td>Male</td>
<td>46-55</td>
<td>over 25</td>
<td>over 25</td>
<td>26.2.2013</td>
<td>41:22</td>
</tr>
<tr>
<td>G</td>
<td>Female</td>
<td>56-</td>
<td>32</td>
<td>32</td>
<td>5.3.2013</td>
<td>39:56</td>
</tr>
</tbody>
</table>

Figure 3: Interviews Conducted for the Thesis

As the researcher is one the employees in the library, the issues of neutrality and trust were addressed by excluding the immediate working community of the researcher as well as all the employees who could be regarded as personal friends. This choice also ruled out all the employees in the official communication roles in the organization. This seemed to be to some purpose of the thesis’ aims: The point of view thus remaining solely on the working community depending on the efficiency of processes and practices built and maintained with the help of the communication professionals.

All interviews took place in late February or in early March 2013. The interviews were conducted in private setting at the library locations — apart from one that took place in a nearby coffee shop on the interviewee’s request. They were recorded with permission of each interviewee on a digital recording device to be transcribed from the file later. For each interview the informants were asked to afford an hour; in practice the conversations took from 35 minutes to 60 minutes depending on the person.

5.4 Reliability, Validity, and Limitations

Reliability and validity of any research depend on the skills of the researcher. Questions concerning reliability and validity are associated with how reliable and valid the researcher’s data collection and analysis techniques are. Using research methods that ensure that the data recording is accurate and the interpretations of data are empirical and logical is important to increasing reliability and validity in qualitative studies.
To be valid, the research should take several things into consideration. In this thesis work, it has been the attempt to do research in a professional, accurate and systematic manner. The research process has been accurately described throughout the thesis to provide transparency. The survey questions and semi-structured interview framework are provided in the appendix. As described by Silverman (2005) it has been the attempt to include in this thesis work the analytic induction, constant comparative method as well as deviant case analysis, and provide the appropriate tabulation for the data. All this is done “in hope of proving the integrity of the conclusions that are generated in this piece of research”.

To be reliable the researcher needs to record the observations consistently, as has been the attempt in this thesis work. When discussing the reliability of qualitative study, it should be defined within the context of qualitative research and by taking into consideration the nature of questioning in qualitative study. The calculatory methods of quantitative study cannot be taken into account. Like Sarantakos (1994, 77-80) who instead of reliability uses dependability to ”a constantly changing world”, and instead of objectivity uses confirmability, and further calls the two concepts ”alternative ways of guaranteeing quality of research without restoring to reliability”, it’s been an attempt to provide the findings a context. In other words, dependability of this work is concerned with the idea whether these findings liable to apply at other times and confirmability concerns the notion whether researcher allows the values to introduce to a high degree.

There are always ethical concerns to be taken in to consideration in any research project. They are especially important to acknowledge in a research setting of this type of action research study, where the researcher is a member of the working community researched. It raises issues in context of mixed roles and collegial trust. As this thesis is not a commissioned work by the employer, it was important to emphasis the fact that the work was initiated by the researcher’s personal interest. The employer, however, showed interested in the thesis project and the studies from the beginning, and supported the researcher throughout the project. The survey question structure was passed in review with the library administration that was able to give some valuable input, and suggestions for additional response alternatives. As the roles of researcher and col-
league may be difficult to differentiate, a clear distinction was made whenever possible. The background information was offered in both the survey cover letter, web survey form, and in all the interview situations.

As the survey and interview themes deal with potentially sensitive issues like management and employee behavior or skill level of individual employees, it was important to stress the anonymity of all data throughout the research process. The requirement of anonymity, however, reduced the possibility of using some sets of the data: Some of the library units as well as age groups within the staff are quite small, and either individual respondents or the colleagues the interviewees were talking about could have been too easily identified. This consideration led for example to the decision to exclude the interviewees’ positions from the table of interviews.

Furthermore, as the researcher is a member of the working community researched, with eight years of experience from University of Helsinki as her employer, she holds a significant amount of tacit knowledge of the practices and organizational culture of the library. Although there has been an attempt to make this distinction in the thesis, and not to include phenomena that cannot directly be filtered from the research data at hand, there’s a chance that this has not been optimally accomplished.
6 Discussing the findings

In this chapter the aim to is to discuss the results of the data analysis for this thesis. The section includes analysis of what tools that are used in the organization and what, on the other hand, are unfamiliar to the employees. The chapter describes what the various tools are used for within the library. Both positive and negative motivational factors for using the tools in the first place and for sharing knowledge through them are discussed further. The results include also the recognized barriers to knowledge sharing in the organization. The limitations of the current research and some ideas for further work are discussed in the end of the chapter.

6.1 Tools Used by the Library Staff

The survey conducted among the HULib staff reveals that quite a wide range of digital tools are familiar to the employees. The survey listed 28 different tools and online services, and most of them were familiar to at least half of the respondents. The most familiar tools for the respondents were email, outgoing ALMA-intranet, mailing lists, YouTube, Yammer and the new beta version of Flamma Intranet. (See figure 4.)

The most familiar tools were unsurprisingly those that had been around for several years or even decades: email services and the old, receding ALMA intranet solution of the university. The new Flamma intranet, of which the beta version had been available only a couple of months prior to the survey, had already become quite familiar among the staff: 42 out of 48 respondents had at least tried the new platform. The open question data as well as the interviews revealed, though, that many feel that both Flamma’s content and functions are still inadequate for the internal communication needs of the organization. The university’s communication unit has been working on the new intranet for several years, and it’s expected that new features will be rolled-out one by one. There’s a plan to abandon the old ALMA intranet gradually by 2014.

It can be safely stated that everyone in the library uses e-mail (see both figures 3 and 4), and practically everyone is also familiar with the mailings lists. There are separate mailings lists for reaching the entire staff of the library as well as a list of each library unit and location. There are also some theme-oriented mailing lists, serving for example all
Figure 4: The Familiarity of the Tools used at University of Helsinki

<table>
<thead>
<tr>
<th>Name of the Tool</th>
<th>Number of Employees Familiar with the tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don't use digital tools at all</td>
<td>0</td>
</tr>
<tr>
<td>Tumblr</td>
<td>2</td>
</tr>
<tr>
<td>Other services, please name</td>
<td>2</td>
</tr>
<tr>
<td>IRC</td>
<td>4</td>
</tr>
<tr>
<td>Pinterest</td>
<td>7</td>
</tr>
<tr>
<td>Vimeo</td>
<td>6</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>6</td>
</tr>
<tr>
<td>Dropbox</td>
<td>12</td>
</tr>
<tr>
<td>Terkko Groups</td>
<td>14</td>
</tr>
<tr>
<td>Other blogging platforms (e.g. blogger.com, voudelus.net)</td>
<td>17</td>
</tr>
<tr>
<td>Twitter</td>
<td>19</td>
</tr>
<tr>
<td>Instant messaging, chat (e.g. msn.com)</td>
<td>20</td>
</tr>
<tr>
<td>Skype</td>
<td>24</td>
</tr>
<tr>
<td>Adobe Connect Pro</td>
<td>24</td>
</tr>
<tr>
<td>Google+ (plus.google.com)</td>
<td>25</td>
</tr>
<tr>
<td>UH Blogs (wordpress)</td>
<td>25</td>
</tr>
<tr>
<td>Other wikis</td>
<td>25</td>
</tr>
<tr>
<td>Flicker</td>
<td>29</td>
</tr>
<tr>
<td>Other wikis</td>
<td>33</td>
</tr>
<tr>
<td>Web forms (e.g. Kirjastoliitto's suomikielinen.city)</td>
<td>35</td>
</tr>
<tr>
<td>Facebook</td>
<td>37</td>
</tr>
<tr>
<td>Network drives</td>
<td>42</td>
</tr>
<tr>
<td>UH Wikis (Confluence)</td>
<td>42</td>
</tr>
<tr>
<td>Youtube</td>
<td>44</td>
</tr>
<tr>
<td>Yammer social networking service</td>
<td>44</td>
</tr>
<tr>
<td>Flamman Internet (beta)</td>
<td>44</td>
</tr>
<tr>
<td>Other mailing lists</td>
<td>37</td>
</tr>
<tr>
<td>ALMA Intranet (oungang)</td>
<td>42</td>
</tr>
<tr>
<td>Email</td>
<td>21</td>
</tr>
<tr>
<td>I have used the named tool either at work or on my spare time</td>
<td>48</td>
</tr>
</tbody>
</table>

Figure 4: The Familiarity of the tools used at University of Helsinki.
the employees involved in library customer training activities or anyone with administrative tasks. The mailing lists are used daily to give out official, administrative, or university HR related information. The employees have accustomed to expect an email whenever there is some new information concerning everyone in the library. The actual information may often be stored elsewhere, in an intranet, in a wiki or on a network drive of the library, and email serves as an invitation to go and have a look.

Remarkable, however, is the fact that nearly 20% of the respondents (9 out of 49) claim never to have accessed the wikis the library is using to maintain a lot of teamwork related materials as well as all content regarding the strategy process and library development functions. There are also a significant number of employees (11 out of 48), who describe themselves as not familiar with the library network drives. Network drives are, nonetheless, main base for many administrative documents and guidelines.

The use of Terkko Groups platform seems to be restricted to those respondents working in close connection with the medical campus library Terkko. The interviewees from the campus describe the platform as “a well serving intranet solution for the campus library” as it holds most of the professional as well as administrative content needed in the daily operations of the library location. Most employees in other library units are under the impression that they have no access to the platform.

When it comes to using the most familiar tools in work related situations, the order of the tools slightly changes. (See figure 5.) The university’s network drivers and wikis seem to be more frequently accessed than the social networking tool Yammer or the video sharing service YouTube. This indicates that not all the users have necessarily found professionally relevant use for the YouTube content. In the interviews and in the open survey questions the respondents frequently referred to the discussion in Yammer as “more of the personal side, and somewhat scatty”; obviously not considering the use of the tool work related. Many of them noted, however, that it is a shame that Yammer has not been able to redeem its opportunities to serve “as the virtual coffee break” of the working community.
Figure 5: The use of various tools at work.
Only a half of the respondents (25 out of 48) claim to be familiar with blogging platform WordPress that the university is supporting. This may indicate a slight misunderstanding while answering the question, as anyone who has ever accessed the library personnel magazine Verkkari or a news feed on the library web pages has in fact been using content generated on this blogging tool. The interviews reveal that there may also be some confusion over the terminology. A couple of the interviewees refer to a wiki when they actually are talking about the blogging platform or the individual blog posts. The researcher also gets several questions of the tools and the manner the news feed on the web site is produced.

The basic social networking seems to have penetrated the lives of library employees. Over 72% of the respondents say they are familiar with Facebook. Most of them (30) do identify themselves as frequent users accessing the service at least several times a month, if not on daily basis. The Google+ is familiar to half of the respondents (24), but not as widely and frequently used as Facebook — a ratio that reflects the general popularity of the said tools. Twitter is familiar tool to 19 respondents, but only nine of them claim to be frequent users. The emerging social content sharing services such as Pinterest (9), and Tumblr (2) are familiar to only a few individuals.

There is quite a variety of other digital tools available for use at the university. The university has introduced Adobe Connect Pro conference call service to cut the costs of work related travel. The service is also used to offer a desktop access for many seminars and conferences organized at the university. Adobe Connect Pro is familiar to half of the respondents (24 out 48). Skype is also relatively widely known (21), but most respondents (29) have never used it at a work related setting.

Some form of instant messaging (e.g. chat, irc) is familiar to at least two fifths of the respondents. The interview data also reveal that some such a tool is something that many employees miss in their work: Easy access to the colleagues working in other library locations as well as in the other departments of the university would be valued. A handful of respondents reveal to be using Dropbox at work although not frequently.

Using Dropbox, Google Drive and other cloud services also raised questions. Accord-
According to the open survey data there was a rumor around that using Dropbox was not allowed within the university network. Nobody, not even the researcher or the online education professional interviewed for the thesis, seemed to have the final answer for the burning question: What tools, of all those available, are in fact allowed at the university? (Maja, 2013) Many employees seem to be aware of tools they have encountered either at work or in their spare time activities, and they recognize the possibilities these tools would provide also at their work. Taking up such tools at the university, however, poses the questions of permissibility. Many employees are also concerned with the data security issues (see figure 13). The rule of thumb seemed to be, however, that if a tool is accessible – that it is not technically disabled in the university network – it could be used.

Apart from one – the youngest – respondent, the employees interviewed described themselves to be “somewhat on the hesitant side” when it came to trying or adopting new technologies and tools. They did not identify themselves among the early adopters, though such group was recognized being present in the working community. Even the three interviewees who claimed to have more profound than average understanding of the subject due to previous studies in information technology, identified themselves in this hesitant group. Even though they were interested in the development of information technology, and even felt that “it is a professional responsibility to keep up with the new stuff”, they felt they were not as eager to try out and adopt the technology as some of their co-workers.

6.2 Tools Used for Various Communicative Functions

The third question of the survey sought to identify the various uses of the digital tools in the working communities of the library. The respondents were asked to identify - by ticking a box - all the tools they had used in certain knowledge sharing functions in their work. The knowledge sharing functions can be grouped into six different set of statements. Tool-wise, the active knowledge sharing habits of the individual worker were surveyed by setting the following options (see figure 6):
Figure 6: Tools Used for Different Knowledge Sharing Functions

- **Sharing knowledge in the working community**
- **Instructing co-workers or employees**
- **Giving feedback to co-workers or supervisors**
• Sharing knowledge in the working community
• Instructing co-workers or employees
• Giving feedback to co-workers or supervisor.

Email was by far the most popular tool used in the active knowledge sharing of the employees. 45 out of 48 respondents considered having shared knowledge via email, 36 out of them using the mailing lists. The outgoing ALMA intranet (30) and library wikis (26) were the second most popular channels. Yammer (16) and library network (17) drives followed with somewhat equal share of use, having been used by only a third of the respondents. Of these four only, not surprisingly, Yammer (10) had a significant use when it came to giving feedback to co-workers or management. Email (38) and mailing lists (21) ruled as the main channels for employee feedback as well.

Apart from the email, the feedback seems to be rarely given by using digital tools. This may reflect the uncertainty of the proper ways of using the tools (discussed further in the chapters 6.5.2-6.5.5) but also be an indication of a working culture where feedback is rarely given. This assumption is supported by the interviews where several employees described the culture as “controlled” and “cautious” when it comes to choosing the respondents and wording for the message. The co-workers were in many situations seen as “too sensitive” to receive or handle open feedback.

As the email is the main channel for sharing knowledge and distributing information within the library organization, it is not surprising to see it hold the position as the most important source of information when it comes to the current matters of the library (see figure 7). The information retrieval habits as well as the way people restored information needed in the work of the employees was surveyed by setting the following options:

• Acquiring information on current issues in my working community
• Acquiring information on current issues in HULib
• Acquiring information on current issues at university
• Acquiring other professionally relevant knowledge
• Note-taking and archiving
<table>
<thead>
<tr>
<th>Function</th>
<th>Number of Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiring information on current issues in my working community</td>
<td>20125</td>
</tr>
<tr>
<td>Acquiring information on current issues in HULib</td>
<td>20125</td>
</tr>
<tr>
<td>Acquiring information on current issues at university</td>
<td>20125</td>
</tr>
<tr>
<td>Acquiring other professionally relevant knowledge</td>
<td>20125</td>
</tr>
</tbody>
</table>

Figure 7: Key Sources for Professional Information for the Staff
For the information needs outside the library but within the university, the university intranet has a significant role (38). Terkko Groups (12), local intranet solution for the medical campus library is an important source of information for the library employees working within the campus. Most other staff members, however, have no access to that content, or, as revealed in the interviews, are unaware of this source of information altogether. The beta version of the new Flamma intranet (20) is yet to have an adequate content to satisfy all information needs. Also Yammer has a role (15) in this type of information sharing, as the subgroups within the service offer a sneak peek to the issues discussed other units of the university. Joining and participating in such groups requires, however, a deliberate effort.

The professionally relevant information from sources outside of the university is, according to this survey, important to many employees. Facebook (14), different non-university wikis (19), and internet forums (10) are mentioned as main sources of such information. Also Adobe Connect Pro offering access to many seminars and meetings in remote locations is mentioned (8) as a channel to get professionally relevant information.

When asked about the tools the respondents liked to use for note-taking and archiving purposes, the role of the most familiar tools e.g. email (37), ALMA intranet (24), and network drives (23) was again highlighted. The outgoing intranet ALMA with its several library related forums, and the network drives seem to have a status of being the official archives of the library. The wiki is almost as popular (22), but gained a lot of criticism as well:

“[The wiki is challenging as] a lot of history gets mixed with the current information. It is a linear development with the wiki documents, but the old and outdated information is still there, as the wiki is not updated as a whole.”

IT-specialist

The version control of wiki documents was considered a difficult task, and thus the tool was seen as a potential source of misinformation as well. The attitude is partly reflected in the communication culture of the organization, where communicating stabil-
ity is highlighted: Determining the credible source is important (Frahm, 2011, 140). Employees easily expect that only information considered “final” is officially disclosed, and employees have learnt to wait for the input from the official sources, e.g. emails from the administration and the management containing a link to documents elsewhere.

In the interviews, when specifically asked, all the respondents admitted to use the mailbox of the university email as their personal archive, even though all of them had tackled with the problem of disk space running out. The interviewees felt that keeping the documents in the email is the easy solution, as “if you have even a rough idea of from whom or when a certain email has come, it is quite easy to find later on.” A couple of the interviewees stressed that sending an email containing an important attachment to several colleagues was a good practice as “it helps keeping the document safe”.

The social media networking tools e.g. Yammer or Facebook, were rarely used for archiving professionally relevant information. One of the interviewees, however, described how she had started a personal blog for these archiving purposes: “To keep these things that I’ve done there, to be able to share them later”. For her the blog serves for the professional profile building purposes as well.

In the past three years, following the merge of the libraries in 2010, the library administration has set a considerable amount of working hours into trying open up the strategy process and encouraging participation in collaborative development work. This has been done both by organizing physical open forums, with management talking points, for employees to meet and discuss the issues emerging as well as by putting the planning material available through digital collaboration tools that offer functions to comment and join or follow discussion. A wiki has been the main tool used throughout the strategy process 2010-2013. This new practice was introduced to answer the feedback of the employees who felt that in the larger organizational units it is more difficult to follow and contribute to issues still in the planning phase.

The tools the employees were using to participate in the development work and other collaborative activities in the library were surveyed through the following four aspects (see figure 8):
• Taking part in a team, a project group, or a working group
• Planning and development work (e.g. strategy work)
• Commenting issues under preparation
• Creating new teams or alliances

Most of the teams and working groups (35) still rely on email as the main channel of information sharing and discussion.

Knowledge sharing in customer care functions was addressed by setting three statements (see figure 9):
• Communicating to customers
• Handling the feedback from customers (as an internal process)
• Answering feedback from customers

Email is recognized as the ruling tool when it comes to the library customer care. 40 of the 48 respondents had used email to respond to the customer feedback. Mailing lists that reach the staff at departments and faculties as well as many student groups (e.g. the Student Union sub-groups, departmental student organizations), were an important (20) tool for communication towards customers. Email, and to some extend (10) the mailing lists were also the main tool used in handling the feedback further, if it issues in it raised any need for further discussion or developing the practices of the library. Also the intranets and Facebook were used by some one fifth of the respondents for communicating current issues to customers.

Blogging about the current issues was a relatively familiar (12) way of communicating towards the customers. Only a few individuals, however, were familiar with using blogs (3) or Facebook (4) for answering the questions the customer had posed through those tools. This may well be indication of the idea, that these social channels are solely maintained by certain employees to whom communication tasks have been assigned, or who have a clear responsibility to deal with the customer feedback in the social chan
Figure 8: Tools Used to Participate in Planning Work
Communicating to customers

Handling the feedback from customers

Answering feedback from customers

Figure 9: Main Tools for Customer Care Communication

<table>
<thead>
<tr>
<th>Communication Function</th>
<th>Number of Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating to customers</td>
<td>20 Mailing Lists</td>
</tr>
<tr>
<td></td>
<td>12 Blogs at UH</td>
</tr>
<tr>
<td></td>
<td>9 Facebook</td>
</tr>
<tr>
<td></td>
<td>9 ALMA intranet</td>
</tr>
<tr>
<td></td>
<td>7 Flamma Intranet</td>
</tr>
<tr>
<td></td>
<td>6 Wikis at UH</td>
</tr>
<tr>
<td></td>
<td>4 Twitter</td>
</tr>
<tr>
<td></td>
<td>3 Wikis at UH</td>
</tr>
<tr>
<td></td>
<td>2 Yammer</td>
</tr>
<tr>
<td></td>
<td>2 YouTube</td>
</tr>
<tr>
<td></td>
<td>1 Adobe Connect Pro</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication Function</th>
<th>Number of Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling the feedback from customers</td>
<td>10 Mailing Lists</td>
</tr>
<tr>
<td></td>
<td>2 Blogs at UH</td>
</tr>
<tr>
<td></td>
<td>1 Facebook</td>
</tr>
<tr>
<td></td>
<td>0 ALMA intranet</td>
</tr>
<tr>
<td></td>
<td>0 Flamma Intranet</td>
</tr>
<tr>
<td></td>
<td>0 ALMA intranet</td>
</tr>
<tr>
<td></td>
<td>0 Blog at UH</td>
</tr>
<tr>
<td></td>
<td>0 Twitter</td>
</tr>
<tr>
<td></td>
<td>0 Wikis at UH</td>
</tr>
<tr>
<td></td>
<td>0 Yammer</td>
</tr>
<tr>
<td></td>
<td>0 YouTube</td>
</tr>
<tr>
<td></td>
<td>0 Adobe Connect Pro</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication Function</th>
<th>Number of Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answering feedback from customers</td>
<td>9 Mailing Lists</td>
</tr>
<tr>
<td></td>
<td>3 Blogs at UH</td>
</tr>
<tr>
<td></td>
<td>4 Facebook</td>
</tr>
<tr>
<td></td>
<td>0 ALMA intranet</td>
</tr>
<tr>
<td></td>
<td>0 Flamma Intranet</td>
</tr>
<tr>
<td></td>
<td>0 ALMA intranet</td>
</tr>
<tr>
<td></td>
<td>0 Blog at UH</td>
</tr>
<tr>
<td></td>
<td>0 Twitter</td>
</tr>
<tr>
<td></td>
<td>0 Wikis at UH</td>
</tr>
<tr>
<td></td>
<td>0 Yammer</td>
</tr>
<tr>
<td></td>
<td>0 YouTube</td>
</tr>
<tr>
<td></td>
<td>0 Adobe Connect Pro</td>
</tr>
</tbody>
</table>

Figure 9: Tools Used for Customer Care Communication
nels. Twitter, Yammer, YouTube and other more socially orientated technology have only a marginal role in customer care.

The fifth dimension addressed was the professional networking and maintaining a public professional profile. The employees were asked to reveal what tools they used for

- Building and maintaining professional profile, and
- Networking professionally

Based on this survey, the digital tools have not a significant role in professional networking in many employees’ life (see figure 10). Emailing between colleagues, customers, and other stakeholders, is seen as networking (18) but the actual social media tools are yet to have very little role in building professional networks among the library staff. Building a professional profile through social technology is a fairly new phenomenon. As working in an industry that has traditionally been able to offer long, steady careers with no acute need of seeking new opportunities, the library staff has had very little need to use of such professional networking services as LinkedIn or Twitter. It may as well be, that as the Finnish library community is relatively small, only a few of the staff encounter demand to build career as visiting expert or guest speaker. Many of them seem to trust the traditional professional networks still over social media.

![Figure 10: Tools Used for Networking and Professional Self-Branding](image)

Note that ‘customer’ here can refer to many different stakeholder groups of the library (e.g. university students, other library users, researchers within the faculties, university administration) depending on the respondent and his work role. An interesting angle to further research would be to see into the digital knowledge sharing habits of the different library customer groups.

---

3 Note that ‘customer’ here can refer to many different stakeholder groups of the library (e.g. university students, other library users, researchers within the faculties, university administration) depending on the respondent and his work role. An interesting angle to further research would be to see into the digital knowledge sharing habits of the different library customer groups.
Some communication functions at the workplace also have a recreational purpose. As many as one in three of all the respondents admit to have used the social networking tools at workplace for sheer amusement. The humorous pictures, typical to be shared through social media today, are still circulated more frequently in the physical coffee tables of the library units. The use of social technology “just for laughs” in the workplace is something a few of the colleagues might resent.

Remarkable, when surveying the use cases of the various tools above, is the quite traditional perception of the organizational communication the library staff seems to hold. Employees talk spontaneously about various internal communication functions, such as learning about the things discussed in the board meetings and receiving other administrative information. Customer care functions, or communicating to the other external stakeholder groups only seldom rose in the interviews. The open survey data also reveals that employees easily perceive communication as an internal function of the organization. Therefore also the issues and challenges brought up by the staff are mostly those that relate to the internal operations and processes of the library.

Another interesting observation of the perception of the communication can be made by surveying the active and passive uses of the technologies. Where most of the digital tools listed are picked at least by some staff members when asked about the key sources of the information, far fewer get to be mentioned when the employees are asked about their own knowledge sharing activities. As the library staff takes pride in being professional information seekers, they are perhaps more likely to learn to use any new tool for information retrieval purposes if they become aware of such a possibility. Being motivated to use the same tools and technologies to share information and knowledge is, however, a whole other ballgame.

6.3 Motivational Factors for Knowledge Sharing at HULib

The motivational factors for knowledge sharing through social technology amongst Helsinki University Library staff were audited for this thesis by setting specific survey
questions on the theme. This theme, including both the positive and negative motivational factors, was also addressed during the interviews.

6.3.1 Surveying Attitudes

The three surveys question dealing with positive and negative motivational factors were designed in the form of statements. The respondents were asked to assess, reflecting on their own, personal experience, how much they agree or disagree with the statements on five-point likert scale, the selection scale ranging from 1 - 5; from “totally agree”, through “somewhat agree”, “don’t know or have an opinion”, “somewhat disagree”, to “totally disagree”. Thus the data produced by these three questions is quantitative by nature. In this thesis work the quantitative data is analyzed by qualitative approach in context with interviews and open survey question data.

The first motivation related survey question addresses the general attitudes towards knowledge sharing. It poses 14 individual sentences, each carrying a value statement. The respondents are asked to evaluate their own attitude towards the value statement based on their own experience by setting a position: I think the following statements are true based on my own experience... (See figure 11.)

The second question is probing the positive motivational factors related to the knowledge sharing culture at the work community (HULib). The respondents are of-
ferred with 13 statements that address a positive motivational factor each: *I am motivated to share knowledge and to participate in the workplace because...* (See figure 12.)

![Figure 12: Recognized Motivational Factors for Knowledge Sharing](image)

Figure 12: Recognized Motivational Factors for Knowledge Sharing

The survey scanning the attitudes towards knowledge sharing reveals that on the individual level, the employees of HULib feel quite positive about the knowledge sharing. Open flow of information and knowledge sharing are regarded important for the atmosphere of the working community. These are typical intrinsic motivational factors, as described by Vuori and Okkonen (2012a, 594), encouraging the employees to be more active on knowledge sharing. Knowledge sharing is seen to help the employees to achieve their professional goals on both individual and organization levels. These are also identified as the key motivators for knowledge sharing behavior in the survey.

Knowledge sharing is seen as an activity that helps the respondents to engage with the working community. Knowledge sharing serves as a networking opportunity to many employees, and may also help in building one’s individual career. Majority of the respondents feel, however, that the employer doesn’t reward knowledge sharing behavior. The clear extrinsic motivational factors as described by Vuori and Okkonen (2012a, 594) seem to be absent from the organization.

Most respondents also regard knowledge sharing behavior being an integral part of the work itself, which works as another intrinsic factor. In the interviews the respondents
refer to the need of new information as a key part of their work-related tasks. Often, however, “the need for a particular piece of information is recognized only afterwards” as the respondents have had no clear picture of what to look for. The employees in developmental or managerial roles stress the importance of discussion as a form of knowledge sharing in many planning and coordinating situations in their work. These overall positive individual level attitudes towards knowledge sharing could help any organization to create a solid base for open knowledge sharing culture.

6.3.2 Opportunities and Possibilities Recognized

An interviewee described her personal attitudes towards the technological change through the digital revolution shaping the entire library industry:

”The library should always be one step ahead, but unfortunately I feel this is not the case. The library is lacking behind, while the publishers [of digital content] are setting the pace. We are tacking there. We should be ears open all the time, look for new stuff, and consider whether it could be any use to us. Open to everything, so to speak.”

The library employs educated individuals with inquisitive minds for new information and positive attitude towards knowledge sharing in general. The open survey data and the interviews draw, however, quite a multifaceted picture of the general level of recognizing the opportunities provided by social technology.

All the employees interviewed refer to some social collaboration technology as a good source of information. The library related blogs, both written by colleagues in Finland as well as by international professionals, are seen as very valuable source of information. Those colleagues who are able to use their time to write professionally relevant blogs are praised by several interviewees. Good blogs that have managed to gather a lot of comments as well are seen both informative source of information and entertaining past time. On the other hand, not all the interviewees were familiar with the terms

---

4 Original transcript: ”mun mielestä kirjaston pitäisi olla aina askeleen edellä, mutta musta valitettavasti tuntuu, että näin ei ole. Että kirjasto kuitenkin vaan yrittää laahata perässä kustantajien ehdolla. Siinä lausvitaan. Pitää olla koko ajan korvat auki, että tollasta, voisiko siitä olla meille jotain. Avoin kaikelle. […]”
“blog” or “blogging”. They were confused in two cases either with wikis or any website publicly available.

Yammer was clearly seen as a promising tool: Several of the interviewees had realized that by using Yammer to communicate with other people within the university community (that is, within helsinki.fi domain) it might be possible to gain access to discussion the library community wasn’t previously even aware of. It might help the librarians to get access to the virtual coffee tables of the university departments that are considered an important target group for library’s service marketing purposes. Yammer had already lowered the barrier for the library IT and communication professionals as they were invited to the university level forums of the communication professionals and online education specialists. In the library units that were merged under the roof of the new Main Library in 2012, Yammer was used – to some extent, at least – to get to know the people employees were about to be working with in the same premises. All this is in line with the benefits of social media described by Nesbit (2011) and others in chapter 2.3. Yammer was seen to have a lot of the potential. The implementation of the tool, however, dragged behind due to reasons discussed further in chapter 6.4.

The possibilities emerging by the open knowledge sharing were not as readily recognized when other tools enabling social functions such as commenting were discussed. When asked about the possibilities and potential benefits of wiki, none of the respondents pointed out the obvious: Unlike the email, the intranets and the network drives where a significant amount of the organizationally relevant information was stored to be accessed by an individual user, wiki offers similar commenting functions as any other social media and thus a possibility to participate. These commenting functions are not available in the outgoing intranet ALMA. With email the long, active comment chains were either available for only restricted number of respondents or caused frustration when filling up the inboxes of people totally unconnected with the matter at hand (on worst cases both). The technical difficulties and the uncertainty regarding the user rights and the visibility of individual wikis, as well as the hesitance to use such a

---

To be fair, it may be very difficult for anyone to distinguish a blog from any other website these days, as many websites are produced solely on a blogging platform – although lacking the blog-like content. Furthermore, there is the terminological confusion in Finnish, as the word ‘blog’ may refer to both a website-like set of content produced on blogging platform and to an individual piece of writing published through such an entity.
tool were more readily discussed (see chapter 6.4). It seems these barriers hinder the employees to recognize some of the potential of the tool.

The unique power of social networking technology was revealed to many library staff member during the IFLA World Library and Information Congress held in Helsinki in August 2012. Dozens of staff members volunteered at organizing the congress activities with hundreds of other colleagues from all around the country. Four respondents in the interviews spontaneously pointed out that organizing the complex and fast changing schedules for the volunteers would have been very difficult without social media where it was easy to contact a large group people on short notice without flooding everybody’s email. After the congress many of those involved have enjoyed the possibilities offered by social networking technology when keeping up with friends made during the international conference.

One informant described how her suspicious and cautious attitude towards social technology was changed while she was involved in an international project, where “the project group wrote very actively in [Facebook], and I realized it was very handy in such a context.” Using the official project portal to communicate would have taken a lot more effort. The concrete experience of benefiting from knowledge sharing on social community tools seems to be a key motivator for adapting the tool.

The Yammer and other social networking services seem to cause further confusion when it comes to the content people are posting online. Even though the tool itself is regarded as having potential, the content employees see peers post online, is not necessarily as useful. The somewhat mixed role of Yammer content is seen questionable. Employees would be motivated to use the tools to lower the barriers between working communities, and to learn to know the colleagues a little better, but are not that interested in the not professionally relevant things some of them fill their timelines with. And how come some colleagues seem to have “endless time at hand to post irrelevancies online when others are busy and stressed out with the moving project of the libraries”? An interviewee, however, sees the culture of actually working with social media being very young still:
When it comes to the actual opportunities to share knowledge in the work community the employees seem hesitant. Based on the survey data, it seems that many employees are not fully familiar with the knowledge sharing forums and activities in the organization, or have not sufficient knowledge of who is responsible of what and could engage in knowledge sharing with them. The interview data also emphasizes this point of view: Several respondents complain that it is difficult to both acquire information and consider the relevant audience for own knowledge sharing activities if you are not familiar with the entire organization and the roles and tasks of individual professionals in it. The lack of organizational expert index is demonstrated here. It emphasizes the value of personal social networks in effective information sharing: Those with longer careers in coordinating or developmental professional roles have a wider network within the library and thus easier access to knowledge.

An interesting aspect emerging in the survey data as well as in the interviews is the role the individual employee in the knowledge sharing processes of organization. Even though the questions addressed try to hold a very neutral point of view to the different roles in the knowledge sharing process, most of the respondents were only eager to analyze their own behavior as information seeker and as receiver in the organizational communication activities. Only after specifically asked about their own knowledge sharing activities and behavior as information producer, a few of the respondents started to consider their own role in knowledge sharing process of an organization.

This attitude commonly held by the employees demonstrates the power of the top-down communication chain of the organization (see 3.1), were employees easily consider themselves being solely the passive objects in the knowledge sharing process. There may also be a deeper perception of an organization demonstrated here: It is typ-

---

8 Original transcript: “Sama on monissa noissa välineissä, täytyy syntyä joku käyttäjien keskeinen kulttuuri. Vaati volyymiä, roskaa pitää olla paljon, että jotkut alkaa tehdä selkeämmin muotoilua käytäntöä.”

71
ical for the non-profit organizations such as government institutions to see the organization to exist primarily for itself. In this context the employees easily see their role – not as active participants working towards certain goals of the organization but rather passive receivers of information. When the employees don’t recognize their personal role as knowledge producers and disseminators, or are lacking the opportunities to do so, they are likely to get the feeling the organization is ”running its own orbit” or even get frustrated when things seem to develop without their say in matters. This phenomenon may also relate to the level of employee engagement in the organization.

6.4 Barriers to the Use

The third survey question tries to monitor the clear barriers there may be in employees’ attitudes or working conditions that impede the employee sharing knowledge through social technology. Again, the attitudes were surveyed in the form of statements: *In my case, the participation and the knowledge sharing in the work community's digital channels is reduced by the fact that …* (See figure 13.)

The overall analysis of this survey question data shows that responses here display a higher dispersion than when the positive motivational factors were monitored. This may be for various reasons. First of all the formulation of the question with greater variety of statements to evaluate may have had its impact. Secondly, according to the open survey data and the interviews conducted, there’s a recognizable group among the library staff that doesn’t feel – or admit to feel – any discomfort while using the digital tools available. They only seem to be annoyed because the other employees do not use the tools, and therefore they themselves are not getting the maximum benefits out of them. On the other hand, as in all employment related surveys, there’s often the tendency for some respondents to answer the survey questions the way they assume is expected from them. (See, for example, Myers, 2009) The difficulties in using the tools offered by the employer may not be as readily admitted, if the expected behavior is to be able to use the tools at hand fluently.

The barriers for knowledge sharing through the social technology will be discussed in relation to personal barriers, technology related issues, and practices of the working
The features and functionalities of the digital tools often change.

<table>
<thead>
<tr>
<th>Statement</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>The features and functionalities of the digital tools often change.</td>
<td>18.8%</td>
<td>36.4%</td>
<td>22.9%</td>
<td>12.5%</td>
</tr>
<tr>
<td>There are too many digital tools at use in my work community.</td>
<td>18.8%</td>
<td>36.4%</td>
<td>22.9%</td>
<td>20.8%</td>
</tr>
<tr>
<td>I'm not sure how my thoughts will be received at work community.</td>
<td>4.2%</td>
<td>31.3%</td>
<td>25.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>I have not received an adequate introduction to the digital tools used in the work community.</td>
<td>12.5%</td>
<td>20.8%</td>
<td>25.0%</td>
<td>31.3%</td>
</tr>
<tr>
<td>The digital tools in the work community are laborious or difficult to use.</td>
<td>4.2%</td>
<td>31.3%</td>
<td>18.8%</td>
<td>35.4%</td>
</tr>
<tr>
<td>Participation and sharing knowledge in digital channels takes too much time from other tasks.</td>
<td>6.2%</td>
<td>22.9%</td>
<td>25.0%</td>
<td>32.4%</td>
</tr>
<tr>
<td>There is not enough opportunities to participate or to share knowledge in my work community.</td>
<td>15.1%</td>
<td>43.3%</td>
<td>32.4%</td>
<td>9.2%</td>
</tr>
<tr>
<td>I think I have already well enough networked.</td>
<td>10.4%</td>
<td>21.6%</td>
<td>39.6%</td>
<td>27.1%</td>
</tr>
<tr>
<td>I do not know in which digital channel the useful or interesting information is located.</td>
<td>20.8%</td>
<td>30.8%</td>
<td>20.8%</td>
<td>31.3%</td>
</tr>
<tr>
<td>I am concerned or confused of the data security related issues.</td>
<td>22.9%</td>
<td>31.3%</td>
<td>25.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>I am not sure in what circumstances I am permitted to participate or share information.</td>
<td>27.1%</td>
<td>31.3%</td>
<td>27.1%</td>
<td>18.8%</td>
</tr>
<tr>
<td>I am afraid that I cannot express my thoughts clearly in writing, and I may therefore be misunderstood.</td>
<td>31.3%</td>
<td>20.8%</td>
<td>20.8%</td>
<td>31.3%</td>
</tr>
<tr>
<td>The information available in digital channels is not reliable.</td>
<td>31.3%</td>
<td>37.5%</td>
<td>37.5%</td>
<td>37.5%</td>
</tr>
<tr>
<td>I do not want to face the criticism my thoughts might raise.</td>
<td>20.8%</td>
<td>20.8%</td>
<td>39.6%</td>
<td>27.1%</td>
</tr>
<tr>
<td>I do not think I have any such information or opinions that would of interest to my co-workers.</td>
<td>27.1%</td>
<td>31.3%</td>
<td>18.8%</td>
<td>12.5%</td>
</tr>
<tr>
<td>I do not think I have any such information or opinions that would benefit the work community.</td>
<td>4.2%</td>
<td>31.3%</td>
<td>31.3%</td>
<td>31.3%</td>
</tr>
<tr>
<td>I do not personally benefit from the participation or the knowledge sharing.</td>
<td>14.6%</td>
<td>37.5%</td>
<td>27.1%</td>
<td>62.5%</td>
</tr>
<tr>
<td>Using the internet or information technology is not comfortable.</td>
<td>14.6%</td>
<td>37.5%</td>
<td>27.1%</td>
<td>62.5%</td>
</tr>
<tr>
<td>The digital channels have no such information that would interest me.</td>
<td>12.5%</td>
<td>31.3%</td>
<td>31.3%</td>
<td>31.3%</td>
</tr>
<tr>
<td>I rather keep the professional knowledge to myself.</td>
<td>8.3%</td>
<td>27.1%</td>
<td>31.3%</td>
<td>62.5%</td>
</tr>
</tbody>
</table>
community in the following subchapters. Organizational culture also influences the understanding of what knowledge is considered important and valuable. Even if an individual would be motivated to share knowledge, the organizational culture may set barriers to it. (Vuori & Okkonen, 2012a, 595.) The latter is discussed further in context of communication, change management, and leadership.

6.4.1 ICT Skills

Majority of the respondents in the survey feel that the features and functionalities of the digital tools change too often for them to be easy to use. Many also feel that the tools available are difficult or laborious to use. Considering the age distribution of the library staff (see chapter 4.1.3), most of the employees have entered the profession way before the time of social media or even any consumer-oriented web was available. They have become familiar with computer-based technology first through the library database systems that started to emerge in the 1980’s.

This history may have affected their attitude towards technology on several levels: First, they have become familiar with computer software by learning one library database system at a time, not through systematic ICT training. It is possible that an employee has a working knowledge of library information system routines, and he can run the database smoothly, but his understanding of computer, other information systems, software, Internet, and applications is otherwise very limited. Secondly, the library databases so far have not exactly excelled at offering an enjoyable user experience. For employees not otherwise engaged in technology, the struggle with the library databases may have even denigrated the reputation of technology, and made it seem generally unwelcoming. (Ruhanen, 2011.) A respondent in the survey voiced an opinion:

“Most of the grass root level workers have no time or interest in the digital reality. So the employees are divided into those who are active, and those who are not. And not even interested in [being active].”

When the technology and the web have gradually penetrated all the office routines as well, the ICT skills of the staff have mostly been left to develop at their own pace. Cer-
tain qualifications or skill levels has not been required. The new recruits are not as a rule evaluated or tested for ICT skills. An IT specialist with a long-term experience from ICT support and training functions shared his insight in the interview:

"Many [employees], who are having trouble learning some new program or operating systems or tools... Many of them have this problem with “the mysticism”. Because there are [other] people who have knowledge about IT, these people tend to think that it requires some sort of special talent or intuition they themselves are lacking. And, still, 99% of IT is simply arbitrary agreements that make the system do this or that. There’s very little where intuition could help you. Some people have learnt that ctrl + another key makes the computer do a certain thing, and are convinced that these things cannot be learnt. This is where the employees should be trained, to understand that IT is simply a bunch of irrational agreements. If the first thing you learn about new stuff is that it’s difficult, and that you are lousy at it... instead that these are simply agreements to be learnt...

Another interviewee with similar experience from support and training also stressed the importance of individual attitudes: “If you have a positive attitude, it’s all going be well [with the new tool]. When you don’t hate the change to begin with… But if you do, it’s going to be a bad for everyone. With positive attitude, the barriers are lower.”

6.4.2 Need for Collaborative Training

Many respondents in the survey also claim that they haven’t been adequately acquainted with the digital tools they are supposed to adopt. The lack of introduction, with the low overall knowledge of ICT and web solutions, hinder the employees to recognize many of the possibilities the social technology could offer to ease the work related processes. This, eventually, may be reducing the productivity of work. Another point affecting productivity emerging in the open data is the excess time the employees feel they are spending as each other’s IT support:

“It also interferes with the work when so many employees are not fluent with the tools. I wouldn’t want to use any more time on helping with the ICT problems of the working community – and by the community I refer to not just the library people but the university community in general.”

An open answer for survey

---

8 Original Transcript: "Monet ihmiset, joilla on ongelma oppia jotain uusia ohjelmistoja, käyttöjärjestelmiä, laitteita niin monilla siinä on tämä mistä jonkin lainen ongelma sen mystiikan kanssa, että on ihmisä, jotka osaa tietotekniikka niin kuin kahdellaan, että se on jonkinlaisia lahjakkuutta tai intuitiota, jota kellä ei ole. Ja kuitenkin 99% prosenttia tietotekniikasta on mielelläni sopimuksia, jotka saa järjestelmän tekeväni sitä tai tätä. Hyvin vähän sellaisia, mitä voisi intuitiolla ymmärtää. Jotkut ovat oppineet, että ctrl+ se tai tämä tekee sitä tai tätä, ja näyttää niinku vakuuttavalla sillä tavalla että eihan toimosto voi oppia. Sen tyypisestä mystisestä pelosta pitäisi auttaa ihmisiä pois niinku ymmärtämään että se tietotekniikka on vaan kasa irrationaalisesti sovitut... Niin, kun se ihminen toimiston uuden asian edessä ensimmäisenä oppii, että täa on vaikeaa ja minä olen huono, sen sijaan että nää on tämämiisä älyttömiä sopimuksia jotka on vaikeita muuta epistavissa."

9 Original answer: Toisaalta myös sellainen tökkii, että osa kollegoista ei hallitse välineitä sujuvasti. Muiden työntekijöiden teknisten asioiden pahkäilyyn en tahtoi aikaani käyttää yhtään rykkyistä enempää. (Työntekijöillä tarkoitan tässä yliopistomaailman toimijoita, en ainoastaan kirjastolaisia.)
Inadequate ICT skills are a clear identified barrier that could be dealt with: More targeted training should be constantly offered, and, whenever a new tool or technology is introduced, there should be a sufficient training period for the employees in the implementation project. Other concerning issues, like data security and appropriate digital community etiquette, could also be included in this training.

In the survey the respondents revealed that currently the most common way to familiarize themselves with the tools used in the organization, was an informal training session organized by a peer or a supervisor. Of the digital community tools discussed, training sessions for wiki organized by university ICT specialists had at some point been attended by one fifth of the respondents. Approximately one employee in every five had been trained by peers or supervisors, and another one in every five had taken the time to learn the features of the tool with a manual. Remarkable is that only a fifth of the respondents claimed that they would know where to look for training and/or manual should they feel the need to get further information on the tool. Eight respondents out of the 48 claimed to be in no need of training or manual to use the wiki.

With the blogging platform, only four respondents had taken a course, another four had been introduced to the tool by a colleague. Only seven individuals claimed to know where to look for the training opportunities or manuals. For Yammer the familiarization had solely taken place by peers. Training organized outside of the university regarding the digital community tools discussed in this thesis had not been attended at all by the respondents.

Most of the interviewees had been taking part in some form of ICT training organized by the employer. Generally, the quality of the training organized by the IT department or the Educational Center for ICT was considered good. The employees, however, felt it was challenging to keep in mind the things learnt during the course, if one had not the immediate need to use the tool in question. This view is supported by research in

---

10 Since the survey was out, a FAQ of the university-wide blogging platform and related services have been published by the Educational Center for ICT, so learning of the features and potential of the tool should be easier in the future.
general, and as Helena Lemminkäinen (2010, 219) puts it: “There is often useful knowledge immersed during the training courses, but the knowledge remains tacit, within individual employee’s mind, and it fails to spread into practice.”

A relevant context was something several of respondents missed during the training. An interviewee suggested:

“I would like to go for a workshop type of approach towards the technology training, like learning together with your peers, where you get experiences of how these tools are used and how one is supposed to work in this digital setting. I don’t believe in separate training courses but this workshop type of thing would have the real working context in it. It would spread gradually like the tacit knowledge.”

Another interviewee stated along the same lines that a successful training session would have “a smaller group… maybe up to 10-12 people, and the instructor could be someone from the library, who’d know how the tools are supposed to be used [in the library working context].”

This suggested approach has already been, to some extent, taken into consideration when employees have been trained to the new working processes of the new Main Library.

To be successful in the future, however, the library organization should consider a training program that aims at raising the general ICT skills level of the staff. As the skill level of the employees has not been evaluated systematically, many of the employees have managed so far by learning the bare minimum needed to operate the library databases and related software in the acquisition process and the customer service.

The libraries as industry are moving towards the digital reality where most of the content delivered to the customers is in a digital form, offered through digital platforms, online or via mobile solutions. All the employees in the customer touch points at least, should have the basic knowledge of the technologies that provide the key product they are working with. As web and mobile technologies are developing fast, one of the key skills of the 21st century library professional is in fact the ability continually to adopt and evaluate new technologies. If the forthcoming technology changes are welcomed with the same indifference as has been the case with lack of the systematic develop-
ment of ICT skills, it may add to further chaos and frustration. The number of tools and technologies introduced is at any case likely to increase, not decrease.

6.4.3 Features of the Tools

The tools at use have some features that may themselves act as barriers for open knowledge sharing. The outgoing intranet ALMA has had somewhat notorious reputation among the university staff, starting from the implementation project failing in 2004. This, again, may reflect upon any tool that it is introduced as intranet’s replacement. When wiki was introduced, one of the key arguments was that it would be more suitable tool for teamwork, and above all, significantly easier to use than the intranet. The overall experience of the tool is not very positive, though. All but one of the interviewees as well as many of the open survey question responses refer to wiki as “difficult to use” or “not very handy to search from”, and “chaotic, as people have so many different ways to use it”. As one interviewee put it: “[The wiki] has many features that are not very intuitive or handy, but if people in general were more fluent with the tool, many of these [features] could be overlooked.”

The user experience (UX) is a significant factor whenever a new tool or service is introduced. All the commercial social media tools have invested in the UX as it is a necessary competitive advantage. The wiki platform Confluence as well as the old intranet too lack the fabulous user experience, and are described by the survey respondents and interviewees as “inflexible”, “unwieldy”, and “crap”. In that sense, they remind many users of the other software acquired and used in the government sector. The native social media generation, on the other hand, is used to simple and functional designs, and may easily get frustrated with systems and software designed for some other objectives.

Imperfect access to the tools is another point of criticism discussed in the survey and interviews. The fact that most of the tools and services require a login with the username and a password is seen as a barrier for some users. The interviewees raise the issue in connection to several tools, but especially the wiki is mentioned: “I haven’t really used the wiki, as it ask for all kinds of passwords. I tried a couple of times, but it failed and [the system] stated that “an unknown user.”
University wikis and blogging platform are connected to university’s LDAP\textsuperscript{12} system so the general university user account can be used to sign in. The access to individual wikis, however, is also dependent on the access rights defined by the wiki’s administration. This barrier is already identified in the library, and some action has been taken to improve the situation. Even though several of the independently set up wikis have been reorganized to be based on the same platform with overall access to all the library working community, the previous experience of access failure may hinder employees to try again: “I have figured that I can live without the wiki as my work is here [in my immediate working community of the library unit]”. Another interviewee, in a management role in which there’s a need to create new working spaces for groups within the library describes the situation: “No, I don’t explicitly know how to [manage the access rights for an individual wiki] although I guess I could figure it out, but yes, yes it’s is relevant who’s got the access.”

The fact that the digital channels at use require written form of the knowledge shared can be identified as a clear barrier as many employees agree that expressing one’s thoughts in writing is challenging. “A key challenge in sharing knowledge online is that once the information is there, it’s difficult to remove or delete”, stated one respondent in open survey questions. This opinion was backed up by many of the interviewees. There is also indication that some employees do not feel comfortable about sharing their ideas in the first place. They either feel that they don’t trust their thoughts to have relevance or they have no clear understanding when and where sharing knowledge openly is appropriate. This can be regarded both as managerial issue as well as cultural phenomenon in the in organization, and will be discussed further in the sub-chapters 6.4.5 and 6.4.6.

\section*{6.4.4 Communication Practices in the Library}

Many of the barriers for knowledge sharing recognized by the employees can be classified under the organizational communication practices of the library. Helsinki Univer-

\textsuperscript{12} LDAP, the Lightweight Directory Access Protocol is an application protocol for accessing and maintaining distributed directory information services over an Internet Protocol (IP) network.
sity Library is an end product of series of organizational merges (see chapter 4.1.1). Throughout the merging process the management of the organization has made choices that affect the current communication practices of the library.

Half of the respondents in the survey agree that there are way too many different tools that the employees are supposed to use at the workplace. This issue stands out in the open survey data as well, as it is mentioned in some form in 18 out of the 26 responses. As one of the respondents in the open question put it:

“The different units in the library use different tools: There’s [Terkko] Groups, there’s wiki, there’s ALMA, Flamma (that truly is still beta), and this and that mailing list and working group. This wide range of tools doesn’t really enhance working conditions. And it doesn’t help us to feel that we work in one, united library.”

The variety of tools create confusion on two levels: First the tools require an employee to master several technologies for similar purposes. Secondly, an employee must be familiar with the organization thoroughly to be able to know which tool is used for what purpose in different units of the library. This adds to the confusion caused by the new technologies itself, and sets an additional barrier for sharing knowledge over the organizational units’ borders. The staff seems, according to the survey data and interviews, to yearn for clearer guidelines on what the tools at hand are to be used for. The widely varying practices of setting up new wikis for any emerging purpose and creating new folders on network drives are criticized by the respondents: If everyone is able to create a unique order, it gets very chaotic over time – and is, besides, quite the opposite of ‘the classification ideal’ of the library profession (see 4.1.4).

As the employees of one library unit have no straight access to the local platforms used in the other campus libraries (e.g. ‘Centraali’ space in ALMA for City Center Campus, Terkko Groups for Medical Campus etc.), sharing information between the library units requires an extra effort from the employees, and probably leaves a significant amount of valuable knowledge in the shade area. The challenging practice of using several tools for similar purposes is also criticized by the interviewees for both causing both extra work and unconstructive employee behavior:

---

“When employees are refusing to use a certain tool because of a personal preference, [and they are let to do by the management], it forces the others to be flexible and copy to content to other platforms [that are hopefully more agreeable to the users] in order to involve as many as possible. It is somehow overlooked, that if you want to be involved, it is your responsibility to go where the information is available and conversation takes place. Wherever that is. […] The management should stop the squeak [about the difficulties and personal preferences] and say that tool is not the issue here. […] It cannot be that employees expect all the communication practices to be tailored to their personal preference, based on how they are accustomed to use the web and digital tools, and if it’s not, they start complaining about how they haven’t been told about the topical stuff.”

In this sense the variety of tools and resistance to change are also management issues, demonstrating lack of leadership on the true objectives of the internal communication. Social technologies at hand are, after all, only tools, as several of the respondents pointed out. They should serve the working community at completing the objectives to achieve the ultimate goals of the organization, not to be seen as objectives themselves.

The simplest of the access barriers would have an easy fix: Several employees in the survey and in the interviews complained how colleagues use email to inform the community that certain information is available and can be located in some other source of information (intranet, wiki, blog, network drive etc.) – and then do not include the link in the email that the receiver could follow to the source. This may reflect, apart from sheer thoughtlessness, the unconscious idea that “colleagues are information seeking professionals for whom finding the right source should not be a problem”. If appropriate linking to the source were something required default from everyone in the organization, the access to knowledge would be considerably smoother in many situations.

An interesting notion is that while employees reveal to long for clear guidelines on which tool to use in various situations, the need for specific social media guidelines did not emerge in the data. The talk of the need for social media guidelines has been going on at university and other government organizations for several years now, but the interviewees did not refer to that discussion. The risk and challenges of social technology, as discussed in context of Nesbitt (2011) in chapter 2.4, did not really seem to

14 Original transcript: “…että ihmiset ovat alkaneet kieltäytymään joidenkin viestintävälineiden käytöstä, koska se käydään tietysä välineessä. Sitten muut siitä keskusteluoporukassa ovat joutuneet jouduutamaan siinä asiassa, ja kirjoittelevat viestejä useampaan paikkaan ja yrittävät saada kaikki mukaan ja näin. Kun jotakin unohdetaan se, että jos haluaa olla keskustelussa mukana, niin siihen keskusteluun täytyy vain etsiytyä, ollise keskustelu missä tahansa. Että jos joi sitä jää ulkopuolelle sen takia että ei suostu käyttämään jostain välineitä, niin silloin pitää katsaa pelin. [Sama keskustelu kuin ALMAN kohdalla?] Tässä on juuri se keskustelu. Ihmiset kokke, että viestintä pitää aina räätelöitä sen oman tavana mukaan ja sen oman verkon- ja työvälineiden käyttötavan mukaan ja jos ei sitä räätelöitä, niin sitä kääntää sitä, että minulle ei ole kerrottu.”
worry the otherwise control-orientated employees. This may be either because the employees see the corporate voice on social media being still mostly the product of the organization’s communication professionals, where they themselves have no part, or because they trust their colleagues to have sufficient new media literacy on the top of their information literacy skills.

6.4.5 Communication Roles

On the level of practical communication tasks, an issue that arose in the interviews was the obscure role of the internal communication professionals in the library. (See 4.1.2) An information specialist interviewed was confused with the role of the colleagues with assigned communication tasks in her own campus library unit:

“It is incomprehensible to me how it’s supposed to work. We have several of these people assigned with communication tasks, and yet we get no information from inside of the house. What is their role? What are the tasks they are supposed to help the library with? [...] In the projects and situations like that, we’d truly need people with communication skills to help us out with polishing the texts, choosing the channels and distributing the info. The communications should be here for us, for the library’s need. Now it seems to be the other way round, the communication people want us to serve them, to provide info [for the channels they maintain and control],”

Another interviewee, a library assistant, was also hesitant when it came to the role of the colleagues with communication tasks: “Now I hear there’s this new communication team, to help the new [Main] library with the communication tasks. They are responsible for the communication needs, and other teams can contact them... I guess it’s still this transition period.”

In another campus library, an information specialist interviewed described her relation to library communicating activities as: “I have my channels, the persons in the [campus] library, who know about the stuff. I listen to them. I trust my channels.” When asked how effective she considered these channels to be when it came to the knowledge sharing on her part towards the colleagues she was more hesitant: “Well, these experts of ours, they have some sort of meetings with the joint operations of the library. I guess [the knowledge sharing] is working to that direction as well. Is it?” This attitude reflects several characteristics of the library’s...
communications functions: Firstly, the individual organizational units have a significant power over organizing their operations, including the communication channels and practices. The joint, coordinated communication efforts and needs seem secondary from the library units’ point of view. Secondly, there is little feedback available in the organizational hierarchy for the employees, should they be taking the initiative to bring forward ideas emerging in the customer touch points. Thirdly, when the organizational communication processes are deficient, more value is invested in the personal and informal networks. This can act as a positive motivation for individual knowledge sharing activities but also be hazardous for the common goals of the library as the communication is dependent on the personal objectives of the employees in these key positions.

When the roles of the employees are not clear to their colleagues – or even to themselves – many library professionals feel hesitant to raise the communication issues, as they have no clear idea who they could have to help them with their needs. The internal communication functions of the library are still seen by most employees as top-down process where the employees’ part is merely to locate and receive the information that is seen fit to be disclosed. While Juholin (2007) suggests that sharing and discussing the big issues of the organization and its operational environment would strengthen partnership for change, the Helsinki University Library management seems to have chosen a more cautious approach. When the library units were merged, the previous communication practices of the former libraries were, for the most part, retained, and the joint communication functions were created on the top of these practices (see 4.1.2). This is another indication that the library management chose to lean towards the practices of communicating stability instead of communicating the need for further change.

One of the goals of the library, set by the current communication management, is to move towards the culture of participation, creation the common atmosphere, and doing and learning together, as Juholin’s idea of successfully communicating organization is described (2007). To achieve that Helsinki University Library should also invest on developing the inter-organizational communication processes that were mostly left to their own devices when the organizational merge took place on administrative level.
From this point of view, the communication issues in the organization are very much both leadership and management issues.

An information specialist interviewed described the attitude of her colleagues stumping in the jungle of fast developing technologies and overlapping communication practices with a common proverb: “Many of us seem to be too busy rowing the boat to actually start the engine.” On individual level the lack of personal interest in the groundbreaking change of the operating environment combined with the inadequate ICT skills may hinder the employee to deploy his or her full potential in the changing situation. On organizational level the library has been using a significant amount of its energy in building additional communication practices on the top of the state of affairs in the libraries prior to the merge. Instead, by communicating the need of further change to the employees, this energy could have been channeled to reorganize the entire library with its communication functions to release the knowledge potential of its employees and networks for the future of the entire library industry.

6.4.6 Management, Leadership, and Organizational Culture

Effectively used social technologies can provide an organization new, powerful ways of to engage more of the organization on a wider range of issues than before. Blogs might create visible professional dialogue, and invite independent thought, analysis, and response to a leader’s ideas or to any employee’s urge to share ideas. Through wikis and other collaborative discussion forums, anyone can contribute to a common effort. Organizational leaders could do some crowd-sourcing, that is try to solve complex issue more effectively by simply asking for input through a social community and listening to the responses from team members. The solution that is created from the collective input is often more beneficial than the one chosen by a small handful of obvious experts. (See Jue & al., 2010 and Vuori & Okkonen, 2012b.) An interviewee with personal managerial experience shared insight on leadership role on social collaboration:

“Yes, it depends on who’s starting the conversations. If there are individuals in significant and relevant positions who start a conversation on a subject, the others will follow. If, say, Head of Administration, for example, would start a thread, employees would join and comment, because she has such a position that whatever she says
The survey reveals that the employees of the library organization hold many beliefs that could promote an active, open knowledge sharing culture (see 6.3). Employees in general believe that sharing knowledge is important for the atmosphere of the working community, and that it helps the employees to achieve their professional goals on both individual and organization levels. There seems to be, however, many barriers within the current organizational culture that discourage the employees to be active on social communities on a practical level. In a role culture, these are often related to the leadership issues. A respondent in the survey puts it quite bluntly:

“When it comes to social media, one of the problems is that the management in our organization doesn’t really demonstrate any interest in it or use the tools. The power of example is significant. They don’t seem to give (the tools) any value.”

The employees are, as discussed in chapter 3.3, constantly looking for signals of the expected employee behavior in the organization. The general lack of leadership on social media issues or a managerial order on the subject – even if it is a vague one – are such symbols. An interviewee continues:

“It has a significant value how the management level regards [the social technologies]. We received quite a clear message in a weekly staff meeting that there’s no relevant content in Yammer, so the tool is useless... The employees interpreted the message so that you should not spend your working hours using Yammer.”

An employee in a managerial role

If the value of social media is denied by the person(s) in top-most positions, it sends a clear signal to the employees. If, simultaneously, other employees, as part of their job description, are trying to promote the possibilities that the social technologies could bring into the working processes of the organization, the situation may appear both confusing and demotivating. It will probably hinder the adoption of such tools, and, in

85 Original transcript: “Kyllä se riippuu siitä, kuka niitä aloittaa niitä keskustelua. Että jos siellä on riittävän niinku korkealla tai relevantissa positiossa olevia ihmisiä, jotka aloittaa keskustelun, niin kyllä se imaisee sinne muidenkin. Jos hallintopäällikkö esim. aloittais keskustelun, niin kyllä sinne varmasti tulisi ihmisiä kommentoinaan, kun hän on korkealla organisatiossa, sinä positiossa, että se mitä hän sanoo, se kinnostaa ihmisiä. […]viintä, että se että sinne saatais aktiivinen keskustelua vaatis, että sinne saatais tämäntietä näkyvät bahnor käymään sitä keskustelu.”

86 Original answer: Eräs ongelma digitaalisten työkalujen käytölle on se, että organisaatiomme johtajat eivät ole kiinnostuneita, eivätkä itse käyttä niitä. Esimerkin voima olis tärkeä. He eivät pidä näitä kanavia lainkaan tärkeinä.

87 Original transcript: “Kyllä sillä on iso merkitys. Kuten myös sillä minen hän muuten suhtautuu näihin välinceisiin. No tämäntietä viestiä on tallat, että Yammerissä ei käydä mitään relevanttiä keskustelua, joten se on turha väline. [Esimies on antanut ymmärtää näin?] Kyllä, suutin piirtein suora lainaus. Ja se kyllä aiheutti sen, että yksiköön henkilöstöstä Yammeriin osallistuminen romahti. Se otettiin viestinä, että teidän ei pidä ryökaanne siellä siellä käyttää. [Sanoo siirrodisessa yhteydessä?] Väkkipalavetissa näin sanois, miustaakseni!”
addition, not motivate but rather frustrate the employees in social media advocate roles. An interviewee, however pointed out, that also the employees with communicational tasks assigned to them, hold a position that offers a chance to leadership: “If a [person in] communication role uses an argument against the use of a [certain] tool, it is even more worrying.” An example of such a behavior is promoting the use of the email as main communication tool for newly appointed team instead any of the social technologies that would actually enable collaboration functions.

A kind of management issue is also the apprehension that sharing ideas or interesting links on social media would take excess time for other tasks. Nearly a third of the respondents agreed to this statement in the survey. The open survey data also reveal that many employees see using social media as an extra effort, not as an integral part of the work itself. This may reflect the attitude of social media being mostly for recreational and thus somehow inferior use. The content on Yammer is mostly seen as something “not professionally relevant” or “not related to my work”. On the other hand, several respondents wonder why the management doesn’t actively encourage the community to use Yammer as its virtual coffee table where current issued could be discussed in a more informal setting without the organizational barriers. This lack of interest to discuss issues through any platform where the thoughts are identifiable and traceable later may well have its roots in the culture of the organization.

There may be several reasons for the lack of management interest in social technologies. Firstly, the level of IT skills among the professionals in management positions represents the average skill level of the older age groups among the work community. If the managers themselves were introduced to technology through the development of library databases and lack the general knowledge about the ICT, they may have more difficulties in recognizing where the social technology could help them at their work. Secondly, the employees in the leadership roles and managerial positions share the same overall attitudes towards the social media as the rest of the employees. Social media is still easily associated only with Facebook and YouTube full of cat videos, and thus mostly with the recreational use on employees’ free time. (Thomas & Barlow, 2011, 16) Thirdly, and most significantly, the use of social technologies at workplace challenges the hierarchical organizational structure, as it promotes the voices of indi-
individual employees regardless their position. In this respect, social media may even be seen as a threat to the current role culture of the organization.

6.4.7 Communication Culture

Helsinki University Library has acknowledged the importance of creativity and innovation, as they are integral strategic values of the university (Helsinki University, 2012). For the strong role culture of the government era organization this may be a significant challenge as both creativity and innovation must lean on the free flow of ideas and sharing knowledge to produce fruitful results for the community (Martins & Terblanche, 2003, 64).

Some steps have been taken towards the beneficial direction: Personnel have been invited to take part in the decision making by opening the strategy process on digital collaboration platforms, people are free to use whatever tool they feel like to communicate, and many social communities are allowed at the workplace. Still creativity and innovation seem to be hampered in some way. The culture of the organization may be a contributing factor in the extent in which creativity and innovation occur in the organization, as discussed in chapters 3.2 and 3.5.1. The current organizational culture and the demands of creativity and innovation may lead to a conflict situation. One can never truly understand an organization until one understands the culture of that organization.

The organizational culture dictates what behaviors are acceptable within the organization. It also establishes the ways that issues in the community are addressed, spells out how relationships are defined and supported, and establishes how work in an organization is done. Once a culture is established, it affects everyone within the community and is extremely difficult to change. The role culture of the library may find it difficult to adapt, if its staff are controlled by tight systems and procedures.

In the words of one anonymous survey respondent the communication culture of the library was described as:

"One can easily get a rap over the knuckles for too open and eager communication. What to communicate, when to communicate, how, to whom, and which point of view to choose? How to have regard to the pecking or-
An interviewee described how “there are traces of the culture of fear still present” in the organization that hinder employees to ask even simple questions – even though there have been many managerial changes in the recent years. A few respondents feel that there’s “an element of deliberate secrecy” in some administrative practices of the organization. The management seems to feel the need to control and maintain the hierarchy of the role culture (“the pecking order”). All of the interviewees, however, agreed that “the culture is gradually becoming more positive” when it comes to participating in knowledge sharing activities.

The need for control is a strong negative motivational factor for knowledge sharing, and helps to explain why so many (17) respondents in the survey felt that they are uncertain of how their thoughts would be received in the library organization. There seems to be an element of mistrust shaping the employee behavior. Organizational trust is a must to create the willingness to take risks because the act of trusting makes one vulnerable to others actions. The employees must rely on the assumption that others will act in a favorable manner. (Kane-Urrabazo, 2006, 190.) Trust refers to employees’ faith in organizational leaders and the belief that ultimately organizational actions will benefit employees. The level of trust in an organization can foretell its success because it is a crucial element linked to employee performance and organizational commitment. (Laschinger & al., 2000.)

A key trait of the communication culture of Helsinki University Library is the control. The element of control is demonstrated both over the message itself and the recipients, who are allowed to have access to the message. It is considered important part of the communication process to determine the recipients of the message, and somehow justify why just the certain individuals or groups should have access to the information. This reflects the strength of the role culture in the organizational communications of the library.

---

19 Original answer: Liian avoimesta ja hanakasta tiedottamisesta voi saada turpaan. Mistä tiedottaa, milloin, miten, kenelle ja mistä näkökulmasta, missä järjestyksessä milloinkin tahoelle (nokkimisjärjestys), millä diplomaattisilla ilmauksilla tai poliittisesti korrektilla sanamoodoilla mahd. äsyrityskynnyksistä ja kärjistyksistä väistelemällä - nämä ovat oman ryökkentäni viestinnässä aina haasteita.
The phenomenon is in stark contrast to the idea of open knowledge sharing and communication culture. Instead of offering everyone in the organization a chance to have access to all information as default (exception of course being any information associated with data protection, HR or other legal issues), a lot of resources is spent controlling the flow of information (e.g. the mailing list recipient, the parallel intranets and team working spaces with complex access rights, the visibility issues). Justifications such “there’s no need to flood everybody’s email” are commonly used, even though the issue could easily be bypassed by proactive use of the social technologies at hand.

As discussed above (in chapter 6.4.2) in the context of access right to the different digital collaboration tools, the control orientated communication culture emphasis also the importance of the visibility in the social communities. An interviewee describes the attitude towards sharing content on Yammer: “I’d appreciate the Yammer group of the library to be exclusively for the library working community. People might write more freely then.” When the interviewer pointed out that the group content is actually being visible only members, and joining the group can be controlled, she continued: “Well, someone told me it is open to all. When employees don’t know whether it is open or a closed group, there’s the fear. […] People are so very cautious here.”

Even when the information is available to all employees, there are clear barriers that affect staff members’ ability to contribute and share their ideas on the subject. Several of the interviewees as well as the anonymous respondents in the survey refer to the fact that even though there is a lot of information available in the organization, it is often accessible “too late in the process” for the employees to participate in the discussion. One example of the importance of timing is the agendas for the library executive board meetings. They are often made available only the previous afternoon before the morning meeting which leaves the employees very little time to contact their management who are actually taking part in the meetings to have their say or start a conversation on a subject on some social platform. There is little room for informal, open debate in the organization even if the attempts to control the flow of information by the timing of the distribution are not deliberate but an unfortunate end product of inefficient practices.
An organizational culture in which the staff is encouraged to generate new ideas, without being harmed, and where the focus is on what’s supported instead of what is not viable, should encourage open knowledge sharing. Tolerance of conflict or mistakes is another element of organizational culture that promotes open sharing of ideas and thus creativity. Successful organization rewards success but also acknowledges failures by creating opportunities to openly discuss and learn from mistakes. An organization that supports learning, by focusing on being inquisitive, encouraging employees to talk to one another, and keeping knowledge and skills of the staff up to date, is more probable to succeed. On the other hand a culture where in which too many management controls are applied will inhibit risk taking and consequently creativity and innovation. To create more open communication culture, the organization should “reach out to internal and external knowledge, encourage debating the ideas, create an environment where constructive conflict will lead to information flow, support project based information flow and actively manage the choice of organizational design.” (Martin & Terblanche, 2003, 72.)

Organizational culture fills the gaps between what is formally announced and what actually takes place in the organization. The journey towards the strategic goal of being creative and innovative is disturbed by the culture that speaks of control and emphasizes the hierarchical roles instead of the polyphony of active knowledge sharing organization. It is very important for an organization periodically to review its culture to make sure it still allows the organization to succeed. This is particularly important in the library industry in which the operational environment is radically changing.

### 6.5 Research Limitations and Ideas for Further Research

One of the key limitations of this type of development orientated study is the fact, that only the employees interested in the theme are likely to take part in the survey in the first place. While writing the thesis one has to be fully aware that the picture emerging from the data reflects mostly the thinking of employees with certain, pro-development mindset. This is a challenge, as the employees whose opinion is not heard in this study are the ones who are not likely to raise their voice when these issues are discussed in
the working community. The train of development will move towards the direction chosen by the ones who participate. One of the respondents in survey pointed this out:

“The development with tools takes place on the terms of the most skilled. Those, who are aware of [the tools], who can use them, and have decided that they shall be used. The others are not asked.”

The idea of “not even being asked” also reflects the lack of interaction in the organization when the change is communicated. It would be very interesting, although laborious, to conduct an interview with everyone in the organization, to form a clear picture of the knowledge sharing attitudes, ICT skills, and interests towards the digital collaboration. If the ethical issues could be respected in the process, such a study would also offer the organization very valuable insight when planning its human resources development in the future.

Although the findings in this thesis emphasize the significance of organizational culture for the knowledge sharing activities of the library, this thesis is by no means to be regarded as a profound study of the organizational or communication culture(s) of Helsinki University Library. Studying these phenomena further, however, would be very interesting, even tempting, and might provide important insight that could help not just the organization at hand but also the entire library industry. The challenges of Helsinki University Library are shared with most libraries in the western world that have a long sweep train of tradition to carry while looking for the roads to prosper in the digital age. If the organizational culture does not drive the change, it is usually getting in the way.

20 Original answer: Digitaalisten työvälineiden käyttöönottossa on edetty teknisten taitureiden ehdolla. He ovat tietoisia niistä, osaavat käyttää niitä ja ovat päättäneet, että niitä käytetään. Muita ei kysytä.
7 Summary and Suggestions for HULib

The intended action research approach of this thesis invites to summarize the key findings of this thesis in the form of development proposals for the target organization. In this chapter the aim is to summarize the four key suggestions provided for the organization. Emerging from the data it is necessary to discuss the technology and ICT skills related issues, the communication practices of the library, the management and leadership issues, and the challenge of creating encouraging and interactive culture within the working community.

These suggestions may well be regarded advisory, and it is not expected that they are implemented in Helsinki University Library right away. The initial motivation for this thesis work is, however, to develop the communication practices of the library by unleashing the potential invested in both its employees and the social technology available.

There are very positive and thus promising individual level attitudes towards the knowledge sharing within the library staff that took part in the survey. Knowledge is valued, and its dissemination and exchange are seen as important assets for organization and the individuals working in it. Knowledge sharing is seen as an activity that helps the respondents to engage with the working community. Knowledge sharing serves as a networking opportunity to many employees, and may also help in building one’s individual career. Open flow of information and knowledge sharing are regarded important for the atmosphere, or organizational climate of the working community.

The thesis work identifies, however, significant challenges that impede the employees to share knowledge in general, and especially when social technologies as media are concerned. These challenges that can be regarded either as negative motivational factors or distinct barriers, can be grouped into four categories:

1. The technology and ICT skills related issues,
2. The communication practices of the library,
3. The management and leadership issues, and
4. The challenge of creating encouraging and interactive culture within the working community.
As suggested also by Vuori and Okkonen (2012a, 600) if the organizational culture does not support knowledge sharing, it does not matter what channels and tools are used is used for knowledge sharing. Therefore, in order to make the most of the potential digital collaboration tools, such as social communities, wikis, blogging etc. and other social media, intra-organizational knowledge sharing mindset and attitude towards knowledge should be prepared to better accept sharing of knowledge in general. It requires a significant change of the current culture that reflects the top-down, control orientated idea of internal communication.

Significant changes can take place only when management of the organization takes the time to assess the culture in which they want that change to occur. This may be a challenge itself, so it would be important to redirect the attitudes of the public sector trained management toward the benefits they will receive from supporting the change effort. (McNabb & Sepic, 1995, 383.) This calls for leadership with a clear vision for the future of the organization and the library industry.

7.1 Comprehensive, Collaborative Training for ICT

One of the key barriers emerging in this study is the inadequate ICT skills of the average library employee. As suggested by the employees interviewed for the thesis, more targeted training is needed with the tools at hand. This training should include in addition to the features and functionalities of the tools the relevant context: What is the tool used for in the library? Why? Why is this one better than some other tool used for similar purposes in the organization (or elsewhere)? The training should also take into consideration what the clear objectives are in implementing the tool in the working process, and furthermore what is the ultimate goal?

A workshop type of approach has been suggested, and to some extent, already used to train employees in the library. A smaller group of employees with similar tasks might lower the barrier to ask questions during the training, and add the value of the real-life working context to it. There are a plenty of employees within the library with adequate
skills and training experience, who could help in planning and carrying out the training program.

Another point of view towards improving the ICT skills level of the employees is the overall need for comprehensive ICT training within the library staff. The employees in IT positions planning and implementing the solutions for distributing the digital content (journals, eBooks etc.) have repeatedly wished that some such training program would be available for the library employees. According to them it would ease the adoption of the new content platforms, and add value to the customer experience whenever they visit the library touch points. Planning and carrying out this more comprehensive training program would naturally be more challenging than organizing the individual tool related workshop. It would probably be worth it in the long run, nonetheless, as it would also ease the adoption of any new technology in the future. Better overall ICT skills of the employees would enhance many of the current working practices, and might also help shape the culture more positive towards the technology in general. Continuing being indifferent towards technology is hardly an option in the digital library of 21st century.

7.2 Making Sense of the Internal Communication Practices

There is a lot of internal communication development work still to be done in the library. Many of the issues that hinder employees from openly sharing knowledge and using the social technology efficiently date back to the organizational merge of 2010. Although it has been three years of the joint operations, many of the communication practices of the library are still obscure to the employees. This is a true distraction, but – as to any procedure level issue – there is a relatively easy fix to it.

The library should plan its communication functions, both internal and external, from the new, customer-oriented point of view. Who or which unit within the library is providing the service should not really concern the customer as long as there is quality service available at every touch point. If the customer is required to have knowledge of the structure of the library organization to get the service he needs, there is a problem in organizing the services.
Internally, the communication tasks could be planned to be divided between the joint communication team and library professionals with assigned communication tasks in the library units according to the needs of all library units. Skilled employees could and should help out in tasks of the other library units as well when it comes to work that requires some special knowledge or skill set. On the other hand, getting rid of the double and triple communication practices in the library units would release resources for the new challenges of the library industry.

Particular attention should be placed to the roles of the communication professionals and the library staff working in communication related tasks. What in fact is expected of them? Are they solely acting as the voice of the organization in the top-down communication chain or could their skills help bring out enhanced products and services the organization is producing? Can their expertise be used to increase the level of interaction in the working community – from the grass root level horizontally through the organizational silos? The library has many operating functions, e.g. customer service related issues, projects, new service launches etc. that would benefit from professionally planned communication work for support.

These communication tasks should be taken into account when planning and budgeting the work and drawing up individual job descriptions. The distribution of communication work should also be communicated to the entire working community, so that everyone would have clear idea of whom to contact when there is need for communication activities. All this is, in essence, communication planning and management level work to be done. This change of the paradigm would also serve the objective of implementing Juholin’s New Agenda Model of Communication as the base for the organizational communications as has been initiated in 2013 in the library.

7.3 Encouraging Management to Embrace Social Technology

In the hierarchical role culture of Helsinki University Library, where most of the power is invested in small group of managers, these individuals also have significant position in introducing any new practice. Using the social technologies to enhance the working
processes is one such initiative. The employees tend to look up to the manager directly above them in the organization for example and hints for expected employee behavior. Thus the attitudes of individual managers matter in adopting the new technologies in greater scale.

An attempt should be made to include the management in the first round of training whenever a new tool is introduced in the organization. The emphasis of such training should be on the opportunities the technology could provide in the working processes, not only on the features and functions of the individual tools. It would also be valuable to have the management level employees to comprehend their position as role models for both expected and tolerated employee behavior, for better and for worse.

7.4 Leading Towards Further Change

Cultures arise from shared experience of success (Schein, 1996). This factor helps explaining why creating new, joint culture in a merged organization can be so very challenging. In the merged organization employees still draw from past experiences of success of their home unit, and the new coworkers and partners can be seen as interfering factors in the familiar path. This attitude can be, quite contrary to the objective, emphasized in the merging process if the organization chooses to communicate stability instead of the need for further change.

To create further change, the organization needs to employ dialogue in the communication. In this all the tools that allow participation, listening, sharing, commenting, and caring are valuable. The social technologies offer a great variety of ways to enhance the dialogical processes of an organization. It depends on the willingness and the ability of the organization how effectively these tools are implemented. Taking up such tools to create dialogue and interaction would show true leadership as form of change management. Led by a committed leader, employees are more likely to start adopting new practices and working in a new way. Only these changes in employee behavior will, eventually, bring on the desired change. The new, shared experiences of success in the process of creating new working practices are in turn the essential building blocks for the new culture of the organization.
Sufficient ICT training, clear communication practices and guidelines, and the example of committed management are steps that should ease the adoption of any new technology in the library organization. They would also, as suggested by the interviewees, be the steps to take to reduce the meaning of new technology to being just a tool, an instrument that helps completing the objectives and achieving the true goals of the working community. This is the attitude that might help to prepare the employees to face the new, revolutionary technologies that will shape the profession in the years to come.
8 References


Kosonen, M. & Niemi, S. 2013. Personal communication with HULib departmental secretaries Marja Kosonen and Susanna Niemi responsible for HR related issues.


Ruhanen, T. 2011. Interview with Tuula Ruhanen for 'Voimasanoja kirjastosta'.


Vuori, V. & Okkonen, J. 2012b. Refining information and knowledge by social media applications: Adding value by insight. VINE, 42, 1, 117-128.


9 Appendix

I List of Figures in the Thesis
II The Survey Question Structure
III The Tools Listed in the Survey
IV The Semi-Structured Theme Interview Frame
I List of Figures in the Thesis

Figure 1: HULib Communication Functions within Organization
Figure 2: HULib Staff as of February 2013
Figure 3: The interviews conducted for the thesis
Figure 4: The familiarity of the tools used at University of Helsinki
Figure 5: The use of various tools at work
Figures 6: Tools used for Different Knowledge Sharing Functions
Figure 7: Key Sources for Professional Information for the Staff
Figure 8: Participation in Planning work
Figure 9: Main Tools for Customer Care Communication
Figure 10: Tools Used for Networking and Professional Self-Branding
Figure 11: Attitudes towards knowledge sharing: The building blocks of organizational culture
Figure 12: Recognized Motivational Factors for Knowledge Sharing
Figure 13: Barriers to Knowledge Sharing
II The Survey Question Structure

1. Olen joskus käyttänyt seuraavia digitaalisia työvälineitä tai verkon palveluita joko työtehtävissä tai vapaa-ajan viettooni liittyvissä asioissa: [Toteutus check-box]

2. Käytän seuraavia digitaalisia työvälineitä säännöllisesti työtehtäviin liittyvien asioiden hoitamiseen tai työhön liittyvän tiedon hankintaan: [Toteutus check-box]


4. Koulutus ja käyttöohjeet työkalujen käyttöön [check-box-ristiintaulukko palvelun nimi - vastausvaihtoehdo]
   - Olen osallistunut työnantajan järjestämään työvälineen käyttökoulutukseen
   - Olen osallistunut muuhun kuin työnantajan järjestämään työvälineen käyttökoulutukseen
   - Esimieheni tai työtöverini on perehdyttänyt tai ohjeistanut minua välineen käytössä.
   - Olen tutustunut työkalun käyttöohjeistukseen
   - Tiedän, mistä koulutusta ja/tai käyttöohjetta löydän, jos tunnen tarvitsevan niitä
   - En tunne tarvitsevani koulutusta tai käyttöohjetta käyttääkseni työvälineet

5. Seuraavat väittämät ovat mielestäni todennäköisiä omaan kokemukseeni perustuen: [Asteikko: Täysin samaa mieltä - Jokseenkin samaa mieltä - En eri enkä samaa mieltä - Jokseenkin eri mieltä - Täysin eri mieltä]
   - Avoin tiedon jakaminen työyhteisössä on tärkeää
   - Avoin tiedon jakaminen työyhteisössä auttaa työyhteisöä jaettuna useille sivuille tarpeen mukaan
   - Tiedän, mistä koulutusta ja/tai käyttöohjetta löydän, jos tunnen tarvitsevan niitä
   - En tunne tarvitsevani koulutusta en tai käyttöohjetta käyttääkseni työvälineitä

6. Tiedon avoimeen jakamiseen ja osallistumiseen työyhteisön digitaalisissa kanavissa minua motivoi, se että...
   [Asteikko: Täysin samaa mieltä - Jokseenkin samaa mieltä - En eri enkä samaa mieltä - Jokseenkin eri mieltä - Täysin eri mieltä]
   - Haluan auttaa työyhteisöä jaettuna useille sivuille tarpeen mukaan
   - Haluan auttaa työtovereitani heidän työssään
   - Haluan auttaa työtovereitani heidän työssään
   - Uskon saavani vastavuoroisesti itseani tietoa tarpeellista tietoa
   - Tiedon avoin jakaminen helpottaa omalta osalta
   - Tiedon jakaminen ja osallistumisen on osa työtäni
   - Tiedon jakaminen ja osallistuminen on osa työtäni
   - Uskon, että olin pyynnöllinen ja kysymyksiin tulevaisuudessa vastataan paremmin
   - Haluan saavuttaa tavoitteeni työssäni
   - Tiedon avoin jakaminen ja osallistuminen auttaa turvaamaan työpaikkani tulevaisuudessa
   - Tiedon avoin jakaminen ja osallistuminen auttaa turvaamaan työpaikkani tulevaisuudessa
   - Tiedon avoin jakaminen ja osallistuminen auttaa turvaamaan työpaikkani tulevaisuudessa
   - Tiedon avoin jakaminen ja osallistuminen auttaa turvaamaan työpaikkani tulevaisuudessa
   - Tiedon avoin jakaminen ja osallistuminen auttaa turvaamaan työpaikkani tulevaisuudessa
   - Tiedon avoin jakaminen ja osallistuminen auttaa turvaamaan työpaikkani tulevaisuudessa
   - Tiedon avoin jakaminen ja osallistuminen auttaa turvaamaan työpaikkani tulevaisuudessa
   - Tiedon avoin jakaminen ja osallistuminen auttaa turvaamaan työpaikkani tulevaisuudessa

7. Omalla kohdallani osallistumista ja tiedon avointa jakamista työyhteisöinä sähköissä kanavissa vähentää se, että [Asteikko: Täysin samaa mieltä - Jokseenkin samaa mieltä - En eri enkä samaa mieltä - Jokseenkin eri mieltä - Täysin eri mieltä]
   - Osallistuminen ja tiedon jakaminen digitaalisissä välineissä vie liikaa aikaa muilta työtehtäviltä
   - Olen mielestäni verkostoitunut jo riittävästi
   - En halua kohdata kritiikkiä, jota ajatukseni voisivat herättää
   - Piidan työtehtävieni kannalta olennaisen tiedon mieleummin itselläni
   - En usko, että minulla on sellaista tietoa tai mieliipiteitä, joista olisi hyötyä työyhteisölle.

105
• En usko, että minulla on sellaista tietoa tai mielipiteitä, jotka kiinnostavat työtovereitani.
• En itse hyödy osallistumisesta tai tiedon jakamisesta.
• En ole varma siitä kuinka ajatukseni otetaan työyhteisössä vastaan.
• En ole varma, missä tilanteissa minulla on lupa osallistua tai jakaa tietoa.
• Työyhteisön digitaaliset työvälineet ovat työläitä tai hankalitä käyttää.
• Digitaalisissa kanavissa ei ole tarjolla minua kiinnostavaa tietoa.
• Digitaalisissa kanavissa tarjolla oleva tieto ei ole luotettava.
• En tiedä, missä digitaalisessä kanavassa tarpeellinen tai kiinnostava tieto on.
• Tilaisuuksia osallistumiseksi tai tiedon jakamiseksi ei työyhteisössäni ole tarpeeksi.
• En ole saanut riittävää perehdytystä työyhteisössä käytössä oleviin digitaalisiiin työvälineisiin.
• Työyhteisössäni on käytössä liian monia erilaisia sähköisiä työvälineitä.
• Sähköiset työvälineet muuttuvat ominaisuuksiltaan ja toiminnallisuusiltaan usein.

III The Tools Listed in the Survey

These are some of the tools currently at use within University of Helsinki.

- Sähköposti
- Sähköpostilistat
- ALMA-intranet
- Flamma-intranet
- Confluence-wikit (Helsingin yliopiston Confluence-palvelu)
- Muut wikit (yliopiston ulkopuoliset wikipalvelut, esimerkiksi kirjasto-wiki)
- WordPress-blogipalvelu (Helsingin yliopiston WordPress-blogit)
- Muu blogipalvelu (blogger.com, vuodatus.net, livejournal.com)
- Twitter-mikrobloggauspalvelu
- Yammer-yhteisöpalvelu
- Facebook-yhteisöpalvelu
- Google+ -palvelu (plus.Google.com)
- LinkedIn-verkostoitumispalvelu
- Tumblr-yhteisöpalvelu
- Keskustelupalstat (kirjastot.fi, suomi24.fi, city.fi, eri erityisalojen palstat)
- Chat-työkalut (esim. mns.com)
- irc-kanavat
- Skype-verkkopuhelupalvelu
- Adobe Connect Pro -verkkokokouspalvelu
- YouTube-videopalvelu
- Vimeo-videopalvelu
- Flickr-kuvapalvelu
- Pinterest-kuvanjakopalvelu
- Kirjaston verkkolevyt (yliopiston ylläpitämät)
- Dropbox-tiedostonjakopalvelu
- Muu palvelu, mikä / mitkä:
IV The Semi-Structured Theme Interview Frame

Aluksi taustaa
1. Kerro itsestäsi.
   - Mihin [kyselyssä käytetystä] ikäyhmään kuuluut? 18-25, 26-35, 36-45, 46-55, 56-
   - Mikä on tehtäväsi kirjastossa?
   - Kuinka pitkä työura kirjastoissa (tai alalla)? Mitä olet tehnyt aiemmin?
   - Entä Helsingin yliopiston kirjastossa?

Tiedon jakaminen työssä - asenteet, organisaatiokulttuuri
2. Minkälaiseksi koet Helsingin yliopiston kirjaston viestintäkulttuurin?
   (Tavan, jolla työhön liittyvistä asioista työyhteisössä kerrotaan)
   - Miten työtehtävien hoitamiseen liittyvän tiedon jakamiseen mielestäsi kirjastossa suhtaudutaan?
   - Minkälaiseksi koet oman lähityöyhteisösi viestintäkulttuurin?
   - Eroaako lähityöyhteisösi koko kirjaston meiningistä jotenkin?

3. Kannustetaanko avoimeen viestintään? Voitko kertoa jonkin kokemuksen tilanteesta, jossa työn-
tekijöitä (joko sinua tai jotakuta työtovereistasi) on kannustettu jakamaan tietoa työyhteisössä?
   Kuka kannusti? Miten?
   - Onko sinulla kokemusta päinvastaisesta tilanteesta? Mitä tapahtui?

Työvälineet - digitaalisten välineiden ominaisuudet ja käyttö
4. Kuvaile omaa suhdettasi tietotekniikkaan yleisellä tasolla? Vapaa-ajan käyttöäsi?
5. Mitä mieltä olet sosiaalisesta mediasta? Somen käytöstä työpaikalla? Työaikana?
6. Miten lähityöyhteisössäsi suhtaudutaan tietotekniikan ja sosiaalisen median? Eroaako se
   omasta suhtautumisestasi?

   - Onko sähköpostin käyttössä mielestäsi jotakin haittauolia?

8. Wiki työvälineenä: Mitä mieltä olet wikistä työvälineenä?
   - Mihin kaikkeen wiki työpaikalla mielestäsi sopii?
   - Liittykö wikin käyttöönoton ongelmia?

9. Blogi työvälineenä: Mitä mieltä olet blogista työkaluna?
   - Mihin blogi mielestäsi kirjaston kaltaisessa organisaatiossa sopii?
   - Seuraatko työtehtävissä vuoksi muita (kirjaston ulkopuolisia) blogjeja?
   - Liittykö blogiin mielestäsi ongelmia?

10. Yammer työvälineenä: Mitä ajattelet verkossa toimivan yhteisöpalvelun käytöstä osana työtä?
    - Miten suhtaudut yhteisöpalveluihin (Facebook jne.) ylipääätänsä?
    - Mitä hyötyä yhteisöpalvelusta voisi olla työssä?
    - Liittykö yhteisöpalvelun käyttöön riskejä?

11. Uuden välineen käyttöönnotto työpaikalla - Mitä se mielestäsi vaatii?
    - Miten käyttöönnottoa pitäisi ohjeistaa?
    - Minkälaisia koulutusta tai ohje- ja tukimateriaaleja haluaisit olevan tarjolla?

Trending topic in Survey: Liikaa välineitä, työntekijöillä ei tietoa siitä mikä tieto on missäkin.
12. Tunnetko saavasi riittävästi tietoa työhösi liittyvistä asioista työyhteisössä?
    - Onko tilanteita, joissa et tarvitse tietoa olla saatavilla?
    - Mitä muita ongelmia tiedon löytämiseen tai osallistumiseen mielestäsi liittyvät?

13. Haluaisitko lisätä jotakin tai palata johonkin aiheeseen?

Opinnäytetyön tavoitteena parantaa tiedon kulku kirjastossa ja tiedon jakamisen edellytyksiä.