

Internal communication with mobile workers: the cabin crew perspective

Petra Lempiäinen



Author(s) Petra Lempiäinen	
Degree programme Degree Programme in Tourism	
Report/thesis title Internal communication with mobile workers: the cabin crew perspective	Number of pages and appendix pages 59 + 5
<p>This study took an employee-centric approach to investigating the issues related to internal organisational communication in a mobile work setting. The study explored what and how employees want their organisation to communicate. Cabin crew work has unique characteristics and mobility patterns, offering an interesting and underresearched context for studying mobility and communication. The study was conducted in cooperation with the Inflight Customer Service department of the case company “The Airline”, one of the leading Nordic Airlines. In 2015, The Airline employed approximately 1500 cabin crew members based in Helsinki (Helsinki airport, HEL/EFHK).</p> <p>The purpose of the study was to discover how internal communication is perceived at the Inflight Customer Service department at The Airline. The study aimed at mapping out and improving the current state of internal communication. The effectiveness of internal communication channels at the case company (The Airline) was investigated in terms of employee (cabin crew) preferences. The research questions were:</p> <ul style="list-style-type: none"> – What are the mobile workers’ preferences for channel and content? – How is internal communication perceived and how could it be improved? <p>The study reviewed literature on mobile work and internal communication for creating a framework for analysing internal communication in a mobile work setting. The case study method was chosen as the most appropriate research method for this study. The body of the empirical data was collected through a survey questionnaire (n=196), complemented with document review and participant observation including informal discussions. The survey, conducted in January-February 2015, gathered data on communication technology, communication channels, information flow, and interaction in the work community.</p> <p>The results indicate that the cabin crew members are well equipped with a variety ICT devices, and that the crew members spend significant amount of time (approximately 100 hours/year) e-working and following formal communication channels. The major development areas were:</p> <ul style="list-style-type: none"> – functionality and accessibility of communication channels – organisation of information and communication channel roles – feedback receptiveness and responsiveness – interaction within the organisation – speed and proactivity of communication and understanding the receiver. <p>The needs for a 24/7 formal support channel and understanding of the mobile nature of the work were highlighted in the results. Cabin crew preferences for channels, effective communication and an ideally communicating organisation were discovered. The results serve as a starting point for developing internal communication towards fulfilling various mobile employee needs.</p>	
Keywords Mobile work, internal communication, cabin crew	

Table of contents

1	Introduction	1
2	Mobility as work.....	5
2.1	Perspectives on mobile work.....	5
2.2	Characteristics of mobile work	7
2.3	Needs, requirements, and mobility	9
2.4	Cabin crew work as a form of mobile work	11
3	Mobility and internal organisational communication.....	13
3.1	Perspectives on internal communication	13
3.2	Effective communication and meeting employee needs	16
3.3	Communication channels in internal communication	19
3.4	Cabin crew and communication	22
4	Research methods	24
4.1	Research approach and methods	24
4.2	Data collection process	26
4.3	Data analysis	29
5	Key results and discussion.....	31
5.1	Overview of internal communication at The Airline	31
5.2	Communication technology and applications	34
5.3	E-work and electronic communication	35
5.4	Information flow and the usefulness of channels	38
5.5	Interaction in the work community	41
5.6	Cabin crew perspectives on internal communication.....	43
5.6.1	The current state of communication	43
5.6.2	The preferred state of communication	46
6	Conclusions	49
	References	53
	Appendices.....	60
	Appendix 1. Questionnaires (Finnish and English)	60

1 Introduction

Mobile work, distributed work, multi-locational work. Telework, e-work, virtual work.

There are many names, definitions and conceptual suggestions for describing the new forms of work, brought about by the increase in mobility at work and the emergence of information and communication technologies (ICTs). Some definitions may be overlapping, or they may describe forms of work that differ greatly in terms of space, time and the use of ICTs. Mobility affects social, geographical and virtual networking and creates new needs and requirements for organisations in terms of communication, collaboration, control, and coordination.

But the “liberation” of work through ICTs is only one part of the story. Not all forms of mobile work are completely new. There is an underexplored area in the field of mobile work research – the work that is intrinsically mobile, i.e. where mobility *is* work. As Cohen (2010) points out, it is “a form of mobile work that has been largely omitted from sociological analysis of mobile work”. In other words, the truly mobile workers such as cabin crew have largely been forgotten. Heinrich Kubis, the world’s first flight attendant, served onboard German DELAG’s passenger zeppelins and travelled the world already in 1912, and Ellen Church started as the first female flight attendant onboard Boeing Air Transport (now United Airlines) in 1930.

Mobility is a prerequisite of cabin crew work. In fact, it is impossible to perform cabin crew duties without changing location. However, flight attendants also spend time - outside of their duties in an aircraft – reviewing safety and service instructions, latest company news, personal emails and so forth. As such, cabin crew work has elements of modern virtual, distributed e-work. Therefore, it is necessary to understand both the common and distinguishing denominators of cabin crew work and other types of mobile work.

As said, mobile work poses new needs and requirements to organisational communication and the employees’ personal information management. Information and communication systems that support mobile work are therefore required, as well as assessment of the needs and requirements that mobile work and mobile workers have for internal communication. Cabin crew represents a mobile worker group that has specific characteristics and mobility patterns, thus offering a unique setting for analysing mobility and communication. Cabin crew work poses challenges to communication with the ground organisation, as reachability of the crew is limited. From the cabin crew perspective, access to information is challenging.

Internal communication is challenging, but effective internal communication is needed for achieving organisational goals. It is also of significant importance for employee identification, engagement and commitment.

This study takes an employee-centric approach to investigating the issues related to internal organisational communication in a mobile work setting, i.e. internal communication with cabin crew at The Airline. The study explores what and how employees want their organisation to communicate. In other words, the effectiveness of internal communication channels at the case company (The Airline) is investigated in terms of employee (cabin crew) preferences.

The study aims at understanding the characteristics of cabin crew work as a form of mobile work, and discovering the preferences of these mobile workers for channel and content in internal communication. The purpose of the study is to discover how internal communication is perceived at the Inflight Customer Service department at The Airline. The current situation is mapped out, the effectiveness of communication channels is assessed, and the areas that need development are identified, so that the foundation for overcoming challenges in internal communication with mobile workers is established. The research questions are:

- What are the mobile workers' preferences for channel and content?
- How is internal communication perceived and how could it be improved?

Organisational communication offers a vast field of research. The research context, namely The Airline and the extremely mobile working patterns of cabin crew, creates a complex setting for studying mobile work and internal organisational communication. In addition to the official internal communication channels, the use and importance of unofficial, informal channels such as social media is touched upon, as the rise of these new channels enables networking also in the off-duty setting.

The focus is on communication between the cabin crew and The Airline, i.e. between the employee and the organisation. Consequently, the study excludes external communication, but also inflight communication (i.e., communication between cabin crew members, or between cabin crew and cockpit crew). However, Crew Resource Management (CRM), the application of human factors (including communication) in aviation, is not fully ignored as it is nowadays understood to encompass all levels of the organisation. It also brings the aviation perspective to analysing internal communication in an aviation organisation.

The results of this study have both practical and theoretical implications. Most importantly, the study helps the case organisation to recognise the areas for development in internal communication. It provides an insight into the devices and channels that the cabin crew uses both on and off-duty. The results are also beneficial for organisations and industries that face challenges in communicating with their mobile workforce. Furthermore, the study contributes to the current research on mobile work and internal communication. Firstly, the study contributes to the underresearched area of mobile work - mobility as work – in terms of cabin crew work. Secondly, it helps to understand the communication needs of mobile workers in the context of mobility as work.

This study was conducted in cooperation with the Inflight Customer Service department of The Airline, one of the leading Nordic airlines. The Airline transported a little over 10 million passengers onboard a fleet of approximately 45 narrow-body and wide-body aircraft in 2015. The Airline has approximately 4800 employees (as of 12/2015) working in flight operations and travel services. In 2015, The Airline employed around 1500 cabin crew, of which approximately 1400 were in active duty. These crew members are based in Helsinki and directly employed by the parent company, i.e. The Airline; crew employed by subsidiaries, crew who have their base outside Finland, leased crew or outsourced crew are excluded from this study.

EU legislation (Council Directive 2000/79/EC) defines mobile workers in civil aviation as “crew members on board a civil aircraft”. Cabin crew is an umbrella term for crew members working in an aircraft cabin. The International Air Transport Association (IATA) defines cabin crew as (IATA 2015, 2):

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.

Cabin crew consists of cabin crew members (CCM), of which one acts as a senior cabin crew member (SCC), i.e. the chief of cabin. To act as a SCC, the CCM must have completed the SCC training. In addition, CCMs and SCCs may have further training and/or work titles at the discretion of the employing airline. At The Airline, there are Pursers (SCCs with additional leadership training), Chief Pursers (as before), and Inflight Supervisors (group leaders), all holding specific posts either on ground or in flight.

In the following, the concepts of mobile work and internal communication are discussed and literature regarding these issues is reviewed. Chapter 2 focuses on mobile work and mobile workers, establishing understanding of cabin crew work as a form of mobile work. Chapter 3 reviews internal organisational communication literature and discusses the importance of internal communication for both the organisation and the employees. Together, chapters 2 and 3 form the theoretical framework of the study, which serves as a backbone for analysing the case study. Both chapters end with a summary of the issues from the cabin crew perspective; cabin crew as a form of mobile work is summarised in chapter 2.4, and internal communication characteristics are summarised in chapter 3.4.

Chapter 4 introduces the research methodology used in this study, providing detailed information on how the study was conducted. The case setting and the results of the empirical research are presented in chapter 5. The internal communication channels in the case company are introduced, and the survey results are presented, before moving on to analysing the results based on the literature review. Finally, chapter 6 concludes this thesis with final remarks and recommendations.

2 Mobility as work

Mobile work broadens the spatial dimension of work. Information and communication technologies have had a profound impact on the ability to exchange information, thus promoting mobile and multilocational work, and consequently making mobile work a hot topic for research. The requirements of the operational environment in mobile work include mediated communication, travelling, multiple workplaces, different cultures, just to name a few. Specific skills and competences are needed for managing with these requirements. (Työturvallisuuskeskus 2014.) However, there are significant differences in the types mobile workers in terms of spatial and temporal mobility. Consequently, the needs and requirements of mobile work vary. Therefore, “to evaluate the needs of mobile employees, it is first necessary to identify such employees” (Vartiainen 2007, 12). So, what are the characteristics of cabin crew work as a form of mobile work, and what are the characteristics of the mobile work community? In the following, these elements are examined in order to create an understanding of the conceptual issues shaping the analysis of cabin crew work.

2.1 Perspectives on mobile work

Mobility, mobile work and mobile workers have attracted a great deal of research interest in the recent years. Cohen (2010) attributes the beginning of the trend to Toffler’s (1980) work on post-industrial Information Age “Third Wave” society, where mobility, technology and freedom are interlinked. In Toffler’s Third Wave society, work is increasingly done in “electronic cottages” by “telecommuters” with a flexible schedule, and the needs for transportation and communication are seen in a new perspective (Toffler 1980, 199-200, 342). Three decades later, the focus on information and communication technology, or more specifically the status of ICT as a driver and facilitator of mobility, is still prevalent in research on mobile work (see e.g. Felstead et al. 2002, Andriessen & Vartiainen 2006, Gareis et al. 2006, Mäkinen 2012, Kietzmann et al. 2013).

But ICT-enabled “telework” does not encompass all the forms of mobile work, as significant variations exist in the space and time flexibility and consequently the mobility of work (see e.g. Wiberg 2005). Moreover, variations exist in the workers’ control over mobility, as mobility is either a possibility or a requirement of the labour process (see e.g. Felstead et al. 2002; Cohen 2010). Felstead et al. (2002, 221) found significant variations in demographic characteristics and employment types of workers in regard to their ability choose their work location, and the actual requirement to work out of an office. Therefore,

it is important to distinguish conceptually those who wish to work out of an office, and those who are required to do so.

Cohen (2010, 66-68) in turn argues that studies on mobile work have, by and large, focused on a white-collar type of mobility that is mainly driven by ICT. Cohen criticises current research on mobile work as having both gender and class bias due to focus on managerial and professional workers and the white-collar phenomenon of “working while mobile”. The gender and class divide of mobile workers is also established in the statistics presented by Gareis et al. (2006, 55), whose numbers are drawn from a Europe-wide survey of mobile workers. The survey concluded that a high level of education and a white-collar, managerial or professional occupation significantly increase the likelihood of mobility at work. Women were 67 per cent less likely to do mobile work than men.

In sum, mainstream studies focus on traditionally stationary, office-based workers who are “liberated” by ICT-enabled communication, whereas few studies focus on traditionally mobile workers who may benefit from ICT-enabled communication in a different way. Due to the assumptions of ICT-dependent telework and working while mobile, current research often omits blue and pink-collar workers in occupations where mobility is work – i.e. cabin crew, pilots, taxi drivers and the like. So, what about those, whose work is intrinsically mobile but the tasks rarely require, support and/or allow the use of ICT?

Kristoffersen and Ljungberg (1999, 271) point out that mobility is a concept that is difficult to define in a meaningful way without excluding the obvious or being too vague. In current research on mobile work, mobility is often defined as “a quality of an individual who moves to and from different places and works in them and, while travelling, uses information and communication technologies as tools” (Vartiainen 2006, 14). Andriessen and Vartiainen (2006, 7) add that “the term mobile is often associated with individuals, although of course a team can be mobile to a certain degree in the sense that all or some of its members are sometimes physically mobile during their work”.

Ojala (2009, 96, 100) suggests using “distributed work” as an umbrella concept that encompasses all the forms of distributed and mobile work. Distributed work is then divided in subcategories based on

- the nature of the work,
- time and space,
- existence or absence of employment contract,
- agreement on distribution and mobility, and
- the nature of mobility.

In the following, some of these subcategories are examined in order to establish a framework for understanding and analysing cabin crew work as a form of mobile work. Moreover, the current definitions of mobile work and mobile workers, and the needs and requirements of mobile work and mobile workers for the organisation are reviewed.

2.2 Characteristics of mobile work

Figure 1 provides an example of time-space dependencies of mobile work. Wiberg and Ljungberg (2001, 154) point out that there is a paradox in the vision of “anytime, anywhere global village” and increase in travelling – if the distance does not matter, why is mobility increasing? Thus in their study of mobile telecommunication engineers, they conclude that although there are tasks that can be performed anytime, anywhere, there are also tasks that are highly dependent on time, place or both. Not all work can be done anytime, anywhere (Wiberg & Ljungberg 2001, 154).

SPACE	independent	<p>Particular time, anywhere</p> <p>tasks can be done anywhere but at a certain time or in a certain order</p> <p>white-collar or service work requiring live communication but no co-presence</p>	<p>Anytime, anywhere</p> <p>tasks can be done independent of place and time</p> <p>work reliant on light technology, no communication or no immediate response needed</p>
	dependent	<p>Particular time, particular place</p> <p>tasks must be done in a certain place at a certain time</p> <p>work requiring co-presence, seasonal work, emergency work</p>	<p>Anytime, particular place</p> <p>tasks must be done in particular place but whenever</p> <p>work reliant on immovable technology, tied to a place but with no/open schedule</p>
		dependent	independent
		TIME	

Figure 1. Time-space matrix of mobile work (adapted from Wiberg & Ljungberg 2001, 157, Wiberg 2005, Cohen 2010, 69).

In short, there are places that need to be visited in order to get the job done, and there are timeframes and deadlines that need to be followed. Mobility may also be a requirement, not a choice. And, although the development of ICTs has – at least in theory - reduced the need for travelling and facilitated “anytime, anywhere” work, people still have the social

need to meet in person, and the need for interactivity of communication. (Wiberg & Ljungberg 2001, 155-156.)

Cohen (2010) elaborates on the Wiberg and Ljungberg (2001), Felstead et al. (2002), and Ojala (2009) notions on the time-space dependency of work and mobility, and whether mobility is a choice or a requirement of the labour process. Hence the drivers for spatial mobility are categorised as (Cohen 2010, 70):

- mobility as work (work is movement)
- mobility for work (work is not movement itself but necessitates it)
- working while mobile (some or all work can be carried out while mobile/at multiple sites).

In the context of this study, the category “mobility as work” provides the most clarifying explanation for the nature of mobility in cabin crew work. The work involves movement of people, goods and vehicles, and the tasks cannot be carried out without changing locations. However, mobility as work is place and time dependent, and in the time-space matrix, “mobility as work” belongs to the category “particular time, particular place” (see figure 1). Both “mobility as work” and “mobility for work” are often experienced in blue/pink-collar jobs, where mobility is a task-related requirement. Conversely, “working while mobile” is usually associated with white-collar work as an ICT-enabled choice (Cohen 2010, 70-71.) Further types and classifications of mobile workers are explained below.

Perhaps the most quoted take on mobile work and mobile workers is the Lilischkis (2003) classification of physically mobile workers. The mobile workers are distinguished, in ascending order, by their detachedness from a fixed working place (Lilischkis 2003, 3):

- On-site movers (movement around a certain site)
- Yo-yos (occasional work away from a fixed location)
- Pendulums (alternate working in two different locations)
- Nomads (work at changing different locations)
- Carriers (work on the move, transporting goods or people).

Lilischkis (2003, 3-6) describes these types of mobile work as multi-location work, although the term does not fully suit the “carriers”. Carrier work usually involves a vehicle, and it cannot be carried out without actual movement. Examples of carrier workers are aircraft cabin crew, sailors, train conductors and bus drivers (Vartiainen 2005, 66). Thus, carrier work matches the Cohen (2010) category “mobility as work”, and is of particular interest in this study.

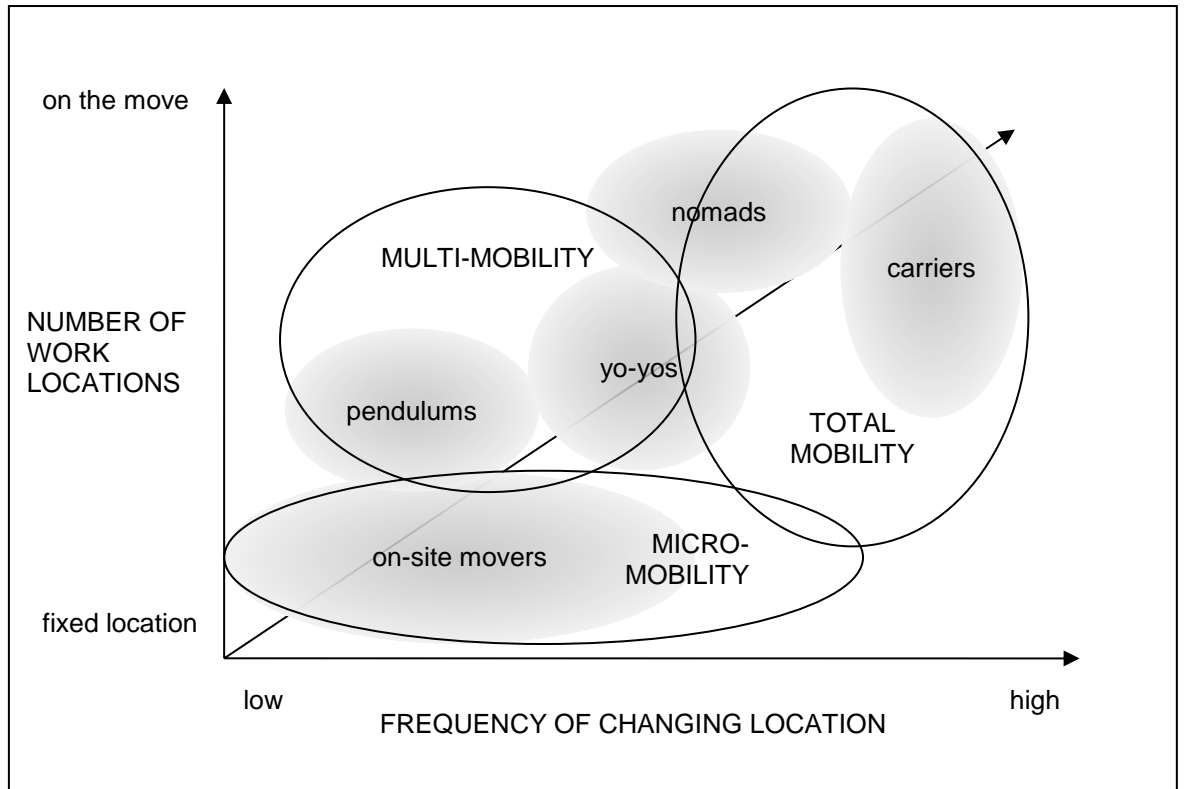


Figure 2. Types of mobile workers and mobile workplaces (adapted from Lilischkis 2003, Schaffers et al. 2005, Vartiainen 2012).

Figure 2 illustrates workplaces and mobile workers in terms of mobility and work location changes. It distinguishes three types of workplaces, categorised based on mobility support and work location changes (Schaffers et al. 2005, 428):

- micro-mobility, on-site mobility that has context sensitive locations
- multi-mobility, ad hoc and occasional mobility
- total mobility, on the move working, often nomadic, multi-time shift work patterns.

Using this framework, the mobile worker categories of Lilischkis (2003) are placed on the matrix (figure 2) to demonstrate their types of workplace mobility. This model takes into account the multiple dimensions of mobile work and workplace mobility that are lacking in the time-space analysis only. These concepts make it easier to understand total mobility, as well as the needs for mobility support in a totally mobile workplace.

2.3 Needs, requirements, and mobility

The change in the inter-organisational structures and strategies in the world of work is driven by a larger scale change in the socio-economic and political context. Demand is created in the markets and through technological change, whereas supply is influenced by demographic and social changes. From the employee perspective, this development of distributed workplaces, network organisations, increased mobility, and interaction through

ICTs bring flexibility in the work environment. However, challenges arise with the lack of face-to-face interaction. Mobile workers may be geographically distributed and less attached to the company, and fear that learning and professional development are impaired. Organisations may have trouble managing social capital. Thus, new skills and competences are required, both from the organisations and the employees. (Andriessen & Vartiainen 2006, 4-5.)

The social and emotional requirements of mobile work call for new social support systems and balancing of work and family life. Work processes should be designed so that they “regenerate rather than consume individual and social resources” (Andriessen & Vartiainen, 2006, 6). Although the capability to invest in supportive technology may be hindered by financial constraints, solving security issues and problems with information management are crucial. For achieving optimal functionality, worker skills and ICTs that meet requirements, i.e. support rather than hinder work processes, are needed. (ibid.). In the following, the skills, needs and requirements related to ICTs are reviewed in detail.

Åkerström and Young (2016, 1-2) stress the importance of internet-enabled technologies in achieving strategic objectives. From the skills perspective, these internet-enabled technologies are fluently used by “digital naturals”, who have the competence to operate effectively in the digital environment. These digital naturals (Åkerström & Young 2016, 9-10):

- have routine access to online platforms such as smartphones
- use these online platforms for news, conversation and information-seeking
- share information, opinions and emotions
- have the required skills to read, write, and assess sources.

However, these characteristics may vary significantly between individuals, so that there are no polar opposites – some people may want to keep things private despite of having the skills and equipment to be a digital natural, whereas some may not have the economic means to be one. Therefore, it is important to distinguish the technological literacy and competence from the willingness to participate. (Åkerström & Young 2016, 10.)

From the needs and requirements perspective, there are several issues that organisations need to address. As discussed earlier (see Andriessen & Vartiainen 2006), the ICT systems should fluently support the work process. So, what are the possible pitfalls? In her research on mobile workers and their personal information management,

Mäkinen (2012) found out three types of ICT-related problems that mobile workers encounter:

- information management problems, such as information retrieval and access to records
- device dependent problems, such as network connection and equipment capacity
- problems related to adjusting to mobile working environment, such as lack of technical education or personal devices, coping with technical problems, global work and networking of work.

Moreover, mobile work brings about challenges for communication flows, as the mobile workers are detached from on-going fixed-location business processes. In line with Mäkinen (2012), Lilischkis (2003) and Gareis et al. (2006) discuss these challenges in detail. Access to infrastructure, resources and face-to-face communication is restricted for mobile workers, thus inducing problems related to (Lilischkis 2003, 13; Gareis et al. 2006, 49-50):

- non-accessibility, in terms of reachability
- unknown location
- limited ability to carry resources, in terms of transporting and processing information
- limited resource access
- media breaks between the fixed and mobile parts of the organisation.

In sum, Mäkinen (2012) and Lamming et al. (2000) list easy access to document services, timely access to documents, streamlined user interface, ubiquity, and compliance with security policies as the most important features of ICT used by mobile workers. For mobile workers, personal information management using ICT is an integral part of work processes. As Mäkinen (2012) points out, “for a mobile worker, mobile devices are mainly personal tools to create, process, transmit, store, share, use and dispose of work-related information.” Therefore, the functionality of these systems and tools is of critical importance.

2.4 Cabin crew work as a form of mobile work

As discussed, not all mobile work definitions and models are applicable to workers belonging to categories “mobility as work” or “carrier work”. However, although there is controversy concerning the classification of mobile work and mobile workers, the requirements that all types of mobile work pose for organisations are not necessarily that divergent. ICTs have become important for mobile workers, it is just the application and implementation of the ICTs that differ.

Table 1 summarises the different conceptual definitions of cabin crew work as a form of mobile work. The Kietzmann et al. (2013) classification is added, as it provides a definition of cabin crews as forms of mobile communities in practice, i.e. knotworks. Knotworks are

“very short term, hydrodynamic relationships within an organisation” where loosely connected, co-located workers join in a “knot”. Cabin crews are excellent examples of a knot, as the crew composition is not constant and therefore the mobile communities of practice are built from scratch at the beginning of the shift. Crews form mental and social spaces through communication and collaboration in a physical location that changes, as both the airplane and the destination are usually different on every flight (see e.g. Vartiainen 2006, 16).

Table 1. Categorisation of cabin crew work as a form of mobile work

Wiberg & Ljungberg (2001)	Lilischkis (2003)	Schaffers et al. (2005)	Ojala (2009)	Cohen (2010)	Kietzmann et al. (2013)
Particular time, particular place	Carrier work	Total mobility	Mobile work (as a form of distributed work)	Mobility as work	Knotworks

The work of cabin crew is inarguably mobile, and it has characteristics that differ from all other types of mobile work. However, as noted earlier, cabin crew work is not entirely limited to duties performed in an aircraft, as communication (on e.g. training, reporting, feedback, daily management) with the employing organisation is largely electronic (see chapter 5 for discussion on crew communication at The Airline). So, in the context of communication between the ground organisation and cabin crew, we can see how cabin crew members spend significant time relying on ICT. As this communication is increasingly electronic, cabin crew members do hours of mobile e-work, outside of the duties that we usually understand as cabin crew work. Thus, cabin crew work is also dependent on ICT in this matter.

In short, cabin crew can be seen as a highly integrated workgroup with low rates of differentiation and specialisation in terms of tasks, competences and roles. Acknowledging the special characteristics of the group is essential in identifying the needs and requirements for building smoothly working organisational structures and processes (Jern 1998, 35-37).

3 Mobility and internal organisational communication

After reviewing the concepts of cabin crew work as a form of mobile work and the characteristics of a mobile work community, it is necessary to look at the forms of internal communication that take place within the organisation. Internal communication comprises communication within an organisation, ranging from informal chats and gossiping to formal management-employee communication. In the following, definitions of internal communication, and the needs and requirements of mobile work and mobile workers for internal communication, are examined. Subsequently, a framework for analysing internal communication with mobile workers is established. The focus is on the aviation industry, as the industry has certain special characteristics in communication. Apart from peculiar jargon, the modern application of Crew Resource Management (CRM) to all levels of the organisation gives a distinct context for studying internal communication.

3.1 Perspectives on internal communication

The importance of effective internal communication is recognised in current research on organisational communication. Internal communication is needed for strengthening morale and identification with the organisation. Organisations communicate to accomplish goals and to acquire what they need – the higher the stakes, the higher the importance of effective communication. Communication helps the employees to understand what is expected, and to accomplish their tasks. (Smith & Mounter 2005, 14; Kanki 2010, 321; Cornelissen 2011, 163.) Robbins et al. (2010, 307) suggest a positive relationship between effective communication and productivity. Ruck and Welch (2012, 295) agree and elaborate that effective internal communication is linked to improvements in performance and service, and ultimately to organisational success.

Organisational communication research has come a long way since the simple linear process of the Shannon-Weaver model, where a sender sends a message to a receiver. Internal communication has become a field of study that is interlinked with several corporate functions in modern organisations. Blurred organisational boundaries, with development of ICTs, call for new approaches to internal communication research (Blundel 2004, 161). As the outdated titles such as “staff communication” and “employee relations” suggest, the emphasis in research and assessment of internal communication has been on a management-centric, top-down, process-oriented phenomenon. Consequently, Ruck and Welch (2012) suggest taking an employee-centric focus on assessing the value of internal communication to both the employees and the organisations. Further, Welch and Jackson (2007, 183) call for a stakeholder approach to

organisational communication, and define internal communication as “the strategic management of interactions and relationships between stakeholders at all levels within organisations”.

Internal communication is challenging. To be effective, communication requires effort from all participants, and it needs to be championed at the top management (Blundel 2004, 2; Smith & Mounter 2005, 14). Poor internal communication results in workplace inefficiency (Welch & Jackson 2007, 178). But in the aviation industry, poor communication may have even more far-reaching consequences. Kanki (2010) has researched communication in the aviation industry, and concludes that failures in communication are a significant underlying cause for accidents and incidents in aviation. Communication is also an integral part of Crew Resource Management (CRM).

Although further discussion and analysis of CRM and CRM-related communication is beyond the scope of this study, the requirements of CRM for internal organisational communication need to be observed due to the profound importance for safety and efficiency in the airline industry (see e.g. Silberstein & Dietrich 2003; Kanki 2010). Since the introduction of the concept in aviation in the 1970s, the application of CRM has expanded to other high-risk environments where human factors are crucial for safe operations (such as hospitals). In short, CRM is the application of human factors in the aviation system. From the CRM perspective, communication is critical for achieving safe flight operations, as it is a crucial part of managing human factors, optimising human performance, and avoiding human error. Any errors may reduce system effectiveness or contribute to an unsafe environment (see e.g. Helmreich & Foushee 2010).

In short, communication is a tool for achieving objectives, and it serves several functions. Communication is context-dependent, and the interpretation of communication depends on social/organisational context (*who* communicates), physical context (*where* the communication takes place), task/operational context (under *what* conditions), and speech/linguistic context (*how* is the message understood). (Kanki 2010, 140.) The functions of internal communication are further discussed below.

Table 2 summarises the functions of internal organisational communication and the potential problems related to these functions. The functions are interlinked, and most communication serves multiple functions simultaneously (Kanki 2010, 122). This summary of functions is especially adapted to the airline environment, where special attention should be paid on overcoming the dysfunctions and barriers to communication (as discussed above about organisational CRM and flight safety implications).

Table 2. Functions and potential problems of organisational communication (adapted from Kanki & Palmer 1993, Kanki 2010, 122-123, Champoux 2011, 326-328)

Functions	Dysfunctions/Problems
Information sharing Feedback	Lack of information or misinformation Communication overload Semantic problems, inappropriate medium/timing
Integration, establishes interpersonal/team relationships	Interpersonal strain, ambiguity Poor listening or decoding Lack of understanding, selective perception, message distortion, filtering
Coordination, persuasion, establishes predictable behaviour patterns and expectations	Nonstandard or unpredictable behaviour patterns
Maintains attention to task, monitoring and situational awareness	Loss of alertness, monitoring or situation awareness
Functions as a management tool Emotion sharing Innovation	Lack of leadership or misdirected management of tasks, time, resources or workload Organisational silence

Sharing information within the organisation – about mission, strategy, policies and tasks – and the integration and coordination of the organisation are the evident functions of internal communication. Sharing feedback provides information on job performance and acts as a motivational tool, thus further reducing uncertainty, but feedback channels also provide means to share emotions and feelings of satisfaction and dissatisfaction (Robbins 2010, 288-289; Champoux 2011, 326-328, 338.) Information sharing functions support decision-making and problem-solving, whereas the social function of communication is to build team relationships and work atmosphere. The social function, i.e. interpersonal and team relationships, is closely related to leadership, as it is important to establish an atmosphere that encourages sharing information. (Juholin 2009, 64; Kanki 2010, 125). This atmosphere is needed for encouraging innovation and creativity within an organisation, and thus it is directly linked with the organisation's competitive advantage and adaptability to market demands (Champoux 2011, 327; Cornelissen 2011, 16).

However, communication is surrounded by noise and suffers from errors caused by the sender, the receiver, the message, or the medium. Dysfunctions related to the message and the communication process are barriers to effective operational communication. Message distortions or delays in processing information occur when the sender and the

receiver do not have the same frame of reference, information is filtered, or there is an information overload. Semantic problems occur when the sender's intention and the receiver's interpretation of the message differ. (Champoux 2011, 327-328.) Semantics is especially important in the aviation industry, where specific job-related jargon may not be well-known to everyone in the organisation, directly impacting information accuracy.

Communication is important in making actions and intentions known to others.

Predictability in information dissemination helps to utilise and understand the information effectively, and establishes communication patterns. These patterns in turn help to maintain situational awareness and attention to task. (Kanki 2010, 127-129.) The ultimate disruption of these functions is called organisational silence. Organisational silence is a serious dysfunction, and it is not caused by noise as the other dysfunctions. It impairs the organisation's ability to change course as negative feedback is blocked, there is not enough information for decision-making, and employees are dissatisfied. Employees are unwilling to share information as it is seen pointless, or they fear punishment.

Organisational silence means that the communication climate is closed, as opposed to an open communication climate, where information flows freely not only upwards and downwards, but throughout the organisation (Champoux 2011, 327-329, Cornelissen 2011, 169-171.)

3.2 Effective communication and meeting employee needs

Abolishing the barriers to communication and establishing an effective communication climate remain the key challenges in internal communication. Blundel (2004, 153) considers hierarchical management systems as major barriers to achieving a change in communication culture. The more vertical layers there are, the more opportunities there are for filtering – both downwards and upwards. Further, any distortions in communication, caused by these barriers, increase uncertainty and decrease satisfaction in the workplace (Blundel 2004, 302; Robbins et al. 2010, 307). Negative impacts on employee engagement and productivity may follow (Ruck & Welch 2012, 294-296). Therefore, further examination of the factors behind an effective communication climate is needed.

There are several overlapping definitions, models and solutions for overcoming barriers in communication, and to establishing an effective communication climate. However, according to Robbins et al. (2010), there is no such thing as perfect communication as distortions caused by the human factor cannot be eliminated. Nevertheless, actions can

be taken towards more effective communication. Effective communication is defined as a sum of factors including (p. 307):

- perceived trust
- perceived accuracy
- desire for interaction
- top-management receptiveness
- upward information requirements.

In the modern, fast-changing corporate world, employees need supportive communication to foster trust, credibility and integrity. For organisational identification, it is important to connect the organisation's vision, values and strategy to people. (Robertson 2005, 34; Ruck & Welch 2012, 296.) Work is part of identity, and the relationship with work can be emotional. Commitment to work and organisation is not a status quo – it can change considerably. The individual needs for belonging and communality, and the needs from the organisation can be contradictory (Juholin 2009, 38-39, 49). For perceived organisational support, employees need to feel that they are valued by the organisation (Ruck & Welch 2012, 296). Juholin (2009) characterises the modern dream organization as “energising”. An energising organisation has (p. 52):

- sense of trust and appreciation
- free-flowing information, relaxed and approving atmosphere
- sense of emotional community
- learning and doing together
- interactive
- responsible leadership and
- responsible individual communication with proactive and self-directing roles.

As a contrast, a paralysing and indifferent organisation contains information for own benefit. A paralysing organisation has a locked atmosphere, hierarchical leadership, relationships that value individuality and separation. (ibid.) This type of an organisation suffers from organisational silence and a closed communication climate (as discussed earlier). As a summary, Robertson (2005) has crafted a communication climate model based on two fundamental dimensions of effective communication. The effective communication climate has highly (p. 35-36)

- open information flow, in terms of disseminating adequate amounts of information on relevant topics (information adequacy), without horizontal or vertical obstructions to free interaction (information flow), supported by two-way managerial information sharing practices (information sharing practices), and
- supportive human interactions, in terms of paying attention to how people communicate, as the effect can be either affirming (employees feel supported) or de-affirming (employees feel defensive).

Blundel (2004, 43) suggests three connected activities that can help in overcoming barriers in communication. Firstly, the receiver should be taken more seriously, meaning that some background research should be done for finding out receiver's pre-existing

attitudes and expectations, i.e. the receiver's needs. Secondly, thinking more clearly about the message helps to match the content to the audience. And, thirdly, the message should be delivered skilfully – with the focus on the receiver, using multiple channels, checking for feedback, and adjusting the communication based on feedback. It is a continuous process, as poor communication practices are difficult to correct. (ibid.)

Now that we have discussed the characteristics of effective communication, an effectively communicating organisation, and an effective communication climate, it is time to look at what other types of communication take place in an organisation, and how they affect the quest for effective communication.

Organisational culture is interlinked with organisational subculture, and official, formal communication structures are interlinked with unofficial, informal communication structures. Formal channels are official organisational channels that follow the authority chain within the organisation, whereas informal channels are unofficial channels that follow spontaneous, individual choices. Formal channels distribute professional messages, while informal channels distribute personal and social messages. (Robbins et al. 2010, 290.) Krackhardt and Hanson (1993) have studied social networking and identified three types of informal social networks within organisations:

- advice network, for problem-solving and providing technical information
- trust network, for sharing sensitive political information and finding support in times of crisis
- communication network, where employees talk about work-related matters.

Van Beek et al. (2011) found these networks to be important for job satisfaction. Unofficial grapevines may be highly beneficial to the organisation, as they usually are much faster than official channels, and usually distribute information that is of great importance and interest to the community. They are effective in gaining employee attention and can thus be used to prepare employees for the official message, or they can be viewed as sources of invaluable feedback and locators of underlying problems. (Blundel 2004, 131, 152; Robbins et al. 2010, 296.)

Although grapevines are beneficial for internal communication, they can easily become counter-productive. Grapevines may be problematic as they are not controlled by the organisation, and that they serve the interest of the people in the network. While majority of information flowing through the grapevine is true, some information may still be misinterpreted and false, exacerbating problems. Rumours flourish especially in situations characterised by uncertainty, ambiguity, and anxiety – such as times of organisational change. As rumours exist so long as there is the underlying cause, quick actions should

be taken to rectify misinformation. However, recruiting “moles”, using authority to create rigid rules, or investing extensive resources to finding out the source of rumours are not fruitful approaches to dealing with grapevine. The best prevention for negative rumours is an effective communication climate and predictable communication patterns. Grapevine is needed in organisations to serve the employee needs for closeness and friendship. (Krackhardt & Hanson 1993; Blundel 2004, 152; Robbins et al. 2010, 296.)

As discussed earlier, Robertson (2005, 34) stresses the importance of meeting the employee needs to share understanding, meaning and trust with credibility and integrity in communication. Messages and new ICT applications alone cannot fill that need (although new social media platforms have created new channels for social interaction, as discussed in the following subchapter). Blundel (2004, 153, 161) calls for more flexible and interactive approaches to communication, and sees training and cultural adjustment as key measures in addressing challenges in communication. These measures should apply to both managers and employees. Training should cover technological and practical issues, so that all parties understand what is expected and how additional support is obtained. Moreover, Welch and Jackson (2007, 187) argue that in order to meet the employees’ internal communication needs, their preferences for channel and content should be researched.

3.3 Communication channels in internal communication

In an increasingly complex organisational environment, it is difficult to create coherent communication patterns. Mobility is a factor that adds an additional feature to communication and to distributed organisations (Vartiainen et al. 2007, 15). To avoid misunderstandings in communication and to reduce possible information overload, it is important that organisations have enough capacity to organise, prioritise and distribute information using correct channels (Quirke 2008, 254, 284). Need for real time information is emphasised, and information can no longer be delayed or hidden. Mastering communication equipment and developing communication channels have become key elements in communication knowhow (Juholin 2009, 31, 67).

Reflecting on the matrix in figure 1 (see chapter 2.2), the time-space framework is applied to communication channels in figure 3. The figure shows the synchronous and asynchronous communication channels. Face-to-face interviews and meetings are two-way communication channels that allow instantaneous feedback, whereas posters and webcasts can be seen as one-way channels with more time-consuming feedback options.

New ICT-applications tend to be more interactive than their analogue predecessors, as discussed later on in this chapter. (Blundel 2004, 10.)

SPACE	independent	Particular time, anywhere - mobile telephony/text message - chat rooms/instant messaging - video/audio conferencing	Anytime, anywhere - email - voice mail/text message - mobile documents - online bulletin boards - groupware - virtual community, blogs
	dependent	Particular time, particular place - face-to-face - casual interaction - presentations	Anytime, particular place - bulletin boards - written records
		dependent	independent
		TIME	

Figure 3. Time-space matrix of communication channels (adapted from Wiesenfeld et al. 1998, Schaffers et al. 2005, Wenger et al. 2005, Champoux 2011)

Face-to-face communication is suggested to be of particular importance in tackling the problems related to detachedness due to mobility. Mobile workers also miss normal office opportunities to take part in informal communication situations (Vartiainen et al. 2007, 13-14). Face-to-face communication, informal discussions and networking do not have a technologically-mediated substitute. As discussed in chapter 2.3, feelings of detachedness and marginalisation may result in loss of motivation and direction. (Blundel 2004, 153; Andriessen & Vartiainen 2006, 4-5.) However, as Welch and Jackson (2007, 187) point out, conducting internal communication mainly face-to-face is virtually impossible, and thus one-way manager-employee communication is both unavoidable and necessary. Quirke (2008, 43) still suggests considering the use of other live channels. Further, Smith and Mounter (2008, 114) point out that informal grapevines and networks are also created even among those working on their own.

Some channels are inherently more interactive than others. As mentioned earlier, face-to-face meetings allow for feedback and interaction, whereas posters on information boards operate in one direction only. New ICT tools encourage interactivity, although it is

controversial how far they can substitute for face-to-face communication. Leonardi et al. (2013) have reviewed the development of corporate social media, and conclude that social media acts as a digital platform for interaction instead of a mere channel for communication transfer. These platforms have an integrated approach, and cover several functions.

Intranets are protected internal internets that, ideally, serve as an improvement to internal communication and information exchange. Interactivity of intranets is expected to encourage participation and thus improve information dissemination. This has led many organisations to digitalise and transfer former printed media channels (such as weekly bulletins and personnel magazines) to the intranet. However, this may hinder information flows to those employee groups that do not have a continuous access to the equipment and networks required for intranet use. Additionally, given the interactivity and social function of the intranet, new skills are required from the employees, as they are no longer the mere users of information, but also authors, publishers and information providers. (Heide 2016, 46.)

Corporate social media applications have created an additional layer of interactivity to internal communication, providing a new platform for information exchange. The platform possesses several characteristics that are highly valued in internal communication (Heide 2016, 47):

- interaction
- co-creation
- discussion
- user-generated content
- multi-model communication and dialogue.

All these characteristics are hoped to enhance quality of communication through improved information flow and participation. Employees can view the communicative actions of others, and those actions can be viewed irrespective of time – thus enhancing social learning within organisations as the range of communication is expanded. Therefore, wide-spread adoption of these platforms is critical for their success. From the users' perspective, social media tools require digital literacy and adoption of new technology, whereas collaborative organisational culture and communication climate are needed from the organisation's perspective. Recent studies show a low adoption rate of social media in organisations, and therefore the efforts to establish a collaborative communication culture should be a priority. (Leonardi et al. 2013; Heide 2016, 47.)

Social networking is a multi-faceted and dynamic concept. Facebook is a prime example of the need for networking, although not everyone is either skilled or willing to network in this manner (Juholin 2009, 35). As discussed in chapter 2.3, the concept of digital naturals is useful in describing how the use of ICTs has become an integral part of everyday life. As Coombs et al. (2016, 153) point out, the use of ICTs is no longer entirely a matter of budget or preference, as the equipment and applications have become essential rather than luxury. It should still be noted that the skill levels and willingness to participate vary, as the fluency in a digital environment does not mean that the individual is comfortable with sharing personal information in social media. These individual preferences are shaped by e.g. career stage, different priorities, culture, and perspectives on privacy - for example, generation Y employees were found to prefer traditional media for internal communication despite of wide adoption of social media in private lives (Welch 2012, 248; Coombs et al. 2016, 154).

In short, mediated internal communication may be effective and of high quality, if the focus is on the employee preferences for channel and content, and the communication fills the employees' need for information, not the manager's need to tell. Any one-way mediated communication, whether digital or analogue, may be strategically justified if the message consistency is important. (Welch & Jackson 2007, 187-189.) Still, the emphasis should be on communities, content and dialogue, not merely on channels and volume of information (Ruck & Welch 2012, 301).

3.4 Cabin crew and communication

As noted earlier, communication holds a very special and important role in the aviation industry. Moreover, cabin crew has unique mobile work patterns that are a challenge for the organisation and its internal communication. Chong (2007, 205) summarises perfectly: "pilots and cabin crew represent an internal communication challenge as they are always 'on the move' and almost never in one place altogether at the same time", whereas Vinnicombe (1984, 7) goes further by describing cabin crew as alienated workforce. Smith and Mounter (2008, 109) elaborate and refer to mobile employees as "special groups" that have particular needs in terms of internal organisational communication. A special group in the context of internal communication can consist of "people who do not turn up for work in the conventional office-bound sense, but work at /.../ home or on the road, rarely touching base". Employees can be diverse in cultural and racial backgrounds, age, gender and sexual orientation. Moreover, the employees are working away from base, in globally dispersed work teams. (ibid.)

In order to meet the needs of the employees on the road, several observations have been made (Smith & Mounter 2008, 118, 125-126):

- although catering for the need of the special groups can be costly in the short-term, treating employees with respect will impact the company reputation
- it is essential to use several channels and media in communication as not everyone has easy access to a computer.

Taking these special groups into consideration and fine-tuning the generic communication structures to meet their needs will result in a more committed workforce, thus making the fine-tuning a “business imperative” (Smith & Mounter 2008, 110). Likewise, Chong (2007, 201) considers internal communication as a strategic tool to help key employees, such as airline cabin crew, to live the core corporate values and to deliver the brand promise, thus making internal communication “the first frontier in the battle for the customer”. Moreover, Stoleroff and Correia (2009, 18) point out in their research on workers’ (cabin crew) perceptions and priorities regarding health, safety and working conditions that it is essential for organisations to survey these perceptions and priorities, not only for the sake of democracy and legitimacy, but for showing genuine interest in improving the quality of working life.

Amnér and Rydén (2001, 7) remind that cabin crew should be seen as “front line operators”, working at the end of a long chain of preparations leading to welcoming the passenger onboard. Cabin crew is the link in the chain that spends most time with the customer and “sells” the company and its products to the passenger, thus making the crew’s competences important for achieving customer satisfaction.

4 Research methods

4.1 Research approach and methods

The research process is a process of reasoning and decision-making, as well as a process of continuous reflection. The process aims at producing a balanced, well-grounded and methodologically strong study. (Häikiö & Niemenmaa 2007, 41.) Flyvbjerg (2006, 226) states that the research problem and its context should guide the choice of research method. Yin agrees (2012, 4, 9), and lists the conditions that determine the use of a specific research method:

- the type of research question (how, why, who, what where, how many, how much?)
- the control of researcher over behavioural events
- the focus on contemporary or historical events.

Experiments often require some control over the actual behavioural events, archival analysis and history studies focus on historical events, and surveys answer questions such as “what”, “where”, and “how much” (Yin 2012, 9-11). Case studies aim at increasing understanding of complex phenomena and their contexts, and thus seek to answer research questions starting with “how” and “why” (Laine et al. 2007, 10; Yin 2012, 9). However, the boundaries of the method classifications are not rigid, and there might be some wiggle room in the choice of a method.

Keeping these guidelines, the nature of the research problem, and the context of this study in mind, the case study method was chosen as the most appropriate research method. Case study research seeks to describe the research target - for example an individual, community, organisation, city, state, civilisation, or even a set of events – thoroughly and in detail. The goal is to accumulate empirical or theoretical knowledge about the target. (Laine et al. 2007, 10-11.) The methodological characteristics that set a case study apart from other research strategies are that

- “a case study investigates a contemporary phenomenon (the case) in its real-world context” (Yin 2012, 2) and
- “the fact that a case study basically is an inquiry of only one single instance (the case), or sometimes a small number of instances, of the object of study /.../ and scores obtained from these cases are analysed in a qualitative manner” (Dul & Hak 2008, 4).

The choice of the case study method is a choice of scientific philosophy and the way of understanding the world and knowledge. The strength of the case study method is that it seeks to understand the phenomena from a variety of perspectives, in their political, economic, social and cultural contexts. (Häikiö & Niemenmaa 2007, 42, 45-46.)

Theorisation and analysis of empirical research relies on existing research knowledge and the skills of the researcher. Successful operationalisation of concepts and constructs requires strong conceptual knowledge that is based on existing research literature. (Jokivuori & Hietala 2007, 10-11.) Strong internal validity, generalisability, and conceptual level are dependent on understanding of conflicting theoretical views and the ability to tie the emergent theory to existing literature (Eisenhardt 1989, 544-545). Similarly, Jokivuori and Hietala (2007, 11) point out that it is important to explain the conceptual structure of the study in order to improve theoretical representation of the study results. The conceptual structure of the study is based on a literature review that synthesises and evaluates, as well as analyses and discusses, the written sources (Coldwell & Herbst 2004, 35).

Conceptual understanding is important in selecting the case, as the case may seek to replicate previous cases, extend new theories, or fill theoretical categories (Eisenhardt 1989, 537). The driving force behind case selection is the sincere interest in learning and understanding the behaviour of people in the specific and complex research setting (Stake 1995, 1-2). Emphasis on complexity and contextuality helps to bring out issues and problems that form a basis for the case study's structure (Stake 1995, 17-18), which is further defined by theoretical propositions and boundary-setting (Yin 2012, 33,44). For creating a solid research design and analysing the reliability and validity of the research, it is essential to define and delimit the case (Yin 2012, 26).

As discussed earlier, cabin crew at The Airline offers a special context for analysing mobility and communication due to the unique mobility patterns. The purpose of the study was to discover how internal communication is perceived at The Airline. The emphasis was on understanding the characteristics of this specific kind of mobile work, and discovering the employee preferences for channel and content in internal communication.

The research questions were:

- What are the mobile workers' preferences for channel and content?
- How is internal communication perceived and how could it be improved?

The context of the study is further explained in chapters 1 (description of the selected case), 2 (characteristics of the target group – cabin crew) and 3 (characteristics of internal communication in cabin crew context) and 5 (description of communication in the case setting).

4.2 Data collection process

Yin (2012, 71) points out that if the preparations for data collection are not done well, the whole study might be jeopardised, especially if further challenges arise in gaining approval and finding respondents for the study. Thus the researcher should follow the study protocol carefully, not only when preparing for data collection, but all the way from designing the case study to writing the report.

The data collection plan is rooted in the research questions. The plan helps the researcher to focus on the relevant issues and to keep track of the process. Rigorous planning and record-keeping of all observations (in this case questionnaire answers, observations, and document review) lay the foundations for creating solid descriptions of the issues under study as well as for analysis and reporting in the later stages. (Stake 1995, 51, 62-63.) For this study, planning and record-keeping included the decisions of issues under observation, the actual observations and measurements, as well as the physical context of the study. The conceptual framework and the research questions served as departure points for selection of data collection instruments and the set of questions for the respondents.

Gaining access, obtaining permissions and safeguarding confidentiality were essential for this study. It was agreed that the name of the commissioning party would not be published, but referred to as "The Airline". The Airline, being the largest flight operator based in Finland, was kind to grant permission for the research and provide information needed to execute the research. Access to respondents was then easy, as the researcher had access to The Airline's premises and databases. The researcher also had access to both formal and informal communication channels used by the cabin crew. Thus the need to guarantee confidentiality was emphasised when planning and executing data collection.

Stake (1995, 56) calls for "connoisseur's appetite" in selecting the best data sources for the study. The survey questionnaire was chosen as a main data source, albeit being a rarity qualitatively oriented case studies, as it produces a lot of data from many different respondents, and the data can be collected anonymously (see e.g. Coldwell & Herbst 2004, 48; Chasteauneuf 2010, 770). Therefore, it was used to collect the body of data, which was further enriched with document review and observations for more in-depth data, as the study has a qualitative focus. Relying on multiple data sources is synergistic and enhances the validity of the study, and it allows for addressing broader range of behavioural topics. (Eisenhardt 1989, 538; Yin 2012, 119-120.)

Although it is often assumed that the use of quantitative evidence is precluded in case studies, Yin (2012, 19, 112-113) reminds that case studies can rely even entirely on quantitative evidence, and sees the survey, using a structured questionnaire, as a type of case study interview. This type of “interview” is relevant e.g. for surveying of the workers in a case study of an organisation – exactly as the situation described in this study. This type of survey interview may follow the sampling procedures of regular surveys. (Yin 2012, 113.) Therefore, statistical sampling logic was used for the purpose of estimating a sample big enough for a scientifically significant study, and for avoiding an undersized or an oversized sample and consequently a study that does not produce useful results or, alternatively, is a waste of resources.

The population (all cabin crew at The Airline) size was approximately 1500. Thus the target sample size was calculated to be 196 at 90 per cent confidence level, with a confidence interval of 5.5. These levels were deemed to provide adequate degrees of precision and certainty as the analytical approach was qualitative and statistical generalisability of all the results was not the primary goal of the study. The sample size (n) calculation used the following equation (see e.g. Lwanga & Lemeshow 1991; SurveyMonkey 2015):

$$n = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \frac{z^2 \times p(1-p)}{e^2 N}}$$

where

N = population size (1500)

e = margin of error (5.5%, i.e. .055)

z = z-score (1.65 for 90% confidence level)

p = population proportion (normal distribution assumed, i.e. .50)

yielding a sample size (n) of 196.

Testing the data collection questions before full-scale research, ie. piloting, is recommended e.g. by Stake (1995, 65). For this study, a pilot group of 9 people was used for estimating the feasibility of the data collection plan and testing the research instrument (questionnaire). Convenience sampling was used to select the pilot study respondents. The pilot phase was successful, and no major changes were required to the questionnaire form, distribution channels, or timeframe. Therefore, the pilot group answers were also used in the final results of the full-scale research.

The data collection process started with direct and participant observation as well as document review. Survey answers were collected between 23 January and 26 February, 2015 using the Webropol platform. Data collection was primarily organised through electronic channels, as this method made it possible to reach also those who were on a leave or on vacation. The link to the electronic questionnaire was distributed through personal emails and a post to the cabin crew social media page. This also guaranteed anonymity to the respondents. A paper version of the questionnaire was also constructed for distribution in the crew lobby. However, the paper version proved to be an inefficient data collection method. Finding respondents was difficult as the departing and arriving crews were busy with their work duties. Only four paper questionnaires were returned.

Apart from the basic demographic questions, the questionnaire gathered information on issues derived from the theoretical discussion in chapters 2 and 3: communication technology, communication channels, information flow, interaction and work community. The questionnaire also included an open-ended question for collecting more qualitative information on internal communication. The questionnaires, the Finnish original and the English translation, are attached to this study (see appendix 1).

The data gathered with the survey questionnaire was complemented with observations and document review. The observations included the data on communication channel usage during the observation period. The amount of emails received were observed for three months between December, 2014 and February, 2015. Additionally, the amount of traditional mail received by the cabin crew, notes posted in the crew centre, as well as the usage of Yammer were observed. In addition, casual discussions about the topics in the scope of this study provided background information during the planning stages of the research. Document review included external and internal company sources such as the intranet and internet pages.

In short, the survey questionnaire provided quantitative evidence about the communication technology and channels used by the cabin crew, and the crew's perceptions of internal communication. The observations and document review provided qualitative evidence about the communication channels, channel use and nature of communication from a different perspective, complemented by the open-ended survey questions about improvement ideas. The analytical implications of these methodological choices are discussed in the following chapter.

4.3 Data analysis

As Stake (1995, 60) points out, quantitative data needs to be processed to understand the underlying meanings, but qualitative data brings about meanings that can be directly recognised by the observer. Thus the quantitative evidence had to be organised and treated prior to further analysis. Numerical data was organised in tables and cross tabulated in Excel when applicable in order to be able to compare variables. Means, medians, standard deviations and quartiles were observed. Based on the tables and cross tabulations, graphs were generated using Excel to enhance visual presentation. All qualitative data was coded according to predetermined themes.

The evidence from all of the sources was reviewed together, creating a pool of data from multiple sources. Thus, the analysis and findings are not based on quantitative or qualitative evidence alone, but the convergence of information (see e.g. Yin 2012, 114). The analysis was guided by the framework developed in chapters 2 and 3, but also possible emerging patterns and concepts were observed. Therefore, the analytical process in this study is reflective and iterative instead of linear as in statistical studies, and the results reflect the research context. The results of the survey are presented in chapter 5.2, and further discussion and interpretation of all results are presented in chapter 5.3. The conclusions recognise the contextual and temporal aspects related to the case.

As Stake (1995, 8) puts it, traditional comparative and correlational studies may be better at creating generalisations, but case studies can still produce valid modification of generalisation. The analytical goal is to reach for analytical or theoretical generalisations, not statistical generalisations (see e.g. Korzilius 2010, 763; Yin 2012, 40). Making statistical generalisations based on case study findings would be, according to Yin (2012, 40), a fatal flaw, as the case is not a sampling unit and thus not representative of any larger population.

As discussed earlier, careful planning is a key in producing a good study. This includes defining and operationalising the research problem, and following procedures rigorously. When using surveys, the quality of the basics of the study design (population, sampling frame, and sample) is important, as is the accuracy and validity of measurements. In other words, sample size and sampling are not the only determinants of survey quality, but aspects of the quality of a study design. External validity can be improved by ensuring that an appropriate population is used when drawing samples, favouring random sampling over non-random sampling, and using reliable research instruments in data collection. Survey results may suffer due to measurement errors (e.g. due to loaded questions),

sampling frame errors (due to difficulty in finding access to a representative sample), or because the respondents try to please the researcher and thus not speaking their minds. (Lenth 2001, 187, 192; Coldwell & Herbst 2004, 35, 43, 47-48.)

The research has a well-defined and delimited research problem and case description, as well as a definite population and meticulously drawn sample. The research instrument was tested with a pilot study, including evaluation of functionality and understandability of the questionnaire. The reliability of the questions in terms of covering the research problem, clearness and wording was deemed good. The position of the researcher in the company allowed easy access to the population and representative sample, and anonymity encouraged the respondents to express themselves freely. However, it should be observed that as most of the respondents answered the online questionnaire, the findings may or may not have a bias towards individuals who are active computer and internet users. Still, the responses received on the printed questionnaire did not indicate any differences with the online responses in this matter.

Cross-sectional surveys capture a snapshot of a situation and make drawing conclusions based on the findings more difficult, as the findings do not get the full story. Therefore, the survey data was enriched with other sources of evidence and a qualitative approach, adding up multiple layers to the data. The triangulation that is made possible by multiple data sources and collection methods contributes to stronger validity of hypotheses and constructs (Eisenhardt 1989, 538). Flyvbjerg (2006, 241) summarises: "The advantage of large samples is breadth, whereas their problem is one of depth. For the case study, the situation is the reverse". For those reasons, the methodological goal was to balance out the subjectivity of qualitative data and the impersonality of the quantitative data for an accurate description of the research phenomenon in its context. This was to ensure that the analysis of the data was accurate and relevant to the research questions.

Context-dependency was inevitable all the way from designing to evaluating the study. Repeating the study - even in the same case company - might yield different results due to changes in the context. Nevertheless, the interpretations of the data are important in understanding the case, as the interpretations yield insights, important themes and new perspectives that are transferable and generalisable to a higher level (Leino 2007, 214). It can be concluded that "predictive theories and universals cannot be found in the study of human affairs. Concrete, context-dependent knowledge is, therefore, more valuable than the vain search for predictive theories and universals" (Flyvbjerg 2006, 224).

5 Key results and discussion

5.1 Overview of internal communication at The Airline

The Airline lists intranet, internal blogs, theme weeks, personnel events, 4D survey (wellbeing at work), occupational health unit, performance dialogue sessions, and discussions with labour organisations as channels of communicating and cooperating with personnel. Other communication channels within the organisation are:

- department-specific weekly bulletin
- company personnel magazine
- sales bulletins
- press releases.

In addition, the Inflight Customer Service department communicates through:

- an email system
- mail lockers in the crew lobby (discontinued)
- info screens in the crew centre lobby
- crew lobby events, such as the quarterly lobby fair.

Figure 4 illustrates these communication channels in the time-space matrix (see also figures 1 and 3). The mail lockers in the crew lobby were removed during a renovation project in 2015. Although the crew members still have a chance to receive traditional mail

SPACE	independent	Particular time, anywhere - mobile telephony/text message	Anytime, anywhere - email - mobile telephony/text message - Intranet - CIS, RRS, manuals - Yammer - blogs - Training Portal
	dependent	Particular time, particular place - face-to-face (e.g. PT and PD) - casual interaction at the Crew Centre - presentations (e.g. Crew Fair)	Anytime, particular place - bulletin boards at Crew Centre - info screens at Crew Centre - mailboxes at Crew Centre (discontinued)
		dependent	independent
		TIME	

Figure 4. Time, space and cabin crew: application of the time-space matrix to cabin crew communication at The Airline

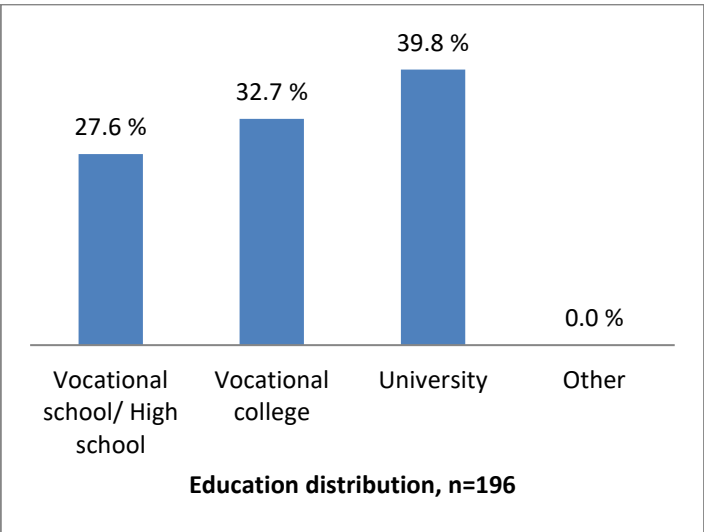
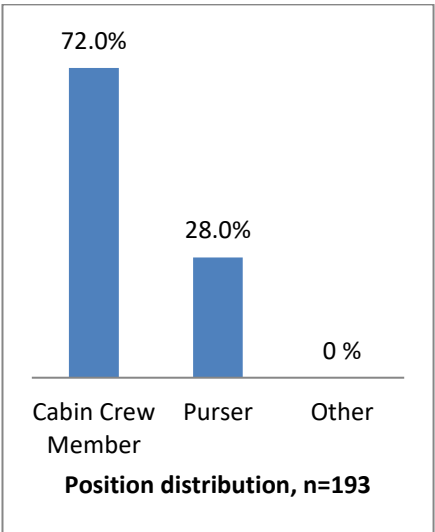
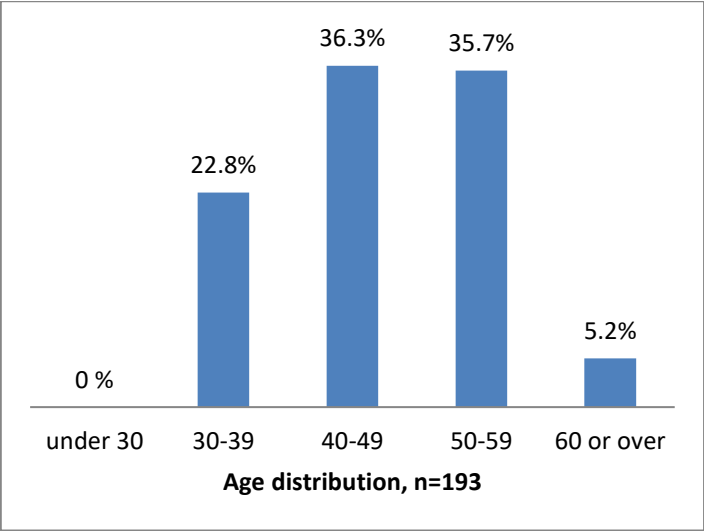
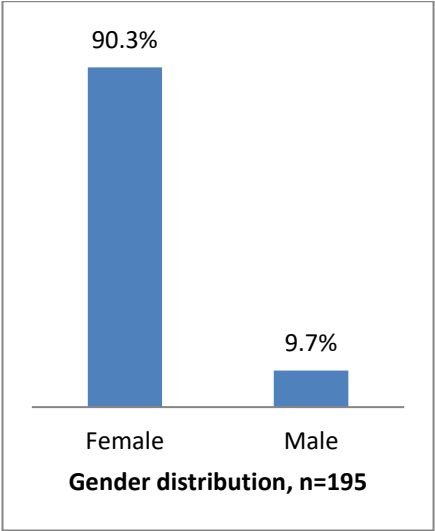
to a communal mailbox in the crew lobby, the communication is now expected to use electronic channels. The corporate social networking service Yammer was introduced to cabin crew in 2014, giving cabin crew a chance to discuss crew issues in a closed virtual group, and also to interact with other employee groups within the organisation.

Interaction and guidance between cabin crew and the department management is mainly electronic. Major internal communication channels for cabin crew are the intranet, weekly bulletin, Yammer and email. Daily operational instructions and guidance are provided through a system called CIS, that provides departing crews with information of practical issues related to their flight. Feedback about flight-related issues can be given through a system called RRS. That is, in operational issues the primary channel for management – cabin crew communication is the CIS, and the primary feedback channel for cabin crew – management communication is the RRS. Additionally, authority-regulated safety requirements and service issues are communicated through cabin manuals and the training portal.

The department management is in charge of communication and guidance regarding the organisation's operations, plans and changes. The primary channel for communicating these strategic issues is the intranet: the department's homepage in the intranet, a specific workspace for cabin crew in the intranet, and a specific workspace for pursers only in the intranet. Additionally, organisation's bulletins may be used.

The survey conducted for this study (mobile work and internal organisational communication at The Airline, see appendix 1 for the questionnaire) gathered information of cabin crew perceptions of the state of communication at The Airline. This included the issues of communication technology, communication channels, information flow, interaction and work community. Results of the survey were grouped with the observation data to form a primary empirical data pool. The questionnaire yielded 196 responses, thus fulfilling the sample size requirement, with minor variations in response rates between questions. This covers 13% of the population of 1500 cabin crew members. 54 respondents provided open feedback at the end of the questionnaire.

Figures 5, 6, 7 and 8 illustrate the demographic determinants of the sample. At the time of conducting the survey, no new cabin crew members had been hired for approximately 8 years. Therefore, 77% of the respondent were 40 years or over, corresponding with the demographic distribution within the organisation; average age of the employees at The Airline was 45 years in the end of 2014. Consequently, there were no CCMs under the age of 30, as the minimum hiring age for the CCM position was 22 in 2006-2007.



Figures 5, 6, 7 and 8. Demographic distributions

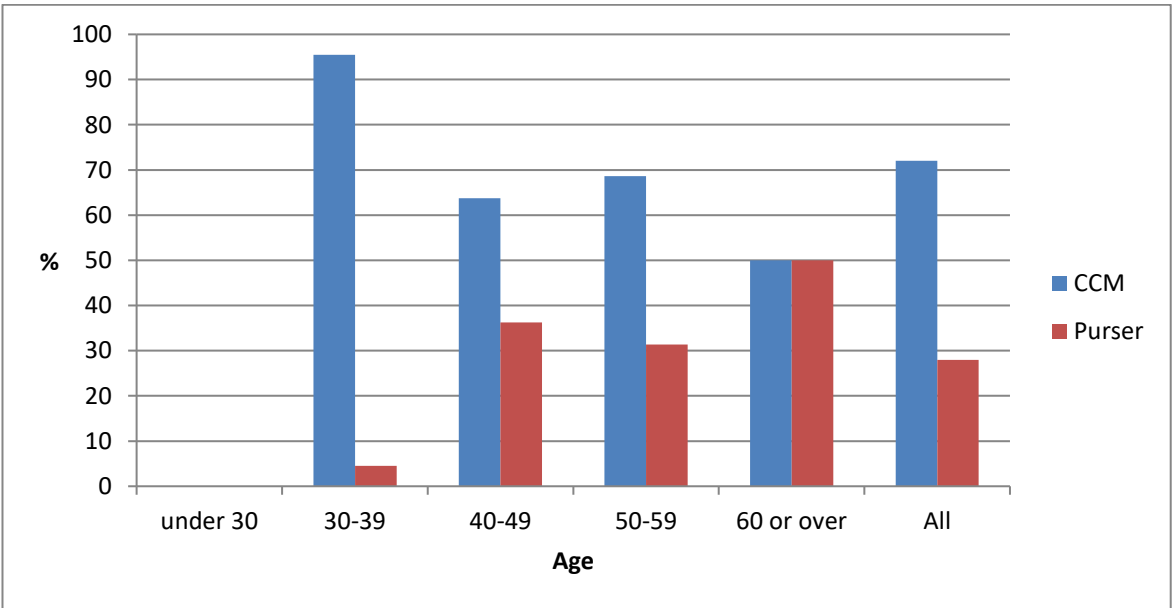


Figure 9. Position distribution by age group, n=193

The crosstabulation in figure 9 shows that in the group of over 60-year-olds fifty per cent had a supervisory position (purser), compared to less than five per cent in the group of under 40-year-olds (as some years of experience is required before being eligible to apply for supervisory positions). This should be noted when analysing results.

5.2 Communication technology and applications

The respondents were well equipped with communication technology that supports their mobile lifestyle. Over 95% had a smart phone, i.e. a mobile phone that allowed access to the internet. Well over 80% had a tablet computer and nearly 75% had a laptop computer, thus supporting the hypothesis of portability as an important quality for equipment in mobile work. All these equipment were used actively for work-related activities. Figure 10 illustrates the use of communication technology in terms of access/ownership and usage for work-related matters. Age of the respondent did not significantly affect the ownership and use of devices, with the exception of landline telephone. None of the under 40-year-olds had a landline telephone, whereas half of the over 60-year-olds had one – although not even the older respondents used the landline actively for work-related matters.

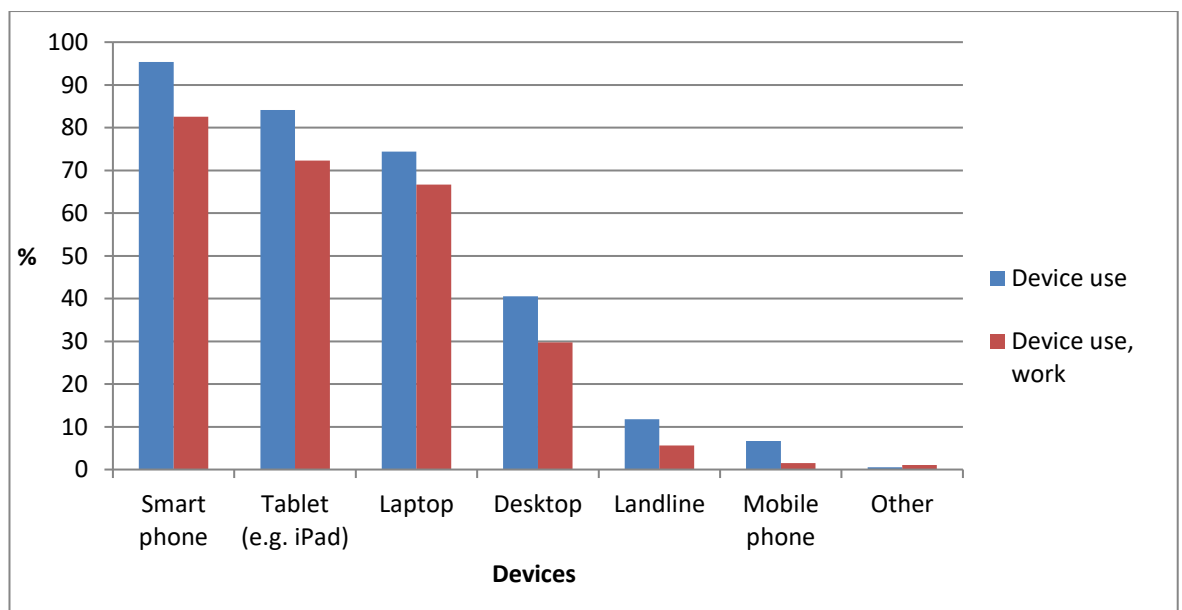


Figure 10. ICT device use, n=195

In total, less than 12% of the respondents had a landline telephone, and less than 7% had a mobile phone that did not qualify as a smart phone. Two respondents had access to a computer only at the crew centre. The crew centre is the only location where cabin crew has company-sponsored access to communication equipment (landline telephone, desktop computers).

Majority, 84%, of the respondents use the above-mentioned devices for work-related matters at home. Smartphone is used by 56% to access work-related information and applications anytime and anywhere. 53% use the devices at a hotel on layovers, during their resting time. Only one third uses the desktop computers at the airport crew centre as their primary access point. These results highlight the independence of cabin crew virtual work of the organisation's premises (see e.g. Vartiainen 2006, 16), as well as the importance of appropriate equipment, connectivity and well-functioning organisational support for mobile work. The need for cyber security in information management is an issue, too.

5.3 E-work and electronic communication

As discussed, cabin crew work includes a variety of tasks that require utilisation of electronic communication channels. Below, figure 11 gives an overview of how much time these virtual tasks require. On average, nearly two hours of e-work is carried out per week. Pursers, having the supervisory position, spend more time e-working and using formal communication channels than the CCMs. This is clearly illustrated in figure 11. The age group 60+ spends considerably more time e-working than those in group 30-39 years, but this is most likely explained by the fact that half of the respondents in the oldest group were pursers, compared with less than five per cent in the youngest group.

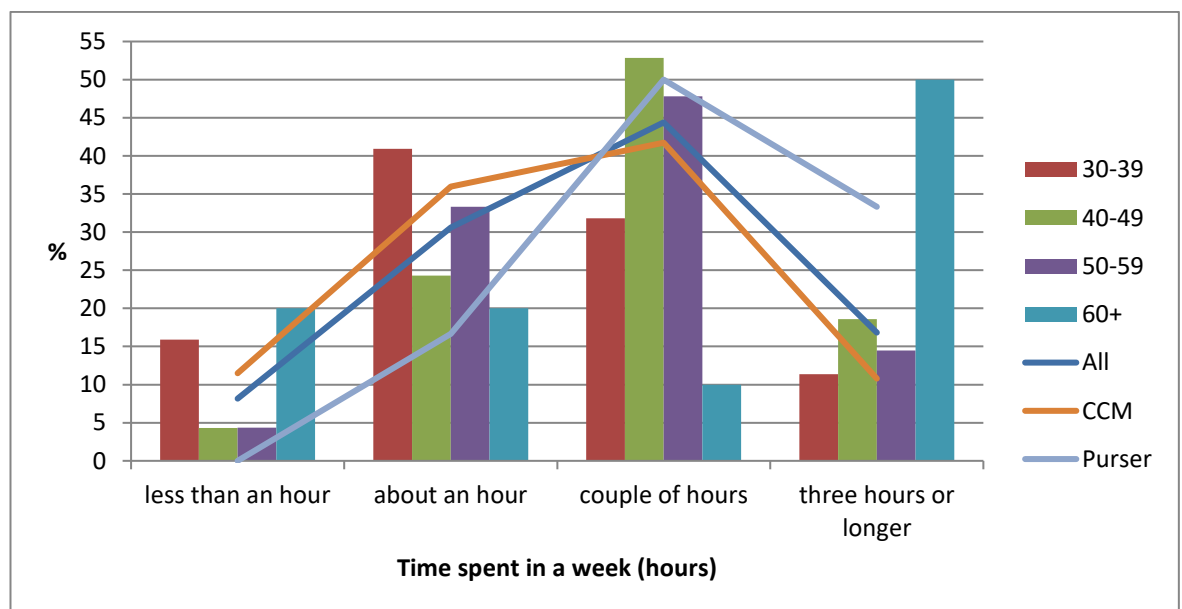


Figure 11. Time spent using formal information channels by age group and position, n=196

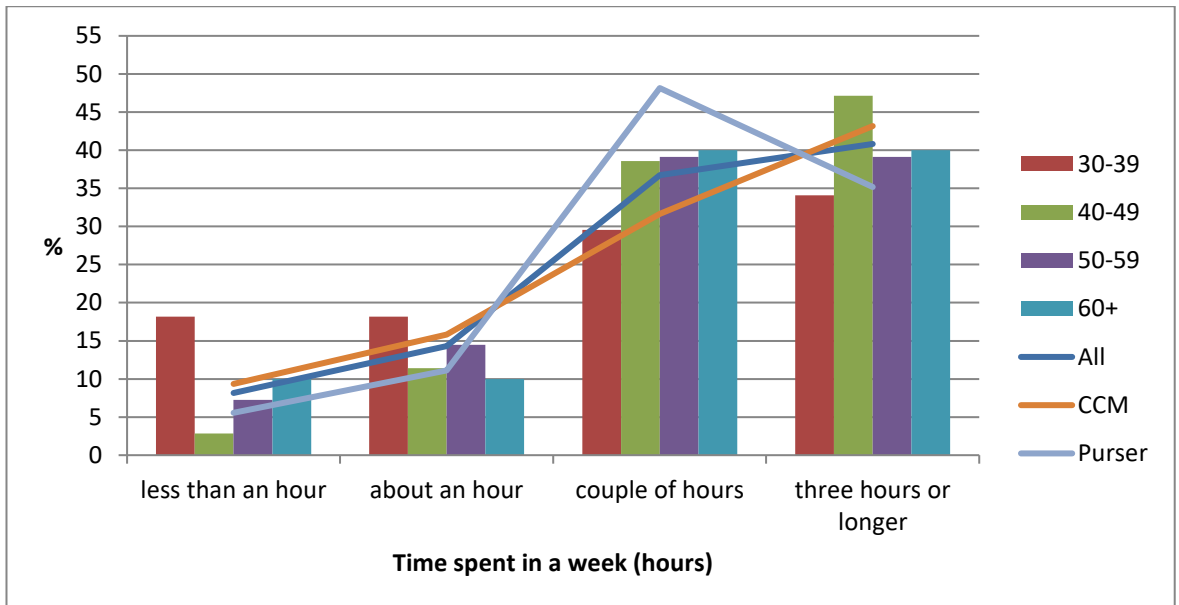


Figure 12. Time spent using informal information channels by age group and position, n=196

As we can see in figure 12, age is not a significant factor when determining the use of social media. Interestingly though, the youngest respondents seem to spend less time using informal channels than any other age group, on the contrary to common hypothesis (see Welch 2012, 248). As e.g. Coombs et al. (2016, 154) argue, career stage and thus different priorities and time pressures seem to have more impact on social media use than age. This claim is supported in this study, too – pursers spend less time using informal channels in the category “three hours or longer”. Figure 13 below summarises the discussion with an overview of all channels and age groups.

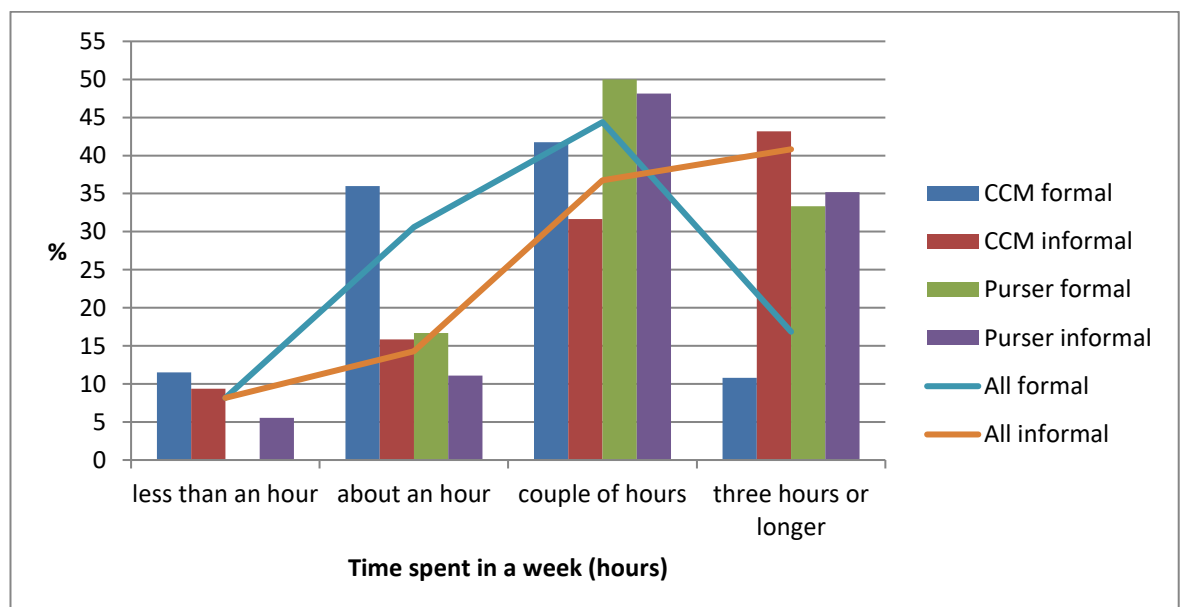


Figure 13. Time spent using formal and informal information channels by position, n=196

Table 3 illustrates the cabin crew perceptions of electronic channel functionality. The channels were assessed in terms of technical functionality and ease of use. Three major concerns were highlighted in the survey results:

- access to channels proved to be difficult with certain types of equipment
- below-satisfactory functionality of some channels
- the channels must be used on off-duty time.

The company email system was the most functional system. The new software version received both positive and negative feedback; the bigger inbox helps in receiving large files and holding more mail, but the software was difficult to use and did not work in mobile devices. The respondents also urged to simplify the login process, as username and password are requested more than once during login to the system.

Table 3. Functionality of formal electronic communication channels, n=196

Channel	Technical functionality (average, scale 1-5)
Company email	3.20
CIS	3.17
Yammer	3.08
Weekly bulletin / Personnel magazine	2.86
Manuals	2.80
Training portal	2.54
RRS	2.48
Intranet	2.35

The company intranet was the underperformer in this category with a below-satisfactory average of 2.35 (on a scale of 1 to 5, 1 being poor and 5 being excellent). 12 respondents also gave additional feedback regarding the functionality of the company intranet. The complaints ranged from slightly irritated “headings on homepage are misleading and uninformative” and “difficult to find information with basic search words” to full-blown frustration such as “intranet is disorganised and information is difficult to find, thus I no longer use the channel”. The major concerns were related to the organisation of information, the speed and ease of information retrieval, and technical failures such as the inoperative search function.

The most important channels in daily operations are CIS and RRS, whereas cabin manuals and the training portal are important in communicating safety requirements and service instructions. From the technical point of view, CIS performed satisfactorily, whereas RRS was perceived clumsy with a restricted space for feedback – the system times out after 20 minutes and allows only for 600 characters per report. Moreover, the

feedback has to be given on off-duty time, thus increasing the requirements for e-working; therefore, there were several calls for enabling the use of RRS on duty time, e.g. through the purser's tablet inflight. The training portal suffered from accessibility issues, as it was not compatible with all types of equipment. The manuals, in turn, were not up-to-date and performed barely satisfactorily despite of their importance.

Although the functionality of Yammer was rated satisfactory, it should be noted that it had a very high nonuser rate (43.3%). Still, the nonuser rate was significantly lower than expected - overall, there were approximately 440 (out of 1500) users of the cabin crew discussion board in Yammer as of January, 2015, thus making the total nonuser rate as high as 70 per cent. However, the use of Yammer was rising during the spring, reaching a little less than 600 users by mid-May, 2015 (user rate 40%, nonuser rate 60%).

These results indicate the need to develop systems and tools that better support the mobile workforce. As Andriessen and Vartiainen (2006, 6) argue, solving problems with information management is crucial despite of the possibly limited capability to invest in supportive technology. Device-dependent and connectivity-dependent problems are a difficult issue at The Airline; the employees acquire the equipment at own expense, for personal use. Thus, compliance with work requirements is not guaranteed. The lack of devices and technical training may influence the employees' skills and abilities related to information management (see e.g. Mäkinen 2012).

5.4 Information flow and the usefulness of channels

The perceptions of the usefulness of communication channels in distributing information are in the core of the effort to make the information flow within the organisation more effective. Accuracy of information, possession of required skills to access the channels, and supportive ICT systems are crucial components of effective information management and communication (Andriessen & Vartiainen 2006; Robbins et al. 2010, 307; Åkerström & Young 2016, 9-10). The assessment of information flow within the organisation includes the informal communication channels, as they are an integral part of communication in an organisation (see e.g. Robbins et al. 2010, 290). In table 4, the usefulness of both formal and informal communication channels in distributing information is assessed from the cabin crew perspective.

As expected, CIS was perceived as the most useful formal communication channel for cabin crew, with a good score of 4.05 out of 5. In this light, it seems rather worrisome that the second most important operational communication channel, RRS, was rated below

satisfactory. This indicates a problem in the upward movement of information. In closer inspection, the major issues affecting the usefulness of RRS as a feedback channel were:

- there is no knowledge if the report went through
- answers take a long time or never arrive
- reports have no impact
- reporting takes unreasonable amounts of time.

These factors significantly affected the willingness to provide feedback. The perception that feedback is pointless is a threat to effective communication and communication climate (see e.g. Robertson 2005; Robbins et al. 2010). It was felt that the provided feedback had no impact in planning, implementation and development of operations - only external pressure, e.g. from customers, gained results.

Table 4. Usefulness of formal and informal communication channels, n= 196

Formal channel	Usefulness (average, scale 1-5)	Informal channel	Usefulness (average, scale 1-5)
CIS	4.05	Colleagues	4.20
Company email	3.47	Facebook	3.87
Crew lobby fair	2.86	Other social media	2.95**
Yammer	2.86*	Customers	2.73
RRS	2.80	Other media	2.58***
Intranet	2.76	Other	n/a
Weekly bulletin / Personnel magazine	2.64		
Crew lobby mailbox	2.51		
Brush up day	2.36		
Crew lobby info screens	2.30		
Performance discussion	2.09		
Average	2.79	Average	3.27

*do not know 36.7% **do not know 29.7% ***do not know 24.9%

Cabin crew members received on average 22 emails per month (.73 emails per day) within the observation period December 2014 – February 2015. This included one-way communication only, i.e. the emails that everyone received without reciprocity. The use of email as a communication channel received a mixed review – there was either too much or too little communication through this channel. Several respondents complained that the emails received were too long and irrelevant to the receiver, or had poor semantics or negative intentions. It was agreed that email briefings should be used in communicating operational matters, such as changes to procedures. Email reached the employees better than the intranet, thus communicating changes in the intranet was not sufficient.

The intranet continued to receive criticism. As seen on tables 3 and 4, the functionality and usefulness of this channel were rated to be less than satisfactory. The disorganisation of information, slow and complicated information retrieval, and outdated or inaccurate information devalued the usefulness of the channel in distributing information. Distrust in information and poor user experiences generated frustration and led to avoidance of the channel. The social functions of the channel, although providing new opportunities for interaction, also require time and skills to use. The digitalisation process moves communication online, decreasing traditional print media (Heide 2016, 46). But, as discussed earlier, the channel does not serve very well those who do not have access to equipment and networks continuously. One respondent summarised: “Nowadays there is too much communication through the intranet. Email would have a better reach.”

The value of social networking channels – other than Facebook – for information flow was barely satisfactory. The value was further decreased by a high percentage of “do not know” answers, indicating either high nonuser rates or indifference of the channel for information flow. Yammer has moderate potential to serve as a corporate social media platform, but the high nonuser rate (43.3%) inhibits its effective use. As high adoption rates are critical for the success of corporate social networking channels (Leonardi et al. 2013; Heide 2016, 47), Yammer currently does not serve its purpose. One of the problems contributing to low adoption rate seems to be that Yammer is one more channel that needs to be followed on off-duty time. One respondent said: “Yammer is a tool that has good intentions, but – once again – requires spending own off-duty time for signing up and utilising”.

Nearly 71 per cent of the respondents found Facebook either good or excellent (39.5% and 31.3%, respectively) in distributing information. The informal Facebook discussion group for cabin crew has approximately 1150 members, making it the most popular social media channel in use. The strengths of the channel are speed, up-to-date information and real-time performance. Further, it provides connection with colleagues, who were seen as the most useful source of information. Thus, the channel serves as the informal advice, trust and communication network (see Krackhardt & Hanson 1993) for employees that are globally dispersed and rarely meet each other. These results highlight the need for social interaction in an informal setting, i.e. the cabin crew equivalent for water-coolers, photocopiers and coffee breaks. However, being informal, there is also a need for a similar formal advice channel that would provide real-time support and an easy way to give feedback. At the moment, informal channels are perceived to be more useful than formal channels in disseminating information within the organisation, with ratings of 3.27 and 2.79, respectively.

5.5 Interaction in the work community

Face-to-face communication is the most effective interactive form of communication that allows for instant feedback, prompt checking for understanding, and observing nonverbal communication (see e.g. Quirke 2008, 27; Cowan 2014, 27, 82). Formal face-to-face communication on ground is a rarity for cabin crew at The Airline. Face-to-face interaction on duty time, outside of an aircraft, was limited to the annual safety training, the brush up day, and the occasional (once a year or less) performance discussions. There had recently been changes in the composition - shortening and combining with annual safety training - of the brush up day, i.e. training day dedicated for current service-related and organisational issues, thus further reducing the formal face-to-face time. Off-duty face-to-face interaction was available at the crew lobby events and personnel events. None of these channels were rated highly in terms of information flow (see table 4).

Despite of the low ratings of the current face-to-face channels, the importance of face-to-face meetings came up in suggestions on improving information flow and interaction in the organisation. One suggestion was a meeting with pursers and supervisors from other departments, with a goal to improve cooperation and information flow between departments, streamline daily processes, and develop leadership skills. In general, interaction between departments within the organisation received a poor rating (see table 5). Face-to-face communication (such as meeting in the crew centre lobby) was also suggested as a solution for improving understanding between the communications department and cabin crew; some respondents felt that the communications department did not have enough knowledge of the job description and the industry, thus leading to factual errors in external communication and irrelevancy in internal communication.

Smith and Mounter (2008, 123-126) argue that internal and external communication and activities should be seamlessly aligned and consistent in order to build trust between employees and the employer. This has significant implications on corporate reputation and brand. Thus, the respondents called for professionalism in communication, and asking for expert advice in matters regarding flight operations. One respondent stated:

The communications department should do research on different jobs in the company so that unfortunate slips of the tongue are avoided /.../ so, get familiar with the facts before speaking out. External communication related to flying should consult crew members who KNOW the facts.

Additionally, unsatisfactory communication in times of organisational crisis (such as industrial action) reduced perceived trust towards the communication function.

The ratings for interaction in the work community ranged from poor to satisfactory. Dysfunctions were reported in both lateral and vertical information flows, with major concerns related to nature of communication within the organisation (openness, inclusiveness, interactivity and between departments) and feedback flows. The results indicate clearly that the respondents prefer informal channels over formal channels, with majority reporting that they receive information better through informal than formal channels (rating 4.08 out of 5). Table 5 summarises the results related to communication and interaction, and gives an overview of the communication climate at The Airline.

Table 5. Satisfaction to communication and interaction, n=194

	Satisfaction (average, scale 1-5)
Information	
Information is current	3.10
Information is correct	3.09
Information reaches me on time	3.08
Information is understandable	2.92
Information is relevant	2.87
Information is easily accessible	2.54
Communication	
Communication is open	2.10
Communication is inclusive	2.07
Communication is interactive	1.99
Communication between departments is adequate	1.80
Feedback	
My opinion is respected	2.08
Feedback I give matters	2.05
My opinion matters	1.94
I get information better through informal than formal channels	4.08

In the following, these issues are further examined. The perceived dysfunctions in communication and the proposed development actions are discussed, and the current state of communication is compared with cabin crew preferences.

5.6 Cabin crew perspectives on internal communication

It is not a surprise that communication is an important issue for cabin crew at The Airline. Vinnicombe (1984) has researched the importance of communication in cabin crew work, and concluded that communication, both upward and downward, is of key importance in the job. The most influential factors in communication were the communication climate, downward communication, relationship with superior, supervisory communication style, and the job position of the cabin crew member. These factors had a significant impact on cabin crew job satisfaction. The importance of communication was linked to the peculiar characteristics of cabin crew as a worker group; as Vinnicombe (1984, 7) summarised: “they are physically located away from the organisational place, they have little contact with their ground supervisors and there is no stability designed into the way they work together”.

Three decades later, the results of this study further highlight the importance of communication for the “alienated” (see chapter 3.4) mobile workers. The lack of face-to-face interaction and the feelings of detachedness are linked with troubles in organisational identification and engagement, as discussed before. Support systems are thus needed, not just in terms of equipment and applications for solving the problems with information management, but also in terms of for finding a meaningful balance of work and family life. In the following, the discussion covers the issues most crucial for communication at The Airline, as experienced by the cabin crew.

5.6.1 The current state of communication

To begin with, a review of the qualitative data collected for this study pinpoints the major concerns and dysfunctions in communication at The Airline. The concerns and the suggested improvements are compiled from the feedback given by 54 respondents at the end of the questionnaire (see attachment 1).

Firstly, the issues related to communication, i.e. openness, inclusiveness, interactivity and adequacy of information flows within the organisation, were:

Communication is dispersed, fragmented, overlapping. Poor communication between departments, department-thinking.

Centralisation of communication to professional communicators was proposed. Moreover, there should be more communication with less communicators, and thus less overlapping for streamlined communication. Department-thinking hinders interaction and leaves no room for creativity. Opinions are suppressed, and there is no common goal within the

organisation. Interorganisational knowledge of each other's work would be beneficial for information flow and interaction. Interaction and cooperation for example in a form of a meeting with marketing, sales, and customer services would increase knowledge of causal relationships and ultimately improve work processes and customer satisfaction. Encouraging creativity and sharing opinions would create a basis for refinement and development of issues together, in agreement.

Nobody seems to be responsible for any area of communication. Top-down attitude, hiding behind one-way channels.

Professionalism and accountability is needed in communication. Communication skills should be developed as current situation hinders interaction. Two-way communication is needed, and interaction should be encouraged. Social media could be used to increase interactivity, although the reachability of corporate social media is questionable (as discussed before). A face-to-face meeting with management at the crew lobby would allow real-time questions and instant feedback.

Employees are not in the loop, issues come up in media before they are communicated to employees, information may be received from customers. Communication is slow, late. Takes a long time for plans and decisions to be communicated. Takes too long to get questions answered.

Improvements on currency of communication and the speed of communicating are called for. Proactive approach is needed in communication as information should reach employees before customers. Slow communication of planning and decision-making slows down the whole process of implementing changes and implementing new procedures. Shorter time between communication and planning/implementation is needed.

Secondly, the issues related to information, i.e. currency, correctness, understandability, relevance and accessibility, were:

Information overload. Channel roles are unclear. Information is not relevant for the receiver. Communicators do not understand mobility, the job, regulations or industry.

Overlapping and possibly conflicting information is received from too many channels, so that it is hard to know which channel to listen to and trust – as a result, not all received messages are read. Clear channel roles are needed, and the formal channels should reach everyone. Channels that are meant to be informal, such as Yammer, should not be used as the only channel to communicate important information. Further, understanding the receiver is the key to successful internal communication. One respondent suggests a

face-to-face meeting with communicators in the crew centre lobby as a way of building understanding.

Information is conflicting, disorganised, outdated, contains factual errors. Lack of trust in information. Semantics, poor language, use of abbreviations. Information is not understandable or clear.

Outdated and incorrect information in the formal channels causes irritation, frustration and distrust in information. Especially the intranet and the manuals should be updated. Understandability of messages is compromised due to use of unfamiliar terms and abbreviations. Changes or misunderstandings in semantics, and using familiar concepts in a dissimilar manner lead to confusion. Poor language and spelling errors in messages give an impression that the sender was in a hurry and put only little effort in composing the message, thus reducing message importance and effectiveness and leading to not listening.

Information retrieval is slow, searching for information takes too long. Access to communication channels while on duty is not possible. Information disappears, cannot be retrieved after e.g. a long leave.

Simplification of information retrieval processes and communication channels is needed so that information can be easily found - there were reports that if necessary and task-related information was not found even after a long search, all other information was ignored too due to frustration. Communication processes and channels should be made known for the employee so that it is clear what channels to use and how. Moreover, the channels have to be accessed on off-duty time; therefore, on duty access to channels is needed. Easy accessibility and equal distribution of information should be priorities.

Thirdly, the issues related to feedback, i.e. upward flow and management receptiveness, and organisational support were:

Lack of respect for the receiver, poor tone of communication. Corrective and constructive feedback is seen as an attack or resistance to change. Imaginary explanations are given to mistakes, no accountability. Leading with fear.

Focusing on improving the communication culture would be more effective than investing resources on investigating and punishing about petty or unnecessary issues. Honest communication of mistakes is a must. Appreciation of professional opinions is called for; employees' expertise should be trusted and utilised by the management. This requires concrete actions, "not just pretty words", as put by one of the respondents.

Feedback is not listened and/or has no impact, and does not reach right receivers. Feedback is difficult to give, and has to be given on off-duty time. Employee voice is not heard.

Feedback should be easy to give. On duty access to feedback channels should be established, e.g. RRS through purser's tablet. Answers should be provided to reports in due time if requested. If the report is referred forward, the end result should be communicated to the original reporter, i.e. the case should be closed. Feedback should be listened in planning and decision-making, and in assessment of functionality of procedures. Feedback given through RRS should benefit the whole organisation.

Supervisors are hard to reach, communication with them is slow, there is no backup. Management plans and decisions impacting personnel are not communicated.

Supervisors and management should be proactive in communication and direction. Especially HR issues should be communicated in an active, not a reactive manner, as communication on duty rosters, vacations, leaves and layoffs have a significant impact on personal life. There should be communication even if there is nothing new going on. A management briefing on current issues was called for, as well as leadership development at all management levels.

The results above illustrate the employee perceptions of the communication climate at The Airline, in terms of perceived quality of communication, quality of information, and quality of organisational support. As discussed before, the perceptions of organisational support and the level of genuine interest in well-being and working life quality have an impact on employee satisfaction and identification with the organisation. Leadership development is important, as the commitment of management to communication is a prerequisite for an effective communication climate (see Andriessen & Vartiainen 2006, 4-5; Juholin 2009, 52; Ruck & Welch 2012, 296). Further, as discussed in chapter 3, Robertson (2005) stresses the importance of good communication skills of the managers in creating trust and enforcing a supportive climate.

5.6.2 The preferred state of communication

Internal communication should be more about the need to know rather than the need to tell, and therefore should have understanding of the employee needs and skills in communication (Welch & Jackson 2007, 187). The empirical data collected for this study suggests that there may be some discrepancy between the communication needs and skills of the cabin crew and the communication goals of the management. Cabin crew is expected to follow the organisation's electronic communication channels actively. An

informal discussion with one of the inflight supervisors revealed that although there has been no training related to using electronic communication channels, everyone “should be able to use them in these modern times”. This may hold true, but the reality may differ. Although cabin crew can be argued to have the qualities of a digital natural collectively, it should be remembered that the qualities may still differ significantly individually in terms of access to platforms and willingness to participate (see Åkerström & Young 2016, 10).

Moreover, the selection of communication channels should follow the preferences of the intended receivers, in order to maximise the effectiveness of the message and thus the success of communication. The point in sending a message is to achieve understanding and the sender’s intended effect (Welch 2012, 248). In the following, the cabin crew preferences for communication channels are examined in detail. Table 6 summarises the formal communication channels in order of cabin crew preference, and suggests development actions for better meeting the employee needs in internal communication.

Table 6. Cabin crew preferences for channel (descending order) and development needs

Communication channel	Development actions needed
CIS	Restructuring, currency and accuracy of information, separate reports for PU/CCM, additional communication of major changes via other channels
Email	Accessibility, simplifying login process, thinking about the receiver
RRS	Delivery receipt for sender, providing answers to reports and closing cases, updating the system, making available inflight (purser’s tablet)
Intranet	Reorganisation, simplification, usability and functionality, fix search function, accessibility, currency and accuracy of information
Weekly bulletin, personnel magazine	Employee perspective, semantics
Face-to-face	Improvement of PD, group discussions, reinstatement of brush up days, leadership forum
Yammer	Increasing participation, allocating responsibilities/accountability, providing answers, keeping it informal

The results emphasise the need for accessing the formal communication channels with all types of equipment, thus indicating the need for development of the software and connections for improved functionality. The need to access and use the communication channels during duty time came up several times in the results, emphasising the need to clarify the divide between work and personal life. Moreover, the accuracy of information, speed of communication, and simplification of communication procedures were the elements that came up as urgent development topics.

Unclear communication channel roles were also a major contributor to dissatisfaction in communication. The need for a 24/7 channel was emphasised, as the mobility of the work and travelling across time zones hindered communication with those working regular office hours, including the supervisors. The information was better retrieved through informal channels that formed virtual and mental/social spaces for sharing common experiences, ideas and ideals (Vartiainen 2006, 16).

The literature related to effective communication and effectively communicating organisation was reviewed in chapter 3.2. The cabin crew preferences for ideal communication and an ideally communicating organisation are listed below, in decreasing order, based on number of occurrence in the open feedback section.

Ideal communication is

open, honest, clear, respectful, direct, quick, concrete, current, relevant, easily accessible, equally distributed, accountable, responsible, concise, proactive, open to feedback, interactive, understandable, trustworthy, ethical, transparent.

Ideal organisation

listens, values feedback, thinks about the receiver, understands the receiver, appreciates professionalism, keeps employees in the loop, understands mobility, has free information flow within the organisation, has cooperation between departments, is interactive.

These needs and ideals reflect the ideals found in previous research on internal communication. These ideals are prevalent among all organisations, not just in those with a totally mobile workforce such as the cabin crew at The Airline. Clearly, there is a strong consensus on the qualities of an effective organisational communication climate.

6 Conclusions

It is safe to conclude that cabin crew work is a peculiar form of mobile work. It has unique characteristics, making it a form of totally mobile distributed work with carrier workers that join in a knot to work in a particular place at a particular time while changing locations.

The cabin crew work shift, “pairing”, starts with signing in to duty at the home base crew centre, where crew members prepare for duty individually, before gathering to a pre-flight briefing with other cabin crew members assigned for the forthcoming flight. The body of the work is carried onboard an aircraft, while moving from one location to another. The pairing ends when the crew members return to home base - a few hours or a few days after signing in to duty - and complete all post-flight tasks such as accounting. Between the pairings cabin crew members e.g. attend annual safety training and have annual performance discussions with supervisors.

But cabin crew members also spend significant amounts of off-duty time following the company’s communication channels, e.g. read emails, browse instructions, receive training through the electronic training portal, review manuals, and participate in discussions through the corporate social media platforms. As discussed in this study, cabin crew members at The Airline spend nearly two hours of off-duty time per week e-working through the formal communication channels, totalling approximately 100 hours of virtual e-work per year. Additionally, many choose to spend at least the equivalent time in work-related interaction through informal channels, e.g. a discussion group in Facebook. All this virtual e-work and social networking is carried out with the help of modern equipment – smartphones, tablet computers and laptops – at home and on the move, anytime and anywhere, except on duty.

This brings us to one of the main challenges in internal communication at The Airline: functionality and accessibility of communication channels. The results of this study helped to identify three problems in functionality and accessibility of communication channels: accessibility with certain types of equipment, functionality of some channels, and accessibility on off-duty time only. As the employees acquire the equipment for their personal use, they might not be compliant with the organisation’s systems. Some systems, such as the intranet, suffer from below-satisfactory performance and user experience. And, as there is no way to access the electronic channels, such as RRS, on duty time, e-working on unpaid off-duty time is necessitated.

These issues are related to the digitalisation process in the organisation. Many of the former analogue channels have been digitalised. The focus on the process seems to have

been on individual channels and software only, leading to mixed quality and usability of electronic channels. Moreover, training has been forgotten in the process, making the barriers for effortless usage high and leaving some non-frequent users behind. It should be remembered that there were respondents that did not own a smartphone and had crew centre as the only access point to electronic channels. Therefore, the individuals who do not have the means or skills to access communication channels through their own equipment should not be forgotten in internal communication, although constituting a very small proportion of the population. The measures suggested in literature include e.g. placing intranet content on screens in the crew centre, as well as targeting the mobile workers with special newsletters.

In addition to functionality and accessibility of communication channels, the areas in internal communication that urgently need improvement are:

- organisation of information and communication channel roles
- feedback receptiveness and responsiveness
- interaction within the organisation and information flow between departments
- speed and proactivity of communication
- understanding the receiver.

From the Crew Resource Management perspective, the most worrying dysfunctions reported were related to information sharing practices. The reports indicating communication and information overload (“I feel like I cannot read all bulletins”, “we have become numb to management emails so many delete them without reading”), poor user experiences (“reduced the usage of the channel”, “stopped using the channel”), inaccuracy of information and poor understandability of communication (“repeatedly found inaccurate information from intranet and manuals”, “cannot understand a single thing”) should trigger a warning, as these are serious dysfunctions, and every measure should be taken to avoid allowing dysfunctional practices to take root. Ignorance of messages and ambiguous information may evolve into safety threats, if important operational information is not received or understood, and mixed procedures develop as a result of inadequate information or faulty interpretations.

Although there is a lot to be done, positive steps towards fulfilling the needs of the employees in internal communication have been taken lately. Yammer was seen as a good platform for increasing interaction within the organisation, although the low adoption rate hindered the optimal use. A further development of an official 24/7 support channel is needed, as an informal corporate social media application alone cannot fulfil the needs of the mobile workforce. Developing the channels according to the needs of the cabin crew

is crucial. In other words, the importance, relevance and urgency of the information to the cabin crew should be assessed, and the appropriate channel should be selected.

Why is this employee-centric approach so important? Naturally, the use of lean media is perfectly fine if it fulfils the receiver's need for information and achieves the sender's intended effect. But richness of media and communication is needed in more complex matters. The emphasis should be on content instead of volume; quality instead of quantity; dialogue, interaction and communities instead of one-way, channel-oriented communication. Internal communication is difficult as it needs to balance control, coordination and cooperation. Cornelissen (2011, 163-164) has summarised that top-down command frustrates individual needs for autonomy, creativity, and sociability, but no control leads to loss of coordination of activities and ultimately failure: "hence, organisations must find ways to meet their employees' individual needs and stimulate their creativity while persuading them to act in ways that meet the organisation's overall objectives".

Understanding the employee needs has far-reaching benefits. Reducing uncertainty is one of them; several researchers agreed that uncertainty, caused by any type of dysfunction or barrier to communication, is a significant negative outcome of ineffective internal communication. The operating environment of The Airline is dynamic and turbulent, bringing uncertainty and change. Restructuring and other major organisational changes create uncertainty. Further, the work environment and communication have changed dramatically since the introduction of ICTs. Constant change and learning new things (such as IT skills) can be demanding and exhausting. In short, uncertainty from the employee perspective has an impact on job satisfaction, identification with the organisation, and engagement. Uncertainty from the organisation's perspective has an impact on ability to achieve goals, develop competitive advantage, and capability to adapt to market demands. From The Airline's perspective, the most important impacts are on safety, productivity and service quality.

Interaction and individual responsibility in internal communication enhance the sense of community and openness, things that are crucial for future organisations. Community is both built upon and strengthened by communication, thus making communication know-how as crucial as good professional skills in organisations. Information should not be flowing only outside-in or top-down – instead, information should be generated and communicated together. This idea is based on social constructivism – the reality is a construction of meanings that are built upon and shared by social interaction. Sharing and

collective learning are the cornerstones of professionalism, leading to improved quality and results. (See e.g. Juholin 2009, 12-13, 24-25).

A long list of attributes that describe the preferred state of communication came up in this study. Effective communication, an effectively communicating organisation, and an effective communication climate were all defined by the cabin crew. These attributes create understanding of the development needs in internal communication and reduce the “alienation” of cabin crew. Despite of not having prompt access to a computer, the cabin crew members have managed to create their own informal discursive place for fulfilling the need for advice, support and communication. This highlights the need to understand the mobile lifestyle of this unique mobile worker group. Understanding these needs and tapping into this discursive activity, great benefits for the organisation could be achieved.

This study assessed the issues in internal communication at The Airline, aiming at mapping out and improving the current state of internal communication at the Inflight Customer Service department. The study explored the mobile workers’ preferences for channel and content, thus providing insights into the perceptions of the current state and the ideal future state of internal communication. The survey gathered data on communication technology, communication channels, information flow, and interaction in the work community, thus contributing new data to the underexplored area in mobile work and communication research. The results serve as a starting point for developing internal communication towards fulfilling various employee needs in communication rather than just fulfilling the need to tell.

References

- Amné, G. & Rydén, O. 2001. Arbetsituation och stresshantering hos kabinpersonal. VINNOVA rapport VR 2001:4. Stockholm: VINNOVA – Verket för Innovationssystem.
- Andriessen, E. & Vartiainen, M. 2006. Emerging mobile virtual work. In Andriessen, J.H.E. & Vartiainen, M. (eds.) 2006. *Mobile virtual work – a new paradigm?* Berlin: Springer.
- Blundel, R. 2004. *Effective organisational communication*. 2nd edition. Harlow: Prentice Hall/Pearson Education Ltd.
- Champoux, J.E. 2011. *Organizational behavior: Integrating individuals, groups and organizations*, 4th edition. New York: Routledge.
- Chasteauneuf, C. 2010. Questionnaires. In Mills, A.J., Durepos, G., & Wiebe, E. 2010. *Encyclopedia of case study research*. Thousand Oaks: Sage Publications, Inc, pp. 769-771.
- Chong, M. 2007. The role of internal communication and training in infusing corporate values and delivering brand promise: Singapore Airlines' experience. *Corporate Reputation Review* 2007, 10, 3, pp. 201–212.
- 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.
- Coldwell, D & Herbst, F.J. 2004. *Business Research*. Cape Town: Juta and Co Ltd.
- Coombs, T.W., Falkheimer, J., Heide, M. & Young, P. (eds.) 2016. *Strategic communication, social media and democracy*. London: Routledge.
- Cornelissen, J. 2011. *Corporate communication: A guide to theory and practice*, 3rd edition. London: Sage Publications Ltd.
- Council Directive 2000/79/EC. Council Directive 2000/79/EC of 27 November 2000 concerning the European Agreement on the Organisation of Working Time of Mobile Workers in Civil Aviation. *Official Journal L* 302, 1 December 2000, pp. 57–60.

Cowan, D. 2014. Strategic internal communication: how to build employee engagement and performance. London: Kogan Page Ltd.

Dul, J. & Hak, T. 2008. Case study methodology in business research. Burlington: Butterworth-Heinemann/Elsevier.

Eisenhardt, K.M. 1989. Building theories from case study research. *The Academy of Management Review*, 14, 4 (Oct 1989), pp. 532-550.

Felstead, A., Jewson, N., Phizacklea, A. & Walters, S. 2002. The option to work at home: another privilege for the favoured few? *New Technology, Work and Employment*, 17, 3, pp. 204–223.

Flyvbjerg, B. 2006. Five misunderstandings about case study research. *Qualitative Inquiry*, 12, 2, pp. 219-245.

Gareis, K., Lilischkis, S. & Mentrup, A. 2006. Mapping the mobile eWorkforce in Europe. In Andriessen, J.H.E. & Vartiainen, M. (eds.) 2006. *Mobile virtual work – a new paradigm?* Berlin: Springer.

Heide, M. 2016. Social intranets and internal communication: dreaming of democracy in organisations. In Coombs, T.W., Falkheimer, J., Heide, M. & Young, P. (eds.) 2016. *Strategic communication, social media and democracy*. London: Routledge, pp. 45-53.

Helmreich, R.L. & Foushee, H.C. 2010. Why CRM? Empirical and theoretical bases of human factors training. In Kanki, B.G., Helmreich, R.L. & Anca, J. (eds.) 2010. *Crew resource management*. 2nd edition. San Diego: Academic Press/Elsevier.

Häikiö, L. & Niemenmaa, V. 2007. In Laine, M., Bamberg, J. & Jokinen, P. (eds.) 2007. *Tapautuskimuksen taito*. Helsinki: Gaudeamus Helsinki University Press.

International Air Transport Association (IATA) 2015. Cabin operations safety: best practices guide 2015. URL: <http://www.iata.org/publications/Documents/cabin-operations-safety-bp-guide-2015.pdf>. Accessed: 14 November 2016.

- Jern, S. 1998. Den välfungerande arbetsgruppen. En genomgång av forskning och praktikererfarenheter. In FOG 1998. Grupper och gruppforskning. FOG samlingsvolym 1. URL: <http://www.ida.liu.se/~TTIT03/info/FOG-samlingsvolym1.pdf>. Accessed: 13 October 2013.
- Jokivuori, P. & Hietala, R. 2007. Määrällisiä tarinoita – monimuuttujamenetelmien käyttö ja tulkinta. Helsinki: WSOY Oppimateriaalit Oy.
- Juholin, E. 2009. Viestinnän vallankumous - Löydä uusi työyhteisöviestintä. Helsinki: WSOYpro.
- Kanki, B.G. & Palmer, M.T. 1993. Communication and CRM. In Wiener, E.L., Kanki, B.G. & Helmreich, R.L. (eds.) 1993. Cockpit resource management. San Diego: Academic Press/Gulf Professional Publishing.
- Kanki, B.G. 2010. Communication and crew resource management. In Kanki, B.G., Helmreich, R.L. & Anca, J. (eds.) 2010. Crew resource management. 2nd edition. San Diego: Academic Press/Elsevier.
- Kietzmann, J., Plangger, K., Eaton, B., Heilgenberg, K., Pitt, L. & Berthon, P. 2013. Mobility at work: A typology of mobile communities of practice and contextual ambidexterity. *The Journal of Strategic Information Systems*, 22, 4 (December 2013), pp. 282-297.
- Korzilius, H. 2010. Quantitative analysis in case study. In Mills, A.J., Durepos, G., & Wiebe, E. 2010. *Encyclopedia of case study research*. Thousand Oaks: Sage Publications, Inc, pp. 761-765.
- Krackhardt, D. & Hanson, J. 1993. Informal networks: The company behind the chart. *Harvard Business Review*, 71, 4, pp. 104-111.
- Kristoffersen, S. & Ljungberg, F. 1999. Mobile use of IT. In Käkölä, T.K. (Ed.) 1999. *Proceedings of the 22nd Information Systems Research Seminar in Scandinavia, Vol. 2*, Department of Computer Science and Information Systems, University of Jyväskylä, pp. 271–284.

- Laine, M., Bamberg, J. & Jokinen, P. 2007. Tapaustutkimuksen käytäntö ja teoria. In Laine, M., Bamberg, J. & Jokinen, P. (eds.) 2007. Tapaustutkimuksen taito. Helsinki: Gaudeamus Helsinki University Press.
- Lamming, M., Eldridge, M., Flynn, M., Jones, C. & Pendlebury, D. 2000. Satchel: providing access to any document, anytime, anywhere. *ACM Transactions on Computer-Human Interaction*, 7, 3, pp. 322-352.
- Leino, H. 2007. Yleinen ongelma, yksi tapaus. In Laine, M., Bamberg, J. & Jokinen, P. (eds.) 2007. Tapaustutkimuksen taito. Helsinki: Gaudeamus Helsinki University Press.
- Lenth, R.V. 2001. Some practical guidelines for effective sample size determination. *The American Statistician*, 55, 3, pp. 187-193.
- Leonardi, P.M., Huysman, M. & Steinfield, C. 2013. Enterprise social media: definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-mediated Communication*, 19, 1 (Oct 2013), pp. 1-19.
- Lilischkis, S. 2003. More yo-yos, pendulums and nomads: trends of mobile and multi-location work in the information society. STAR issue report n. 36. Milano: Databank/Empirica.
- Lwanga, S.K. & Lemeshow, S. 1991. Sample size determination in health studies: a practical manual. Geneva: World Health Organization.
- Mäkinen, S. 2012. Mobile work and its challenges to personal and collective information management. *Information Research* Sep2012, 17, 3.
- Ojala, S. 2009. Työ hajautuu – missä käsitteiden rajat? *Työelämän tutkimus – Arbetslivsforskning* 2/2009, 7, 2, pp. 92-104.
- Quirke, B. 2008. Making the connections. Using internal communication to turn strategy into action. Hampshire: Gowan Publishing Limited.
- Robbins, S.P., Judge, T.A. & Campbell, T.T. 2010. Organizational behaviour. Harlow: Pearson Education Ltd.

- Robertson, E. 2005. Placing leaders at the heart of organizational communication. *Strategic Communication Management*, 9, 5, pp. 34-37.
- Ruck, K. & Welch, M. 2012. Valuing internal communication: management and employee perspectives. *Public Relations Review*, 38, 2, pp. 294-302.
- Schaffers, H., Prinz, W. & Slagter, R. 2005. Mobile and location-aware workplaces and global value networks: a strategic roadmap. In Camarinha-Matos, L.M., Afsarmanesh, H. & Ortiz, A. (eds.) 2005. *Collaborative Networks and Their Breeding Environments*. New York: Springer Science+Business Media, Inc., pp. 425-436.
- Silberstein, D. & Dietrich, R. 2003. Cockpit communication under high cognitive workload. In Dietrich, R. & von Meltzer, T. (eds.) 2003. *Communication in high risk environments*. Hamburg: Helmut Buske Verlag GmbH, pp. 9-56.
- Smith, L. & Mounter, P. 2005. *Effective internal communication*. London: Kogan Page Ltd.
- Smith, L. & Mounter, P. 2008. *Effective internal communication*, 2nd edition. London: Kogan Page Publishers.
- Stake, R.E. 1995. *The art of case study research*. Thousand Oaks: Sage Publications, Inc.
- Stoleroff, A. & Correia, T. 2009. The place of health, safety and work conditions in the demand priorities of workers: the case of airline cabin crews. In Morin, E., Neves, J., Ramalho, N. & Savoie, A. 2009. *New research trends in organizational effectiveness, health, and work: A Criteos scientific and professional account*. Montreal: Criteos/HEC-Montreal.
- SurveyMonkey 2015. Sample size calculator. URL: <https://www.surveymonkey.com/mp/sample-size-calculator/>. Accessed: 7 June 2015.
- Toffler, A. 1980. *The third wave*. New York: Bantam Books.
- Työturvallisuuskeskus 2014. Mobiilin työn hyvinvointikartoitus. URL: http://ttk.fi/files/3692/Mobiilin_tyon_hyvinvointikartoitus_tallennettava.pdf. Accessed: 10 November 2016.

van Beek, A., Wagner, C., Spreeuwenberg, P., Frijters, D., Ribbe, M. & Groenewegen, P. 2011. Communication, advice exchange and job satisfaction of nursing staff: a social network analyses of 35 long-term care units. *BMC Health Services Research* 2011, 11, 140. URL: <http://www.biomedcentral.com/1472-6963/11/140>. Accessed: 14 November 2016.

Vartiainen, M. 2005. Mobiili työ ja organisaatio. In Vartiainen, M., Lönnblad, J., Balk, A. & Jalonen, K. 2005. Mobiilin työn haasteet. *Työpoliittinen tutkimus* 269. Helsinki: Työministeriö.

Vartiainen, M. 2006. Mobile virtual work – Concepts, outcomes and challenges. In Andriessen, J.H.E. & Vartiainen, M. (eds.) 2006. *Mobile virtual work – a new paradigm?* Berlin: Springer.

Vartiainen, M. 2007. Distributed and mobile workplaces. In Vartiainen et al. 2007. *Distributed and mobile work: places, people and technology*. Tampere: Tammer-Paino Oy.

Vartiainen, M. 2012. Etätö johtamisen ja esimiestyön kannalta. Etätö valtiolla -seminar 18 September 2012. URL: http://www.valtiotyönantaja.fi/lehti/fi/vinkkari/3_2012_etatyoeokra_paivitetty_1_2013/vartiainen.pdf. Accessed: 3 November 2013.

Vinnicombe, S. 1984. Communications and Job Satisfaction: — A Case Study of an Airline's Cabin Crew Members. *Leadership & Organization Development Journal*, 5, 1, pp. 2-7.

Welch, M. & Jackson, P.R. 2007. Rethinking internal communication: a stakeholder approach. *Corporate Communications: An International Journal*, 12, 2, pp. 177-198.

Welch, M. 2012. Appropriateness and acceptability: Employee perspectives of internal communication. *Public Relations Review*, 38, pp. 246-254.

Wenger, E., White, N., Smith, J.D. & Rowe, K. 2005. Technology for communities.

CEFRIO Book Chapter. URL:

http://technologyforcommunities.com/CEFRIO_Book_Chapter_v_5.2.pdf. Accessed: 6 November 2013.

Wiberg, M. & Ljungberg, F. 2001. Exploring the vision of “anytime, anywhere” in the context of mobile work. In Malhotra, Y. (ed.) 2001. Knowledge management and business model innovation. Hershey: Idea Group Publishing, pp. 153-165.

Wiberg, M. 2005. Anytime, anywhere in the context of mobile work. In Khosrow-Pour, M. (ed.) 2005. Encyclopedia of Information Science and Technology IV, 1st edition. Hershey: IGI Global, pp. 131-134.

Wiesenfeld, B.M., Raghuram, S. & Garud, R. 1998. Communication patterns as determinants of organizational identification in a virtual organization. *Journal of Computer-Mediated Communication*, 3, 4.

Yin, R.K. 2012. *Case study research: design and methods*. Thousand Oaks: SAGE Publications, Inc.

Åkerström, M. & Young, P. 2016. Meet the digital naturals. In Coombs, W.T., Falkheimer, J., Heide, J. & Young, P. (eds.) 2016. *Strategic communication, social media and democracy: the challenge of the digital naturals*. London: Routledge.

Appendices

Appendix 1. Questionnaires (Finnish and English)

INTENTIONALLY LEFT BLANK

LIIKKUVA TYÖ JA YRITYKSEN SISÄINEN VIESTINTÄ

Hei! Tällä kyselyllä kartoitetaan liikkuvan työn (matkustamohenkilökunta) ja yrityksen () sisäisen viestinnän yhteensovittamista. Tutkimus on osa opinnäytetyötä Haaga-Helia ammattikorkeakoulussa. Kyselyyn vastataan nimettömänä, ja vastaaminen vie vain n. 5 minuuttia. Kiitos jo etukäteen vastauksistasi!
Petra Lempiäinen, postilokero 2611, petra.lempiainen@ .com

TAUSTATIEDOT

1. Ikä

- alle 30 vuotta
- 30-39
- 40-49
- 50-59
- 60 vuotta tai yli

2. Sukupuoli

- Nainen
- Mies

3. Työtehtävä

- Cabin Crew Member
 - Purseri
 - Muu, mikä (esim. IFS)
-

4. Ylin koulutus

- Ammatillinen koulutus/ylioppilas
 - Opistotutkinto (esim. yo-merkonomi)
 - Korkeakoulututkinto
 - Muu, mikä
-

VIESTINTÄTEKNOLOGIA

5. Mitä viestintälaitteita on käytössäsi?

- Lankapuhelin
- Matkapuhelin, perusmalli (vain puhelu- ja tekstiviestitoiminnot)
- Älypuhelin
- Tabletti (esim. iPad)
- Kannettava tietokone
- Pöytäkone
- Muu, mikä _____

6. Mitä laitteita käytät TYÖASIOIHIN liittyen?

- Lankapuhelin
- Matkapuhelin, perusmalli (vain puhelu- ja tekstiviestitoiminnot)
- Älypuhelin
- Tabletti (esim. iPad)
- Kannettava tietokone
- Pöytäkone
- Muu, mikä _____

7. Missä pääasiassa käytät edellä mainittuja laitteita TYÖASIOIHIN liittyen?

- Koti
- TOKE
- Hotellit
- Mobiililaitteella milloin vain
- Muu, mikä _____

SÄHKÖISET VIESTINTÄKANAVAT

8. Ovatko yhtiön tietotekniset viestintäkanavat mielestäsi TEKNISESTI toimivia ja helppokäyttöisiä?

	en käytä	ei ollenkaan			tydyttävä	erinomainen
CIS	0	1	2	3	4	5
RRJ	0	1	2	3	4	5
Intranet	0	1	2	3	4	5
Yhtiön sähköposti	0	1	2	3	4	5
Viikkotiedote/Okay	0	1	2	3	4	5
Yammer	0	1	2	3	4	5
Manuaalit CSM, OM-A, TYK, Lookbook	0	1	2	3	4	5
Training portal	0	1	2	3	4	5

9. Kuinka paljon sinulla kuluu keskimäärin aikaa VIKOSSA yhtiön virallisten tietoteknisten sovellusten käyttöön? (CIS, RRJ, intranet, yhtiön sähköposti, tiedotteet, Yammer, manuaalit, training portal)

- alle tunti
- tunnin verran
- pari tuntia
- kolme tuntia tai kauemmin

10. Kuinka paljon sinulla kuluu keskimäärin aikaa VIKOSSA epävirallisten tietoteknisten sovellusten käyttöön TYÖASIOIHIN liittyen? (Facebook, muu sosiaalinen media, muu (digi)media)

- alle tunti
- tunnin verran
- pari tuntia
- kolme tuntia tai kauemmin

VIESTINTÄKANAVAT JA TIEDONKULKU

11. Kuinka hyödylliseksi koet eri viestintäkanavat työsi ja työyhteisösi tiedonkulun kannalta?

	en osaa sanoa	ei ollenkaan	tydyttävä	erinomainen		
CIS	0	1	2	3	4	5
RRJ	0	1	2	3	4	5
Intranet	0	1	2	3	4	5
Yhtiön sähköposti	0	1	2	3	4	5
Viikkotiedote/Okay	0	1	2	3	4	5
Yammer	0	1	2	3	4	5
TOKEN postilokero	0	1	2	3	4	5
Esimieskeskustelu	0	1	2	3	4	5
Brush up -päivä	0	1	2	3	4	5
Aulamessut	0	1	2	3	4	5
TOKEN info screenit	0	1	2	3	4	5
Facebook	0	1	2	3	4	5
Muu sosiaalinen media	0	1	2	3	4	5
Kollegat	0	1	2	3	4	5
Asiakkaat	0	1	2	3	4	5
Muu media	0	1	2	3	4	5
Muu, mikä _____	0	1	2	3	4	5

TIEDONKULKU, VUOROVAIKUTUS JA TYÖYHTEISÖ

12. Kuinka työhösi ja työyhteisösi liittyvä tiedonkulku ja vuorovaikutus toimivat?

	ei ollenkaan	tydyttävä	erinomainen		
Tieto saavuttaa minut ajoissa	1	2	3	4	5
Tieto on ajankohtaista	1	2	3	4	5
Tieto on oikeaa	1	2	3	4	5
Tieto on ymmärrettävää	1	2	3	4	5
Tieto on relevanttia	1	2	3	4	5
Tieto on helposti saatavilla	1	2	3	4	5
Tiedonkulku on avointa	1	2	3	4	5
Tiedonkulku yhtiön eri osastojen välillä on riittävää	1	2	3	4	5
Tiedonkulku on vuorovaikutteista	1	2	3	4	5
Tiedonkulku on osallistavaa	1	2	3	4	5
Mielipiteestäni ollaan kiinnostuneita	1	2	3	4	5
Antamalla palautteella on merkitystä	1	2	3	4	5
Mielipidettäni kunnioitetaan	1	2	3	4	5
Saan tiedon paremmin epävirallisista kuin virallisista kanavista	1	2	3	4	5

AVOIN PALAUTE

13. Onko sinulla kehitysehdotuksia, jotka liittyvät viestintään, tiedonkulkuun ja vuorovaikutukseen?

MOBILE WORK AND INTERNAL ORGANISATIONAL COMMUNICATION

This questionnaire was constructed to investigate internal communication in the context of mobile work (cabin crew) and case organisation (██████). This research is part of a thesis for Haaga-Helia UAS. Answers are submitted anonymously and it takes only about five minutes to answer. Thank you in advance for your answers!
Petra Lempiäinen, mailbox 2611, petra.lempiainen@██████.com

BACKGROUND INFORMATION

1. Age

- under 30 years
- 30-39
- 40-49
- 50-59
- 60 years or above

2. Gender

- Female
- Male

3. Job description

- Cabin Crew Member
 - Purser
 - Other, please specify (e.g. IFS)
- _____

4. Highest completed education

- Vocational school/High school
 - Vocational college (e.g. QBA)
 - University
 - Other, please specify
- _____

COMMUNICATION TECHNOLOGY

5. Which communication devices do you use?

- Landline
- Mobile phone, basic model (only call and sms functions)
- Smartphone
- Tablet computer (e.g. iPad)
- Laptop computer
- Desktop computer
- Other, please specify _____

6. Which devices do you use in WORK RELATED matters?

- Landline
- Mobile, basic model (only call and sms functions)
- Smartphone
- Tablet computer (e.g. iPad)
- Laptop computer
- Desktop computer
- Other, please specify _____

7. Where do you mainly use the abovementioned devices in WORK RELATED matters?

- Home
- TOKE crew centre
- Hotels
- With mobile device whenever
- Other, please specify _____

ELECTRONIC COMMUNICATION CHANNELS

8. Are the company's electronic communication channels TECHNICALLY functional and easy to use?

	N/A	poor	satisfactory	excellent		
CIS	0	1	2	3	4	5
RRS	0	1	2	3	4	5
Intranet	0	1	2	3	4	5
Company e-mail	0	1	2	3	4	5
Weekly bulletin/Okay	0	1	2	3	4	5
Yammer	0	1	2	3	4	5
Manuals CSM, OM-A, TYK, Lookbook	0	1	2	3	4	5
Training portal	0	1	2	3	4	5

9. How much time do you spend on average in a WEEK using the company's formal information channels? (CIS, RRS, intranet, company e-mail, information leaflets, Yammer, manuals, training portal)

- less than an hour
- about an hour
- couple of hours
- three hours or longer

10. How much time do you spend on average in a WEEK using informal information channels for WORK matters? (Facebook, other social media, other (digital) media)

- less than an hour
- about an hour
- couple of hours
- three hours or longer

COMMUNICATION CHANNELS AND INFORMATION FLOW

11. How useful do you find the different communication channels in distributing information at work?

	do not know	poor		satisfactory		excellent
CIS	0	1	2	3	4	5
RRS	0	1	2	3	4	5
Intranet	0	1	2	3	4	5
Company e-mail	0	1	2	3	4	5
Weekly bulletin/Okay	0	1	2	3	4	5
Yammer	0	1	2	3	4	5
TOKE mailbox	0	1	2	3	4	5
Performance discussion	0	1	2	3	4	5
Brush up -day	0	1	2	3	4	5
Crew lobby fair	0	1	2	3	4	5
TOKE info screens	0	1	2	3	4	5
Facebook	0	1	2	3	4	5
Other social media	0	1	2	3	4	5
Colleagues	0	1	2	3	4	5
Customers	0	1	2	3	4	5
Other media	0	1	2	3	4	5
Other, please specify _____	0	1	2	3	4	5

INFORMATION FLOW, INTERACTION AND WORK COMMUNITY

12. How would you rate the information flow and interaction in your work community?

	poor		satisfactory		excellent
Information reaches me on time	1	2	3	4	5
Information is current	1	2	3	4	5
Information is correct	1	2	3	4	5
Information is understandable	1	2	3	4	5
Information is relevant	1	2	3	4	5
Information is easily accessible	1	2	3	4	5
Communication is open	1	2	3	4	5
Communication between different departments is adequate	1	2	3	4	5
Communication is interactive	1	2	3	4	5
Communication is inclusive	1	2	3	4	5
My opinion matters	1	2	3	4	5
Feedback I give matters	1	2	3	4	5
My opinion is respected	1	2	3	4	5
I get information better through informal than formal channels	1	2	3	4	5

OPEN FEEDBACK

13. Do you have ideas for developing communication, information flow and interaction?
