

# **DEGREE THESIS**

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The Value of Corporate Information on Company Mobile Phones in Finland: A Study.

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#### Abstract:

This research thesis critically analyses the value and volume of company information stored on corporate employees' mobile phones in Finland, and employee awareness of corporate information located on corporate mobile phone devices.

This thesis argues that as modern day business activities increasingly rely on telecommunication technologies for the storage and circulation of company information, mobile phones are increasingly being used by Finnish corporate employees to store and transmit company data (Ficora, 2008, p.5). The increase in corporate mobile phone subscriptions and employee mobility (BlackBerry, 2008), in a society where information is the major key to organisational wealth (Green, 2002, p.75), indicates that sensitive corporate data is being accessed and received on mobile phone devices (Mobilise your workforce, 2007). The research provides a comprehensive analysis of mobile phone use in the Finnish corporate environment and determines the relevance of corporate information on company mobile phone devices today.

The quantitative results and empiric study concludes there are significant amounts of corporate related data being placed and stored on employee mobile phones in Finland. Results also indicate that Finnish corporate mobile phone users are predominantly unaware of valuable corporate related information being stored on company mobile phones (p.48). Over 60% of corporate survey participants were recognised to fail to implement any precautions in regards to responsible management of company mobile phone devices (p.59). Findings illustrate that companies operating in Finland require clear company data awareness policies on all company supplied mobile devices, to ensure sensitive company data is responsibly managed by employees (p.52).

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#### **GLOSSARY OF TERMS**

**Content management application** – An application located on a wireless mobile device to assist in the management of content and information

**Mobile phone backup** – A process of which content on a mobile phone is moved and stored to a secure location

**Mobile workforce** – Employees with professional functions moving around in and outside company premises

**Mobility** – The quality of moving freely

**Smartphone** – A mobile phone offering advanced capabilities beyond a typical mobile phone, often with PC-like functionality

**Wireless devices** – Is referred to any type of electrical or electronic operation which is accomplished without the use of a "hard wire"

#### ABBREVIATIONS IN THIS STUDY

**FICORA** – Finnish Communications Regulatory Authority

**GSM** – Global System for Mobile Communications

**M-learning** – Mobile learning

MMS – Multimedia Messaging Service

**NDA** – Non Disclosure Agreement

**PDA** – Personal Digital Assistant

**PDF** – Portable Document Format

**SMS** – Short Message Service

**Wi-Fi** – Wireless Fidelity

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# **FOREWORD**

I would first like to thank my wife Heli Sawicki, who patiently stuck by me and whose love and support carried me through to the completion of this thesis. My thanks also go to Megan Jaworski and Mark Morley who during their busy schedules still found time and were willing to proof read my work. I would also like to acknowledge and thank my supervisor, Sveinn Eldon, for his assistance on some key issues in my thesis.

This thesis is the culmination of eight months of intense reading, discovery and learning. I am grateful for the opportunity to have been able to combine work, study and research with a focus on mobility through mobile telecommunications technology.

# **CHAPTER 1**

# **OVERVIEW OF STUDY**

# 1.1 Introduction

This research critically analyses the value and volume of company information stored on corporate employees' mobile phones in Finland, and employee awareness of corporate information located on corporate mobile phone devices. This research study argues that the increase in employee mobility (Noll, 2007) and modern day advancements in telecommunication technologies are supporting and encouraging corporate employees to conduct work by accessing, receiving and storing corporate information on mobile phone devices (Schmidt et al., 2005).

Utilising a quantitative research approach in analysing and discussing secondary and primary gathered data and incorporating literature appropriate to the research topic, this survey also gathers a depiction of the current environment through the use of survey questionnaires and semi-structured interviews as tools to determine the apparent value and awareness of corporate information stored on employees mobile phones in Finland.

Fixed-line phones have been the universal communication tool for Finnish corporate employees over the decades. But during the past ten years, mobile phones have become the essential work tool for corporate employees. In 2007, Finland's corporate mobile phone subscription rate rose by 5.8% to 1.2 million subscriptions (Ficora, 2008, p.5). Professional users previously used the standard communication functionality of their mobile phone. In today's business era, Finnish corporate employees are utilising mobile phone features to conduct business by communicating with clients and colleagues through video calls, phone email and more. The growth of sent SMS (short message service) and MMS (multi-media messaging service) messages confirm the rapid increase in mobile phone data services. A six percent increase in SMS sent messages was registered in 2007, an increase of 200 million against the 2006 total (Ficora, 2008,

p.6). Finnish corporate employees are communicating via new avenues through mobile phones, and also storing more company related information on work mobile phones devices such as company product information, presentations, work emails, company contacts etc (Koschembahr, 2005). Advancements in technology are improving employee capabilities to perform and conduct work when away from the office through a mobile phone device. In 2011, the estimated global mobile workforce is estimated to be one billion workers (BlackBerry, 2008). This signifies that considerable amounts of potentially sensitive company data will be accessed and stored on employees mobile phones in Finland. The main concern for corporations in Finland will be how to mitigate the risk of sensitive company information being incorporated into stored messages on mobility devices, as well as the potential for misuse.

Taken together, these facts and other issues reviewed in the literature review imply the corporate information process to be an economic activity. Since institutions and firms are involved in the production, collection, exchange, distribution, circulation and control of company information, corporate data is evidently valuable to the company that has produced or received it (The Information Revolution, 1995). Corporate security concerns mount as work demands cause Finnish corporate employees to be increasingly mobile. Studies confirm that corporate employees believe sensitive company data is accessed from mobile phones in order to conduct work when away from the office (Savage, 2008). Many companies are becoming aware of the security implications when employees are accessing corporate information on mobile phones, especially when corporate Smartphone users, who are most likely to access sensitive company information regularly, are 40% more likely to lose a Smartphone device (Hughes, 2007).

Mobile phones have inevitably caused work to follow the worker, changing the attitudes of Finnish corporate employees towards working and office hours (Puro, 2002, p.22). The pressures of a fast paced corporate information society has been accompanied by technological improvements in the way corporate work can be completed, empowering

employees to be more productive by the use of mobile phones whilst away from the confines of the office.

# 1.2 Background

The motivation for the research topic is inspired through the author's relationship with a mobile phone software vendor. The research will be conducted in conjunction with a mobile software company utilising company contacts, prior information and material gathered.

The objective of the research is to conduct a study consistent with the quantitative dominant paradigm with one small component of the alternative paradigm in the data collection phase (Creswell, 1994, p.177). This approach is selected with a view to build upon the understanding gained in the framework of the study and to increase the knowledge of modern telecommunication technology use in the Finnish corporate environment.

# 1.3 Central Aims and Objectives

The central aims and objectives of this research study are to analyse the use of mobile phone technologies by employees in the Finnish corporate sector, and also the importance of company information stored on employees mobile phones. The intended research is targeted towards corporate mobile phone users in Finland.

Given these aims and objectives, the following research questions are formulated to help assist the research outcome.

- What is the apparent value of corporate related data stored on company mobile phones is Finland?
- How aware are Finnish employees of corporate information stored on company mobile phones?

Two types of data have been used in the study: primary and secondary data. Secondary data will be gathered to strengthen the justification of the research by reviewing related literature to the research topic. Primary data will be gathered using selected research tools in obtaining new information. Secondary data is data that already exists, and has been collected for another purpose (Steppingstones, 2004).

The intended objective of the thesis is achieved by conducting a survey questionnaire that will be distributed and collected electronically in order to assist the quantitative method selected in compiling primary research data for the thesis. Semi-structured interviews will be also used as a data gathering tool in discovering the principal uses of a mobile phone during daily work activities and if company information stored on employee mobile phones are of value to companies.

Findings during the research may enhance the author's insight in Smartphone content management applications. Determining the benefits and opportunities in the mobile content management software market will allow mobile phone software developers, operators and mobile phone manufacturers to grasp the potential and need of mobile phone content management solutions in the corporate segment.

# 1.4 Scope of the Research

Amid increased employee mobility in the corporate work environment (Mctel, 2006) the importance of mobile work tools such as mobile phones are becoming more evident. With 40-70% of employees of a company working in different geographic locations, the reality of company and work related information accessed and shared through numerous wireless tools is evident (Noll, 2007).

Whilst mobile phone data is applicable to all mobile phone users, this thesis deliberately focuses on corporate mobile phone users as a group. The intended research is targeted towards corporate mobile phone users in Finland. The thesis examines the significance and importance of company information stored on a corporate mobile phone in relation to corporate employee daily activities.

A corporate mobile phone is expressed in the thesis as a company work tool for which is used for work related purposes such as communications, and other work related purposes that will be further discussed in the research.

# 1.5 Rationale for the Research

Various mobile phones are being manufactured specifically for the corporate segment, offering features that enhance a corporate employee on the move. A common feature for corporate specified mobile phones is phone email. Although other common mobile phone features are also relevant to corporate mobile phone users daily tasks, such as, phonebook, calendar diary etc, and the ability to receive and view Word and Portable

Document Format (PDF) documents. These features and other related applications increase employees contribution in work activities when away from the office.

With more employees working away from the company headquarters, the use of mobile tools such as mobile phones allows employees to stay connected with work activities when on the road or abroad (Mobilise your workforce, 2007). An increased mobile workforce is the trend the business world has entered with workers demanding more flexibility in their work. With technology supporting this move, companies have no alternative but to embrace the trend with employee mobility clearly improving several work activities such as sales initiatives, greater work life flexibility and customer intimacy.

Although corporate employee mobility deployments can bring a number of benefits to companies, they also bring risks associated with potential sensitive company data being stored on corporate employees mobile phones. As the global workforce becomes increasingly mobile new security risks will emerge sparking new measures in guarding corporate information being accessed on numerous mobile tools including mobile phones.

The focus population of the research are corporate mobile phone users due to the unique connection between the mobile phone, the use of the mobile tool for everyday work activities and the company related information stored on the device. The study sets out to identify the apparent value of corporate data stored on Finnish corporate mobile phones, and the awareness of employees in relation to what corporate data is being stored on Finnish corporate mobile phones.

# 1.6 Research Structure

This research study is divided into six chapters. Chapter Two introduces the history of mobile phones in Finland, Finland's corporate environment and key figures of corporate mobile phone subscription rates. Through the extensive use of secondary research, Chapter Two contends that there is a significant rise in corporate mobile phones subscriptions in Finland and a simultaneous decrease in fixed-line networks.

Chapter Three develops the construction of the research topic through secondary data by the extensive use of literature review. Chapter Three continues to build on the research theme by summarising important literature focusing on Finland's corporate mobile phone culture, information economy, mobile phones as a corporate tool, an increasing mobile workforce and security concerns of an increasingly mobile corporate workforce. Chapter Three provides a framework for establishing the importance of the study, and a benchmark for the results in the study (Creswell, 1994, p.21).

Chapter Four outlines the research design and method used in this study and explains the process by which the primary research data was gathered from the selected Finnish population sample. The reliability and validity of the data gathered in the research will be confirmed by outlining the face and content of the validity. Interpretation of the data and results will be interpreted in relation to the research questions and research aim in Chapter Five.

Chapter Five draws from the interviews conducted to assist in examining the primary survey questionnaire data gathered and discusses the analysed results against the forecast of corporate mobile phone technology and usage trends. In this chapter, the continued analysis of results and findings from Chapter Four against secondary research findings will assist in attempting to answer the research questions introduced in Chapter One. Through interviews with multiple corporate mobile phone users, this chapter

outlines the significance of corporate data on company mobile phones and the awareness of Finnish corporate employees in relation to company data being stored on mobile phones.

Chapter Six outlines the conclusion of the primary and secondary research. Chapter Six concludes the research and seeks to reflect the report aims and objectives with the findings in the study.

# **CHAPTER 2**

# **MOBILITY USE IN FINLAND**

# 2.1 Introduction

This chapter introduces the culture of mobile phone use in Finland through secondary information gathered. Section 2.2 begins with an introduction of the history of mobile phones in Finland. Section 2.3 reports key figures including corporate mobile phone subscription rates. Section 2.4 concludes the chapter by summarising key secondary findings which will be supported by the following chapters.

# 2.2 Mobile Phones in Finland

The nation of Finland has a proud and continuing history in the development, production and delivery of cutting-edge mobility technology and services. Finland was one of the first countries to develop a Mobile Telephone service in 1981, becoming the world's first cellular network to span several countries (James, 1998). At that time, businessmen predominantly carried very expensive and very heavy (ten kilograms), 1982-vintage Mobira Senator "portable" phones. The population in Finland viewed portable mobile phones as being glamorous and only affordable for the rich. Over a decade later in August 1998, Finland's mobile phone penetration became the first in the world to exceed 50 percent of the population (Communications Superpower, 2003).

Finland has an impressive amount of firsts when it comes to mobile phone technology and innovation. Finland was the first country to begin second-generation systems which lead to the introduction of an all digital system that included Global System for Mobile Communications (GSM) technology (Mobile Phone, 2008). The first short message

service (SMS) was sent in Finland by a man called Matti Makkonen, who is known as the "reluctant father of SMS" (Kalliokoski, 2008). In 1993, the first person-to-person SMS was sent from phone to phone in Finland. Mobile phone payments were trialled first in Finland in 1998 when a number of soft drink vending machines were enabled to work and sell by SMS payments. The first downloadable content for mobile phones was sold in Finland to a mobile phone. The content was a downloadable ring tone which was sold through a service introduced by Elisa (Mobile phone, 2008). News services were introduced in Finland in the year 2000 and launched via SMS to mobile phone users across the country. In 2005, the Finnish government decided that the fastest avenue to warn the country's citizens of a disaster was via the mobile phone network. This approach has since been taken to use by a number of countries who send immediate notifications of earthquakes and other natural disasters (Mobile phone, 2008).

Finn's are known as being a self preserved and quiet nation, but when new information and communications technology are concerned, the Finnish population have a reputation for being a country of 'hyper communicators'. The term 'hyper communicators' stems from the Finnish populations embrace of communication and information services (Duryee, 2006). Finns have made it clear through their willingness to incorporate telecommunications technology into every day life (James, 1998).

Until recently, Finland was the most advanced information society in the world. It earned its position as a communications superpower on many criteria. The people of Finland had been well prepared to use high technology and information services (Communications superpower, 2003).

For Finns, a mobile phone is primarily a means of personal contact. Around the globe it is common to hear people talk on a mobile phone, but in Finland the majority of the population communicate via SMS. Finn's enjoy new technology and embrace any novel innovative ideas of informative communications. This reality becomes more real when the practicality of having a mobile phone is genuine and mobile operator costs are as low as they are in Finland, it allows the majority of the Finnish population to enjoy the

many benefits of using a mobile phone actively (James, 1998). According to a recent study conducted by Pöyry Telecom Oy on 'Mobile Call Prices 2008 International Comparison', Finland has the over-all lowest mobile call prices in Europe. This is partially due to the fierce competition in Finland's mobile phone service market which forces operators to offer mobile phone services and products for reasonable prices. In doing so, competitors need to be efficient and keep costs in check (Communications superpower, 2003). Figure 2.1, presents the basket values for selected European countries. Of all countries included in the 'Mobile Call Prices 2008 International Comparison', Finland has the lowest basket value at 12.74 euros per month (Pöyry Telecom Oy, 2008, p.15).

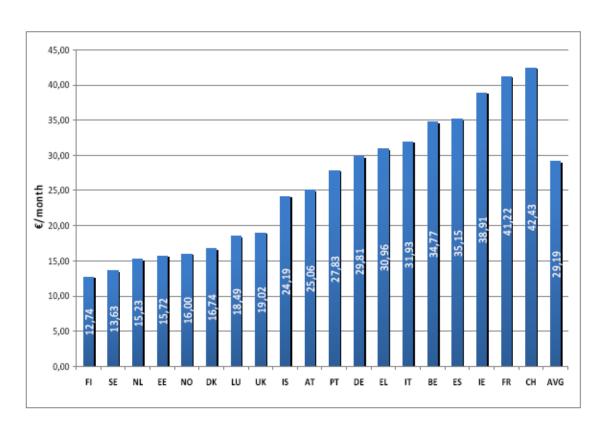


Figure 2.1. Price basket values for User Profile 1 in April 2008 (Pöyry 2008).

Nokia, the flagship of Finnish communication and Finland's biggest company is currently the world's largest mobile phone manufacturer. Nokia has expanded and become a reputable organisation due to the company's mobile phone product competence, research and innovative capabilities (Communications Superpower, 2003). Although the most rapid growth phase for Nokia seems to be over, the company continues to be profitable and is further gaining market share in mobile phones. Nokia's global success has no doubt played a hand in Finland's affection for telecommunications technology.

# 2.3 Mobile Phone Subscription Figures in Finland

# 2.3.1 Corporate Mobile Phone Subscription Rates

With a population of around five million people, Finland's willingness to use mobile phones is confirmed by the country's mobile phone subscription rate which stands at six million subscriptions (Ficora, 2008, p.5). According to the Ministry of Transport and Communications, the Finnish mobile phone penetration exceeded 50% of the population as far back as August 1998. By December of that year, the number of cell phone subscriptions outnumbered fixed line phone connections (Culture of Finland, 2006). The mobile phone subscription rate has steadily grown over the years as presented in Figures 2.2 and 2.3. An increase of 7% during 2007 was seen in Finland's mobile phone subscription rate compared to the previous year (Ficora, 2008, p.5). Today the mobile phone subscription rate comfortably surpasses the total population number in Finland.

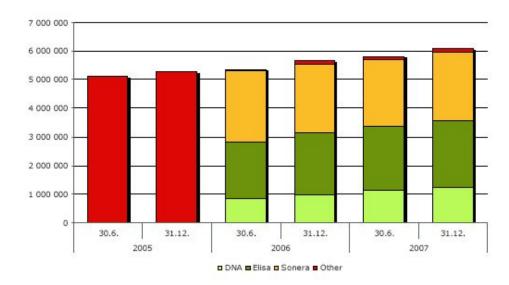


Figure 2.2. Mobile subscription rate and market share in Finland 2007 (Ficora 2008).

2005-2006								
Year		20	005			20	006	
Date	31.3.	30.6.	30.9.	31.12.	31.3.	30.6.	30.9.	31.12.
Mobile subscriptions	4 930 000	5 100 000	5 200 000	5 270 000	5 280 000	5 360 000	5 510 000	5 670 000

Figure 2.3. Mobile subscriptions in Finland 2005-2006 (Ficora 2007).

Corporate mobile phone subscriptions have also been consistently increasing during the last five years. The Finnish Communications Regulatory Authority (Ficora) estimates that 20% of the total mobile phone subscriptions in Finland are corporate customers. This percentage is applied in the 2006 and 2007 Ficora reports. In 2006, the total amount of corporate mobile phone subscriptions in Finland was 1.134 million (Ficora, 2007, p.7). In 2007 that figure rose by 5.8% to 1.2 million corporate mobile phone subscriptions (Ficora, 2008, p.5). The increase in corporate mobile phone subscriptions indicates the continued trend of mobile phone penetration into the Finnish corporate environment. This increase may be associated with mobile operators introducing a wide range of business focused plans and the increase in corporate supported mobile phone services such as emailing capabilities.

#### 2.3.2 SMS and MMS

Other significant mobile phone related figures which have grown rapidly over the years in Finland are SMS and multimedia message service (MMS) numbers. As Figure 2.4 shows, the amount of SMS and MMS sent in Finland yearly totals into the billions. In 2006, three billion text messages were sent in Finland, 300 million more then the previous year which is a 10% increase (Ficora, 2007, p.7). The growth of SMS messages continued in 2007, almost 3.2 billion SMS messages were sent in Finland, which signifies an increase of 200 million to the previous year, almost a 6% increase (Ficora, 2008, p.6). Estimations can be made of the number of SMS being sent from corporate mobile phones in Finland. If only five percent of the total SMS sent in Finland in 2007 were from corporate mobile phones, the figure remains a staggering 150 million short text messages. As there are no concrete figures on corporate sent SMS, only estimations can be expressed.

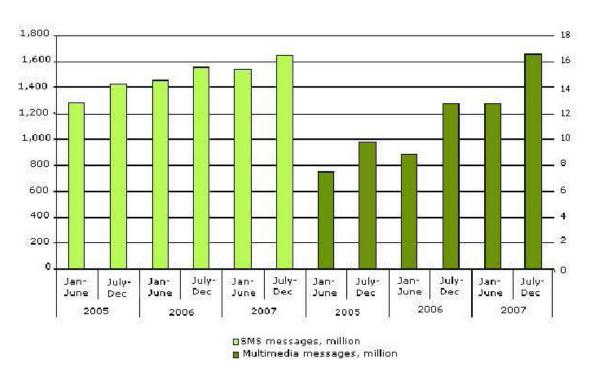


Figure 2.4. Sent SMS and MMS messages in 2005-2007 (Ficora 2008)

# 2.3 Fixed Line and Mobile Phone Subscription Rate Comparison

Fixed telephone network subscriptions have steadily decreased over the past years. Households and organisations have felt that the need for fixed telephone lines was not sufficient when a mobile phone subscription was in use (Ficora, 2008, p.11). In Figure 2.5, the decline in fixed-line subscriptions and networks is shown in comparison to the increase in mobile phone subscriptions during the years 1990, 1995 and to the end of 2007. The total decline of fixed-line subscriptions at the end of 2007 from the beginning of that year was 9%, i.e. by 180,000 connections (Ficora, 2008, p.11).

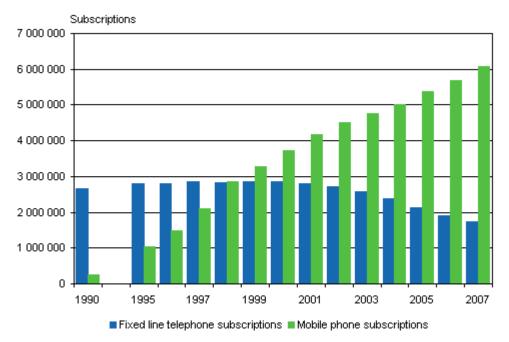


Figure 2.5. Numbers of fixed line and mobile telephone subscriptions in 1990 and 1995-2007 (Telecommunication 2007, Statistics Finland 2008)

The fall in fixed-line subscriptions is supported by the decrease in outgoing fixed-line phone calls in minutes. Figure 2.6 represents the number of outgoing calls in minutes from fixed network phones and mobile phones in Finland from 1995-2007. The average

length of a telephone call in the fixed-line network decreased by eighteen seconds during 2007 (Ficora, 2008, p.12). The number of fixed-line phone calls made in 2007 also declined by 20%.

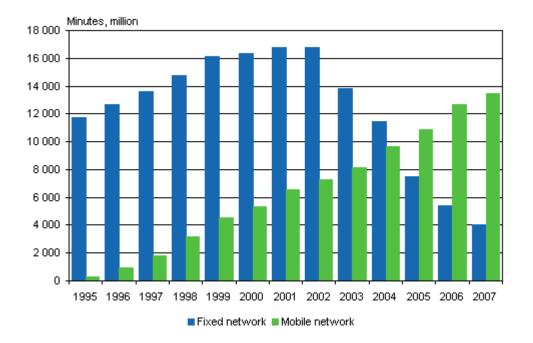


Figure 2.6. Number of outgoing call minutes from the local telephone network and from mobile phones in 1995-2007 (Telecommunication 2007, Statistics Finland 2008)

The number of calls made by corporate and domestic fixed-line and mobile phone subscriptions strengthens the trend of the declining use of fixed-line networks in Finland. Figure 2.7, represents the number of outgoing calls from private and corporate fixed-line and mobile phone subscriptions. The figure shows that the number of outgoing calls made by mobile phones is increasing against fixed-line phones. Approximately 28% of the total outgoing mobile phone calls were made by corporate subscriptions in 2007. Outgoing call minutes by corporate subscriptions have also increased in 2007 to around 28% of the total outgoing call minutes made by mobile phones. Domestic subscriptions have a significant higher percentage in outgoing mobile calls due to the higher total subscription rate.

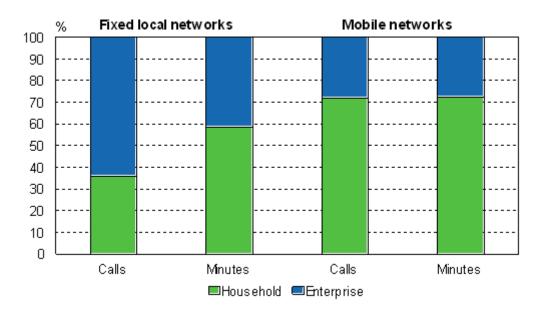


Figure 2.7. Number of outgoing calls from private (domestic) subscriptions and corporate subscriptions in 2007, per cent (Telecommunication 2007, Statistics Finland 2008)

# 2.4 Conclusion

Chapter Two examined the history of mobile phone communications in Finland and also the enthusiastic relationship the Finnish population have with mobile devices. The chapter included the proud Finnish history in mobile phone innovation and technology summarising the many break through and firsts recorded in Finland or by a Finnish individual. Introducing the total country and corporate mobile phone subscription rates in Finland allowed a further introduction to the research topic by acknowledging the increase in mobile phones in the corporate environment. The 5.8% increase in corporate mobile subscriptions during 2007 in Finland translates to rise in mobile phone usage in the corporate environment. Notable figures and facts introduced in Chapter Two are strengthened in Chapter Three with the review of literature. The impact of mobile phones in Finland's corporate culture is signified by the importance of corporate information, and the ability to access, receive and distribute from mobile phones.

#### **CHAPTER 3**

# **REVIEW OF LITERATURE**

#### 3.1 Introduction

Chapter Three reviews and summarises literature relevant to the research topic through the form of books, journals, past related researches, internet articles and other qualified publications related to the issue. The literature review is the construction of the research study. The chapter provides the arrangement and direction for the research project and the rest of the thesis (Katzer et al., 1978, quoted in Keyton 2006, p.301). Section 3.2 looks at the Finnish mobile phone culture in the corporate environment. Section 3.3 introduces the term 'Information Economy' and draws attention to the wealth in corporate information. Section 3.4 reviews literature focused on mobile phones used as a work tool by corporate employees. Section 3.5 summarises articles focused on the security concerns of an increased mobile workforce. And Section 3.6 summarises Chapter Three by capturing major themes and highlighting the most important aspects of the literature review.

# 3.2 Finnish Mobile Phone Culture

The Finnish population are well known for their self-reserved stereotype, but when communications technologies are involved, Finns are very eager to take use of it. During the past ten years, Finland's population have adapted new communications technology devices to become part of everyday life (Statistics Finland, 2006). In Finland, a mobile phone is not just a phone. It is a credit card, a menu and an entertainment centre (Gerlin, 2001). Mobile phones have become the norm of everyday life in Finland, so much so that it is no longer considered rude when a mobile phone rings in a restaurant or business meeting. Due to this national acceptance of

telecommunications technology, Finland has gained the reputation as a "mobile phone nation". In the book Perpetual Contact: Mobile Communication, Private Talk, Public Performance, Aahkus, Katz (2002), it was documented that most of the Finnish population carry their mobile phone everywhere, because they do not want to lose their instant contact. For example, the statistic that 93% of both men and woman stressed that one of the main reasons for obtaining a mobile phone is availability (Nurmela et al., 2000, quoted in Katz, Aakhus 2002, p.22). These statistics are also evident in the Finnish corporate mobile phone culture. Mobile phones were initially intended for Finnish business men and woman whose work required travelling regularly. Mobile phones were initially intended only for voice communications. Today mobile phones have a major role in Finnish corporate life due to the constant availability of colleagues and clients, although availability via the mobile phone is becoming a problem in the Finnish corporate culture. Many Finnish corporate workers opt to use their personal mobile phones for work rather than receiving a new mobile phone device from their employer. This is partly due to the convenience of only having one phone and number. But the consequence to this trend is when the corporate employee is no longer at work. Office hours and personal time become entwined as the office follows the corporate employee through the mobile phone. Reluctantly, this means a Finnish corporate employee is at work wherever they are as they can be reached at any time of the day.

Mobile phones have changed the attitudes of Finnish corporate workers towards workplace and office hours. It is clear that with a mobile phone, separating work and personal time is difficult (Puro, 2002, p.22). In today's Finnish corporate environment, it seems normal not to comply with standard office hours etiquette when a corporate employee has a mobile phone. It has become a common state of mind in Finland that contacting someone via a mobile device after work hours is not discourteous but an accepted practice. This conveys that Finns currently struggle to draw a line between work and leisure.

According to Statistics Finland (2002), Finnish corporate men and woman have different patterns in mobile phone usage. A calculated 91% of men and 83% of woman

state the reason for owning a mobile phone is to deal with everyday business. Finnish woman tend to maintain the availability mentality more so then Finnish men by not switching off their mobile phones of at night (Puro, 2002, p.22).

A general trend in Finnish telecommunications in recent years has seen an increase in the use of mobile phone services and a simultaneous decrease in the use of fixed telephone network services. This trend continued strongly in 2007 and is forecast to continue (Telecommunication 2007, 2008). Finland continues to lead the way in trialling and integrating mobile phones into everyday activities. What is certain for the future, the Finnish population will continue to embrace and integrate new innovative mobile phone technologies and services into corporate and everyday life.

# 3.3 Information Economy

In the book Communication, Technology and Society, Green (2002) explains that the wealth of information available in today's society has a considerable impact on everyday life. Information is considered as an economic activity, since firms and institutions are involved in the information's production, collection, exchange, distribution, circulation, processing, transmission and control (The Information Revolution, 1995). Current research and development in information technology is moving away from desktop-based general purpose computers and towards more task specific information appliances such as mobile phones and Personal Digital Assistants (PDAs). Mobile information appliances are increasingly used in numerous diverse situations and locations, setting new requirements to their interaction methods (Schmidt et al., 2005).

In a society where information is the major key to wealth (and where information workers include managers, lawyers and teachers as well as stockbrokers and IT consultants), information has never been more plentiful or more accessible (Green, 2002, p.75).

An information economy is a defined term that characterises an economy with an increased emphasis on informational activities (Verzola, 2006). Corporate workers are no longer restricted to the confines of company headquarters, office or branch. The obstacle of distance have been overcome by the corporate worker's ability to remain connected to clients, company networks and colleagues due to work tools such as laptops and mobile phones. As information becomes the most important capital of a company, security enhancements for company information are becoming a standard practise.

Organisations are systems which combine human abilities and physical resources to produce outputs and attain goals. Communication is the vehicle through which this combination takes place (Sanford et al., 1976, p.115). Organisations take advantage of technology in improving the way work is done. Technology generally refers to the way work is done, the methods of task performance and the way tasks are related to each other. The type of technology used ultimately affects the nature of the specific jobs and tasks that individuals perform (Sanford et al., 1976, p.114). Mobile phones as a communications technology allow organisations to increase the mobility of employees, not interrupting the communication vehicle between clients and colleagues, maintaining the critical information being circulated by the organisation.

# 3.4 Mobile Phones as Corporate Work Tools

In the Finnish corporate environment, beginning a new job generally means being equipped with a new mobile phone. Although it is not uncommon for some employees

to rather use personal mobile phones for work purposes or at least maintain their personal phone number. Overall, the conception of mobile phones becoming more a standard work tool is supported by the development of mobile phone features and applications that directly increase the mobility of a corporate worker through a mobile phone. Long gone are the days when talking on a mobile phone was the only purpose used for mobile phones. Communicating via talking on a mobile phone is still the overwhelming purpose of using a mobile device, an increasing amount of features for mobile phones are being introduced and used for increasing corporate workers mobility. Corporate mobile phone users are more likely to use data services such as email and two-way messaging. Some 88% of corporate mobile phone users use two-way messaging compared to 78% non-enterprise users. 55% of corporate users send and receive email messages compared to 32% of non-corporate users, and corporate mobile phone users account for considerably less of the total of mobile phone subscribers, but spend twice as much time using data applications (Cambanis, 2003).

Mobile phone devices and PDA devices are taken everywhere and are used in various environments and situations to perform different tasks (Schmidt et al., 2005). Mobile phones, affect either directly or indirectly every aspect of a users personal and professional life. They have transformed social practises and the way society does business (Katz, Aakhus, 2002). Mobile phone technology integrated into the corporate environment does alter the way work is done. Rice & Katz (2003, in Koskinen, 2007, p.5) state that many uses of mobile phones are related to managing practical affairs and work. Mobile phones allow corporate employees to become increasingly mobile. In an increasingly mobile workforce, corporate workers are making use of the advances in mobile phone technology, allowing them to travel and work away from the company headquarters but still be connected to work activities. In 2011, Japan is expected to have the highest percentage of mobile workers with an estimated 80 per cent of the Japanese workforce being mobile (BNET, 2008).

According to research firm IDC, the mobile user population is set to increase from 800 million in 2007, accounting for 25.7 percent of the worldwide workforce, to one billion in 2011, accounting for 30.4 percent of the workforce (BlackBerry, 2008).

Corporate Social Responsibility (CSR) can also be connected with the movement towards a mobile workforce (Williams, Aguilera, 2006). Companies are looking for alternatives in cutting costs. Costs such as maintaining a large office building can be substantially minimised by mobilising an employee or allowing work to be completed from home. This would also address environmental issues with employees travelling significantly less when working from home.

The growing mobile workforce number is due to the pressure on companies to provide work/life balance programs for their employees. Corporate employees are craving flexibility and will change employers to obtain it. Features such as mobile email, are allowing corporate workers more flexibility with day to day activities. According to studies conducted, 40 per cent of office workers are bored with the deskbound nature of their jobs and feel the situation affects their productivity (Mobilise your workforce, 2007); this suggests that corporate workers want a job with the flexibility to spend at least half their working day out of the office.

The mounting demands of employees wanting to be more mobile are not the only intended rationale of mobile phones as work tools. While mobile phones can be used for making a phone call, sending an email, or organizing calendar schedules, wireless technology can and will extend beyond these functions in the near future. For many years, wireless devices have provided sales workforces with instant communication to colleagues and customers, solving the problem of staying connected while on the road or away from a desk. Today, the need goes beyond email and voice communications. Sales workers for companies face an ongoing challenge of accessing important information whenever and wherever they need it. Depending on the industry, corporate

sales employees require access to information about changing prices, product information or product updates (Koschembahr, 2005).

M-Learning (mobile learning), is a new teaching concept for corporate sales employees when conducting training meetings for clients. Mobile devices such as mobile phones can be used for storing training material used for training purposes. The option of receiving byte sized information to a mobile device can mean a corporate employee taking advantage of unproductive time to stay engaged and relate information to a specific task. Other advantages of m-learning are the possibilities of receiving new information by being notified as soon as it becomes available. Travelling corporate employees can be notified of specific changes through an email or SMS to their mobile phone device (Koschembahr, 2005).

In research conducted by Nokia Research Centre, increased mobility provided by wireless technology and mobile phones has given enterprises more flexible ways of managing their business processes and communication. There is even more potential in mobile technology to increase productivity for corporations seeking to increasingly mobilise their workforce. There are numerous organisational areas where mobility can be leveraged to benefit a mobile workforce, such as, field maintenance workers or sales employees (Lähteenmäki et al., 2006, p.2). In the construction industry a large percentage of project costs are created by mistakes caused by incorrect information due to the lack of appropriate communication.

New initiatives and technology are being developed to support the increase in a mobile workforce. These initiatives will allow employees to continue their daily activities and be productive when travelling or away from the office. With employee job satisfaction rising, due to the ability to balance work and family life more equally, companies will reap the rewards with a more motivated and satisfied workforce.

# 3.5 Mobile Workforce Security Concerns

Most corporations in Finland have stringent policies on sensitive company information. Precautions such as NDA's (Non-Disclosure Agreements) are used to enforce company confidentially regarding technology, client information and other related confidential information. In the article "Smartphones opening up security risk", Marcia Savage discusses the security concerns of corporate employees accessing company information from a mobile phone. Mobile devices such as mobile phones now carry sensitive corporate data. Extra security measures are needed to minimise the risk of loss (Mobilise your workforce, 2007).

In a quantitative survey of two hundred mobile phone users conducted by market research firm Decipher Inc (2008), 70% of the survey participants felt they accessed what they considered to be sensitive data from their mobile phones in order to work outside the office. Another 89% of the respondents said they can access company emails and company related information from either their work or personal mobile phone when away from the office. A growing percentage of the corporate workforce are becoming mobile, and the majority are capitalising on smartphone technology as a work tool by using mobile phones not only for talking and email but also for storing important records and files. The research indicated that corporate employees are aware of the risks involved with accessing corporate data from mobile phone devices. Encouragingly, 82% of the survey respondents said they were open to their respected company initiating security technology on either their personal or company smartphone (Savage, 2008). An estimated 8 million mobile phones worldwide were lost in 2007, including 700,000 smartphones. Corporate smartphone users, who are mobile users most likely to access sensitive company information, are 40% more likely to lose a smartphone device (Hughes, 2007). Many companies are now taking notice of the security implications of accessing and storing corporate data on a mobile phone and are encouraged that employees are also aware of the risk.

If users are aware of the risk to begin with, you are ahead of the game. Many risks can be addressed with technology, but the human factor is usually the wild card. Awareness and education are paramount to strengthening the overall security posture of an organisation (Savage, 2008).

Other issues concerning corporate employees accessing company data is on which device they choose to do so. Most companies supply employees with a mobile phone as a work tool, but occasionally employees prefer to use a personal mobile phone for work or the company is not willing to supply the employee with a company mobile phone. In this situation, corporate employees believe that companies should allow workers to store and access company information on their personal mobile phone if corporate mobile phones are not provided. A number of companies are beginning to introduce policy training on company issued mobile phones; but these companies most likely also do not allow corporate data to be accessed on non-corporate mobile phone devices (Mobilise your workforce, 2007).

Although it is clear that mobility deployments can bring a number of benefits to companies, they also bring risks associated with sensitive data sitting on mobile phone devices. Corporate data security measures for mobile phones should be a standard practice in mobility deployments for companies. As the global workforce becomes more mobile, new security risks will emerge sparking added measures in guarding corporate information being accessed on mobile phones.

# 3.6 Summary of Literature Review

In Chapter Three, the term 'Information economy' was introduced and defined as a term that characterises an economy with an increased emphasis on informational activities (Information Economy, 2008). These activities include company operations such as the production, collection and exchange of information related to a company's interest. The

ability to access information at anytime, anywhere, is existent in today's Finnish corporate society. This reality is altering where and in which way work is completed as technological advances allow corporate employees to conduct work while away from the office. Innovative mobile phones features are being introduced by mobile phone manufacturers to support the growing demand of mobility in the corporate world. Mobile phones are no longer specifically used for communicating by talking, but are also used for gaining and storing work related information intended for work activities such as product information and company reports. An increased mobile workforce is the trend the business world is entering with workers demanding to be more flexible in their work. With technology supporting this move, companies operating in Finland have to embrace the trend with employee mobility clearly improving several work activities such as sales initiatives and employee motivation.

In an age where technology is taking over the way certain work activities are conducted, the ability to access information and share it has brought with it numerous risks. Sensitive company information being circulated and accessed by company employees via mobile phone outside of the office increases certain security risks, risks that companies and employees are beginning to understand. Finnish mobile phones users in particular are avid users of mobile phones. Finland which is also known as a "mobile phone nation" has created a mobile phone culture that defines Finland as a country. It is a country that happily embraces the use of mobile phones for work purposes, thus now, ingraining mobility solutions into the nation's mobile phone culture. For this reason, Finnish corporate mobile phone users need to be aware of the importance of the company information stored on their mobile phones, may it be on a corporate supplied or personal mobile phone.

# **CHAPTER 4**

# PRESENTATION OF METHODS AND RESULTS

# 4.1 Introduction

Chapter Four begins with an explanation of the research design, and the process by which the quantitative research method was conducted. Section 4.2 describes the research methodology, and Section 4.3 provides a description of the research design. Section 4.4 outlines the procedures in obtaining participants, and discusses the considerations in the research undertaken. This section further describes the questionnaire and interview schedule and the profile of the participants interviewed. Section 4.5 presents and describes survey questionnaire results through graphs. Interpretation of results will conclude in Chapter Five. Section 4.6 verifies the validity and reliability of the primary research and section 4.7 concludes the chapter by summarising key aspects of the chapter.

# 4.2 Research Methodology

The role of the researcher is to gain an insight into a critical area of research, and bring to light the most important findings of the study area of interest. The correct use of methodology through survey questionnaires and direct contact is crucial in laying a solid foundation for the later analysis and interpretation of results (Casebeer, Verhoef, 1997). Quantitative research is the manipulation and representation of numerical data and observations in explaining the occurrence the observations reflect (Neill, 2007). By including traditional quantitative approaches and statistical techniques, improved precision and as a result greater objectivity can be seen in the thesis (Keyton, 2006, p.36). This thesis implements a 'between methods' approach in the collection of primary

data, in the form of survey questionnaires and semi-structured interviews (Creswell, 1994, p.174).

In order to address the central objective of this research report – to examine the significance and awareness of company information stored on Finnish corporate employees mobile phones – an inductive 'dominant-less dominant design' was necessary to obtain and analyse the answers and thoughts of Finnish corporate mobile phone users (Creswell, 1994, p.177). The preferred method of primary research was selected to enhance the comprehensiveness of the research study.

## 4.3 Research Design

The purpose of this thesis is to generalise from a sample of a population so that interpretations can be made about some attitude, characteristic, or behaviours of the sampled population (Babbie, 1990, quoted in Creswell, 1994 p.118). The sample population focused in the research are corporate mobile phone users in Finland. Specifically Finnish corporate mobile phone users in Helsinki, Vantaa, Espoo and Turku will be included in the thesis.

Incorporating a 'dominant-less dominant design' in the thesis allows the author to present the study within a single dominant paradigm, which in this research is quantitative, with one small part of the overall thesis drawn from the alternative paradigm (Creswell, 1994, p.177). The design is used and planned to provide insights in a research that will inform following data collection and analyses. (Greene et al., 1989, quoted in Mactavish et al., 2000). This thesis incorporates a consistent quantitative study approach including numerical data gathering through survey questionnaires with a small alternative paradigm interview component in the data collection phase. The advantage of a 'dominant-less dominant design' is the ability to

present a consistent quantitative observation in the thesis but still allow limited information to be used in probing in detail one aspect of the research (Creswell, 1994, p.177).

In view of the role of quantitative research methods in testing hypotheses through surveys such as questionnaires, by applying a consistent quantitative approach and statistical techniques, the author can bring greater accuracy and, as an outcome, greater objectivity to the thesis (Keyton, 2006, p.36). This thesis utilises a survey method approach in collecting data which allows the author to generalise the findings from a sample of responses to a selected population (Creswell, 1994, p.117). A quantitative survey design also commonly uses an inductive approach in the construction of theory, as research questions and theoretical frameworks are constructed in conjunction with the information and research gathered (Creswell, 1994, p.117).

The forms of data collection used in obtaining primary data in the research are survey questionnaires, in the form of a web based system and, semi-structured interviews. The questionnaires were delivered to the survey participants via email. The participants would click on a web link in the email received to access a web based questionnaire. When the questionnaire is completed, the data is automatically collected for analysis. Interviews were administered face to face or over the telephone. The selected sources of data collection procedures were due to cost effectiveness, availability and convenience.

### 4.4 Research Limitations

As with all survey-based research, there are limitations to the interpretation of the results. Survey participants may differ in interpretation of questions, which in turn can influence the responses to some items (Research Limitations, 2008). Participant's industry, daily activities and responsibilities may identify an inconsistency in primary

research results. The survey was based on a self report in regards to what the Finnish corporate employee considers as being relevant information in regards to company data stored on mobile phones.

Applying a dominant-less dominant design as a primary data gathering method may receive concerns from quantitative and qualitative pursuits who would see the selected approach as a misuse of the two paradigms because the central assumptions of the study would not link or match the qualitative or quantitative data collection procedures (Creswell, 1994, p.177).

## 4.5 Reliability and Validity of Data

Reliability in gathering and the analysis of data is crucial in the research design. In general, validity speaks to the truthfulness or accuracy of the measurement, and reliability speaks to the consistency or stability of the measurement (Keyton, 2006, p.105). Accuracy is increased in the research study by cross checking information sources, which in turn allows cross confirmation and improves reliability (Sommer & Sommer, 1991). A variety of data gathering methods are important in increasing the reliability of the research.

To maximise the validity and reliability of the data collected for the research study, two hundred Finnish corporate mobile phone users were selected to complete the survey questionnaire, and twenty other Finnish corporate participants were selected for interviews. The total survey questionnaire respondents equalled thirty nine Finnish corporate mobile phone users and twenty interview participants, totalling fifty nine respondents for the thesis, a twenty nine percent response. The reliability of the study is considered to be high, as the participants were well advised of the research purpose and the analytical use of their information gathered. The author was consistent in the use of

data collection procedures (Keyton, 2006, p.54). All survey and interview participants were measured to have answered questions honestly.

#### 4.6 Procedures

#### **4.6.1 Ethics**

Research ethics includes the application of essential ethical principles to a range of topics involving scientific research (Walton, 2008). In selecting a research topic that involves a study on corporate activities and company information, it is vital that ethical issues are adequately addressed. Given that the aim of the research is to gather primary research data by utilising survey questionnaires and interviews with the aim to better understand the population sample unique experiences with corporate mobile phones, it is essential that participant and company confidentiality was assured before participation of survey questionnaires and interviews. The research participant's relationship to the researcher must also be considered so that the relationship is not affecting the collection, interpretation and reporting of the data (Keyton, 2006, p.76).

Participants in the survey questionnaire were presented an introduction to the research topic and the objective and aim of the research (see Appendix 1). The respondents name or company would not be traced at the completion of the questionnaire. Selected respondents could choose whether to participate and complete the survey questionnaire. Interview participants were also provided with an oral explanatory statement which explained the nature and objectives of the research (see Appendix 3). In conducting the interviews, participants were contacted and asked of availability. A suitable time and place was then scheduled for the interview. Confidentiality of the data collected, as well as participant details, was assured at all times.

### 4.6.2 Participants

Two hundred Finnish corporate mobile phone users were selected to complete the survey questionnaire. Twenty participants who did not complete a survey questionnaire were selected for interviews. The total survey questionnaire respondents equalled thirty nine Finnish corporate mobile phone users. Twenty Finnish corporate employees participated in interviews.

In order to gain an insight into the research topic, research participants in different corporate industries were selected to potentially uncover differences in usage patterns of mobile phones in a company environment. There are 1.2 million corporate mobile phone subscribers in Finland (Ficora, 2008, p.5). The population sample of corporate mobile phone users in Helsinki, Vantaa, Espoo and Turku are estimated to be around 400,000. Surveyed and interviewed participants ranged from a variety of industries (see Table 1 for further details), they included both male and female and were generally in a position of management within the company. Interview participants varied in age from 20 to 65 years of age.

The authors associations made through employment in the Finnish corporate environment allowed the access to the relevant sampling frames. This included company contacts of the author's employer and personal professional contacts. This indicates that the thesis uses a single stage sampling process due to the access the author has to a focused population, allowing the sampling of sample population directly (Creswell, 1994, p.119).

Table 4.1. Interview dates and participants.

<b>Company Name</b>	Interview No.	Interviews	Date of
			Interview
Huurre Group Oy	1	1	10/06/08
Reigate	2	1	11/06/08
Espime Ltd	3	1	11/06/08
Capman	4	1	16/06/08
TietoEnator	5	1	16/06/08
IBM	6	1	16/06/08
Moonsoft	7, 8, 9	3	17/06/08
Avaya Finland	10	1	17/06/08
Tools Finland	11	1	17/06/08
Sautumaa	12	1	17/06/08
Logica	13	1	17/06/08
Webropol	14, 15, 16, 17, 18	5	19/06/08
Addecco	19	1	24/06/08
Bearing Point	20	1	26/06/08

## 4.6.3 Questionnaire and Interview Schedule and Process

The survey questionnaire was developed specifically for the research using a web based survey tool (see Appendix 2). The survey questionnaire included closed-ended questions and was statistically analysed using quantitative analysis methods. At the completion of a survey questionnaire, the data was gathered automatically via a web based tool ready to be analysed.

Interviews were conducted by asking semi-structured questions. The technique was selected to allow the respondents to shape their own opinions to the questions (Baker, 2002). Semi-structured interviews are a more flexible tool than highly structured interviews. They allow more probing in finding out the reasons for certain answers. Semi-structured questions are also more common in business related research studies (B2B International, 2006). The interview uses questionnaires questions with predefined answers as well as those where the respondent is free to say whatever preferred (B2B International, 2006). In each interview, questions are asked in the same manner. Interviewee's responses were gathered on paper by summarising general answers to the questions. Each interview lasted approximately five to ten minutes.

The selected survey design was the preferred type of data collection procedure due to the rapid turn around in data collection, and the ability to identify attributes of a population from a small group of individuals (Creswell, 1994, p.119). The number of questions presented in the survey questionnaire was determined to best compensate the busy schedule of corporate recipients, which in return would potentially allow the maximum amount of responses. The survey data was collected over a period of one month during June 2008. This is to ensure that the maximum amount of selected participants had an opportunity to participate in the interviews and questionnaires. The population sample size totalled 400,000 individuals; a sample size of two hundred and twenty participants allows an accepted margin percentage of error (Raosoft, 2004).

The questionnaire survey and interview questions were constructed and tested in conjunction with telecommunication professionals. The questions were tested on several corporate professionals before delivery to selected participants. This was to ensure that the questions asked were as relevant as possible in relation to the research topic.

## 4.7 Analysis of Data

## 4.7.1 Age Groups of Corporate Survey Questionnaire Participants

Mobile phones were initially marketed as business tools. Due to the cost in using portable mobile phones when first introduced, corporate mobile phone use was restricted to top managers and executives. In today's corporate world, most employees have a mobile phone used for business activities. Figure 4.1 indicates the age group of participants in the survey. All the survey questionnaire respondents were allocated to a specific age group range. Up to 35.9% of the survey participants fall under the age group of 30-39. The equal second largest age group in the survey are the 20-29 and 40-49 age groups which both total 25.6% of the participants in the survey questionnaire. The 50-59 and 60+ age groups account for the remaining 12.8% respondents in the survey. Figure 4.1 indicates that the largest participant group in the survey of corporate mobile phone users are in the age range 30-39.

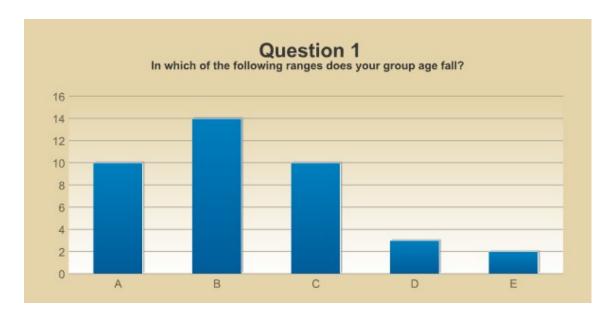


Figure 4.1. Mobile users' age group.

- A) 20-29
- B) 30-39
- C) 40-49
- D) 50-59
- E) 60+

## 4.7.2 Importance of Mobile Phone for Everyday Work Activities

Survey respondents were asked to rate the level of importance of their mobile phone for everyday corporate work tasks. This question explores the necessity of using mobile communication in the work place and the degree of disruption that would be caused by the absence of the work tool. Figure 4.2 shows questionnaire participants responses in percentages. Up to 51.3% of the survey respondent's indicated that their corporate mobile phone is critical for every day work purposes. Another 25.6% of the survey respondents expressed mobile phones to be very important in their daily corporate tasks. The results convey that corporate employees who have been equipped with a mobile phone as a work tool are very dependent on their mobile phones. The remaining 10.3% of corporate employees in the survey expressed that mobile phones are not important for their everyday work purposes. This may indicate that these employees make use of landline phones or that their jobs do not demand a lot of interaction with others.



Figure 4.2. The importance of mobile phone in everyday work tasks.

- A) Not important
- B) Important
- C) Very Important
- D) Critical

### 4.7.3 The Use of SMS for Corporate Work Related Tasks

The central use of mobile phones in the Finnish corporate environment remains to be for direct communication via talking. Finnish corporate survey respondents were asked if other forms of mobile phone communication features or mobile phone tools were used for work related tasks. SMS messaging has rapidly increased over the years by private mobile phone consumers. SMS use in the corporate environment has yet to be thoroughly researched so respondents were asked if SMS messaging was used for work related tasks. Figure 4.3 illustrates the results. Up to 74% of the survey participants believed they did use SMS messaging for work related tasks, where as 26% of the respondents believed that they did not use SMS messaging for work related tasks.

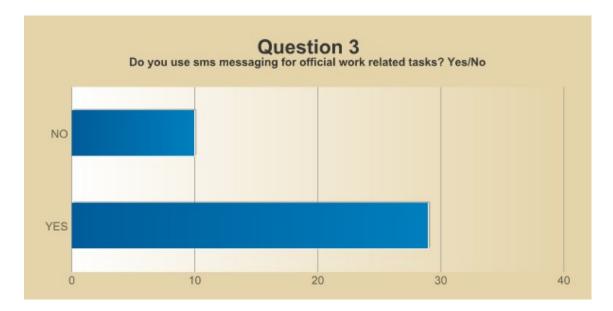


Figure 4.3. The use of SMS messaging for official work related tasks.

## 4.7.4 The Storing of Calendar Dates and Appointments

Finnish corporate mobile phone users' respondents were asked 'Where do you store important work calendar dates?' Results are presented in Figure 4.4. Around 23% of the survey respondents store the majority of all work related calendar dates and appointments on a corporate mobile phone. Up to 18% of corporate mobile phone users surveyed store the majority of calendar dates in a calendar diary. While over 20% of the survey participants suggested that they store important work dates and appointments in both mobile phone and diary. There are other alternatives in storing work calendar dates and appointments and this is presented by the response of over 38% of the respondents. These respondents use alternative such as office outlook with sync to 'windows mobile phone', 'PC and calendar diary', 'PC and mobile phone', 'only PC and exchange'.

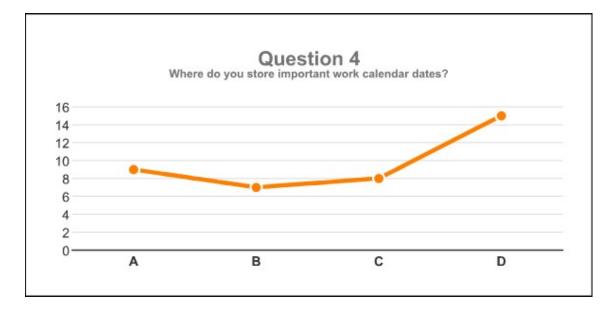


Figure 4.4. The storing of calendar dates and appointments on corporate mobile phones.

- A) Phone Calendar
- B) Diary
- C) Both
- D) Other, Office Outlook & sync to win mobile, PC and Diary, PC, PC and Phone, exchange

### 4.7.5 Perceived Valuable Corporate Mobile Phone Data

Survey participants were asked what corporate mobile phone data they believed was of value to them and their company. The given alternatives were Contacts, Photos, SMS, Calendar, Emails, None and Others (See Figure 4.5). According to survey respondents, corporate 'contacts' stored on a mobile are viewed to be of the highest importance receiving 30.4% responses. Phone calendar received 23% responses suggesting that the phone 'calendar' is the second most important company data stored on a mobile phone. Another 13% responses suggest 'SMS' are of value in regards to corporate information which is stored on a corporate mobile phone. Survey participants believe that 'emails' stored on a company mobile phone are also of value receiving 11% responses, subsequently 11% of the responses indicate that there a no important company information stored on a corporate mobile phone. 'Other' important corporate data stored on a mobile phone such as 'documents', 'memos', 'security code to office', 'GPS information' (landmarks), 'notes', 'phone settings', 'bookmarks', 'own notes and data' & 'settings of 3rd party applications' received 6% responses. The response option that received the lowest recognition of importance was 'photos', receiving 5.1% responses.

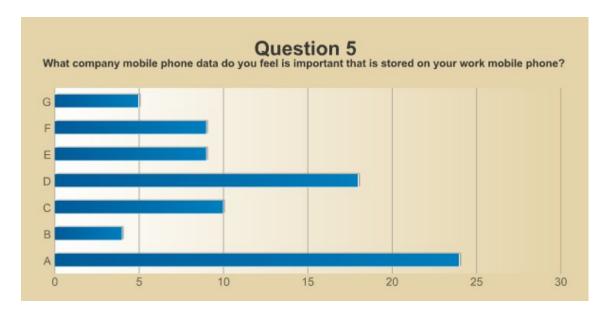


Figure 4.5. Perceived valuable corporate mobile phone data.

- A) Contacts
- B) Photos
- C) SMS
- D) Calendar
- E) Emails
- F) None
- G) Other: documents, memos, security code to office, GPS information (landmarks), notes, settings, bookmarks, own notes, data & settings of 3rd party applications

## 4.7.6 Corporate Mobile Phone Data Difficult to Recover if Lost

Continuing from previous questions presented to the survey participants, the question 'What company mobile phone data do you feel would be difficult to recover if lost?' was presented to the questionnaire survey participants. The intent of the question was to discover the true importance of corporate mobile phone data by the difficulty and effort to recover if lost.

According to the survey respondents, the data in (Figure 4.6) is presented from most difficult to least difficult in recovering company mobile phone data. The following data received the given responses, 'contacts' 27%, 'SMS' 20%, 'no data' 18%, 'photo's and 'other' (documents, settings, memos, passwords to different systems, some passwords stored on phone, secret contact numbers, security code to office) 13%, 'calendar' 9% and 0% for emails.

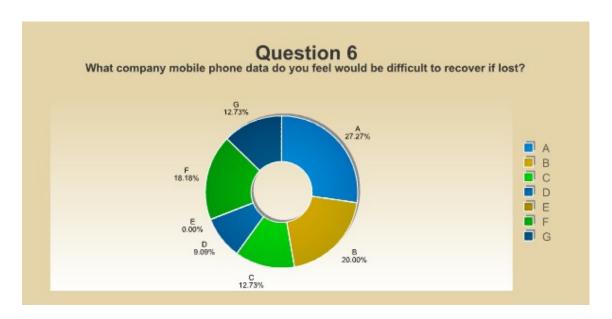


Figure 4.6. Company mobile phone data difficult to recover.

- A) Contacts
- B) SMS
- C) Photos
- D) Calendar
- E) Emails
- F) None
- G) Other: Documents, settings, memos, passwords to different systems, some passwords stored on phone, secret contact numbers, security code to office, nothing, because I write down everything as well and everything is in backend systems

## 4.7.7 Data Stored on Corporate Mobile Phones

The familiar perception of having a corporate mobile phone is that at times it will be used for personal use. The question was asked if both work and personal data are stored on company mobile phones. According to the survey participants, an overwhelming 92% of the corporate respondents suggest they store both personal and company data on their corporate mobile phone as presented in (Figure 4.7), compared to the 8% who believe that they do not store both personal and work data on a corporate mobile phone.

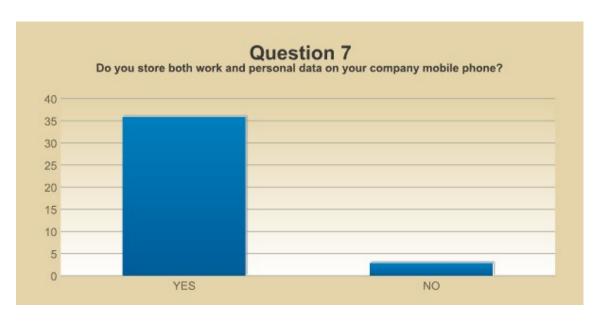


Figure 4.7. Data stored on corporate mobile phones.

### 4.7.8 Losing a Corporate Mobile Phone or Corporate Information

Mobile phones are one of those items that if lost cause an unnecessary nuisance in life. In Figure 4.8, results are shown from the survey questionnaire respondents who were asked if a company mobile phone or any important data stored on a corporate mobile phone has been lost before. Up to 74% of the questionnaire survey participants responded that they have never lost a company mobile phone. Around 15% of the Finnish corporate questionnaire respondents answered that they have lost a company mobile phone or company data at least once and another 5% of respondents answered they had lost a company phone twice during their professional career. Another 5% of the questionnaire participants have been unfortunate enough to lose a company mobile phone or data more than four times. According to the survey participants, 74% respondents have never lost a corporate mobile phone or any company related information on the phone. Where as 26% of the respondents had lost a company mobile phone at least once during their professional career.

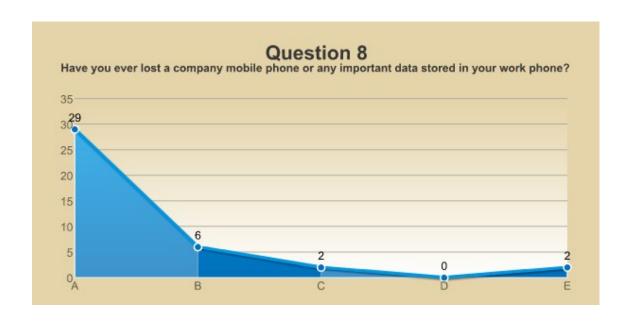


Figure 4.8. The number of times corporate mobile phone information has been lost.

- A) Never
- B) Once
- C) Twice
- D) Three times
- E) Four times+

#### 4.7.9 Backing up Corporate Mobile Phones

In the last question of the survey questionnaire, Finnish corporate participants were asked if they backup their company mobile phone. The results in (Figure 4.9) indicate that 46% of the survey questionnaire participants do backup their corporate mobile phone in some manner in comparison to the 54% of survey participants who do not backup their corporate mobile phone.

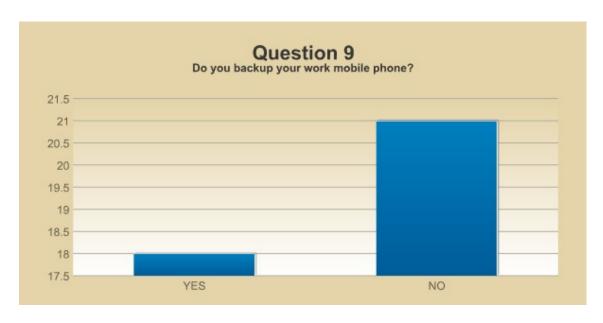


Figure 4.9. Backing up corporate data.

### 4.8 Conclusion

Chapter Four explained and provided a justification for the methodology adopted for the research thesis. The validity and reliability of the primary data was questioned and represented in the context of the research. The chapter also discussed the research steps undertaken, including the selection of questionnaire and interview participants. Primary data gathered was presented with graphs and textual analyses confirmed the figures without interpreting the results. Further analysis of the results with be discussed in Chapter Five were the primary data gathered through interviews will be applied to the survey questionnaire results to allow a deeper analysis of the primary data gathered.

## **CHAPTER 5**

#### **DISCUSSION**

#### 5.1 Introduction

Given the speed in which telecommunication technologies are evolving, and work demands increasing, one can assume that Finnish corporate mobile phone users are failing to recognise what may be considered to be corporate sensitive data on mobile phone devices. Therefore, findings in the research suggest that significant amounts of sensitive corporate data are being accessed and stored on corporate mobile phones, at the inadequate awareness of a large percentage of corporate mobile phone users, through new and existing mobile phone functions (p.45). This research applies a consistent quantitative paradigm in examining corporate mobile phone use in Finland. In specific, the use of mobile phone devices for daily work activities, and the information viewed, shared and stored on employee mobile phones. Findings also signify that the use of mobile phone devices and awareness of sensitive company information stored on a mobile phone differs by employee, work responsibilities, industry and organisation. Overall, findings suggest that corporate businesses operating in Finland need to introduce clear company data awareness policies on all company supplied mobile phones, to ensure sensitive company data is responsibly managed by employees.

## 5.2 Interpretation of Results

Secondary and primary research findings notably suggest that telecommunication tools such as mobile phones are becoming a common and essential device for corporate employees in Finland. Up to 76.9% of responses in the survey questionnaire confirm that mobile phones in the Finnish corporate environment are becoming increasingly

important as work tools. Important in terms that daily work activities would be exceedingly difficult to perform without a mobile phone, "crucial, most of my work is done via email or on the phone" (Interview. 4). Mobile phones are related to managing practical affairs and work (Rice, Katz, 2003, quoted in Koskinen, 2007, p.5). Results are further supported by findings through secondary research investigated in the study. In 2006, the total amount of corporate mobile phone subscriptions in Finland was 1.134 million (Ficora, 2007, p.7). In 2007 that figure rose by 5.8% to 1.2 million corporate mobile phone subscriptions. The increase in corporate mobile phone subscriptions indicates the continued trend of mobile phone penetration into the corporate environment.

In accordance with an increase in corporate mobile phone subscriptions, there was a 9% decline of fixed-line subscriptions at the end of 2007 in Finland (see figure 2.5), (Ficora, 2008, p.11). The figure presented in the Ficora report consists of total fixed-line subscriptions in Finland. As one interviewee proclaimed mobile phones are "Vital, use only mobile phones in the office, fixed phone lines are not used in the office" (Interview. 7). Twelve of the twenty interview participants (60%) confirmed their organisation does not use fixed-line telephones. The decrease in fixed-line subscriptions is not only visible in small to medium sized companies in Finland. Logica, a leading IT and business services company with 39,000 employees worldwide and with 2,800 employees in Finland has also discontinued the use of fixed-line telephones in the Finnish branch. The discontinued use of fixed-line phones by a large company in Finland represents a certain increasing reliance on mobile phones in certain industries in Finland. This trend may indicate the increased mobility of Finnish corporate employees and also be supported by the low mobile phone usage cost which according to a recent study conducted by Pöyry Telecom Oy on 'Mobile Call Prices 2008 International Comparison', indicated Finland having the over-all lowest mobile call prices in Europe. Finnish corporate employees whose work is mainly confined to an office work space, or fixed-line telephones are still a main source of communication in the company could disregard the importance of mobile phones as a work tool.

Mobile phones affect either directly or indirectly every aspect of a corporate users professional or personal life. They have transformed social practices and the way we do business (Katz, Aakhus, 2002). Mobile phones are allowing Finnish corporate employees to be more productive when travelling or away from the office, "can contact and be contacted by others when away from the office" (Interview. 3). The worldwide mobile workforce is set to reach one billion in 2011, accounting for 30.4% of the global workforce (BlackBerry, 2008). Corporate smartphone applications such as mobile phone email allow corporate employees to execute work activities when away from the office. Although findings in the research suggest mobile phone email is not the only phone feature Finnish corporate employees are using to conduct work. Survey questionnaire results indicate that Finnish employees utilise short text messaging for everyday work activities. Up to 74% of the survey questionnaire participants believe they use short text messaging for work related activities "if a client can not be reached over a urgent matter like an advertisement price agreement, a SMS is sent for a quick direct contact and as a reminder to them" (Interview. 11). Other corporate activities using short text messaging are legal contractual agreements between companies. Alterations in legal contractual agreements are sent by SMS from a party to another, highlighting minor details that require minor but significant changes (Nylund, 2008). The most common purpose for sending a work related SMS was during a time when a phone call was considered to be inappropriate. Findings suggest that Finnish corporate mobile phone users notion of short text messaging is that it can be used for official work purposes but still be seen as a discrete and non-offensive avenue of contacting a colleague or client during all hours of a day. Considerable increases in sent SMS and MMS messages support the interpretation of the collect primary data. In 2007, almost 3.2 billion SMS messages were sent in Finland, an increase of 200 million to the previous year (Ficora, 2008, p.6).

It is often said that a company's biggest capital is its information (Green, 2002, p.75). Determining what corporate information is more sensitive differs on the company and its employees. Results from the survey questionnaire imply that corporate contacts, short text messages and calendar dates and appointments are of highest of value on a corporate mobile phone. The importance of the corporate data magnifies when it is only

stored in one place, "all company calendar entries are stored on company phone" (Interview. 10). Around 23% of survey respondents suggested they store the majority of their work calendar dates and appointments on the corporate mobile phone, where as 20% store important work related dates in both phone and diary. Other responses imply that survey respondents store important calendar dates on PC and mobile phone. Uncommon sensitive company information such as "security code to office is stored on the phone which could be a security risk but replaceable" (Interview. 19) are being stored on Finnish corporate mobile phones. Questionnaire responses suggest that corporate participants view on sensitive company information on mobile phones is awoken by the options given in the questions.

Easily replaceable corporate phone data alters the attitude of Finnish employees in terms of what company data is perceived to be of value. Various company data if lost is easier to recover than other corporate information stored on a mobile phone. Corporate related photos are not commonly stored on a company mobile phone, but survey questionnaire responses suggest that if they were they would be difficult to recover, along with 'corporate documents', 'memos', 'passwords to different systems'. Corporate contacts and short text messages are perceived to be difficult to recover if lost. Findings imply that storing of corporate contacts is commonly done only on a mobile phone. If a company phone gets lost, broken or crashes, retrieving those contact details is time consuming. Short text messages is data also not stored any other place than on the mobile phone. If the employee does not periodically backup a mobile phone, the risk of losing all corporate related SMS is real. Even more so when corporate mobile phone users are considerably more active users of data services then non-enterprise users (Cambanis, 2003). In contrast, company information such as calendar dates were perceived to be significantly valuable, but respondents suggest that even so, the information could be retrieved, either from a colleague who is working on a similar project or a client who the employee has regular meetings with. Company related emails received and stored on a corporate mobile phone are valuable in terms of company information and business dealings being circulated and accessible to external parties. Although questionnaire responses indicate that emails stored on a corporate mobile phone are easy to recover if the device or information becomes lost. This is accurate as company emails received

and viewed on a mobile phone will also be sent to a company server and retrieved the next time an employee accesses their email account on a computer. Therefore emails in a sense are always backed up and retrievable when viewed on a mobile phone device.

With an increase in corporate mobile phone subscriptions, mobile workers and the use of mobile phone features for work related activities, certain security issues arise. An estimated 8 million mobile phones worldwide were lost in 2007, including 700,000 smartphones. Corporate smartphone users, who are mobile users most likely to access sensitive company information, are 40% more likely to lose a smartphone device (Hughes, 2007). Statistics confirm that added security measures are needed to minimise the risk of loss (Mobilise your workforce, 2007). Security risks enlarge when company data is accessed on mobile phones regularly. Survey results signify that Finnish corporate employees do store and access company information on their mobile phone, information sensitive enough to cause security concerns. But it seems that other sensitive data is stored on corporate mobile phones, such as personal data. 92% of the survey respondents claim both work and personal data is stored on company mobile phones, "personal contacts and SMS, also photos and some notes" (Interview. 20), "SMS, pictures and calendar. Personal data is more crucial if lost" (Interview. 12). One can assume that certain employees have more assurance in retrieving company information if they are taking the necessary precautions by periodically backing up company data stored on a work phone.

Company data stored on mobile phones in Finland is being lost with 15% of the survey questionnaire respondents confirming the loss of a corporate mobile phone or information in the past. As the figure is not devastatingly alarming, it may suggest that some Finnish mobile phone corporate users are more careful with a mobile phone device than others, "If users are aware of the risk to begin with, you are ahead of the game. Many risks can be addressed with technology, but the human factor is usually the wild card" (Savage, 2008). The increase in mobile workers forecast in 2011, and the increased use of mobile phones as a corporate work tool, security issues of corporate mobile phone data could rise. Finnish corporate employers will need to measure the risk

of their corporate mobile phones and information by ensuring that the company data on the mobile phone can be retrieved if lost. Finnish corporate mobile phone users need to improve the measures taken in securing mobile phone data as survey results suggest. 61% of survey participants state they do not initiate a backup on work mobile phones, "No, but should because nearly lost phone before" (Interview. 18). Results may translate that corporate mobile phone users are not aware of what may be company related data on their mobile phones and the risks of that information being lost. Another suggestion of the fact may be that survey participants' employers do not educate or equip adequately employees with content management solutions for mobile phone devices. Up to 39% of all respondents do secure their corporate data one way or another, "our company uses software that syncs most important phone data wirelessly to a company server" (Interview. 4).

Responses to survey questions appeared to stimulate consideration of what corporate related information actually may be stored on mobile phones. Research results indicate that there is valuable corporate information being stored on Finnish corporate employees, but at the unawareness of a significant amount of Finnish corporate mobile phone users. These Finnish corporate employees appear not to be conscious of what may be considered to be company sensitive data, and when and how it can be alternatively received and stored on a corporate mobile phone.

## **CHAPTER 6**

### CONCLUSION

This research study examined the apparent value of company information on Finnish corporate mobile phone devices, and employee awareness of corporate information stored on company mobile phones. Whilst most corporate information is considered to be sensitive and of value, company information on Finnish corporate employee mobile phones has not been sufficiently recognised. Mobile phones in the Finnish corporate environment are becoming an essential device in carrying out daily tasks (p.44). Evidence suggests that mobile phone devices will be increasingly taken advantage of as the global mobile workforce is set to reach one billion by 2011 (BlackBerry, 2008). This fact is supported by the transforming use of mobile phone technology in conducting daily work (Katz, Aakhus, 2002). Novel and existing mobile phone features are being used to create, receive, circulate and store significantly important company related information on mobile phone devices (p.46). Findings in this study indicate that substantial amounts of corporate sensitive data are placed on employees mobile phones, information which would mount concern if lost or found in the wrong hands (p.48). This occurs unexpectedly as employees are instinctively using mobile phone features such as phone email, calendar and SMS to conduct work everyday. The study also shows that Finnish corporate employee awareness of corporate information is not adequate by the fact that satisfactory precautions are not implemented to allow information being recovered promptly if lost. This reality is supported by the 61% of corporate employees who participated in the research, signifying that their company mobile phones are not managed or backed up by any method. (p.59)

The sample population of the research included Finnish corporate mobile phone users in Helsinki, Espoo, Vantaa and Turku. The research aim and objective was achieved by conducting a study of secondary and primary data research gathered through a literature review, survey questionnaires and interviews. The study approach incorporated a consistent quantitative study approach including numerical data gathering through

survey questionnaires with a small alternative paradigm interview component in the data collection phase.

The quantitative results and empiric study conclude that there are significant amounts of valuable corporate data being accessed, viewed and stored on company mobile phones in Finland. Whilst measures are beginning to be introduced by companies in Finland, corporate employers are largely leaving the accountability on employees to responsibly manage corporate supplied mobile phones. Corporate employers are not satisfactorily educating employees or introducing correct measures to allow the suitable management of company information on mobile phones. By educating and introducing clear company data awareness policies on all company supplied mobile phones and the growing acknowledgement of mobile phone devices as efficient work tool, Finnish corporate employees will be able to seize the maximum use of a mobile phone as a twenty first century work tool.

#### 6.2 Recommendations for Future Research

Two features of this thesis present opportunities for future studies. A future research examining the use of mobile phones within different industries in Finland may be studied. The study may discover which industries operating in Finland depend highly on company mobile phones and in turn receive and store more company information on mobile phones devices. This topic area could also discover which industry employees are more likely to be mobile workers in regards to job responsibilities and activities. The second feature for future research involves a study on content management solutions for mobile phones. Researching what can be the most feasible cost effective avenue for equipping corporate employees with a solution that allows the management of company information stored on mobile phone devices.

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## **APPENDICES**

## Appendix 1: A Copy of the Survey Questionnaire Explanatory Email

Nathan Sawicki

Thesis Questionnaire

## **Corporate Mobile Phone Study**

## A Study on Corporate Mobile Phone Information

It is said that 50 to 70% of companies that lose company data will go out of business within one year of initial data lost. This statistic is quite daunting considering that company information today is stored and managed on various company tools such as PC's and increasingly mobile phones.

Mobility is increasing in today's corporate world with <u>40-70% of employees</u> of companies working in different locations. 90% of these employees work away from the company headquarters. This fact adds to the significance of mobile phones in today's corporate environment. Employee's mobile phones are becoming as important of a work tool as a laptop.

The objective of this questionnaire is to examine the importance and significance of the corporate information stored on company mobile phones in today's Finnish corporate environment. This questionnaire includes two types of questions: multiple choice and closed-ended questions. The selected methods of questions are designed to support each other in the analysis of the research data.

Please feel free to write down your own thoughts. Your response to all of the questions is highly appreciated. The research is conducted and based on a final thesis for a Bachelor in International Business.

Please click here to begin the questionnaire.

I nank	you	ior	your	participation	!

Best Regards,

Nathan Sawicki

# **Appendix 2: A Copy of the Survey Questionnaire Questions**

1)	In which of the following ranges does your group age fall?
*2)	How important is your company mobile phone for your everyday work tasks?  Not important Important Very Important Critical
*3)	Do you use sms messaging for official work related tasks? Yes/No Please Select
*4)	Where do you store important work calendar dates?  Phone Calendar  Diary  Both  Other (Please Specify):
*5)	What company mobile phone data do you feel is important that is stored on your work mobile phone?  Contacts Photos SMS Calendar Emails None Other (Please Specify):
*6)	What company mobile phone data do you feel would be difficult to recover if lost?  Contacts SMS Photo's Calendar Emails None Other (Please Specify):
*7)	Do you store both work and personal data on your company mobile phone?  Please Select ▼
*8)	Have you ever lost a company mobile phone or any important data stored in your work phone?  Never Once Twice Three times Four times+
*9)	Do you backup your work mobile phone?  Please Select  Finish Survey

### Appendix 3: A Copy of the Research Explanatory Message to Interviewees

#### Dear Interviewee,

The objective of the study being conducted is to examine the importance and significance of the corporate information stored on company mobile phones in today's Finnish corporate environment. The research is conducted and based on a final thesis for a Bachelor in International Business.

Your participation in this research is completely voluntary. You may withdraw at any stage, or avoid answering questions which feel too personal or intrusive. The information you share will be analysed for the study. No personal details of participants will published but interviewee's company name will be included in the completed research.

You will have the opportunity to obtain a summary of the research results by contacting the researcher.

# Appendix 4: A Copy of the Interview Questions and Responses

Interview questions and responses	Company: Huurre Interview date: 10/06/08 Interview 1	Company: Reigate Interview date: 11/06/08 Interview 2	Company: Espime Interview date: 11/06/08 Interview 3	Company: Capman Interview date: 16/06/08 Interview 4
Do you feel that you have important company phone data stored on your company mobile phone?	Some calendar dates and SMS messages	Yes, but am confident to restore because is fairly easily to do so. But not to recent state or settings	Some company contacts	Yes, work emails and calendar dates. SMS do not usually contain sensitive material
2. Have you ever lost your work phone or any important data stored in your work phone?	No, I use my personal phone when travelling or going out	Not phone but phone data after the phone has crashed	No	Yes, record year was 2006 when I lost 12 phones
3. Do you use sms messaging for official work related tasks?	Yes, but not much	Yes, but not mission critical stuff like email	Some relatable work tasks but not much	Yes I do, for getting information to a lot of people fast. Also letting someone know that a problem has been solved
4. How important is your mobile phone for your everyday work tasks?	Very important, mobile phone is the work tool used most often	Very important, but mostly only for communication	Very important, can contact others and be contacted when away from the office	Crucial, most of my work is done via email or on the phone
5. Do you store both work and personal data on your work mobile phone?	Yes	Yes	Yes	Yes
6. What company phone data is irreplaceable if lost?	Customer contacts	Critical customer communication such as sms. Also photos	Important customer contacts	Just SMS would be lost. But nothing irreplaceable there
7. Do you backup your work mobile phone?	No	Yes, via Mac sync	No	Yes, our company uses software that syncs most important phone data wirelessly to a company server

Interview questions and responses	Company: IBM Interview date: 16/06/08 Interview 5	Company: TietoEnator Interview date: 16/06/08 Interview 6	Company: Moonsoft Interview date: 17/06/08 Interview 7	Company: Moonsoft Interview date: 17/06/08 Interview 8
Do you feel that you have important company phone data stored on your company mobile phone?	Yes client contacts. I call all clients from the mobile phone	No	Yes, interviewee believed contacts and calendar stored on company mobile phone are important	Yes, mainly contacts
2. Have you ever lost your work phone or any important data stored in your work phone?	No	Yes, lost it!	No	No
3. Do you use sms messaging for official work related tasks?	Yes, all the sms messages will be stored on the mobile phone	No	No	Very seldom but yes. Verifying and confirming appointments and meeting times with clients
4. How important is your mobile phone for your everyday work tasks?	Important enough, also uses office phone to make work related calls	Not so important	Vital, use only mobile phones in the office. Fixed phone lines are not used in the office	Very important, no LAN lines in office.
5. Do you store both work and personal data on your work mobile phone?	Yes, some personal contacts and photos	Yes, calendar dates and contacts	Yes, contacts and some sms messages	Yes, calendar dates and contacts
6. What company phone data is irreplaceable if lost?	Clients contact information, confidential discussions and passwords to different systems that a stored on the phone	Nothing. I feel that everything is replaceable	Company contacts	Company contacts and calendar appointments store on the phone
7. Do you backup your work mobile phone?	No, but most data is located on my work laptop	Yes, via Bluetooth to the PC	No	No

Interview questions and responses	Company: Moonsoft Interview date: 17/06/08 Interview 9	Company: Tools Interview date: 17/06/08 Interview 10	Company: Satumma Interview date: 17/06/08 Interview 11	Company: Logica Interview date: 17/06/08 Interview 12
Do you feel that you have important company phone data stored on your company mobile phone?	Yes, mainly contacts	Yes, mobile phone calendar data	No, no direct relatable company information that could be seen as important	No not really
Have you ever lost your work phone or any important data stored in your work phone?	No	No	No	Not a company phone
3. Do you use sms messaging for official work related tasks?	Yes, sending a quick response during a meeting if someone has called when I have not been able to pick up	Yes, when somebody calls during a meeting, sending a short text message to tell in a meeting	If a client can not be reached over a urgent matter like a advertisement price agreement a sms is sent for a quick direct contact as a reminder to them.	No
4. How important is your mobile phone for your everyday work tasks?	Very important, no LAN lines in office.	Very important, no fixed phone lines in the office	Very important again. No LAN lines in the office	Crucial, no LAN line phones again. Only mobile phones
5. Do you store both work and personal data on your work mobile phone?	Yes a few contacts	Yes mainly contacts	No, keep work and personal phone separate	Yes, sms, pictures, calendar. Personal data is more crucial if lost
6. What company phone data is irreplaceable if lost?	Do not keep to much important company data on the phone	Calendar entries as all company calendar entries are stored on company phone	Company contacts would be difficult and annoying to retrieve	Nothing really, can get everything back
7. Do you backup your work mobile phone?	No	No	No	Yes, data is backed up on company server but not periodically

Interview questions and responses	Company: Avaya Interview date: 16/06/08 Interview 13	Company: Webropol Interview date: 19/06/08 Interview 14	Company: Webropol Interview date: 19/06/08 Interview 15	Company: Webropol Interview date: 19/06/08 Interview 16
Do you feel that you have important company phone data stored on your company mobile phone?	Yes, data such as company contacts and some personal picture	Yes	No	Yes, but not using mobile phone to access email.
2. Have you ever lost your work phone or any important data stored in your work phone?	No	No	No	No
3. Do you use sms messaging for official work related tasks?	Sometimes, usually if it is late in the evening and I have to contact someone about business	Yes	Yes	Yes
4. How important is your mobile phone for your everyday work tasks?	To important! It's my main source of communication with clients and colleagues	Crucial, no longer use LAN phones only mobile phones	Very important	Very important
5. Do you store both work and personal data on your work mobile phone?	Yes, both personal and work contacts. Some personal photos	Yes	Yes	Yes
6. What company phone data is irreplaceable if lost?	Company information is replaceable but not personal	Some contacts could be hard to retrieve	Nothing	Nothing
7. Do you backup your work mobile phone?	No	No	No	Yes

Interview questions and responses	Company: Webropol Interview date: 19/06/08 Interview 17	Company: Webropol Interview date: 19/06/08 Interview 18	Company: Adecco Interview date: 24/06/08 Interview 19	Company: Bearing Point Interview date: 26/06/08 Interview 20
Do you feel that you have important company phone data stored on your company mobile phone?	No	Contacts stored on phone e.g. clients and colleagues numbers	Yes, company contacts	Work contacts and security codes e.g. to the office alarm
2. Have you ever lost your work phone or any important data stored in your work phone?	No	Yes, but got it back eventually	Left the phone somewhere but eventually got it back	No
3. Do you use sms messaging for official work related tasks?	Quite rarely but sometimes with the boss when he is traveling	Sometimes sending work related sms between colleagues	Yes, in the evenings or when it is not appropriate to call	No, not work related important stuff
4. How important is your mobile phone for your everyday work tasks?	Very important, especially when travelling	Very important as clients constantly call for training purposes	Very important, no LAN lines in office.	Not important
5. Do you store both work and personal data on your work mobile phone?	Yes	Yes, phone numbers, pictures and stored sms	At the moment no	Yes, personal contacts and sms. Also photos and some notes
6. What company phone data is irreplaceable if lost?	SMS and some contact info of business associates	Some work related passwords	Nothing really. Security code to office is stored on the phone which could be a security risk but replaceable	Nothing, all is replaceable
7. Do you backup your work mobile phone?	No	No, but should because nearly lost phone before	No	No