Internal communication through intranet to the operative employees - case Finnair pilots

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This study investigates internal communication to mobile workers through internal communication channel intranet taking special focus on the internal communication to the employee group of pilots of the Finnish airline Finnair. The key characteristic of pilots’ work is mobility: for pilots to perform their job, it is required for them to change locations. This creates various challenges for internal communication. As mobile work is an increasing phenomenon, it makes this thesis interesting also in a larger working life scope.

The aim of this thesis is to find suggestions and solutions to how to enhance the communication with the pilots through intranet and how to activate the pilots to use intranet more. This is done by investigating the literature and themes around mobile work and internal communication and analyzing the results of empirical research conducted among the employee group of pilots. This research was conducted at the time when the company was transferring internal communication from the old intranet platform to the new, modern intranet platform.

This thesis begins with introducing the case company, the research objectives and research questions. After that, a thorough view of the literature concerning mobile work, internal communication, change management and Technology Acceptance Model is presented. After explaining the case study, conducted digital survey and arranged World Café workshop method as the research methodology, the findings of conducted research is showcased. Finally, conclusions and development ideas are proposed and areas of future research are suggested.

The key challenge in internal communication through intranet to the pilots is reaching the pilots. The mobile character of pilots’ work creates difficulties for internal communications in accessing the company’s intranet both technology wise and timewise: intranet might not be accessible all around the world and as there is low possibility to access the intranet during work hours, pilots are required to use their own free time to familiarise their selves to company’s internal communication in intranet. In addition to an employee to have a smooth access to intranet, intranet itself should be easy to use. Also, the variety of different digital tools used in the company and the unclear roles of these tools can cause resistance towards the digital tools in general. In addition to these technical aspects, content of the intranet should be relevant and interesting to its users for them to experience the intranet useful.

To overcome the challenges in accessibility and the ease of use of intranet, new technical solutions are required. More training of intranet usage should be provided to pilots in order to enhance the perceived ease of use and usability of the intranet. The variety of digital tools should be aligned and the roles and purposes of the tools should be communicated clearly. Content enhancement should be made to make intranet more appealing and useful to its users. In the event of change, change management and change communication should be executed with care to enable smooth and permanent transition.

**Keywords**
Mobile work, internal communication, intranet, pilots
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1 Introduction

Airline business. What an alluring and mystical industry that even nowadays has a positively tingly and mysterious character. Wherever a pilot or a cabin attendant is present or whatever they tell to the audience, they always catch attention. But how to catch attention of the pilots and the cabin crew? And more specifically, how to catch their attention towards their own organization and its state, news and happenings, that is internal communication?

This study focuses on internal communications and intranet usage of the employees of a Finnish airline Finnair. The study aims to find solutions on how the internal communications could reach better operative employees and taking a special focus on the Finnair pilots.

Finnair is a Finnish national airline founded in 1923. It is a network airline focusing in flying between Europe and Asia. Finnair flies to 19 destinations in Asia, seven in Americas and over 100 destinations in Europe (Finnair company website 2017). Finnair has over 5 000 employees and most of them are working in operations meaning they are on the go: ground crew at the airport, technicians working on aircrafts in hangars and cabin crew and pilots in the air. The company’s strategy aims to accelerated growth, and so for example the number of employees is growing rapidly. Currently Finnair has approximately 900 pilots of which about 30 are female (Miettinen 2017).

The key characteristic of pilots’ work is mobility: the pilots do not sit at the office by the computer with connection to internet based digital tools but fly above the clouds in a very restricted environment and work in different destinations around the world. As mobile work is an increasing phenomenon, it makes this thesis interesting also in a larger working life scope. More on the topic of mobile work on chapter three.

The operative employees are a challenge to internal communications because of their mobile work. This special character of their work gives space to the assumption that the pilots are not easy to reach which creates more questions such as for example how engaged pilots as mobile workers are towards the company’s internal communication and how they see the usage of the main internal communication channel intranet. This research investigates these questions.
In this thesis, internal communication refers to the employee communication between the organizations’ communication department and the employee group of pilots. Internal communication is crucial in order to keep the employees up-to-date and informed about the company’s current affairs. It is also a key in maintaining and enhancing the employees’ engagement and commitment towards the company. The concept of internal communication is presented more deeply in chapter three.

This research investigates the intranet usage among Finnair pilots using company intranet platform in February 2017. Intranet, where most of the internal communication takes place, was renewed in April 2017. This study aims to build the comparable ground in intranet usage. New research should be conducted to see the effect in intranet usage after the renewal. The new intranet is modern, responsive and easier to use on mobile devices. In this renewal project, also content enhancements were executed for communications to better reach the employees.

The thesis has six chapters. The thesis begins by introducing the context in which the study takes place and addresses the objectives and research questions of this research. After that, in chapter three, the subject is approached from the existing literature point of view. Here, all the key concepts are introduced. The means and methods in conducting this research are introduces in the methodology chapter, chapter four. Chapter five focuses on the findings of this study followed by chapter six where discussion and suggestions based on the findings are presented.
2 Context of the project

The pilots are a challenge to internal communications because during their duty hours they are up in the air and do not have a daily access to the main internal communication channel intranet like office staff does. The pilots do not necessarily meet their managers very often. On the other hand, in some cases face-to-face meetings with managers are the best ways to reach the pilots. That is why it is challenging for the internal communications to reach the pilots to get them informed and involved in company communications.

In her thesis Petra Lempiäinen (2016) studied internal communication from the cabin crew point of view. In the thesis, she uses the definition of The International Air Transport Association (IATA) of the cabin crew as

Crew members that are not Flight Crew members and are designated to perform safety duties in the passenger cabin in accordance with the requirements of the operator and the Authority; qualified to perform cabin functions in emergency situations and enact procedures to ensure a safe and orderly evacuation of passengers when necessary. Equivalent terms: Flight Attendant, Cabin Attendant. (IATA 2015, 2.)

In her study, she found out that there is a need to develop systems and tools to better support the mobile workforce. In the survey that she executed to gather information from the cabin crew members it stood out that from all the company’s electronic communication channels intranet was performing the worst: in functionality 2,35 and in usefulness 2,76 on the scale one to five number one being poor and number five being excellent. (Lempiäinen 2016, 37-39.)

As Lempiäinen’s thesis excluded pilots in her study, there was a need to continue the research where her thesis ended and deep dive into the internal communication from the pilots’ point of view.

IATA defines Flight Crew as

The crew members essential to the operation of an aircraft, the number and composition of which shall not be less than that specified in the operations manual and shall include Flight Crew members in addition to the minimum numbers specified in the flight manual or other documents associated with the certificate of airworthiness, when necessitated by considerations related to the type of aircraft used, the
type of operation involved and the duration of flight between points where Flight Crews are changed.
For each flight, the Flight Crew members shall include the Pilot-in-Command (The pilot designated by the operator as being in command of the aircraft and charged with responsibility for the operational control and safe conduct of a flight) and may include, as appropriate:

- One or more Copilots;
- When a separate flight engineer’s station is incorporated in the design of an aircraft, one flight engineer especially assigned to that station, unless the duties associated with that station can be satisfactorily performed by another Flight Crew member holding a flight engineer license, without interference with regular duties;
- One member who holds a flight navigator license in all operations where, as determined by the state of the operator, navigation necessary for the safe conduct of the flight cannot be adequately accomplished by the pilots from the pilot station;
- One member who holds a valid license, issued or rendered valid by the state of registry, authorizing operation of the type of radio transmitting equipment to be used. (IATA 2015, 2.)

In this thesis, a pilot is considered as an accordingly trained pilot or co-pilot who is in an employment relationship with Finnair flying regularly short-haul and/or long-haul flights to Finnair destinations.

2.1 Objectives

The needs and objectives of this research were specified in discussions with the communication department representatives. As the intranet was on the renewal process, there was a need for knowledge on intranet usage.

This research aims to find suggestions and solutions on how to enhance the communication with the pilots through intranet and how to activate them to use intranet more. When suitable ways, processes and tools for communicating to pilots have been found they can be expanded to concern communications also to other employee groups.

2.2 The research questions

Objective of this study is to find solutions on how the internal communications could reach better the Finnair pilots. This is done by investigating the literature and themes around internal communication and analysing the results of empirical research conducted among the employee group of pilots.
Based on the findings of this research, the internal communication department has data and knowledge of the pilots’ intranet usage. Also, conclusions and suggestions are made on preferred channels and content, what the communicators can use as background information for their decisions regarding internal communications and intranet in order to reach and activate pilots better into using intranet.

Based on the objective, the following research questions can be designed:

The main research question of this study is:
How to improve internal communications through intranet to better reach the Finnair pilots?

This main research question can be divided into three sub-questions:

Research question 1:
What are the challenges for internal communication to reach the pilots?

Research question 2:
What are the characteristics of the most preferred intranet content?

Research question 3:
How to develop the usability of intranet?
3 Theoretical framework

Development work is never to be initiated from scratch: it has to always lean on theories, methods and previous studies (Ojasalo, Moilanen & Ritalahti 2015, 53).

Since the internal communication to pilots consist of several variables, it is important to understand the theories behind the variables. In this chapter of literature review, the relevant frameworks, theories and concepts are presented. The chapter introduces the current knowledge of the phenomenon. The discovered frameworks, theories and concept help the empirical research in the aim of finding answers to the research questions.

In the next sub-chapters, the essential concepts of this thesis are introduced. They are the concept of mobile employees, the concept of internal communications and intranet, the concept of change management and communication and the concept of technology acceptance model.

3.1 The life of a mobile employee

As the thesis narrows down to the pilots as mobile workers it is crucial to define and understand the concept of mobile employees. While the work mobility and remote work are booming concepts in the modern era of work life, it is nothing new in the aviation business. Mobility is a fundamental element of the pilots’ and cabin crew occupation. To perform their work, it is mandatory to be remote and constantly change location.

Mobile is defined as a quality of an individual who moves to and from different places and works while travelling, utilizing information and communication technologies (Mäkinen 2012). Mobile work is a combination of technology, workplace organization, (inter-) organizational procedures, and facilities and support systems allowing people to work at times and locations of choice (Schaffers 2005, 3).

Mobility is required in many jobs, but it appears in different forms and in various degrees. Some employees move around most of the time, and do so by necessity of their work. For others, mobility is temporary. It may be compulsory, but is often voluntary (Wiberg & Ljungberg 2001, 160).

The basic criteria for mobile work concern the concepts of time and space, and the interrelation between them. In her thesis, Lempiäinen (2016) creates a time and space related
matrix of mobile work based on the views from Wiberg & Ljungberg (2001) and Cohen (2010).

Figure 1. Time-space matrix of mobile work (Lempiäinen 2016, 7).

\[
\begin{array}{|c|c|}
\hline
\text{SPACE} & \text{TIME} \\
\hline
\text{independent} & \text{dependent} \\
\hline
\text{Particular time, anywhere} & \text{Anytime, anywhere} \\
\text{tasks can be done anywhere but at a certain time or in a certain order} & \text{tasks can be done independent of place and time} \\
\text{white-collar or service work requiring live communication but no co-presence} & \text{work reliant on light technology, no communication or no immediate response needed} \\
\text{Particular time, particular place} & \text{Anytime, particular place} \\
\text{tasks must be done in a certain place at a certain time} & \text{tasks must be done in particular place but whenever} \\
\text{work requiring co-presence, seasonal work, emergency work} & \text{work reliant on immovable technology, tied to a place but with no or open schedule} \\
\hline
\end{array}
\]

As the matrix shows, the researchers (Cohen 2010, 68; Wiberg & Ljungberg 2001, 167) conclude that actually few tasks can be done truly anytime, anywhere. As Lempiäinen formulates it, there are places that need to be visited to get job done, and there are timeframes and deadlines that need to be followed (Lempiäinen 2016, 7).

Perry, O’Hara, Sellen, Brown and Harper (2001) address the question of anytime, anywhere from the standpoint of access to for example corporate email, documents or intranet. They point out that the notion of “anywhere” assumes a geometric notion of space in which all places are assumed to be functionally equivalent. “Anywhere” also holds a notion of space in terms of different properties and social norms governing the kinds of activities that can take place there. In sum, anywhere access is possible, but may not be acceptable. “Anytime” often assumes a linear notion of time, as opposed to the “anytime” characterized by the social norms and properties of time that affect information access and communication behavior. (Perry & al. 2001, 326.)
In the mobile work of a pilot, “anywhere” access to for example internal communication channels is possible in theory since basically the globe is equipped with internet connection, but in practice the stability of the connection varies. Also, in theory, “anytime” is possible but then there is again a question of reliability of internet connection, and other questions related for example employees working hours versus free time.

In addition to the framework of mobile work being understood as time and space related, mobile work has been investigated and defined by the relation between mobility and the performance in work-related tasks and by the nature of the mobile works voluntariness or compulsion. Cohen (2010, 70) defines these three types of mobile work by the relationship of mobility to the accomplishment of work tasks:

- **Mobility as work:** workers whose object is the achievement of motion, such as cycle couriers, truck drivers or pilots. This has to do with movement of people, goods or vehicles between places. Some workers in this group can control the temporal ordering of work (for example cycle couriers) or their routes (taxi drivers), whereas other workers have little (bus driver) or no (flight assistant) control over route or temporality. Mobility as work is dependent on place and usually time, but involves spatial maps or ‘workscapes’ peculiar to the task.

- **Mobility for work:** workers whose work is not movement itself but necessitates movement, such as district managers, sales representatives or plumbers. Their work is scattered, tasks may be short or long and mobility is required to perform in the job.

- **Working while mobile:** workers whose work may be accomplished while moving or in multiple locations, but could equally be accomplished in a single location, such as office workers. Formally working while mobile is a choice, but circumstances may force to mobility. ICT transformation have expanded the tasks that it is possible to work while mobile.

As Cohen (2010, 65) puts it, *working while mobile* is usually seen as white-collar phenomenon while *mobility as work* and *mobility for work* involve more diverse occupations, and have been disregarded from sociological analysis of mobile work. From these three forms of mobile work, working while mobile is the most researched one. Cohen (2010, 66) underlines that this is controversial since most spatially mobile workers are the employees whose job involves mobility as work and mobility for work.

Mobile work has always had a tight interrelation to ICT. Cohen refers to Toffler (1980), who initiated the trend of linking mobility, technology and freedom, and criticizes the prevailing view, that even though more critical studies have been conducted, there is still a strong connection between mobility and ICT. (Cohen 2010, 67.)
Lilischkis is one of the researchers who is investigating the concept of mobile work from the ICT point of view. Lilischkis (2003, 3) looks at the construct of mobile work from the level of the individual physical mobility, and introduces five categories by the detachedness of the workplace:

- on-site movers, whose work requires movement around a certain site
- yo-yos, who are occasionally working away from a fixed work location
- pendulums, who work alternate at two locations
- nomads, who work at changing fixed locations and
- carriers, who work on the move transporting goods or people.

Lilischkis refers to these classifications also with a term of multi-location work: while mobile work stresses the ability to move workers and tools, multi-location work has a connotation of being able to work at numerous different places. While the definition of multi-location work fits with on-site movers, yo-yos, pendulums and nomads, it is to be noted that it does not fit to the grouping of carriers. The carrier group indicates that usage of a vehicle is needed to perform the job. Examples of the carrier employee groups are train conductors, aircraft flight crew, sailors and taxi drivers. (Lilischkis 2003, 3; 6.)

In the context of this research, the mobile character of the pilots’ work is most accurately described by Cohen’s (2010) description of mobility as work and Lilischkis (2003) definition of carriers.

While the time, space and physical mobility may differentiate the characteristic of mobile work, the necessity for user friendly, effective and functional digital tools remain in all of the presented models of mobile work. One of the main challenges for a mobile worker is the accessibility to digital tools. Similar to the office workers, the pilots and the cabin crew need to receive and send information in digital environment to perform their work, using several tools such as email and work-related operational systems. For these tasks, mobile devices, such as laptop computers, tablets and mobile phones are essential. For a mobile worker, mobile devices are mainly personal tools to create, process, transmit, store, share, use and dispose of work-related information, such as records (Mäkinen 2012).

Perry & al. (2001, 342) note, that information access in not simply about having the capability to pull the appropriate document across a network, but also how the document is used and whether it is in the appropriate form for viewing and interaction. Due the variety and complexity of communication technologies, personal information management plays a significant role in an employee’s work processes, disregarding whether the employee is sitting in the fixed office or working remotely (Mäkinen 2012). As the personal information
management skills differs between individuals, success in executing the task varies. Working in the mobile environment demands certain devices and know-how but many mobile workers are willing to familiarize themselves with the devices only enough to carry out their work tasks (Mäkinen 2012).

Technology wise, there are ways to ease the pain of the mobile workers. To enhance the acceptance and usability, developing information systems which support mobile work better would also improve records management in the mobile working environment (Mäkinen 2012). Technologies should be lightweight and highly tailorable information and devise sets, rather than highly specific, integrated systems (Perry & al. 2001, 345).

One of the problems faced by mobile workers away from the office environment is how to maintain informal awareness of what is going in the company and how to maintain a sense of community (Perry & al. 2001, 341.) In other words, how to get and remain engaged.

William A. Kahn (2010), the acknowledged father of the engagement concept, addresses engagement from individual point of view, and builds the concept of engagement on the earlier studies of work motivation, where workers were assumed to be either on or off. Kahn (2010, 20) refers to his earlier definition (Kahn, 1990) and sees engagement so that employees offer up different degrees and dimensions of their selves according to some internal calculus that they consciously and unconsciously make. Welch (2011, 332) underlines the significance of Kahn’s (1990) definition of individual’s work engagement as harnessing of organizational members’ selves to their work roles: in engagement, people employ and express themselves physically cognitively and emotionally during role performance. Kahn (2010, 22) argues, that there are three crucial elements affecting to whether people are to be engaged or not: feeling of meaningfulness of the engagement, sense of safety in engaging and availability of engaging.

As people engage when they feel it is in their interest to do so, a basic strategy in enhancing the engagement of others, is to help to align their interests. Engagement can be supported by making people see the meaning in what they do by, for example, clearing roles to make people express their selves accordingly, clarifying correlation between work actions and rewards and making the measurement systems by which they are evaluated visible, fair and fair. All this requires interaction with other people. Work has more meaning when people are joined with others. (Kahn 2010, 22-24.)
Kahn (2010) refers to safety in forums where people represent themselves. The safety of a forum, that is whether an employee feels secure in participating, addressing difficult issues and speaking up, defines whether the employee shall engage or not. Here, a leader plays a significant role in giving or not giving the availability to engage. In engagement perspective, it is a leader who needs to balance between being close enough to an employee to give support but distant enough to give an employee an autonomy of their work. In enhancing the level of engagement, leader’s task is also to provide open and functional collaboration and communication between different teams, groups and divisions to make meaningful co-operation and engagement available. (Kahn 2010, 25-28.)

Once a person has been engaged, it is not to be said the person will stay engaged in the future. Kahn (2010) underlines that employee engagement is delicate and fragile, yet quite resilient. The researcher describes employees’ senses as sophisticated radars that are constantly looking around for signals whether their engagement matter, how safe they are and whether their leaders truly welcome and know that to do with them. Even if the engagement is lost, there is hope. Kahn (2010) highlights that people have desire to engage, and they have an instinctive drive to express who they are, who they want to be and when they have a change they will do it. (Kahn 2010, 29-30.)

In literature, employee engagement is approached also from the organizational point of view. Welch (2011) defines organizational engagement as a dynamic, changeable psychological state which links employees to their organizations, manifests organization’s member role performances expressed physically, cognitively and emotionally, and influenced by organization-level internal communication. Welch highlights that employee engagement is a crucial factor affecting organizational effectiveness, innovation and competitiveness. In developing employee engagement internal communication plays a significant role as it can convey the values of the organization to all employees, involve them with the goals of the organizations and enable employees to identify with the values of the organization. (Welch 2011, 328-329, 339-341.)

Welch (2011) refers to the discussion of engagement’s fundamental nature: whether it can be seen as an attitude, a psychological or motivational state or a personality trait. This multidimensional perception of engagement is useful for communicators as it highlights a need for employee communication to understand and serve internal stakeholders’ core communication needs (trait) as well as surface communication needs (state and attitude). (Welch 2011, 335-336.)
Even though the concept of engagement is enticing and interesting element in internal communication, due the limitations of this thesis, the concept of engagement is not investigated further.

From the pilot point of view, accessing the information can be challenging, as can be reaching pilots and getting them engaged from the internal communication standpoint. Now, that the concept of mobile work and mobile employees has been discussed, it is crucial to define the meaning of internal communication.

3.2 Company communications: what, where and to whom?

In this chapter, the concept of internal communication is addressed. As the thesis focuses in the internal communications for pilots, the construct of internal communications needs to be looked closer. What is internal communications? How does it differ from the other methods of communications the company exercises? What are the characteristics that make internal communications effective? What are the pitfalls that should be avoided and on the other hand areas of development?

In short, communication is defined as transmission and exchange of information between individuals or systems (Kuutti 2012, 223). One of the first, and the most referred, models in the field of communication is the Shannon and Weaver model from the 1948. This linear model consists of a sender as information source, transmitter, channel through which the message is sent, receiver and destination as a person who receives the message. During the transmission, the message may be distracted or affected by external noise, and this can affect the message in the destination. (Kuutti 2012, 172, Fiske 2000, 20.) This model has acted as a fundament for various modifications and extensions of communication models.

This view has also been much argued due its approach in concentrating communication only as transferring message. In addition of transferring the message, communication is considered as creating meaning and generating community. These approaches have been considered as contrasts of each other but they can also be seen complimenting each other. (The learning materials of the University network of Communication science website 2017.)
As this research focuses on the communication in a specific company, it is adequate also to define the meaning of corporate communication. Cornelissen (2014, 5) describes corporate communication as “a management function of all internal and external communication with the overall purpose of establishing and maintaining favorable reputations with stakeholder groups upon which the organization is dependent”. Corporate communication includes several areas of communication such as media relations, investor relations, public relations, environmental communication, labor market communication (recruitment), issues and crisis management, change communication, internal communication to employees and corporate advertising (Cornelissen 2014, 4; Welch & Jackson 2007, 181). In corporate communications, communication is defined as the tactics and media that are used to communicate with internal and external groups (Cornelissen 2014, 7). The goal of corporate communication is to create and develop the relationships between an organization and its stakeholders and to have an influence on the image that the stakeholders formulate of the organization (Isohookana (2007, 189).

In Cornelissen’s and Isohookana’s description of corporate communication above, several key elements stand out, such as internal communication, external communication, reputation and stakeholder.

The difference between internal communication and external communication will be dived deeper into in a moment. But first, reputation and stakeholder concepts are briefly introduced.

In communications, reputation is referred as an individual’s collective representation of past images of an organization established over time through communication or previous experiences (Cornelissen 2014, 7). In other words, reputation is an outcome of an encounter of a picture created by the means of external communication and a picture created in a human mind. A good reputation assists the company to gain justification to its existence, increases company’s attractiveness, brings added value to its products and services and encourages the organization to develop its operations. (Cornelissen 2014, 7; Kuutti 2012, 111). Cornelissen (2014, 3) emphasizes that the core task of corporate communication practitioner is to build, maintain and protect company reputation.

Cornelissen cites Freeman (1984 in Cornelissen 2014, 44) stakeholders as any group or individual who can affect or is affected by the achievement of the organizations’ objectives. Koschmann (2016, 1) quotes Laplume, Sonpar and Litz (2008) in introducing a key thought in literature on the meaning of a stakeholder: an organization exists within an extensive network of interdependent relationships with other organization and components,
and should therefore be managed in the interest of all legitimate stakeholders who can affect or be affected by the organization. Finnair as an international stock company has several different stakeholder groups for example shareholders, customers, competitors, media, the board of directors, employees, regulators, unions, suppliers, global and local associations, alliances, partners and upper level schools.

3.2.1 The concept of internal communication

At this point, it is time to concentrate to the differences of internal and external communications. Kuutti (2012, 197) explains internal communication as communication within the personnel of an organization through different channels, for example an internal magazine or intranet, and external communication as communication addressed towards the society through for example mass media. In other words, while internal communication is addressed to the employees of an organization, external communication aims to reach external stakeholder groups. However, the line between internal and external communication isn't always this simple. Welch and Jackson (2007, 180) remind that internal communication becomes external communication in a click when an email is forwarded to the media or a newsletter taken home. Welch and Jackson (2007, 180) underline the dual role of an individual: an internal employee can at the same time be a company’s shareholder and customer.

Isohookana (2007) draws a picture of internal communication as a center of an organization’s communication that is surrounded by external communication, that is marketing communication and corporate communication. The success of internal communication can be seen and sensed outside of the company and in that way internal communication affects stakeholders’ images of the organization, its products and services. From this standpoint, internal communication supports corporate communication and marketing communication and also other way around. (Isohookana 2007, 221.)

Cornelissen (2014, 279) defines internal communication as all methods, such as internal newsletter and intranet, used by a firm to communicate with its employees. Welch and Jackson (2007, 182-183) emphasize Cornelissen’s view on the need to consider the media and message content in internal communication but criticize the definition because of its missing linkage to strategic management.

As this research aims to find solutions concerning company’s internal communication, it’s relevant to define more comprehensibly the construct of internal communication.
The first question addresses the name of the construct: how should internal communication actually be called? Researchers approach internal communication with terms like staff communication, employee communication, employee relations, industrial relations, change management and leadership communication (Smith and Mounter 2005, 7, Cornelissen 2014, 28-29). The question articulates well the multidimensionality of internal communications.

The question of how internal communication should be called, has one answer in itself: the key stakeholder group of internal communication is clear, it is the employees of an organization. Welch and Jackson (2007) introduce a framework of internal communication which at the same time differentiates stakeholder groups and provides tools to focus on all employees. They put together internal communication with different groups with different stakes within an organization and end up with identification of participants in different levels of organizations: all employees, strategic management (CEOs, senior management teams), day-to-day management (directors, head of departments, team leaders, division leaders, the CEO as line manager), work teams (departments, divisions) and project teams (internal communication review group, company's email implementation group). This construct suggests a series of interrelated dimensions of internal communication and underlines Welch’s and Jackson’s point of internal communication as strategic management of interactions and relationships between stakeholders within organizations across a number of interrelated dimensions including internal line management communication, internal team peer communication, internal project peer communication and internal corporate communication. (Welch & Jackson 2007, 183-185.)

Based on the finding of key stakeholder group, the aim of internal communication can be defined. In addition to its earlier introduced role in supporting marketing communication and corporate communication, Isohookana (2007) defines the goal of internal communication as to unite together employees, employee levels, departments and processes and to create and develop company's identity and internal relationships to ensure that the objectives of an organization is accomplished. Isohookana specifies the objects of internal communication to

- engage to company strategy, vision and values
- engage and motivate to company goals and result-oriented actions
- streamline everyday work tasks
- inform matters
- impact on the effective use of resources
- create a positive atmosphere and the sense of community
• prevent and manage conflicts
• effect and engage to company culture and company identity
• effect company image and brand. (Isohookana 2007, 221, 223).

Welch and Jackson (2007, 192) completes the list of aims with an awareness of organization’s changing environment and understanding of its evolving aims.

As acknowledged here, internal communication has several goals. To achieve these goals, wide selection of messages need to be delivered through the most suitable channels. Let us next look into the types of internal communication.

Internal communication exists in several places and situations, that can be divided for example as management communication, corporate information and communication systems, communication between functions, staff communication and change communication (Cornelissen 2014, 164, Isohookana 2007, 226).

Management communication refers to two types of leadership communication: communication from the organization’s executives to employees with an aim to communicate the company strategy, vision, goals and status, and communication between an employee and a manager, which is often related directly to the specific tasks and work performance. As leading individuals is foremost interaction, these types of communication also include the elements of listening and giving feedback as key factors of success in communication.

Corporate information and communication systems is considered as technologies and communication systems that broadcast corporate decisions and developments to all employees across the organization in order to keep them updated about corporate matters, intranet and emails, for example. The content in these systems is usually general rather than specific.

Communication between functions is crucial to ensure the prosperity of an organization. An organization is a sum of its functions that need to work well together and understand each other, in which fluent communication flow is crucial. Staff communication is seen as human resources communication in interaction with an employee, HR department, manager and executives: for example, information of recruitment, company policies, payroll, employment and more and more of talent and development.

Change communication is crucial in the time of change: the way a change is formulated, announced and explained to employees are key elements in adopting or neglecting the
Change. Change communication is mostly directed from up from the executives and managers to down to employees, but it also requires interaction between the levels. (Cornelissen 2014, 164-165; 224; Isohookana 2007, 227-234.) Chapter 3.3 elaborates the concept of change communication.

As introduced, there are several types of communication within an organization. The variety of communication types urges the demand of the communication to be effective. Tourish and Hargie (2009) argue that organizations that communicate effectively perform effectively. They claim that in order to build successful business, it is a core requirement to communicate with employees since better informed and involved employees can help build better organizations (Tourish & Hargie 2009, 26).

Creating and conducting effective communications puts communication skills in the focus: information exchange – in all its forms from sharing information, giving and receiving feedback, commenting on different issues and proposals, attending meetings – is central to the effective performance of the management function as is the openness of communication and the personal style of a communicator. Tourish and Hargie (2009) refer to Welch and Jackson (2007) who describe promotion of a positive sense of belonging to the employees and consequent creation of relationship characterized by commitment as one of the key goals of internal communication. (Tourish & Hargie 2009, 8-9.)

This positive communication is shown to have an improving impact in overall performance in different studies. In the studies, these communication actions have not been complicated acts of a magician but small adjustments. As Tourish & Hargie (2009, 10-13) put it, internal communication programmes that make significant improvements are often characterized by their simplicity and they are often designed by a creative approach to ensure the maximum amount of interaction between as many groups as possible.

Tourish and Hargie (2009, 18) point out, that effective organizational communication fulfils the personal needs of an employee and answers the questions like “what is my job, how am I doing, how are we doing, how do we fit in to the whole, does anybody give a damn, how can I help?” and through that promotes organizational cohesion and effectiveness.

As already described earlier from the external communication point of view, it is not indifferent how the internal communication is managed. Coherent internal communication enables the organization to present a consistent and clear image to its external publics (Tourish & Hargie 2009, 24). An organization is a totality from which internal communication
cannot be excluded: all communication is part of an integrated whole (Welch & Jackson 2007, 180).

All this communication presented above has to flow in channels. Some of the communication occurs in face-to-face situation, which is widely seen as the most multidimensional and the richest way to communicate. Face-to-face communication enables straight feedback and the exchange of information is in a more personal level than in other communication means (Lipiäinen, Karjaluoto & Nevalainen, 2014, 278). Face-to-face communication as two-way communication is considered ideal in studies, but it is unrealistic to suggest internal communication to be conducted primarily in face-to-face dialogue (Welch & Jackson 2007, 187).

So, in spite of the request for two-way, face-to-face communication, more and more information is distributed in digital channels. One-way communication is appropriate when message consistency is important and in these circumstances, it is a necessary strategic choice to decide the used media, whether new release, video, website or newsletter (Welch & Jackson 2007, 187).

Digital channels have taken over the printed channels during this century. In the earlier days, it was common that an organization published regularly a staff magazine that was delivered to all of its employees. So did Finnair still a few years back. Due required companywide efficiency improvements and the ongoing development of digital tools, channels and applications, internal communication has moved into the digital world. As social media platforms have rushed in, internal communication has adopted features and applications also from there, such as Yammer.

Companies adopting new digital tools aim to use the tools in communicating with employees, facilitating two-way conversations, gathering ideas, giving feedback, triggering greater engagement and motivation and encouraging employees to contribute to organization’s strategy (Lipiäinen & al. 2014, 276).

In their study of a Finnish multinational industrial corporation with a long history, Lipiäinen & al. (2014) counted as digital tools’ advantages the easiness and fastness of use, reviewability and revisability, possibility to store information, ability to use new tools (such as blogs) to communicate company spirit, ability to communicate with people around the world and in different time zones and increase of flexibility of work. The major challenges in using new digital tools the researchers found were related to the lack of clarity, employees’ different habits in using different channels, information overload, diminished feedback
and minimal social cues, feeling of formal communication preventing development of personal relationships and pronounced direct, provocative and aggressive communication style. Based on these findings, the researchers highlight the importance of informal face-to-face communication as relationships are easier to build and nourish when meeting person to person as it is via digital channels and the role of digital channels in more formal communication. Also, the introduction of new technology should be considered carefully and the digital tools and their usage should be well organized. Along with the launch of new digital tools, clear common guidelines should be provided to all users as well as information how tools are used within an organization and is responsible for what. (Lipiäinen & al. 2014, 281-284.)

On the other hand, although social media channels are considered limited in their ability to carry social information in comparison to face-to-face interaction, social media channels can facilitate complex information distribution due their rich features, like webcams, embedded audio and video, commenting, sharing and online chat functions (Men & Hung-Baesecke 2014, 448).

On the contrary to the research of Lipiäinen & al. (2014) of a Finnish company, Men Hung-Baesecke’s (2014) research of Chinese medium-sized and large corporations’ employees end up in different results in internal use of social media tools. The researchers state that according to the participants of the research, benefits for social media in internal use were making connections and communication, seeking for information, building community, managing personal identity, empowerment and entertainment. Men and Hung-Baesecke underline that when workers get encouraged to participate in the company’s social media communication channels, the communal environment would empower them to join the conversation, provide feedback, comments and share information. (Men & Hung-Baesecke 2014, 458.) As social media platforms are rather new elements in the variety of internal communication tools, there is a need for deeper research in the benefits, downsides and effect in different organizations and different cultures of using them as internal communication instruments.

Despite the new and developing digital tools available for companies for internal communication and willingness to introduce them within an organization, traditional communication channels are in favor among the employees. Whereas email remains the most commonly used digital communication channel, Lipiäinen & al. (2014) refer to a study by Friedl and Verčič (2011) that found out that employees born in the 1980’s, who are widely considered as digital handy and savvy, prefer traditional internal communications channels at
their workplace while having a strong preference in social media tools and applications in their personal lives. (Lipiäinen & al. 2014, 277-278.)

Now, that the construct of internal communication is presented, it is time to introduce the communication channel in the spotlight of this thesis, intranet.

### 3.2.2 Definition of intranet

As this research concentrates on intranet as the main channel of internal communication to the pilots, it is crucial to understand the definition of intranet. Intranet has been defined as a form of distributed information infrastructure that unifies geographically dispersed work forces, as a database and a channel of internal communication and as an intraorganizational internet technology based on data transmission network (Lai 2001, 95; Isohookana 2007, 278; Kuutti 2012, 61).

Lai (2001, 98-99) describes the meaning of intranet in organizations to empower employees around the world through a communication tool supporting collaboration, interaction and enable real-time sharing of corporate information, such as documents, forms, news, policies, phone directories, product specifications and pricing information across functional boundaries and organization levels. Lai (2001, 98-99) sees that intranet can help employees to distribute and communicate their ideas more readily and in that way, enable them to be more involved in the decision-making process, improve their work performance and decision quality by providing corporate data access and intraorganizational communication.

Lai (2001) writes that in today’s dynamic business environment, corporate decisions about adopting new technological innovations, such as intranets, are influenced by expectations that the systems will have a positive impact on business processes and organizational performance. Based on his research he noticed that intranet contributes more significantly to employee and organizational performance in larger organizations than in smaller organizations, but the extent of intranet usage does not necessary indicate an equivalent extent of optimal intranet use within the organization and its employees. (Lai 2001, 95; 98.) In other words, it is not enough for intranet to exist. For intranet to be utilized to the maximum, it needs to be useful for its users.

From individual employee’s standpoint, using – or not using - intranet is a matter of personal information management skills, what Mäkinen (2012) highlighted in the previous
chapter concerning the mobile workers. Lai (2001, 99) sees, that intranet allows users to take responsibility for creating and maintaining their own data, and refers to his research, where the respondents rated intranets as producing most critical effect on the document management process, trailed by data management, distributed processing, business and communication processes.

In addition to the construction of intranet as an information and data management tool, it is also considered as a channel for interorganizational collaboration and interaction. In this field, intranets face competition from conventional groupware products, such as in Yammer, Sharepoint and Office365 tools used at Finnair. Lai (2001, 100) points out that in the end, it is not about technology but how the technology is used to improve employee performance: successful collaboration requires positive input from employee as well as a good fit between task and technology. For intranet, it is crucial to offer a set of standardized communication capabilities that support daily business collaboration activities (Lai 2001, 100).

State-of-the-art technology needs to be properly planned to fit the need of an organization, carefully adopted and widely launched for the organization to benefit the system comprehensively and to make the intended users to use it successfully. A greater extent of intranet implementation can motivate the organization to apply more effort exploiting the technology and gain competitive advantage (Lai 2001, 99).

### 3.3 The framework of Technology Acceptance Model

As discussed earlier in the chapter 3.2.1, increasing amount of communication occurs in digital channels. Digitalization has affected strongly also internal communications. At the same time, the flood of information and the expansion of digital channels are exhausting the audience and provoking resistance to new digital tools. For a digital tool or application, it is crucial to find the intended users and stabilize the usage of the application among the users.

The Technology Acceptance Model (TAM) is a framework that aims to explain factors effecting on a person’s attitude on an information system. TAM theorizes that a person’s intention to use a system is determined by two elements: perceived usefulness and perceived ease of use. TAM argues that on intention to use, the effects of external actors,
such as information system characteristics, development process and training, are mediated by perceived usefulness and perceived ease of use. Studies claim that TAM explains typically about 40% in usage intentions. (Venkatesh & Davis 2000, 186-187.)

3.3.1 Perceived usefulness and perceived ease of use

Perceived usefulness is defined as the extent to which a person believes that using the system will enhance a person's job performance. The definition of ease of use is the extent to which a person believes that using the system will be free of effort. Perceived usefulness is also influenced by perceived ease of use because the easier the system is to use, the more useful it can be. (Venkatesh & Davis 2000, 187.)

Venkatesh and Davis (2000, 187) highlight that since the perceived usefulness has been a fundamental driver in usage intentions, it is important to understand the building blocks of its construct and how the influence of the building blocks changes over time with increasing experience using the system. Venkatesh and Davis (2000) introduce framework called TAM2, extended model of TAM, which adds social influence processes and cognitive instrumental processes to the framework.

3.3.2 The need of extending TAM

The social influence processes are three interrelated social factors that affect the individual’s willingness to adopt or to reject a new system: subjective norm, voluntariness and image. Here, subjective norm refers to a person’s perception that most people who are important to him or her think a person should or should not perform the behaviour in question. Voluntariness is seen as the extent to which potential adopters perceive the adoption decision to be non-mandatory. Image is defined as the extent to which use of an innovation is perceived to enhance person’s status in social system. (Venkatesh & Davis 2000, 187-189.)

For the four cognitive instrumental processes affecting perceived usefulness Venkatesh and Davis (2000, 190-192) list job relevance, output quality, result demonstrability and perceived ease of use. Job relevance is defined as individual’s perception of the degree to which the information system in question is applicable to a person’s job. The output quality is the level of how well the system in question performs those tasks related to a person’s job. Result demonstrability addresses to the tangibility of the result of using the innovation. Perceived ease of use is retained from the original TAM theory and is the extent to which a person believes that using the system will be free of effort.
In their studies Venkatesh and Davis found out that by including social influence processes and cognitive instrumental processes TAM2 explained up to 60% of the variance of usage intentions. The findings showed that subjective norm had a significant direct effect on usage intentions for mandatory systems but as the user gained experience on the system, the impact of the social information in forming perceived usefulness and intention to use decreased. Concerning the cognitive instrumental processes an interesting finding Venkatesh and Davis found was the interconnection of job relevance and output quality in determining perceived usefulness: opinion of a system’s usefulness is affected by an individual’s cognitive match of a person’s work goal with the consequences of system use. As opposite to social influence processes, the effects of cognitive instrumental processes remained significant over time. (Venkatesh & Davis 2000, 198-199.)

As practical suggestion of how to improve the technology acceptance Venkatesh and Davis propose that in addition to designing systems to better match job-relevant needs, improving the quality of their output or making them easier to use, practical interventions are needed for increasing result demonstrability, such as empirically demonstrating to users the effectiveness of a new system relative to old system to enhance user acceptance. The researchers point out that compliance-based approaches to introducing new systems seem to be less affective over time that the use of social influence to achieve positive changes in perceived usefulness. On the social information Venkatesh and Davis suggest for example to create communication campaigns to lift the reputation associated with system use to increase identification. (Venkatesh & Davis 2000, 199.)

Technology acceptance model has faced criticism. Legris, Ingham and Collerette (2003, 191) write that TAM is a useful model but it needs to be integrated to a broader model to take into consideration human and social change processes. Legris & al. (2003, 191) highlight that the analysis of empirical research using TAM shows that the results are not totally consistent and clear which leads into a conclusion that significant factors are not included in the model.

Based on their own research and critical analysis, Legris & al. (2003) estimate that TAM model hardly explains more than 40% of the variance in use even with the additional variables. The researchers list that the biggest pitfalls of TAM model concern that some of the TAM researches are done among students and are not conducted in a business environment, the applications investigated include office automation or system development application and is not examining the introduction of business process applications and that the studies don’t measure system use but self-reported use. In addition to a proposal of adding more emphasis on measurement, Legris & al. (2003) with other researchers (e.g.
Lee & Byung Gon, 2009) stress that TAM considers information system to be an independent issue in organisational dynamics while innovation and change management research implicates that technological implementation is related to organisational dynamics, which will have a strong impact on the outcomes. (Legris & al. 2003, 202; Lee & Byung Gon 2009, 192.)

3.3.3 TAM and intranet

Technology Acceptance Model has also been investigated in the intranet point of view by for example Lee and Byung Gon (2009). They agree with Legris & al. (2003) on their insight of requirement to include additional factors in TAM to better understand what elements affecting perceived usefulness, perceived ease of use and usage of intranet. Lee and Byung Gon researched extended TAM using external factors and subjective norm influencing usage of intranet within organizations. They underline, that intranet is used by organizational employees within organizations, and organizational factors may have influence on the acceptance of intranet as well as other external factors such as the task, user characteristics, political influences and the development process. These factors can have an indirect effect on the technology acceptance behaviour influencing beliefs, attitudes and intentions. (Lee & Byung Gon 2009, 191-192.)

Based on their study, Lee and Byung Gon (2009, 199) suggest that technical support, web experience, task equivocality, task interdependence, subjective norm, perceived ease of use and perceived usefulness are the factors affecting intranet usage.

Here, technical support is considered as offering of educational programs, encouragement to use intranet, providing user-friendly software and system development tools and help functions for usage of the systems. Technical support is positively linked to decreased anxiety and increased favourable attitude whereas the lack of technical support can be a crucial barrier to the effective use of intranet. Management can increase the motivation of employees by giving technical support, persuading that using intranet is useful and can increase job performance. In that way, technical support is one of the factors affecting subjective norm. (Lee & Byung Gon 2009, 193.)

Lee and Byung Gon (2009, 194) define web experience as the experience of using web, internet and internet-based systems. They claim that the web experience of an information system affects its usage because users learn to use the system by experience and it does
not demand great expertise to use. Users with more experience are less affected by complexity of an information system and notice better the long-term benefits for their work.

Regarding the web experience, different experience levels of users should be noted when new information systems are launched. Company should choose proper strategies and promote voluntary acceptance of information technology when adopting new intranet because mandating technology use against the will of an individual could result in negative impressions (Lee & Byung Gon 2009, 199).

Task characteristics mean the task equivocality, that is the extent that tasks are diverse, ambiguous, not repeated and not similar to familiar tasks, and interdependence, the extent that a task is interdependent with other tasks. Lee and Byung (2009) see, that task characteristics should be included as the factors affecting attitude and behavior because they affect subjective norm as the individuals performing tasks need to see the influence of their actions on interrelated activities inside and outside of their organization. With high task equivocality and task interdependence employees are likely to be more affected by colleagues and motivation to follow the opinions of others to reduce a possibility of risk and that increases the subjective norm. (Lee & Byung Gon 2009, 195).

Lee and Byung Gon (2009, 195) see the subjective norm as an individual's perception of whether people important to the individual think the behavior should be performed, in other words, a social pressure that affects perceived usefulness, perceived ease of use, intention to usage behavior and actual usage. The other side of the subjective norm is, that after the start phase of using an information system has passed, subjective norm has no effect on usage.

Lee and Byung Gon (2009, 199) highlight that according to their study, technical support and web experience have a notable effect on perceived usefulness: as a user perceive greater usefulness of intranet, they tend to use intranet to a greater extent.

In their study, the researchers noted two less important factors: perceived ease of use and subjective norm. Lee and Byung Gon (2009) interpret that the insignificant effect on perceived ease of use indicates that the design of an interface to improve ease of use is less important than the functionality aspects of intranet in its purpose to perform organizational tasks. According to the researchers, the minor effect of subjective norm on usage of intranet suggest that the expectation of others and the external pressure to intranet usage has
no strong effect on the actual use of intranet in long term. They suggest that the employees should be encouraged to use intranet by self-recognition of the values of intranet. (Lee & Byung Gon 2009, 199-200.)

As a summary of the technology acceptance model introduced here, it can be highlighted that over everything, it is crucial that the intranet is considered useful. If intranet provides the user the information they need in their work, they are willing to cope with difficulties in ease of use. Technical support and web experience can support the perceived usefulness, but the peer pressure doesn’t have a long-term effect on usage. Although perceived ease of use in considered a significant factor in general in TAM framework, in intranet usage it is less important element compared to the usefulness of intranet.

3.4 Summary of the literature

This chapter has discussed widely of the key literature and the key concepts related to this research: the characteristic of mobile work, internal communication and internal communication tools and channels, change management and change communication and the acceptance of technology in the form of Technology Acceptance Model. Based on the presented knowledge of the theories and concepts in the setting of this thesis the key theories can be divided into three categories of accessibility of intranet, content of internal communication and perceived ease of use of intranet.

Intranet accessibility is a notable barrier in intranet usage in the context of this research. To perform their job, it is mandatory for pilots to change location. According to literature presented in the chapter 3.1, pilots’ mobile work is to be described from two standpoints:

- mobility as work, which means workers whose object is the achievement of motion and whose work is dependent on place and usually time (Cohen 2010, 70) and
- definition of carriers as employees who work on the move transporting goods of people Lilischkis (2003, 3; 6).

This constant change in location effects the ability to be connected to the organization, among others the main internal communication channel intranet. Another obstacle of using intranet is pilots’ work time. During workhours pilots are practically unreachable in the cockpit of the aircraft and in most of the cases in order to use intranet, they will have to use their own free time.

Another key theme of this research is the content of internal communication. As internal communication has several objects from engaging staff to company strategy, vision and
values, informing matters, streamlining everyday work task and to creating a positive atmosphere and the sense of community, to name a few, a wide selection of messages are needed to be delivered through most suitable channels. The relevancy of these messages to the receiver is not to be disregarded. Content in intranet needs to be relevant for the user since the perceived usefulness is seen as a fundamental driver in usage intentions of technology (Venkatesh & Davis 2000, 187).

In the way of how technology is welcomed and further used by employees, ease of use, that is the extent which a person believes using a system is free of effort (Venkatesh & Davis 2000, 187), is a crucial element. Especially in exercising mobile work, user friendly and functional tools are vital. Here, also the perceived usefulness has a significant role. If the users face difficulties in easiness of use, they are willing to cope with them as long as intranet provides the information they need.
4 Conducting the research: methodology

This chapter introduces the means of research methods selected in this study. The choice of the case study research approach is explained as well as the research methods, data collection and data analyzing procedures.

The goal of this study is to find solution how the internal communications could better reach the Finnair pilots. As introduced earlier, the challenges of the internal communications to pilots are the mobile character of their work and in the usefulness and ease of use of the company intranet.

In development work, key factor is the use of multiple research methods to ensure a broad selection of information, ideas and point of views on which to build the development project. In literature, the methods are divided in to quantitative and qualitative methods along with communal methods that are typical in development of a specialist level work. (Ojasalo & al. 2015, 40.)

This research includes qualitative data collected by conducting a digital user survey of intranet usage to the pilots and from a workshop with the pilots to get deeper understanding of the challenges in intranet usage and internal communication to pilots.

4.1 Research approach and methods

Case study is an applicable research approach when the objective of a study is to understand thoroughly a situation of an organization with a goal to resolve a problem or generate development ideas through research (Ojasalo & al. 2015, 37). In a case study, it is crucial to discover plenty on a narrow topic than learn a little in a vast set: the case is investigated taking local, time-related and social situations and connections in to consideration. (Ojasalo & al. 2015, 52-53). A case study allows investigators to focus on a “case” and retain a holistic and real-world perspective (Yin 2014, 4).

In this thesis case study was chosen as a research approach because the study is investigating a detailed case, internal communication through intranet to pilots, in a real-life context with different data sources with an aim to create profound information on the topic.
According to Yin (2014, 10) “how” and “why” questions are explanatory and likely to lead to the use of a case study as the preferred research method. As the main research question of this thesis is “How Finnair's internal communications should be developed to better reach the Finnair pilots” a case study is a suitable method for the research.

It is typical for a case study, that the research uses different data collection methods to get a deep and thorough picture of the topic (Ojasalo & al. 2015, 37). In this study survey and workshop data collection methods were used.

A survey is an applicable tool when the topic is already known but there is a need to ensure the accuracy of the knowledge and to mark status of the topic as a starting point to the research (Ojasalo & al. 2015, 40). A survey seeks answers to questions of “who”, “what”, “where”, “how many” and “how much” (Yin 2014, 9). In this research, an online survey was used to establish ground for the research and find out the current stage of intranet usage among the entire employee group of pilots.

The essential weaknesses of a survey are the superficiality of data and the uncertainty of the attitudes of the respondents: how seriously the respondents answered to the survey, how well the response alternatives were on the respondents’ point of view and how much knowledge the respondents had beforehand on the subject. (Ojasalo & al. 2015, 121.) To generate more data to complement survey data, a workshop was arranged to get more information and deeper understanding on the research topic.

In a case study, the data is often gathered in natural situations, for example observing individuals in different situations or analyzing written documents (Ojasalo & al. 2015, 55). With a group of pilots, a workshop following the World Café method was arranged to get more depth and understanding to the online survey results.

During the workshop, the researcher observed the participants and the discussions the participants had between them in groups. A communal method is typically a way to connect individuals to create new insights and development ideas with a creative approach (Ojasalo & al. 2015, 44).
4.2 Data collection

In this research, the data was collected using qualitative method: by conducting a digital survey to the entire employee group of pilots and arranging a workshop with a smaller group pilots.

If the data collection preparation is not done well, the entire case study can be jeopardized (Yin 2014, 71). Testing the data collection topics and questions before conducting them is strongly recommended (Stake 1995, 65). Conducting this study, the digital survey questions were developed in co-operation with the communication department and the flight operations to ensure the right forming of the questions so that they are understandable to the pilots. Also, the questionnaire and the technical usability of the structured digital survey was tested with a test group of five persons. No major need for change to questions or technical usability was found by the test group. The workshop theme questions where sparrad with the guidance counselor or this thesis. Some clarifications to the questions were made.

A typical data collection method is a survey in which multiple questions are asked in a same format from a vast audience. This audience forms a sample of a specific targeted universe. The material is analyzed by statistical methods and data is generalized to apply to entire universe. (Ojasalo & al. 2015, 104.)

Starting point of the data collection was a digital survey conducted in middle of February 2017. The goal of the survey was to establish the status of the intranet usage of the old intranet platform among the pilots before the new intranet platform was launched. The survey was sent to 899 pilot recipients agreed with the Head of Communities and Strategic Messaging from the company's communication department and Vice President of the Flight Operations. The survey was sent from Flight Operations email address to enhance the credibility and importance of the survey, and to indicate that the management of the department is supporting this survey. A remainder email was sent to all of the recipients from the same email a week after the first email. Survey was conducted by using the Digium survey platform between 15th and 28th of February.

In addition to the basic demographic questions, the survey addressed questions regarding the use of internal communication channels and intranet content. The survey also included one open-ended question in order to collect more information of the pros and cons of intranet usage (see appendix 1). Most of the open-ended questions were written in English.
Out of 899 recipients 190 answered the questionnaire the response rate being 21.1. 79 out of 190 participants gave open feedback in the end of the questionnaire. As shown in the figure 2, the sample was quite thorough cross section of the Finnair pilots. Responses were handled anonymously.

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<th>Lukumäärä</th>
<th>Prosentti</th>
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<td>25.26%</td>
<td>20%</td>
</tr>
<tr>
<td>2. 5-10</td>
<td>32</td>
<td>16.84%</td>
<td>40%</td>
</tr>
<tr>
<td>3. 10-15</td>
<td>31</td>
<td>16.32%</td>
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<tr>
<td>4. 15-20</td>
<td>37</td>
<td>19.47%</td>
<td>80%</td>
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<tr>
<td>5. 20-30</td>
<td>36</td>
<td>18.95%</td>
<td>100%</td>
</tr>
<tr>
<td>6. 30-40</td>
<td>6</td>
<td>3.16%</td>
<td></td>
</tr>
<tr>
<td>Yhteensä</td>
<td>190</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Figure 2. The background of the survey respondents.

To enrich the survey data with deeper understanding of the intranet usage, workshop data collection method was used. Qualitative methods include different interviews and participatory observation. In qualitative method, the number of examinees is much more limited than in a quantitative method: the aim is to gather plenty of information on a narrow area to understand the phenomena better and comprehensively. (Ojasalo & al. 2015, 105).

* Vastaus=response options, lukumäärä=numbers of respondents, prosentti=response rate, yhteensä=total.
To complement the survey data, a workshop was arranged as part of the pilots’ regular Round Table seminar days to get more insight from the pilots on the intranet. In qualitative method, the target individuals of the research are carefully chosen to ensure that the data accuracy (Ojasalo & al. 2015, 105).

As mentioned, the group of pilots in the workshop were participating a two-day pilots’ Round Table seminar. To participate to the Round Table seminar, the participants must apply themselves voluntarily. This indicates that the participants are willing to share their thoughts and experiences and work in a group.

In the workshop, present was ten pilots representing a good cross section of the employee group: short haul and long haul flights pilots, pilots with long and short careers in the company, younger and older pilots and both genders.

The workshop was executed by using the World Café Method. The World Café Method is a process that aims to facilitate collaborative dialogue and to share knowledge and ideas to create a living network of conversation and action (Slocum 2005, 185).

Following the principles of the World Café Method, the pilots were divided into three groups to discuss the selected topics. The researcher had selected the topics in advance based on the theory of technology acceptance model introduced earlier in the chapter three and the data from the digital survey that needed more careful examination, see the appendix 2. The three topics were 1) intranet at work: where, when and how, 2) intranet usability: essential features and 3) intranet content: what has to be there and how would you like to participate.

On each of the questions the groups had 15 minutes’ time to discuss together and write their opinions and development ideas on post-it notes. After that groups moved to the next topic so that in the end all of the groups had discussed on each of the three topics and shared their thoughts, experiences and development ideas.

After that the researcher as the World Café facilitator guided through all the topics and post-it notes with the pilots with discussion and clarification of the opinions and development ideas. The post-it notes were grouped to more clearly see the formed themes of opinions and ideas.

After that a vote was arranged in order to prioritize the emerged opinions and development ideas. Each of the participant had three votes for each of the topic that they could
divide between the presented opinions and ideas as they wished. At the end of the workshop, the entire group discussed of the topics and agreed on the prioritized opinions and ideas to ensure all the voices were heard. The workshop was arranged in Finnish.

In qualitative methods, it is typical that the researcher is near the examinees, often participates in examinees’ action and makes own, justifiable interpretations (Ojasalo & al. 2015, 105). During the workshop, the researcher listened to the groups’ discussions and made clarifying questions. The researcher also had a note book to write notes of observations and discussions that occurred during the workshop.

4.3 Data analysis

In this research, thematic analysis was used in finding the key topics of internal communication and intranet usage from the survey data and workshop findings.

Thematic analysis aims to identify the essential topics or themes forming the research data. Thematic analysis proceeds from identifying and categorizing the themes to enable the researcher to carry out a closer and more detailed exploration. (University of Jyväskylä website 2010.)

According to Aronson (1995), thematic analysis consists of five steps. First step is to gather data from which the patterns can be listed. Next step is to identify all the data that relates to the classified patterns. The third phase is to combine related patterns into sub-themes. When collecting sub-themes to obtain a comprehensive view of the information, it is easy to see a pattern emerging. The next step is to build a valid argument for choosing the themes. When the themes have been collected and compared to literature on the subject, the researcher is ready to formulate theme statements to develop a story line. (Aronson 1995.)

Data collection methods of this research were introduced in the previous chapter 4.2. In the survey phase, the questions concerning the assumed main areas of internal communication to pilots were roughly divided into themes of intranet accessibility, intranet usability and intranet content. During the process of analyzing survey data, these themes got more flesh around the bones. Based on the survey answers, the themes were formed into categories to find the areas of strength and areas that need development to be discussed in the workshop with pilots.
The analysis of data from the survey and the workshop was guided by the earlier introduced theoretical concepts of internal communication and Technology Acceptance Model, that is the themes of intranet usability, intranet accessibility and intranet content. Combining these elements in one process, answers to research questions were defined.

Qualitative data have meanings directly recognized by the observer. (Stake 1995, 60). For the analysis of the survey, an Excel document was created based on the data of the digital survey to sort and analyze the responses. The data was filtered and color coded to highlight the focus areas and to differentiate the demographics.

For the qualitative data, the post-it format data of the workshop was categorized by topic into key groups to form clear areas of development.
5 Findings

This chapter introduces wider the results of the conducted survey and workshop with pilots. Here, the linkage between the theories, themes and results are presented.

5.1 Survey results

In the digital survey that was conducted among the pilots, nearly all (177 out of 190) of the respondents told they are using intranet but with different frequencies, see figure 3. According to the 13 respondents who told they are not using the intranet, the reasons not doing so varied from intranet content not being interesting or relevant, intranet being hard to use, not having time or interest using intranet on their own time or instead of using intranet they are reading the information in PDF format summaries that are delivered to pilots.

![Bar chart showing intranet usage](image)

Figure 3. Usage of intranet according to the survey.

The answers of the survey pointed out clearly the difficulty in reaching the pilots during their work hours. 157 respondents said that they do not have a daily routine of checking intranet during their duty hours. 100 respondents stated that they usually check intranet at home.
One of the respondents wrote:

*Finnair has forgot its pilots in internal communication. Intranet does not work in airplanes, nor have we time to check it during flight planning before a flight. The only possibility to use intranet would be during our free time while idea of intranet is to use it during the workday.*

As pilots' work is mobile, it comes of no surprise that majority of the respondents of the survey state that they use intranet mostly on a mobile phone or a tablet. In the future, 27 respondents stated they prefer to use intranet on desktop, 69 on mobile phone and 81 through an application. The majority of pilots stated that they would use the intranet more often if employer would provide a mobile device.

This was underlined also in the survey answers:

*Pilots do not have work equipment: laptop or tablet. Even more funnier is that the chief of an aircraft checks out a 200 million aircraft under his butt and he doesn't have a company provided mobile phone abroad. I personally do not answer company calls while abroad or answer if they call in my hotel room.*

*Yammer and email do not work on Android apps. Yammer would be a perfect way to keep in contact especially during training courses.*

*I have also been told several times that user's computer of mobile device does not work with intranet or its applications. Easy way to solve this is that company provides devices that are prepared by IT dep and that devices are configured properly. I believe that this also will improve time spent in the intranet.*

The extended focus in executing communication in digital channels was questioned in the open answers of the survey. A need for more two-way communication was longed for. Some respondents stated that there is no such a thing than communication between the superiors and pilots:
Intranet is not a means of communication with operative personnel as we do not sit behind a desk ... The company has abolished paper communication without providing necessary digital alternative.

A leaflet every now and then with only technical information isn’t communication.

To me intra seems like a place where someone is making news and updates and others are reading that content, hence I feel it is not two-way communication as it is.

Intranet is a good way of enhancing information sharing. There are lots and lots of different ways to do this. Still, I think that intranet cannot replace good conversations and face-to-face meetings.

According to the survey, pilots most often use intranet pages related to their work performance. Manuals, training, crew guidelines (for example information on passports, visas etc.), crew planning and human resources related pages were viewed the most. Also contact information of the organization was often used. In an open answer to additional most used pages ID travelling (portal for finding information of flight benefits) and crew meals order were mentioned, see figure 4.
Figure 4. Most used pages in intranet.

* Vastaus=response options, lukumäärä=numbers of respondents, prosentti=response rate.

The survey shows that there is a clear thirst for the company communication among the respondents using intranet. A significant amount of the respondents and all of the youngest respondents agreed on the statement “I'm interested in hearing about happenings around the company”. The survey indicates that the challenge is with the means of delivering the message and the way information is presented.

According to the survey responses it looks like the targeted messages are the most efficient tools to reach the pilots. 155 recipients who are using the intranet said they like to receive targeted content and 162 recipients agreed on the statement “Email is the typical way to reach me”.

One of the survey’s open answer respondents defines this as:

*Information for flying personnel doesn’t reach the targeted receivers very well. It seems a bit as if the writers assume that we who fly read the intranet
daily or even hourly. Info about events is often missed and the occasion long gone before anyone hears about it. E-mails are read more frequently so that is a better way to reach us.

As social media based internal communication application are becoming popular tool for companies and are considered as a natural tool for millennials, it is surprising that 18 out of 21 youngest respondents told they are not clicking “like” button below a story when they find the story interesting. A clear majority of the respondents answered the same. Minority of respondents said that commenting on a post in intranet was a good way to communicate with other employees.

Based on the survey, video is not seen as a most preferred content format of content. 27 respondents out of 177 told they would like to get more internal communication presented in video format. 27 pilots stated that they rather watch videos than read stories. 52 respondents agreed that video interviews are a good way for the company executives to inform the staff.

Concerning reading instead of watching, 57 respondents out of 177 stated they are interested in reading stories of the everyday life of colleagues working around the company.

On the other hand, visuality seems to appeal to the pilots: 147 respondents of the survey agree that graphics is a good way to learn about company's current state.

The willingness to participate in content creation for the intranet was considerably low. Only 46 out of 177 survey respondents agreed that they can envision themselves creating content.

According to the research data of this study, intranet is technically not very easy to use. It was clearly pointed out in the digital survey responses that the technical structure of the intranet needs improvement. 159 out of 177 respondents disagreed with the statement “Intranet is well organized to provide quick answers to my questions”, see figure 5, and 153 out of 177 respondents disagreed with the statement “It is easy to find the information I’m looking for in intranet”, see figure 6.
Also in the open feedback section of the survey many pointed out that navigating and finding information they were looking for was a challenge due the unfunctional search engine, outdated information or unclear structure.
Surprisingly difficult to find contact information from the intranet. Just spent half an hour to find tel. number to Crew Service Desk. Daily, basic functions should be a priority instead of contemplations about videos of colleagues’ day to day life.

Very complicated website where it’s difficult to find what you are looking for. When opening a main menu several sub-menus are opened. Many times I have to rely on the search feature because I don’t find what I want in the jungle of menus. Even the search feature isn’t the easiest way to find what I’m looking for.

Many pages contain years old information that is already outdated. That’s why intranet doesn’t feel like good place to find information. Also finding the right pages is sometimes very hard, navigation is awful.

Intranet needs to be more up-to-date and more available for flight crews. There is often good information available, but most of us just don’t have the habit of checking it (it is a separate site to Skyway). Also, I find it very disturbing that most of the emails containing links to intranet do not work when working outside of Finnair network (=always for flight crews) and more importantly the search function does not work when using intranet via access solution page. It is very hard and demanding to find any relevant fresh information from there.

As presented earlier, pilots most often use intranet pages related to their work performance. It is an interesting finding that according to the survey finding this information can be difficult. About a half, 85 out of 177 respondents agreed with the statement “I can find information in intranet that is relevant for me to perform my job”. Notable is that less than half, 69 out of 177 respondents agreed with the statement “I’m able to find relevant operative information in intranet”. These difficulties have unavoidable effect on the intranet usage and the attitudes against the system.

In the open answers of the survey frustration towards the flood of too many digital tools applications and channels was stated. One of the recipients of the survey outlined the frustration:

There are too many systems and intranet lacks interest. Yammer: probably ok, tried to log in once, did not work, never again. Email: tried to get email to
cellphone, did not work (it was not secure or something), spent three years without company email. Only occasional visits to gate email. It should be app that downloads material offline to read also while airborne. Pilots are offline most of time so no way to use free time to check company intranet. Notification about things you want. Much better search functions.

Several development ideas were proposed in the survey’s open answers. Many of the ideas highlighted the importance of easiness of use:

- Perhaps the company-wide communication should be brief but accurate: clickable headlines only. Compare to front page of a text-television. More effort and frequency appreciated on matters concerning one’s own area of expertise and branch in organization. Easy-to-find HR, medical, uniform etc. guides and notes are of great value too!

- A “talk to your boss” button would be fun. You could send your boss a message and he would be online when he wants. Then he could answer your question immediately or later.

- To reach pilots better it wouldn’t be bad to have some sort of rss feed or equivalent on Skyway (the main page we use at every work day).

5.2 Workshop results

As mentioned in the chapter 4.2, the workshop with the group of pilots was part of their two-day Round Table seminar, where the participants needed to apply. The ten participants presented well the employee group of the pilots since present was short haul and long haul flights pilots, pilots with long and short careers in the company, younger and older pilots and both genders.

To follow the World Café Method, the pilots discussed in three groups the pre-selected topics. The groups were formed randomly among the participants. As mentioned in the chapter 4.2, the topics had been selected by the researcher based on the theory of technology acceptance model introduced earlier in the chapter three and the data from the digital survey that needed more careful examination, see the appendix 2. The topics were 1) intranet at work: where, when and how, 2) intranet usability: essential features and 3)
intranet content: what has to be there and how would you like to participate. After discussion and suggestions developed in the discussion, the suggestions were written on post-it notes. All the participants had total of nine votes, three for each theme, to vote for the most important development needs and ideas of each of the themes.

On the question one, intranet at work: where, when and how, post-it notes included terms own device, mobile phone, during work time, in an aircraft, in briefing before flight, in crew bus and in offline mode as a part of the electronic flight bag, EFB, that is a digital information delivery and management system in the cockpit.

Most votes (11) gathered, quite naturally, the post-it notes of using the intranet at the workplace during work time. Second came the post-it note with the mention of EFB with nine votes.

Question two concerning intranet usability attracted a lot of attention also in the workshop and proved to be a real pain point. Things mentioned in the post-it notes were ease of use, usability in different devices, easy access, one log in, usability in an aircraft, clear guidelines and training, clarity in content, clear headlines, colour coded themes of content, attractiveness of intranet and cleared indication of the information focusing in pilots.

Most of the votes (15) were given to group of technical elements as the participants longed for easy access, user friendly interface and clear overview. The ease of use theme gathered most votes in the workshop prioritization phase. Second was the post-it notes group of clearer content with four votes.

During the workshop discussions of frustration towards too many digital tools applications and channels were raised. It was unclear to the participants what all of the digitals tools are for and why there is so many different tools (for example Company Hub, Yammer, Sharepoint, Workday, Skyway and Crew web). Clarification was requested.

In the workshop, the participants suggested several improvements such as one log in in a device to access the intranet, adding the intranet access link to the favourites section in the digital device’s internet browser to provide an easier and faster access to intranet, clearer headers of news and stories published in intranet, color coded themes on different areas of news and stories and clear indication for information that is relevant especially for pilots. A wish of creating an application for the intranet was proposed. Also, training for intranet usage and clear instructions for use was suggested. Under this topic, a need for intranet being generally interesting was pointed out.
The final question concerned intranet content. The thirst for company related information mentioned in the survey answers was clearly verified in the workshop. The intranet content theme got the most post-it form opinions and development ideas in the workshop.

The suggestions of preferred content could be divided in:

- company official news, such as company bulletins, department related news, human resources related news (e.g. promotions), deadlines for applications (e.g. vacations), company stock price, operative information (e.g. flight punctuality, abnormal occasions and circumstances during flights) and benefits and discounts,
- light and relaxed information, such as comic reliefs and weekly competitions,
- community information, such as company hobby clubs, department unofficial happenings, anniversaries, family days, pre-Christmas parties, information about the company’s flight destination, general travel tips and news from the global aviation world,
- guidelines and instructions, frequently asked questions and
- employee contact information with pictures.

Most of the votes for importance (10) went to the company official news. Second was the community information with five votes.

In the workshop, there was no clear identification of the most preferred content type. Most discussed content types were written text and video, and both had supporters and opponents. There was no willingness among the workshop participants either to contribute in the production of intranet content.

A specific question of content targeting did not draw attention in the workshop. When the facilitator asked about whether the targeted message would be preferred over general message, the answer was yes, but the discussion turned quickly in to other subjects.

Social media related internal communication applications or characteristic of social media as part of digital tools did not occur in the discussions, opinions or development ideas of the workshop.
5.3 Result in the light of theory

As clearly pointed out in the results of the survey and the workshop, the profound question in internal communication to pilots is how to reach them. As also discussed in the chapter 3.1, it is evident, that the mobile characteristic of their work composes difficulties in intranet usage as it is compulsory for a pilot to change location in order to perform his or her job.

Pilots’ own comments on the difficulties on reaching the pilots presented in the chapters 5.1 and 5.2. underline the view of Perry & al. (2001) on the question of time and space interrelation in mobile work and the notion of access anytime and anywhere. Even though accessing for example intranet could in theory be possible anywhere and anytime, it may not feasible in real work life situations or be socially acceptable: for example, it is impossible to access intranet in the cockpit of an aircraft during flight, stability of internet connection varies in destinations around the world and during free time a pilot is likely to have other responsibilities in personal life than accessing work-related tools and documents.

Pilots’ interest of using intranet on a mobile phone or a tablet indicates that as employees do not have devices provided by the employer and they use organization’s internal digital tools from the devices they select and purchase themselves, the variety of mobile technology and features in devices diverges significantly. This puts pressure on the form of communication offered in intranet. As Perry & al. (2001, 342) note, information access is not only a question of pulling a document across a network but also of whether the document is in an appropriate form to be viewed and interacted with. The variety of technology and intranet content puts focus also in individuals’ technology skills. Personal information plays a significant role in an employee’s working process effecting the success of how tasks are executed (Mäkinen 2012).

To support the pilots’ wish for more two-way communication studies claim that face-to-face communication is considered ideal because it enables straight feedback and communication in more personal level (see eg. Lipiäinen & al 2014, 278; Welch & Jackson 2007, 187) but in real life and in such a big company like Finnair, it is unrealistic to suggest internal communication to be presented in face-to-face dialogue.

Still, management communication introduced in chapter 3.2.1 is a crucial element of internal communication as are corporate information and communication systems in delivering general information to employee masses (Cornelissen 2014, 164-165). Both of them have
an important role in the palette of internal communication. It is notable that according to the survey some of the pilots feel that communication between the superiors and pilots do not exist.

For business to be successful, it is a core requirement to communicate with employees since better informed and involved employees can help build better organizations (Tourish & Hargie 2009, 26). According to the Technology Acceptance Model (Venkatesh & Davis 2000; Legris & al. 2003; Lee & Byung Gon 2009) for technology to be welcomed by its users the system need to be most and foremost useful to its users. From the employee engagement point of view, good content that fulfils personal needs of an employee can enhance the engagement towards the organization (Welch 2011; Tourish & Hargie 2009). This can be interpreted that interesting and relevant content is the key to successful internal communication in intranet. As the results indicate, the pilots have interest towards company information. More focus needs to be put in to the form in which the information is presented and through which channel the information is distributed.

The preference for targeted messages supports the view of Friedl and Verčič (2011) to whom Lipiäinen & al. (2014) refer that even the employees born in the 1980’s, who are supposed be natives of digital age, prefer traditional internal communication channel, such an email, at work. On the other hand, in the mobile work life of a pilot, email can be considered as most stable and easily accessible communication channel.

The low interest in social media based communication channels in the research data is a notable finding since companies are adopting new digital tools with social media characteristic with aims of for example facilitating two-way conversations, gathering ideas, comments and greater engagement and participation (Lipiäinen & al. 2014, 276). According to research data of this thesis, social media applications and characteristics currently in use are not performing as they are meant to perform, at least among the masses of employees. This could be also a matter of cultural differences, as the studies of Lipiäinen & al. (2014) and Meh & Hung-Baesecke (2014) in Finnish and Chinese working environments showed in chapter 3.2.1.

Also, the low interest in video form content is an interesting outcome since universally the consumption of video content has been risen rapidly during past years and is still rising (Forbes 2017). More focus should be put in this question to find out the reasoning behind statements against video content to find whether it is a matter of technology, user’s own device or attractiveness of the content that videos in intranet are not considered more preferred content type.
On an individual's intention to use an information system, two elements are determinant: perceived usefulness and perceived ease of use (Venkatesh & Davis 2000). In addition to these two components, Lee and Byung Gon (2009) propose that technical support, web experience, task equivocality, task interdependence and subjective norm are factors that have an effect on intranet usage.

On the other hand, if the intranet is considered useful, workers are willing to cope with the difficulties with devices to carry out their work tasks (Mäkinen 2012). Lee and Byung Gon (2009, 199) support this view: the design of an information system to improve ease of use is not as important as perceived usefulness of intranet in its purpose to perform work related tasks.

According to the survey and workshop results, intranet is technically hard to use and the needed information is hard to find. It indicates the need of improving the technical elements of intranet and also providing training to the employees.
6 Conclusions

This chapter aims to answer to the main research question of how Finnair’s internal communications through intranet should be developed to better reach the Finnair pilots. Conclusions and development ideas based on the findings introduced in chapter five are presented. Also, needs for further research are examined. The quality, validity, reliability and ethical point of views are presented. In the final chapter, the role of the researcher is explained, and the thesis process and researcher’s own learning path are described.

6.1 Need for better reach

In response to research question 1, what are the challenges for internal communication to reach the pilots, the data from the survey and the workshop indicate that a major obstacle in communication is the matter of accessing the digital applications where communication is delivered. Pilots do not sit by the office desk and in their office, the cockpit, there is no accessibility to intranet. Also, the time for intranet usage is a challenge. Since the pilots do not have access to intranet during their work time, it is expected for them to use their free time for exploring company information. Different technologies employees use is also a challenge since there is no control over the presentation mode of the information in the recipient’s end.

Based on this research, it is evident that internal communications with the pilots face difficulties. Principal cause and perhaps the cause that is most complicated to solve is reaching the pilots and accessibility of intranet. It is coded in their work characteristics as mobile workers that pilots are constantly on the move around the world and practically never by a work desk in front of a computer. As addressed in literature review, this creates challenges for internal communications technology wise and timewise. All the organization’s digital tools, such as intranet, are not accessible everywhere, either in flight destinations or in their office, in the cockpit of an aircraft. As there is low possibility for a pilot to use intranet during his or her work hours, it is practically required for them to go to intranet during their free time. This is something that an employee is not necessarily willing to do.

It is clear that new technical solutions are required. In general level technology develops nowadays almost with the speed of light. It could be possible in the future to find secure and appropriate ways to use company digital tools in the cockpit without an effect to flight
operations. As aviation industry is carefully and justly very restricted and technical development in that environment is more complex, it may take longer time to find solutions that fit the needs of both internal communication and flight operations.

In the meanwhile, the company can take smaller steps in enhancing the accessibility of internal digital tools and in reaching the pilots. Good ground for enabling employees the same level of access in digital tools is to provide the employees with similar devices. A device reform could enable enhancement in accessibility also into intranet by for example pre-installing intranet application or adding intranet log in link to the favorites sections of internet browser to all of the smartphones before handing them out to users.

Timewise it should be considered and evaluated would it be possible to include a time slot for updating oneself on company news during work time, for example during the briefing before the flight.

### 6.2 Need for appealing content

In response to research question 2, what are the characteristics of the most preferred intranet content, data reveals that content in relation to work performance is currently the most used content. Pilots prefer content types like company’s official news, light and relaxed information such as competition and light-hearted, funny spots, information of the community such as hobby clubs, events and travel tips, guidelines and instructions and employee contact information. Although pilots prefer visual output of information, like infographics, only minority of pilots prefer content in video format. Social media elements in content do not attract much of preference. As a channel, email is considered as the most effective message delivery channel due its reliability and easiness of use in the work life of a mobile work employee like a pilot.

In contrast to the complex challenges in accessibility of intranet and perceived ease of use of intranet, internal communication content is easier to adjust to meet the needs of reaching pilots better. It can be stated based on the literature that effective internal communication informs employees, fulfils their basic needs and answers their basic questions. At the same time, effective internal communications commit the employees to the organization which enables them and the organization to perform better.
According to the research data, it is evident that internal communication to pilots can be enhanced to improve the attractiveness of the intranet and engage pilots more to the organization. Currently most used intranet content is related to pilots’ everyday work: manuals, guidelines, training materials, crew planning and human resources information. Providing this information in clear, easy to use format is essential.

In addition to work performance linked content, the data of this research shows a desire for organizational information, such as company’s official news, relaxed and funny spots to lighten up the atmosphere and community news and stories both inside the company and inside the aviation business globally. Addressing these wishes for content, evaluating the possibilities to execute them and allocating resources to fulfil them are in the hands of communication department. Ways to put implement these wishes are for example creating new story types and creating own columns or pages to dedicated themes.

There was a request for clarifying the division between different news presented in the workshop. This could be done by for example color coding the main themes communicated in the intranet. Also, the main employee target group of news could be indicated to enhance the findability. If coding is to be executed, it is to be kept in mind that the overlook of the intranet stays clear and simple.

In the matter concerning the content of news and stories, increased focus could be directed to writing clearer headers and in the visuality of information output as there was a finding in the research data of the significant preference in information in visual mode. In video content usage, confrontation is identified. Growth in video consumption is a universal phenomenon but according to the research data of this study, it seems video is not considered as a preferred format of content in intranet.

The researcher suggest that deeper focus should be put in monitoring the video production and video usage to find out suitable themes and times for video content. Also, the technology aspect of video usage should be monitored especially once the smartphones are rolled out to see the possible effect of technology in video consumption.
6.3 Need to develop the usability

In response to research question 3, how to develop the usability of intranet, the development points are according to the research data to improve the structure of intranet platform to be clearer for user and to improve the search feature of the platform. Also, administrators of the intranet platform need to keep the content accurate and up-to-date, and this concerns also smaller details such as ensuring that the links provided in the platform are functioning. In the ecosystem of organization’s digital tools, the roles and purpose of different information systems, platforms, tools and applications should be clarified for users to understand their necessity. Also, training for using the new intranet and its new element should be provided.

Ease of use seems to be one barrier in current intranet usage, the research data revealed. Individuals’ perception of technology affects their attitude toward the technology and, in turn, their acceptance of technology (Lee & Byung Gon 2009, 192). According to the research data, the experience of the old platform was somewhat negative and that feeling could also have affected the perception of other digital tools and applications, such as the new intranet platform.

The technology itself and the level of skills or expertise of the user are components affecting the acceptance of computer technology. Individual skills and expertise, in other words user training and experience, are found to be related to user beliefs and usage. Opportunities to gain experiences using information systems are shown to improve user’s beliefs about the system. (Lee & Byung 2009, 194.)

A need for user training became evident in the workshop where for example a development idea of an intranet application was presented. An application for smartphones already exists but this information had not reached the users. In the launch phase of new intranet portal, a wide and informative launch campaign was executed with for example information and guidance in video format in intranet, arranging pop-up training clinics around the Finnair campus and also online in Skype (Finnair 2017a; Finnair 2017b).

Due to their mobile work, pilots may have missed this opportunity. A new, smaller size communication campaign could be arranged now when the new platform has been up and running for a while and the employees have had time to get familiar with it. In the campaign, the materials from the earlier launch campaign could be used and the most essential characteristic of the new tool highlighted so resources wouldn’t be needed from the communication department to produce new content.
A smaller and less resources demanding implementation of a reminder communication campaign to pilots could be producing a visual one-pager leaflet of new intranet features, such as how to log in to intranet with a few clicks and how to subscribe news targeted to pilots to user’s email. As the pilots indicated in the survey and in the workshop, they like to get information in visual form and in addition, they liked to read information PDF form summaries, visual infographic could be designed. The infographic could be delivered either in print mode to all of the pilots or as an email attachment. In email delivery, there is the possibility to ignore the email and delete it immediately without a glance at the attachment. Regarding this aspect, a print version delivered to pilots could be a better choice.

The empirical demonstration the effectiveness of a new system relative to old systems can have a positive effect in the user acceptance (Venkatesh & Davis 2000, 199). This power of example and technical support was also proven accurate in the workshop. Once the faster sign in process was performed by a professional from the communication department, many of the workshop participants reached for their smartphones and performed the same two-click process.

This can be counted as a very simple example of what Lee and Byung Gon (2009) refer as technical support and encouragement to use intranet. Technical support is positively linked to decreased anxiety and increased favourable attitude towards technology acceptance (Lee & Byung Gon 2009, 193). Combined with web experience, defined as the experience of using web, internet and internet-based systems, technical support can have a significant effect on perceived usefulness: when a user experiences greater usefulness of intranet, a user tends to use intranet to greater extent (Lee & Byung Gon 2009, 199).

This need of training can also be interpreted as a need for enhanced change management. It was indicated clearly that pilots were ready and even wished for the changes of intranet for example through the high survey response rate and in the large number of responses in the open feedback possibility in the survey. As change management contributes strongly to the success of change implementation (Cornelissen 2014, 224) it can be noticed that management and change communication has not reached the employee group of pilots efficiently enough since there seems to be lack of knowledge of how to use the new features of intranet.

As mentioned in chapter 5.2, workshop participants expressed their frustration towards too many digital applications in use and the difficulties of understanding their role in the total toolkit of work-related tools. In these situations, it becomes a responsibility of each
individual to manage the tools and the information (Mäkinen 2012). As employees have different abilities to manage digital tools and the attitude towards digital tools varies, success in executing tasks differ. These difficulties can be eased by enhancing usability and developing information systems to better support mobile work (Mäkinen 2012).

There are multiple separate information systems to support the work of a pilot which makes it difficult for management to align the tools, not to mention the work and resources in the company's information technology department that the alignment would require. Nevertheless, the flood of digital tools should be recognized. The roles of information systems should be clarified and if possible, information systems should be merged. The roles of the systems should be clearly communicated to the employees for them to get better grip of the toolkit.

As acknowledged, the unification of information systems would be a massive project and that is why it is improbable to happen. A lighter solution could be to create better linkage between the tools by for example banners or text links to enable movement between tools and application with one click.

6.4 Further research

This thesis contributes to field of internal communication research through its examinations of an under researched area, the role of intranet in internal communication and internal communication to the employee group of pilots. This research focused on the intranet usage behavior before the renewal of the intranet platform. Now, that the new platform has been in use for several months, a follow-up study would be in place to see how the changes have affected the usage. Also, the success of change management and change communication could be evaluated.

In more general level, further studies should investigate the effect of subjective norm in the usage of internal communication's digital tools and applications among the mobile workers such as pilots where the reality of belonging to a community of an organization is significantly different than among the employees working for example in a fixed office.

Also, technology acceptance behavior, beliefs, attitudes and intentions among mobile workers could be an interesting point of view for further research. An intriguing focus of a research would be addressing the question of what elements effect on employees' partici-
pation and engagement in internal communication content production. Peer-to-peer communication and interaction are often welcomed by recipients but willingness to participate to the production of that kind of content is often low.

As digital tools with social media characteristics are conquering internal communication channels, it would be interesting to investigate their effect on internal communications. As studies showed in chapter 3.2.1, there are differences in cultures how well new digital tools are welcomed by employees and how the new tools effect on employees’ engagement.

Technology wise and in the point of view of an organization with large number of mobile workforce it could be useful to investigate deeper the grounds effecting the decision concerning technical choices of contemporary digital tools and applications. Is it fundamental needs, resources, attitudes or maybe the urge to stay on the crest of a wave of development that at the end define the decisions?

6.5 Reliability, validity, ethical points and the role of the researcher

The goal of a report is to describe the study in such a comprehensive manner as to enable the reader to feel as if they had been an active participant in the research and can determine whether or not the study findings could be applied to their own situation. (Baxter & Jack 2008, 555.)

Yin (2014, 49, 240) defines reliability as the consistency and repeatability of the research procedures that has been used, and continues to define the goal of reliability to be to minimize the errors and biases in a study. In other words, if the research was replicated, the outcome would be the same. Merriam specifies that the more times the findings of a study can be replicated, the more stable or reliable the phenomenon is thought to be (Merriam 1995, 55).

Ojasalo & al. (2015) write that a detailed description of a research process and argumenting interpretations are essential for a reader of the research to make conclusions of the reliability of the research. The researchers continue that reliability can be enhanced by using triangulation meaning that the phenomenon is investigated from multiple point of views, for example utilizing several different materials, sources and data gathering methods. (Ojasalo & al. 2015, 105.)
Internal validity is defined as how compatible the findings of a research are with the reality. Internal validity can be strengthened by triangulation, member checks, peer or colleague examination, statement of researcher’s experience and submersion to the research subject. (Merriam 1995, 53-54.)

External validity means the level to which the findings can be generalized. It is a requirement that can be troublesome in qualitative research. Case studies are generalizable to theoretical propositions and not to populations or universes (Yin 2014, 21). The goal of qualitative research is to understand the particular in depth rather than finding out what is generally true of many (Merriam 1995, 57). External validity can be enhanced by detailed description, multi-site design, modal comparison and sampling within the study component parts (Merriam 1995, 58-59).

The credibility of this thesis has been achieved by several actions. The research process has been described thoroughly and in detail and interpretations and conclusions have been argued. In the research process triangulation has been executed. Peer and colleague examination has taken place. The reliability of the data and results can be showcased by the survey documents and workshop materials.

Goals of the development work must be of high morale, development work must be done in honest, careful and accurate manner and the outcome need to be of use of practice (Ojasalo & al. 2015, 48).

In this thesis, the phenomenon has been carefully investigated in several points of views. All the choices made concerning the selected theories, applied research methods, data collection and data analysis have been explained thoroughly. The data has been handled with appropriate means. The individuals participating to this study have been properly informed of the basis, meaning and use of this thesis and the participants have been treated anonymously. References to other authors’ texts and researches have been articulated clearly.

The researcher is working in the company but not as a pilot or in a communication department. This position gave the researcher an opportunity to make observations while the observations kept an objective point of view. The researcher has engaged herself in investigating the phenomena by researching the literature, submersing into the data collection and analysis and reporting.
During the research process, the researcher found it delighting that handling large amount of difficult scientific material in other language than mother language became a routine and finding essential facts in that material was easy. The research gained a great amount of knowledge on internal communication, mobile life of a pilot and internal communication executions within the company that will have a great impact the researcher’s actions as a communicator in the future.
References


Cohen, R.L. 2010. Rethinking 'mobile work': boundaries of space, time and social relation in the working lives of mobile hairstylists. Work, employment and society, 24,1, pp. 65-84.


Appendices

Appendix 1. The digital survey invitation letter and questions

Dear recipient,

I’m approaching you with a request to participate in a survey that studies how the Finnair intranet should be developed to make it easier to use and more interesting especially for pilots. The survey is a part of a thesis that focuses in improving internal communication in Finnair and it is supported by Flight operations and Finnair Communications. The thesis is for Haaga-Helia degree programme of Communication management.

This survey asks about your intranet using habits and it has three sections: 1) who you are, 2) internal communication channels and 3) intranet content.

It will take about five minutes to complete the survey. All the answers will be analyzed anonymously and confidentially. The last day to answer this survey is Tuesday 28th of February 2017.

This survey concerns the current status of the Finnair intranet. New intranet platform will be launched during the first quarter of 2017. After the launch a follow-up survey will be conducted in June.

Should you have any questions, don’t hesitate to email me. Thank you for your feedback!

To the survey:

If the link does not open, copy it to your browser.

Best regards,

Lotta Wahlroos
Part 1: who you are

Age: 20-30 30-40 40-50 50-60
Gender: female male
I mainly fly: long haul short haul both
Duty years as pilot in Finnair: 0-5, 5-10, 10-15, 15-20, 20-30, 30-40
I use Finnair intranet approximately:
daily
weekly
monthly
only if a colleague tells me about interesting information that is available in intranet
I don't use intranet

Reason I don't use intranet is (select all that apply):
I don't have time
I forget intranet exists
Content is not interesting
Content is not relevant to me
Intranet is technically hard to use
Something else, please specify

Part 2: internal communication channels

Scale: Strongly agree 1, agree 2, disagree 3, strongly disagree 4
I have a daily routine of checking intranet during my duty hours (either before check-in or after landing)
I usually check the intranet at home
I would use intranet more often if employer would provide a mobile device
In my perspective navigating in the intranet is simple
The intranet is well organized to provide quick answers to my questions
I use intranet mostly through a mobile phone or tablet
Email is typical way for internal communications to reach me
The best way of getting information of my own unit is to meet with my supervisor face to face
Following Finnish media is the best way to keep up with the company's current state
Unstable connections in the flight destinations keep me away from using intranet
In the future, I would prefer using intranet on (pick the most preferred channel for you): desktop, mobile phone, application
Part 3: Content

Scale: Strongly agree 1, agree 2, disagree 3, strongly disagree 4

It is easy to find the information I’m looking for in intranet
I can find information in the intranet that is relevant for me to perform my job
I’m able to find relevant operative information in the intranet
I am aware of what information is available in the intranet
The content in the intranet is relevant to me
I feel intranet is only for corporate formal news such as strategy updates
News and stories in the intranet makes me feel proud to be working in the company
I learn about the financial state of the company from the intranet
I talk with my colleagues of the content in intranet
I’m interested in reading stories of the everyday life of the colleagues working around the company
I’m interested of hearing about happenings around the company
I like to get content that is targeted to me
I would like to get more internal communication presented in video format on the intranet
Video interviews are a good way for the company executives to inform the staff
I rather watch videos than read stories in intranet
Graphics are a good way to learn about company’s current state
I can envision myself to create content to the intranet
I often click like button below the story when I find the story interesting
I feel that commenting a post in intranet is a good way to communicate with other employees

Most often I use pages of (pick as many as needed):

- Company strategy
- Financial reports
- Guidelines
- Manuals
- HR
- Crew planning
- Crew guidelines (passports, visas, etc.)
- Airbus leaflets
- Training
- Training bulletins
- Company benefits
- Organizational charts
- Contact information
- Legal issues
Communications
IT
Safety
Something else, please specify

Any other comments about internal communication or intranet in Finnair?
Appendix 2. The World Café method workshop agenda

1. Introduction of the researcher, the research and the workshop agenda
   - Researcher’s background
   - A brief summary of the survey
   - A brief introduction of the World Café method
   - Goals of the workshop
   - Introduction round of the participants of the workshop

2. Working in groups addressing the selected themes
   - Intranet at work: where, how and when?
   - Intranet usability: what are the key features?
   - Intranet content: what should be there and how would you like to participate?

3. Go through together with the participants
   - What issues were raised?
   - What development ideas were presented?
   - Free commenting and enhancing the ideas

4. Voting and prioritizing the ideas
   - Finding the most important ideas to be taken forward

5. Ending the workshop