ADOPTION OF MOBILE PAYMENT METHODS
— A CHALLENGE FOR THE SENIOR CITIZENS OF SWEDEN?

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Abstract
For the first time ever, mobile payments in Sweden have overtaken cash as the preferred method of payment when it comes to monthly payments. With cashless payments growing in Sweden and all over the world it is clear that mobile payment methods are going to increase in our everyday lives. As elders tend to have more difficulties learning and understanding software, it is not unlikely that this will affect the adoption of mobile payment methods. As cash is rapidly disappearing as a payment method in Sweden it is important to gain insight into which factors affect the acceptance of mobile payment methods among senior citizens, as they are the most frequent users of cash today. This is a qualitative case study where five seniors have been interviewed about their opinions on mobile payments based on a theoretical model of mobile adoption consisting of eleven variables. The interviews came to center around the Swedish mobile payment application Swish as it was the only mobile payment service that the participants were aware of and had experience using. The study’s goal is to gain knowledge of what variables are of importance to the senior consumers when deciding whether or not to adopt a mobile payment system. The main findings of the study are that the variables: social influence, attractiveness of alternatives and trust are the variables that have been seen to affect the senior citizens’ adoption of mobile payment the most.

Sammanfattning
För första gången i Sverige har mobila betalningar gått om kontanter som den föredragna betalningsmetoden när det gäller månatliga betalningar. Eftersom kontantlösa betalningar växer i Sverige och över hela världen är det uppenbart att mobila betalningsmetoder kommer öka i vår vardag. Eftersom äldre ofta har svårigheter att lära och förstå programvara är det inte osannolikt att detta kommer att påverka adoptionen av mobila betalningsmetoder. Då kontanter snabbt minskar som betalningsmetod i Sverige är det viktigt att få insikt om vilka faktorer som påverkar acceptansen av mobila betalningsmetoder bland äldre, eftersom de är de vanligaste kontantanvändarna i dag. Detta är en kvalitativ fallstudie där fem seniorer har intervjuats om sina åsikter om mobila betalningar baserat på en teoretisk modell för adoption av mobila betalningsmetoder som består av elva variabler. Intervjuerna kom att centreras kring den svenska applikationen Swish eftersom det var den enda mobila betaltjänsten som deltagarna hade kännedom om och hade erfarenhet av. Studiens mål är att få kunskap om vilka variabler som påverkar den äldre generationens adoption av mobila betalmetoder. Studien visar att variablerna socialt inflytande, attraktivitet av alternativ och förtroende är de variabler som har visats påverka seniorernas adoption av mobila betalningar mest.
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1. Introduction

1.1 Background

For the first time ever, mobile payments in Sweden have overtaken cash as the preferred method of payment when it comes to monthly purchases according to a report done by Insight Intelligence (2018). When it comes to weekly purchases cash and mobile payments are equally common, but mobile payments are expected to overtake cash in that regard as well. The same report shows that 21% of the respondents expect mobile payment services to be their main method of payment in ten years’ time. With mobile payment services, like the Swedish provider Swish, showing steady growth (Getswish 2018) and global players such as Apple Pay and Samsung Pay entering the market, it is clear that mobile payments are becoming a valid payment option in the Swedish market.

The growth of mobile payments can become beneficial for both consumers and businesses, both when compared to cash and to card payments. As most mobile payment services are provided by large technology companies, they can use their knowledge to create better services compared to banks. This means that the checkout process can be made smoother and more secure for the consumer. It also adds extra value to both parties when these services are included in an already existing digital ecosystem.

With an increasing number of stores going cashless, it is important that all members of society are able to use the new technology. This development puts pressure on the older generations to adopt the new technology in order to perform simple payments. Since old age often brings about difficulties, adoption of mobile payment methods might be a cause for concern to senior citizens.

1.2 Mobile payment methods

Mobile payment refers to payments where a mobile device, commonly a smartphone or a tablet, is used when purchasing goods or services. Mobile payments make it possible to pay without having to use cash, credit cards or other kinds of payment methods.

1.2.1 Payment applications

The Swedish mobile payment service Swish is a mobile payment service that enables peer-to-peer transactions as well as consumer to business payments (Getswish 2018). More and more businesses are starting to offer Swish as a payment option to their clients but the majority of Swish transactions still consist of peer-to-peer transactions (Getswish 2018). Swish is an online payment platform that consists of a connection between a user’s bank account and telephone number. To use Swish, one has to have a digital identification service installed on their phone called Mobile BankID (BankID 2018). BankID is a service provided by the banks that enables an electronic identification. The electronic identification can be used online for purchasing goods, money transferring, getting access to one's personal insurance information or healthcare appointments. BankID works as your personal password when performing a payment with Swish. When using Swish the telephone number of the receiver is typed in followed by the amount to be transferred. The finishing step is to type in a personal six-digit code in the BankID application to verify the payment, once the correct code has been typed a confirmation of the transaction is shown to the user. Swish also offers the user the
opportunity to scan a QR-code instead of manually type in the receiver’s numbers. A QR-code, quick response code, is a two-dimensional barcode that generates information when scanned by a camera (Rouse 2013). By targeting the mobile phone’s camera towards the QR code, the QR-code is scanned and the receiver’s number is automatically pasted in the correct field. The interface of Swish is scaled-down and simple with only a few buttons existing, all to facilitate ease of use.

Samsung Pay is a payment system offered by Samsung that is integrated with the company’s smartphones (Samsung 2019). Samsung smartphones have integrated Near Field Communication technology (NFC) and Magnetic Secure Transmission (MST) technology that enables the phones to replace credit cards. The MST technology in the phone imitates a credit card which makes it possible to use the mobile payment method with older infrastructure designed for credit cards. The technology inside the smartphone is connected to a credit card and by extension a bank account. The service offers different verification alternatives for conducting transactions, some being iris scanning, fingerprint scanning or PIN code. To pay with Samsung Pay in a store where they have a traditional card reader, one simply hovers the phone over the card reader to perform the payment and follows up with a verification method of your choice.

Apple Pay is a similar payment service to Samsung Pay that enables iPhone/iPad users to pay with their phone/tablet, using NFC technology (Apple 2019). The payment method was first launched in 2014, but came to Sweden in 2017 (Apple 2019). Face ID or touch ID is used for verification.

Many of the large smartphone companies offer the opportunity to use an electronic wallet. The electronic wallet can be connected to many different cards such as credit cards, membership cards and gift cards. The cards are now mimicked in the phone and thus do not need to be physically present during use (Samsung n.d.; Apple 2018).

1.2.2 Near field communication

Near Field Communication, NFC, is a technology that enables contactless communication between entities (Kjell & Company 2017). The entities exchange data when in proximity to each other using radio wave technology. It originates from the Radio Frequency ID (RFID) technology which also is a wireless communication method between some sort of tag and a reader (Sempler 2005). The NFC technology is commonly used in bus cards, key tags and credit cards. Today the technology is put into smartphones which enables contactless payment between your phone and common card readers. All new Swedish credit cards have NFC technology embedded in the cards which enable contactless payment. The function is commonly referred to as “blip” and works in a contactless manner where the user hovers the credit card a few centimeters above the card reader (Svt 2017). Depending on the amount, the payment occurs immediately or requires the input of a PIN code to be accepted.

1.3 Problem discussion

With cashless payments growing in Sweden and all over the world it is clear that mobile payment methods are going to increase in our everyday lives. A report done by Insight Intelligence (2017) describes the payment habits of the Swedish population and how mobile payment methods are increasing in use every year. However, the same report shows that only 13% of the respondents between the age of 65 to 74 expect mobile payments to be their main method of payment in ten years’ time.
As elders tend to have more difficulties learning and understanding software (Ziefle & Bay 2004), it is not unlikely that this will affect the adoption of mobile payment methods. A large obstacle for mobile payment methods to become accepted among senior citizens is that these kinds of users tend to emphasize ease of learning as a cause for technology acceptance (Renaud & Biljons 2008). The fact that the only real possibility to learn is when queuing at the store, might render it too stressful for senior citizens to even consider using mobile payment services.

As cash is rapidly disappearing as a payment method in Sweden it is important to gain insight into which factors affect the acceptance of alternative payment methods among senior citizens, as they are the most frequent users of cash today.

1.4 Purpose and goal
The purpose of this study is to gain knowledge of what the main causes of mobile payment adoption are among senior smartphone users. This research will be of interest to companies in the mobile payment field. The study will shed light on what variables are of importance to the senior consumers when deciding whether or not to adopt a mobile payment system. In this study, the attitudes of senior smartphone users’ willingness to use mobile payment methods will be investigated. With mobile payments being a new technology, it might be troublesome for the Swedish senior citizens to adopt the service. This leads to the research question:

Which are the main factors affecting mobile payment adoption among elderly smartphone users in Sweden?

1.5 Delimitation
The study is limited to senior citizens who are smartphone users, as they are expected to have a better understanding of technology and have the necessary hardware to use mobile payment methods. Owning a smartphone is an obvious prerequisite for using mobile payment methods and interviewing people that do not own a smartphone would thus not be of interest as they have not adopted the necessary facilitating technology to be able to use such a service. Excluding these non-adopters of smartphones would, of course, lead to their thoughts and views not being heard, but as they have to adopt a whole different technology in order to have the possibility to use mobile payments, it increases both the relevance and feasibility of the study to exclude them. It could, however, be of interest for further studies to investigate smartphone adoption among senior citizens, as an increasing number of our daily tasks are being migrated to our phones.

This study will be focused on mobile payments from customer to business, as peer-to-peer transfers are already established in Sweden, and is thus not expected to bring any significant findings.

1.6 Target audience
This study is mainly targeted to companies that develop mobile payment systems, as it could be of interest to them to know how a certain user group perceive these kinds of services. The
study is also of interest to anyone interested in the field of technology acceptance, especially technology acceptance among elders.

1.7 Disposition
In order to outline the structure of this study, a short summary of the contents of each chapter will be presented.

Chapter 1 - Introduction
In this chapter the reader will be given a brief introduction into the field of mobile payments methods. This will be followed by a problem discussion about how the event of mobile payment methods might be problematic for elders. In connection to this a problem statement and goal will be defined along with a delimitation of the study.

Chapter 2 - Previous research
This section will present previous research made in the field of technology acceptance. The reviewed studies will be grouped into three categories that could be relevant for the theme of this study. The categories are: general technology acceptance, senior technology acceptance and mobile payment acceptance.

Chapter 3 - Theoretical framework
In this chapter a suitable theoretical model to base the study on will be chosen based on the reviewed literature. The chosen model will then be described in detail.

Chapter 4 - Methodology
The methodology chapter will describe and motivate the chosen approach for this study, from start to finish.

Chapter 5 - Result
In this chapter the empirical data collected in the study will be presented.

Chapter 6 - Discussion
This is where the results will be analyzed and compared to the chosen theoretical model.

Chapter 7 - Conclusion
In this chapter the conclusion will be made about the findings of the study.

Chapter 8 - Evaluation
In the evaluation chapter, the study itself will be critically reviewed. This will be done in order to shed light on potential weaknesses that could affect the results.

Chapter 9 - Future research
In the last chapter the authors will give their opinion about what further studies can be made based on this one.
2. Previous research

To obtain a deeper understanding of the phenomena of mobile payment adoption and technology acceptance among elders, previous research will be looked into. Special focus will be put on technology adoption research.

2.1 General Technology acceptance

In order to fully understand technology acceptance, one must first look at the general model used in the field before looking at more case specific models. Notice that the words acceptance and adoption are used interchangeably throughout this thesis, as is common in similar research.

2.1.1 Theory of Reasoned Action

Fishbein and Ajzen (1975) created the famous Theory of Reasoned Action, TRA, a model designed to explain a person’s behavior relative to that person’s intentions to behave in a certain way. In the TRA, a person’s behavioral intention is dependent on that person’s attitudes towards a certain behavior and their subjective norm. After TRA was criticized for not taking into consideration circumstantial factors, Ajzen created the Theory of Planned Behavior to meet this critique. The Theory of Planned behavior, TPB, is an adaptation of TRA. The theory resembles TRA with the exception of the new variable Perceived Behavioral Control, PBC, which explains an individual’s perception of how easy or hard it is to perform a behavior (Ajzen 1985).

2.1.2 Technology Acceptance Model

The Theory of Reasoned Action also came to be the foundation of the Technology Acceptance Model by Fred D Davis (1989). The technology acceptance model, TAM, helps explain why people use or do not use some kind of technology. The model consists of two different explanatory factors which are perceived usefulness and perceived ease of use. Perceived usefulness explains the user’s need and usefulness of the technology whilst perceived ease of use describes how easy or difficult a technology is to use according to the user. The model can be used to find out the reasons for user acceptance or the lack thereof (Davis et al. 1989).

2.1.3 Unified theory of acceptance and use of technology

The unified theory of acceptance and use of technology, UTAUT, is a result of thorough comparisons of technology acceptance models, made by Venkatesh et al. (2003). The UTAUT model aims to explain technology acceptance for users depending on four main variables. The variables are performance expectancy, effort expectancy, social influence and facilitating conditions. Performance expectancy can be defined as the user’s belief that they will perform better at work if using a technology. Effort expectancy lets us know how easy or hard a user thinks using a technology will be. Social influence is about how the users experience that other important people think that they should use or not use a technology. Facilitating conditions is a construct that depicts if the user finds the infrastructural compatibility being sufficient for using a technology. These variables, or constructs, are all affected differently by variables like gender, age and experience. Together they help explain a user’s behavioral intention to use a technology.
2.2 Senior Technology Acceptance

In order to better understand technology acceptance among senior citizens, a new model was presented, which was based on the traditional TAM. Senior Technology Acceptance Model (Renaud & van Biljons 2008), STAM, explains the different variables that are relevant for elderly people’s technology acceptance. Since senior citizens often are troubled by physical restrictions like impaired vision or a lack of understanding software, e.g. navigation of menus, the adoption process of a technology differs. The study found different acceptance factors and adoption phases that the seniors face when adopting a new technology, for example, ease of learning and confirmed usefulness.

In 2011 a study was conducted with the aim to understand which of UTAUT and the Model of Adoption of Technology in Households (MATH) is the superior model to predict internet usage among the elderly (Niehaves & Plattfaut 2011). It was also examined if the models could be improved by adding socio-demographic variables to the models. The researchers concluded that both models were able to effectively explain internet acceptance among elderly users. When looking at the results of the study, it shows that the MATH is slightly better at explaining the phenomena and that UTAUT is the more feasible of the two as it has fewer variables to investigate. Both models could improve their explanatory powers by adding socio-demographic variables according to the study. In addition to investigating the usefulness of the two models in the context of internet acceptance among elders, the results of the study also show that there is a significant difference in internet acceptance among older seniors and younger seniors, suggesting that senior citizens are not a homogenous group.

2.3 Mobile Payment Acceptance

An article by Kim, Mirusmonov and Lee (2009) tells us about the different factors that determine if a person adopts a mobile payment system or not. The study aims to find out which variables affect the adoption. They divided the users into two different groups, early adopters and late adopters. The study was conducted together with TAM (perceived usefulness and perceived ease of use) and six other variables: innovativeness, mobile payment knowledge, mobility, reachability, compatibility and convenience. The study found that people with high personal innovativeness (people that find it easy to try out new functions/systems) found it easy to use mobile payment systems. Unsurprisingly the study found out that people with previous knowledge of mobile payment systems found them easier to use than people without previous knowledge of the systems. An important variable for mobile payment system turned out to be reachability. By reachability the study means that you are always contactable by your bank, always can pay whomever you want at any time or place. Reachability was the most important factor when it comes to perceived ease of use and perceived usefulness. To get people to use the mobile payment systems the companies need to keep the systems easy to use and avoid unnecessary complexity.

In a qualitative study done by Litesjö and Östergren (2018), one can read about the Swedish people’s attitudes towards mobile payments among non-users. The authors concluded that, among the subjects, the perceived usefulness was not very high as they were content with their current payment method, where bank cards were dominant. An interesting finding was that the subjects seemed open towards using the Swedish mobile payment service Swish as a payment method if they were to offer an alternative way of making the transaction, as typing in a phone number was deemed too inconvenient.
In Lindström and Tarnawski’s (2015) paper, the factors that affect the using of the Swedish payment app Swish is studied. Like the article by Kim, Mirusmonov and Lee (2009) this study also bases their research on an evolved TAM-model. The aim of the study was to find out which factors affects the acceptance, adoption and intention of using Swish. The study found out that perceived ease of use of the app Swish is an important factor when it comes to Swish’s large number of users.

Amoroso and Magnier-Watanabe (2012) created an extended version of the traditional TAM, as they thought the traditional one was not directly applicable to the case of mobile payments. By reviewing previous literature in similar fields, they identified the eleven variables on which the model for mobile payment adoption is based. To test the new model, it was applied to the case of Mobile Sucia in Japan which, at the time, was the most successful mobile payment system in the world. One key finding was that the success of a mobile payment system is dependent on “one or several stakeholders to create favorable conditions, often in congruence with one another” (Amoroso & Magnier-Watanabe 2012). In this case, the stakeholders could be a customer at a store and the store itself. If the customer were to have an app for mobile payments in their smartphone and the store has the necessary hardware to receive mobile payments, it would be seen as favorable conditions for the mobile payment method to be accepted.
3. Theoretical framework

*In this chapter, the previously used models for explaining technology acceptance is evaluated and compared in an attempt to motivate this study’s chosen research model.*

### 3.1 Previous models

To explain the phenomena of mobile payment acceptance among elders, there are many useful models with varying degrees of relevance. General technology acceptance models like UTAUT, MATH and TAM are widely used in all sorts of cases, where the former two have been proven useful when analyzing internet usage among elders (Niehaves & Plattfaut 2011). However, these models do not take into account the specific variables that are relevant in a mobile payment context. Furthermore, the MATH model is focused on technology within a household, as it takes into account utility for children. This makes the model more relevant when analyzing shared technology within a household, like a family computer, and is less relevant for a mobile payment application that is used on a personal smartphone. The MATH also puts emphasis on costs, which are negligible in the context of mobile payment methods. TAM is the most commonly used model when it comes to technology acceptance, but it is usually modified to fit into a certain context. The original TAM would therefore not have much utility when analyzing mobile payment acceptance or technology acceptance among elders.

The STAM was specifically developed for analyzing technology acceptance among elders, which could make it a good fit for this study. It is, however, hardware-focused and was developed to explain mobile phone acceptance during different stages of usage. As the aim of this study is to investigate a software service during a non-specific stage of usage, the STAM might not be applicable.

When analyzing the case of mobile payment acceptance among elders, a model specifically developed to explain mobile payment acceptance would be useful. Kim, Mirusmonov and Lee (2009) aimed to do precisely this when they created an extended TAM model, where they identified the underlying variables affecting perceived usefulness and perceived ease of use in the traditional TAM, regarding mobile payment acceptance. The model includes innovativeness, mobile payment knowledge, mobility, reachability, compatibility and convenience as the underlying factors. It also includes mobile payment users’ type, where the effect of early and late adoption on the other factors is compared. What the authors fail to consider when creating this model is the social influence. In order to truly understand mobile payment adoption among elders, it is important to investigate social influence as elders tend to be influenced a lot by their younger relatives’ technology acceptance (Mallenius, Rossi & Tuunainen 2007). The inclusion of early and late adopters as an analysis variable could be useful when investigating emerging technologies such as mobile payment methods, but as the elderly are rarely considered early adopters of technology in the wider population, it is deemed irrelevant for this study. To investigate early and late adopters specifically among the elderly population might not be of relevance either, because the elderly are, as stated earlier, mostly influenced by their younger relatives.

To ensure the highest possible standard of the results of this study it is important to use an analysis model that has variables that are relevant for mobile payment adoption among elders. As the general technology acceptance models do not take into consideration the unique factors that affect mobile payment adoption, they are not optimal for this study. Much like the
general models, the STAM doesn’t take these factors into consideration either. It does however, consider how technology adoption differs among elders compared to the general population. The model created by Kim, Mirusmonov and Lee (2009) would seem like a good fit for this study, but as it fails to take into account the social factors when it comes to mobile payment adoption, it is not. As elders tend to be influenced by their younger relatives regarding technology acceptance, it is clear that this is a factor that needs investigation.

3.2 Research model

The model best suited for this study is the one created by Amoroso and Magnier-Watanabe (2012), which was created to be applied to cases of mobile payment adoption (Figure 1). This integrated model of mobile wallet adoption includes eleven variables that affect actual usage of these services. The inclusion of the social factors in this model is important, as the aim of this study is to investigate mobile payment adoption in the context of adoption by senior citizens, a group which tends to be influenced by relatives when adopting new technology. In chapter 3.3 a simplified model based on the original model by Amoroso & Magnier-Watanabe will be presented (Figure 2). The simplified model is made by the authors to facilitate the overview of the mobile payment adoption process. The simplified model will include the same variables but exclude some of the connections between them.

![Figure 1. Model of mobile payment method adoption (Amoroso & Magnier-Watanabe 2012)](image)

By conducting an extensive literature review on technology acceptance, Amoroso and Magnier-Watanabe (2012) identified the following eleven variables that directly or indirectly affect the usage of mobile payment services:
3.2.1 Perceived ease of use
Perceived ease of use is together with perceived usefulness part of the traditional TAM and other models based on it. Perceived ease of use is defined as: “the degree to which an individual believes that using a particular system would be free of physical and mental effort”. Amoroso and Magnier-Watanabe (2012) hypothesize that if a user perceives a mobile payment service as easy to use, they are also more likely to perceive the service as useful. The authors also found from previous studies that there is a positive relationship between perceived ease of use and attitude towards using, behavioral intention to use, social influence and actual usage.

3.2.2 Perceived usefulness
Perceived usefulness is, as mentioned earlier, one part of the traditional TAM together with perceived ease of use. It is defined as: “the degree to which an individual believes that using a particular system would enhance his or her performance” (Amoroso & Magnier-Watanabe 2012).

3.2.3 Attitude towards using
Attitude towards using is, according to Amoroso and Magnier-Watanabe (2012), a person’s positive or negative feeling towards performing a specific behavior. This variable is based on the theory of reasoned action (Fishbein & Ajzen 1975), where it is identified as a major factor influencing a person's actual behavior. Attitude towards using will, together with behavioral intention and actual usage, henceforth be referred to as the usage chain. This due to that these are the steps that needs to be passed in order to reach actual usage.

3.2.4 Facilitating conditions
Facilitating conditions are defined by Amoroso and Magnier-Watanabe (2012) as: “The belief about the accessibility to resources necessary to facilitate any service”. After their literature review, Amoroso and Magnier-Watanabe (2012) hypothesized that facilitating conditions should have a direct impact on perceived usefulness and attitude towards using. In simpler terms, this means that if the infrastructure for mobile payments is well developed, it is more likely that the users will perceive the service as useful and in turn have a more positive attitude towards using it.

3.2.5 Perceived value
Perceived value is the trade-off between what a user receives and what they sacrifice when using a service (Amoroso & Magnier-Watanabe 2012). What they receive could be quality, benefits or utilities and in turn they might need to sacrifice things such as price, time and effort. So, for a service such as mobile payments to have a perceived value for a user, whatever the user receives must outweigh what is sacrificed.

3.2.6 Perceived security and privacy
According to Amoroso and Magnier-Watanabe (2012), perceived security and privacy has a positive relationship with a user’s attitude towards using a service and also the user’s behavioral intention to use it. They also claim that there is a negative relation with perceived risk and trust in a service. Security, in this regard, concerns things such as authentication, confidentiality, non-repudiation and data integrity. Privacy includes data collection, unauthorized access, errors and secondary use.
3.2.7 Social influence

Social influence sometimes referred to as subjective norm, is the degree to which a person believes that important people close to him or her think that they should use a system (Amoroso & Magnier-Watanabe 2012). As using mobile payment services is mostly a voluntary act, unless no other option of payment is provided, social influence act by influencing the user’s perception of the services. Social influence is suggested to have a relationship to behavioral intention to use and to attractiveness of alternatives.

3.2.8 Trust

Trust, when it comes to mobile payment services, is a belief that the service provider will perform the service in accordance with the user’s expectations (Amoroso & Magnier-Watanabe 2012). As mobile payment services are internet based, and thus acting in an uncertain environment, it is of great importance to gain the trust of the users.

3.2.9 Behavioral intention to use

Behavioral intention is how strong a person’s intention to perform a specific behavior is. In their literature review, Amoroso and Magnier-Watanabe (2012) found it to be a predictor of actual use of a technology. It was found that behavioral intention to use was directly influenced by all other variables except for facilitating conditions. They did find some evidence of a correlation between behavioral intention and facilitating conditions, but because the evidence was unambiguous that connection was left out of the model.

3.2.10 Perceived risk

Perceived risk is defined as: “the subjective belief of suffering a loss in pursuit of a desired outcome” (Amoroso & Magnier-Watanabe 2012). If a user perceives it as risky to use mobile payment methods, it is likely that they will abstain from using it. Since the use of mobile payments includes people's money, it is important to mitigate the perception of risks.

3.2.11 Attractiveness of alternatives

Attractiveness of alternatives is how a customer perceives the availability of good alternative services on the marketplace (Amoroso & Magnier-Watanabe 2012). There are not many mobile payment methods available in Sweden, thus the competition among them would not be extensive at the moment. The main competitors to mobile payments services in Sweden would be card payments and cash. This is an obstacle that needs to be overcome in order for people to truly adopt mobile payment methods.

3.3 Simplified model

As the original model created by Amoroso and Magnier-Watanabe (2012) includes connections between the different variables, many of which can seem redundant, it is difficult to understand the model when visually represented. For this reason, a simplified version of the original model was created. In the simplified version, only direct connections to the earliest point in the usage chain will be included. For example, in the original model perceived value has a direct connection to both attitude towards using and behavioral intention to use. In this case the direct connection to behavioral intention was excluded, as perceived value will affect behavioral intention through attitude towards using in extension. Trust as a variable is excluded from the simplified model as it is largely affected by perceived
risk and perceived security/privacy and can be seen as an aggregation of the two. In the simplified model the variables affecting the usage chain are grouped into “internal motivators” and “external influences”. Internal motivators are, in this case, the user’s own perception of the service that is being investigated. These are the variables that are mainly affecting the user’s attitude towards using the service. External influence are the environmental factors that affect the behavioral intention to use the service. If a positive attitude exists, these variables can take the user to the next step in the usage chain which is behavioral intention to use.

Figure 2. Visualization of a simplified mobile payment adoption model.
4. Methodology

In this chapter, the approach for the study is presented. In order to answer the research question in a thorough and reliable way, the chosen approach for this study will be a qualitative case study.

4.1 Review of existing work

When searching for relevant theories among existing research the search engine Google Scholar was used together with different search phrases. Google was used when searching for information about mobile payments, Swish, BankID and other mobile payment related technologies.

Here follows a table of the used search phrases and databases to facilitate the finding of reports, articles and studies mentioned throughout the paper.

<table>
<thead>
<tr>
<th>Search phrases</th>
<th>Databases and search engines</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Mobile payment adoption”</td>
<td>Google Scholar</td>
</tr>
<tr>
<td></td>
<td>ACM Digital Library</td>
</tr>
<tr>
<td>“Mobile payment senior”</td>
<td>Google Scholar</td>
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<tr>
<td>“Technology acceptance”</td>
<td>Google Scholar</td>
</tr>
<tr>
<td>“Technology acceptance senior”</td>
<td>Google Scholar</td>
</tr>
<tr>
<td>“Swish statistics”</td>
<td>Google</td>
</tr>
<tr>
<td>“Mobile payment method”</td>
<td>Primo</td>
</tr>
<tr>
<td>“Technology Acceptance Elders”</td>
<td>Google Scholar</td>
</tr>
<tr>
<td>“Mobile Payment Adoption Sweden”</td>
<td>Google Scholar</td>
</tr>
</tbody>
</table>

4.2 Research design

4.2.1 Qualitative data collection

The chosen method for this study is a qualitative case study as this will allow for a deeper understanding of how different factors are affecting the adoption of mobile payments among Swedish seniors (Denscombe 2010). The choice of having a qualitative research approach will result in richer data and a deeper understanding of what factors are important for the subjects when choosing whether or not to use the payment services (Recker 2013). Conducting interviews rather than using a quantitative approach, like a questionnaire, will make it possible to explain a phenomenon to the subjects if needed.

The study is conducted through a deductive qualitative research consisting of several in-depth interviews. When performing a deductive research, the researcher first studies existing theories about the world, forms expectations, and then tries to gather material to support said
expectations (Jacobsen 2002). An inductive approach, where one performs research without almost any knowledge about the field to ensure that no data is dismissed by the researchers’ expectations (Jacobsen 2002), would not have been possible in this case since the researchers already have pre-existing knowledge about the field.

4.2.2 Interview method
Interviews were held face-to-face in a semi-structured manner in order to retrieve as much data as possible from the interviewees. Using semi-structured interviews allowed the participants to speak more freely than in a structured interview and might have led to more interesting discoveries. It made the interviews more flexible and feel more like a two-way conversation which according to Recker (2013) will make the subject feel more comfortable and more likely to embrace in the interview. In order to make participants feel more comfortable, the interviews were held in a, to them, familiar setting. In this case, a setting were the participants attend board meetings.

The interview questions were based on the model of mobile payment method adoption (Amoroso & Magnier-Watanabe 2012) to help make the interview questions more relevant and in turn make the collected data more valuable.

4.3 Result analysis
The data analysis of a qualitative research occurs both during the data collection and after the final collection unlike in a quantitative research (Recker 2013). After interviewing an interviewee, the first step is to transcript the whole interview using the recorded audio. When handling qualitative data, it is important to make copies of the material since losing a transcript or an audio file could have disastrous consequences. The lost data would be impossible to replace and new data would have to be collected (Denscombe 2010).

Content analysis is a manner of analyzing data by grouping certain parts of a transcript into fewer, more meaningful and descriptive categories (Jacobsen 2017). This is referred to as coding. Coding is a common way of organizing data that makes it possible to get an overview of the phenomena and discover new findings.

Traditionally the process of coding is often done in two stages. The first stage is called open coding and occurs when the author code together words, phrases or sentences that resembles each other. This is done to simplify rich and “heavy” data. The second stage of coding is called axial coding and follows the open coding in the analysis process. Axial coding occurs when categories from the open coding process is grouped together to even broader categories to facilitate the analysis (Jacobsen 2017). By doing this the analysis will soon exist of many different categories, where each will have their own place in a hierarchy. The higher up in the hierarchy of categories you get, the broader should the term of the category be (Denscombe 2010).

As the interviews in this study were highly influenced by the theoretical model of which they were intended to investigate, conventional content analysis did not seem suitable. Instead directed content analysis was used to analyze the gathered empirical data. According to Hsieh and Shannon (2005) this is a good approach if there already exists a theory that might benefit from further description. Directed content analysis is a content analysis approach where the researcher codes the empirical data into categories from an existing theory (Hsieh & Shannon 2005), in this case the Model of mobile payment method adoption (Amoroso & Magnier-
Data that cannot be coded into the existing categories is used to create new categories or subcategories to already existing ones. Using this strategy can result in a contradictory view of the phenomenon investigated or it might extend and enrich the theory (Hsieh & Shannon 2005).

The directed approach does come with a set of limitations. As the researchers enter the analysis phase with a strong prior knowledge of the subject, which guides the coding process, there is a risk that a bias could be present. This would mean that it is more likely that the researchers will find data that supports the theory, rather than contradict it. Using probing questions in the interviews, in order to either validate or disprove the theory, might give the interviewees some cues in which way to answer the questions to please the interviewers (Hsieh & Shannon 2005).

The gathered empirical data from the interviews in this study was first transcribed, then the transcribed interviews were read thoroughly and repeatedly by the researchers to create a clear view of what was said. Coding of the interviews was later done into the different predetermined variables from the theoretical model. Table 1 illustrates the directed content analysis approach for analyzing the material.

Any remaining data from the interviews that did not fit into any of the predetermined variables were given their own codes and later put into the context in which they were discussed in order to see if they had any relation to some of the predetermined variables. The remaining data was analyzed using the conventional approach of open and axial coding (Jacobsen 2017). Table 2 illustrates the approach for analyzing the remaining data that did not fit in to any of the predetermined variables.

Table 1. Illustration of directed content analysis process.

<table>
<thead>
<tr>
<th>Meaningful entity</th>
<th>Predetermined variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Yes, I don’t think Swish is particularly hard to use. But on the other hand, there might be ways to use it that I don’t know about. But just this easy way to pay through a phone number can’t be problematic, I don’t think.”</td>
<td>Perceived ease of use</td>
</tr>
<tr>
<td>“I expect them to be secure because you have to have a BankID to do something.”</td>
<td>Security</td>
</tr>
<tr>
<td>“…a good friend that we spend a lot of time with said: “This is great thing! You should really get this”. Then I’ll do some research about it.”</td>
<td>Social influence</td>
</tr>
</tbody>
</table>

Table 2. Illustration of analysis of additional data.
### Meaningful entity

<table>
<thead>
<tr>
<th>Open coding</th>
<th>Axial coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>“...in some way it is the situation that determines which method to use... Sometimes you can feel that now is probably a good situation to pay by card, and then you do that. So, it’s kind of an intuitive feeling that, now is a good situation to use this.”</td>
<td>Situation determines payment method</td>
</tr>
<tr>
<td>“I would think, how embarrassing, is the whole queue going to stand behind and wait for me to do this.”</td>
<td>Changes opinion depending on setting</td>
</tr>
<tr>
<td>“I just went to the bank and told them that I wanted Swish, and how do I do that? Then they just helped me.”</td>
<td>Receiving help</td>
</tr>
<tr>
<td>“That I have learned from my son and grandson. They had to instruct me at first, but then it works, then it is great.”</td>
<td>In need of assistance</td>
</tr>
<tr>
<td>“That I do not really have any knowledge about.”</td>
<td>Do not have any knowledge</td>
</tr>
<tr>
<td>“I shall say, I am completely clueless.”</td>
<td>Is clueless</td>
</tr>
</tbody>
</table>

### 4.4 Ethical consideration

To ensure the participants’ privacy the interviews were all anonymous. The choice of having anonymous interviews was firstly out of consideration to the participants, but secondly to gain truthful and sincere answers to the interview questions. The idea of having anonymous interviews started with the desire to receive as honest answers as possible, as participants are more willing to speak truthfully if their identity is protected. Hence, the interview participants will in this study simply be known as participant A, B, C etc.

Before starting the interviews, all participants were informed of the anonymity, that the interviews will be recorded and their right to anytime end the interview. Lastly, they were also informed of the way their information would be used in our study and for what purpose. The opportunity to receive the finished thesis was offered to all of the participants out of consideration. The interview subject appeared to interest the participants and many of the participants expressed gratitude of their newly gained knowledge. Some of the participants
explicitly stated that they participated out of curiosity and the possibility of learning new things.

4.5 Verification & validity

When researching it is important to perform the study in a credible manner. This can be done by taking into account the four variables dependability, credibility, confirmability and transferability (Recker 2013). Dependability refers to whether or not other researchers would come to the same conclusions if doing the same research or observing the same data. In the domain of research evaluation dependability is sometimes referred to as reliability. Inquiry audit is a way of obtaining dependability where a third objective party analysis the data to make sure that the findings can be replicated. Credibility, or internal validity, means that the authors have gathered sufficient evidence to support their interpretations of the findings (Recker 2013). Ensuring credibility can be done by triangulation, or by writing down all decisions during the process in order to provide evidence for the interpretations. Confirmability is the principle of independent verifying of research findings. This means that an external part would reach the same assumptions if looking at the same collected data. An example of this is when an interviewee gets to read the transcript of the interview to be able to verify and correct their statements (Recker 2013). Transferability, or external validity, refers to how much the findings of the study can be used in different contexts. If the findings can be transferred and applied to other fields the study has achieved transferability (Recker 2013).

4.6 Sample selection

The geographical demarcation of the participant is limited to the city of Borås, Västra Götaland, Sweden. The primary motivation for conducting the data collection in this city is for convenience reasons. As the aim of this study is not to find any representative data, the differentiation between the subjects was deemed sufficient, even though the subjects all live in the same city.

Senior citizens cannot be considered a homogeneous group when it comes to age (Niehaves & Plattfaut 2011), hence the aim was to get subjects that represent both younger and older senior citizens. This goal was not reached as the age span ended up being between 73-79. The participants were all part of an association board, which could mean that they are a bit more sociable and livelier than the average senior citizen in Sweden. Despite the narrow age span, the subjects had a varying degree of computer literacy, which created some interesting discussions.

The subjects were reached through The Swedish Association for Senior Citizens (SPF Seniorerna) in Borås, which was deemed a good way to reach senior citizens and create a greater mixture of background among the subjects.

In total five persons were interviewed. The average time for each interview was 45 minutes. Some of the interviewees needed more time to answer the questions and some needed less. After five interviews the answers started resembling each other suggesting that a saturation within the subject was reached. According to Sheree Dukes (1984) it is sufficient to have a sample size of 3-10 people in a phenomenological study. As this study was done to investigate elders’ perception and experiences with the phenomenon of mobile payment methods, it could be considered a phenomenological study.
5. Result

In this chapter the result of the study will be presented. At first the participants of the study and their backgrounds will be introduced. The chapter continues with an introduction of the coding process which is based on the variables from the model by Amoroso & Magnier-Watanabe (2012). The chapter finishes of with the presentation of three additional variables that were discovered in the coding process.

5.1 Introduction of interview participants

The authors interviewed five people, of whom 4 were women and one man. They all belonged to the same association where they all had a board position.

Interviewee A is a 73-year-old woman. She has a history of working with computers and have been in charge of the accounting of companies where she used IT systems. She has both children and grandchildren.

Interviewee B is a 78-year-old woman who worked with computers for 20 years before she retired. She has both children and grandchildren and lives together with an IT interested partner in the city Borås. She does not share her partner’s interest of IT.

Interviewee C is a 75-year-old woman. Half of the year she lives abroad. During that time, she stays in contact with family and friends through the internet. She has both children and grandchildren, of whom she depends on when it comes to IT.

Interviewee D is a 79-year-old man that used to work within the police. He has an interest of technology and tries to always stay up-to-date with innovations. He has grown up children that also uses technology.

Interviewee E is a 75-year-old woman. She used to work as a principal where she used a computer daily. She has both children and grandchildren and lives together with her husband. While she enjoys learning new things about IT, often with guidance from her grandchildren, her husband doesn’t.

5.2 Presentation of result

The empirical data is coded into and presented under the different variables in the Model of mobile payment method adoption by Amoroso and Magnier-Watanabe (2012). In addition to the variables from the model, three additional phenomena will be presented.

5.2.1 Perceived ease of use

When it comes to the ease of use of mobile payment methods Swish was used as an example since it was the only payment method the subjects had used. There seem to be a consensus that Swish as a service, is an easy one to use according to the participants. Many of the subjects thought of the service as simple, uncomplicated and with a clear process. The simplistic layout of the application, which does only have the most crucial buttons visible in the interface, made the process smooth and accessible. Finding the right contact using the contact list button was considered useful and most practical among the subjects. It was common for the subjects to use the contact list feature in the application instead of typing in
the number manually, since many of the participants usually added the phone number in to their contacts after having made a transaction through Swish for the first time.

“Yes, I don’t think Swish is particularly hard to use. But on the other hand, there might be ways to use it that I don’t know about. But just this easy way to pay through a phone number can’t be problematic, I don’t think.” - Interview D.

However, when asked about the specific use-case of using mobile payments in store many of the interviewees stated having a different opinion. As the first question was about the Swish application in general, the subjects thought about the peer-to-peer transfer service, which was viewed as easy to use. When the subjects switched focus to expressing their thoughts on using the service to pay in store it started to sound differently. The previously considered easy-to-use application Swish was now considered time consuming, inconvenient and not smooth enough for it to be worth paying with Swish. Since they have to manually type in the stores 10-digit code in what could possibly be an unfamiliar setting the service was not considered as convenient to use as when used in a peer-to-peer setting.

“I think Swish has too many numbers that you have to write and all that, but I use it if they ask me to. Otherwise I have my cards, bank cards and so on...” - Interview B.

“Yes, well the only downside is that it takes a bit of time. You know, because I’m in this senior citizen association and at our monthly meetings they have the possibility to pay by cash or Swish. But that creates a line... Because many do not save the “Swish code” as a favorite, so each time they have to stand there looking at this and write the numbers, and that creates a line.” - Interview C.

5.2.2 Perceived usefulness
The opinion on the usefulness of mobile payment services seemed to be mixed among the interviewees. Some of the interviewees saw it as a useful tool and a good complement to other payment methods, while others had a hard time seeing the utility of the service when comparing it to their preferred payment method:

“Yes, but I think it’s very good. I think it’s a good tool.” - Interview E.

“Yes, absolutely. I think it’s a bit of fun to keep up. Even though I’m a bit older I think it’s fun to keep up with how it works and what’s happening, so you stay on track.” - Interview D.

As perceived usefulness is part of the TAM, which serves as a basis for Amoroso and Magnier-Watanabe’s (2012) model, it could be seen as one of the most important variables. It can, therefore, be a large obstacle for mobile payment adoption if the perceived usefulness is low. When discussing the utility of Swish with the participants who did not perceive the service as useful, it was obvious that comparative utility was important for them, rather than the utility of the service itself:

“It can be easier to just insert your card at the store or so, of course. Just input your four numbers. At a store it’s easier if they have that device and I just insert my card. That is... compared to taking out your phone and... it’s easier with card.” - Interview B.

“No, not if I have a bank card, and if they have one those payment code, that you put your bank card into.” - Interview A.
5.2.3 Facilitating conditions

For users to adopt a mobile payment service it is obvious that a good infrastructure for the service must exist. Most of the interviewees actually had the perception of Swish being available almost everywhere, stating having seen the Swish sign almost in all stores, but admitted to not having paid that much attention to look for it as it was not their preferred payment method:

“I have not experienced that I have come across places where it is not possible. But I don’t use it so frequently so I am not looking for it everywhere I go.” - Interview D.

“So, I do not look for it so much since they have a bank box (card reader), but I now feel that I have seen it more and more, so most people probably have it.” - Interview A.

This perception of a developed and widely spread infrastructure to facilitate mobile payments made the respondents feel like they could leave home without bringing their wallet and only make purchases with their phone. It is important to note that even though there was a positive feeling towards leaving home without a wallet, the respondents had not actually tried to do so. It seems as though in this case, perceived facilitating conditions generates a more positive attitude towards the service. As this is only their perception of the facilitating conditions, it could be that if the respondents were to try leaving home with only their phone, they would find that the infrastructure is not what they expected. One respondent did say that lacking network reception might be something that could prevent her from paying, if she were not to bring her wallet.

“I could actually feel that I can do that. Now I do it very rarely, maybe that’s why I am so convinced that I would manage. But I do not feel that it is an obstacle for me if I would have forgotten the wallet because then I have the mobile phone with me.” - Interview E.

“...where the reception is not available and you do not have this network connection and all this... and should I then make a payment then it would after all be an obstacle and there are obviously obstacles then.” - Interview E.

5.2.4 Perceived value

Regarding the perceived value of a mobile payment service, some of the interviewees failed to see much personal gain from using it. Some did, however, claim that it seemed better for the store owners as it would mean lower transaction costs than using cards. Using Swish instead of card when purchasing for small sums would make the store owner avoid transaction costs. Some of the participants saw mobile payment as a valuable complementary payment method to use when other payment methods are not available. Some participants expressed a sense of security and satisfaction in having different options when it comes to payment.

“[about appreciating options] Yes, I think there is a diversity and you can handle it.” - Interview E.

“Yes, there are of course advantages if you... I think... yes, because many times when they take Swish, they don’t have one of those card readers. So, it’s apparently very good for small businesses, that’s perfect.” - Interview C.
“...I’m maybe a little bit of the opinion that if you buy for pretty small sums, you think that with card the store owner still needs to pay for it. However, if I pay with Swish there would be no additional charges on their part, I would think. I don’t know if that’s the case nowadays, but it used to be.” - Interview D.

Paying with other payment methods than Swish was considered preferable since Swish demanded more time and effort when making a payment. Some of the interviewees were of the opinion that they needed to sacrifice both time and convenience when using mobile payment methods. Especially card payment was considered a more valuable payment method with it being easier than mobile payment methods and also quicker.

“... it takes a little bit longer than to just insert your card, input the code and then take the card. Because then you have to put it in, and then confirm, or... and jump over to BankID and then you have to do that part and then you need to wait until it’s done and to send and... so for me it’s probably a little bit too inconvenient.” - Interview C.

“...it’s easier with card.” - Interview B.

Though not all of the participants valued card payment higher than other payment methods. One participant saw mobile payment methods as a more convenient alternative than both card or cash payment since she considered it a quicker alternative.

“What should I say, with the card it’s like... it’s little bit of a slower process [compared to Swish].” - Interview E.

5.2.5 Perceived security and privacy

The interviews show that although there seems to exist a knowledge gap of security risks, the overall feeling of mobile payments is that they are safe to use and the risk of something happening is low. This goes against the general notion that lacking knowledge about a technology makes the perception of it more riskful. This is partly due to the confidence in the BankID and that in the process of making a payment, a verification is included which clearly shows the name of the recipient.

“I expect them to be secure because you have to have a BankID to do something.” - Interview C.

“I have not read that you can be deceived in the same way as losing a credit card or something. I haven’t heard about that with Swish. There is certainly some way to fool people, but I have no knowledge of that.” - Interview D.

Another reason for the participants feeling of safety is that Swedish banks are the ones behind BankID and Swish. Some of the participants clearly stated that they would not feel as safe using a mobile payment application if it was a tech company behind it and not a bank.

About if companies where behind Swish and not banks:

“I think I had been more skeptical and it might be very naive to think so. But since it is a bank, I think, but then it must still be safe.” - Interview E.
“Yes, one might have greater confidence in banks generally than larger companies. Banks have, for the most part, quite a lot of confidence among people in general, so there might be some difference in that” - Interview D.

On the topic of privacy and how the interviewees feel about how mobile payment systems, like Swish, handle their personal data the common response was of ignorance. It was not common to have any particular thoughts about the privacy matter. If any, the interviewees trusted that the handling of data was done in an appropriate way.

“I shall say, I am completely clueless.” - Interview E.

“Where BankID is being used, there I trust the privacy.” - Interview C.

5.2.6 Social influence
When asked about social influence all of the interviewees admit to have been influenced by their family to some extent, especially younger members of the family. This is not surprising as it has been found in previous studies that elders tend to be influenced mainly by their younger relatives when it comes to adopting new technology (Mallenius, Rossi & Tuunainen 2007). Many also claim to use their family for technical support when it comes to these kinds of services:

“They would say: “Mom, you should get this thing”. Okay, here you go, here’s the phone.” - Interview C.

“I have grown-up kids and they probably talked about it, so I guess that’s why I got it. Then there was TV commercials, so you couldn’t really avoid getting to know about it. And then you also got information about Swish by post from Telia or something like that, I would think.” - Interview D.

“Yes, I have my partner who is very interested. I’m not that interested in it. But it’s probably he who has influenced me that I should... but about Swish and all that, I’m not that interested in it, but I still use it because it’s easy to use.” - Interview B.

Many claims that their immediate family is not the only source of influence when it comes to mobile payment adoption. Most have heard about it from friends as well, who have talked warmly about the service. This influence contradicts the finding of Mallenius et al. (2007) which seemed to show that elders are not influenced as much by people in their own age group. It could be that the technological advances made, during the time since that journal was published, has made the elders of today more comfortable with technology and thus talk about it more with their peers.

“Yes, I think so. I’m absolutely convinced about that because a good friend that we spend a lot of time with said: “This is great thing! You should really get this”. Then I’ll do some research about it. It’s not like I’m getting on every single thing that’s new, that I don’t. But things that can make my life easier, our daily life, they are good tools and those I would like to have.” - Interview E.

“Yes, of course you are (influenced by friends). “I’ll pay and you can Swish me later”, that’s what you say nowadays.” - Interview C.
One interviewee said that she had been influenced by both her friends and family but claims that the source of influence has no real effect on her technology acceptance, as long as the service is useful. It is hard to know if this is actually the case when it comes to influence or if the person sees herself as open to new experiences rather than being influenced by others.

“It’s probably... well it has no significance it something... I think I’m very open to what’s happening in society, if there’s a development or something. If it’s children, grandchildren or friends, well that sounds interesting and I’ll do some more research about it. Sometimes maybe I’m a bit more careful and sometimes I’m a bit quicker to get on it, if I see that this is a good thing. So, it probably doesn’t matter. If it’s the little man or the grown-up man doesn’t matter to me.” - Interview E.

5.2.7 Trust
When asked about Swish specifically, all of the interviewees claimed to trust the company. As previously mentioned in 5.2.5, the fact that it is banks that are behind Swish and BankID is an important factor to take into consideration when discussing the trust of mobile payment methods.

“Yes, that I have [trust in Swish]. I use Swish both privately and, in the association, and it always works perfectly.” - Interview A.

“Yes, I have [trust in Swish]. It could be that there are things going on that would make me trust them less. But I haven’t noticed anything like that yet.” - Interview D.

The interviewees were asked if the fact that Swish is backed by a group of large Swedish banks affected their trust and if they would have lower trust in services provided by large tech companies. They all stated that they would not trust large companies to the same extent as they trust banks. Many of the participants went to the bank to get Swish and BankID for the first time. The support and trust the banks provide the users when it comes to mobile payment method may affect the adoption of mobile payment methods positively. Without the perception of trust and the same availability of support, tech companies might encounter problems when it comes to the adoption of their mobile payment applications.

“No, I wouldn’t want to have that. I don’t know, I trust the banks. I try to have as little as possible of other things on my phone.” - Interview C.

“Yes, I would have [another perception], I think so. Then I think I would be more skeptical and that might be a very naive way of thinking. But because it’s a bank I think: “this has to be safe”. And when I have a meeting with my advisor (at the bank) she says: “This you can trust”. ” - Interview E.

5.2.8 Perceived risk
The interviewees did not perceive that there were any major risks associated with the use of mobile payments, in this case Swish. Since the process of Swish is dependent on the verification using BankID and also a six-digit code, the subjects thought of it as unlikely that something would happen to them. As mentioned in the previous section about trust, the fact that BankID is backed by banks leaves the user feeling safe when making payments with Swish. Since banks are behind the applications, the thoughts are that precautions must have been taken to protect the users against risks. Some participants felt that there are more risks
with using cash than mobile payment. It is easier to be robbed off your cash than for someone to rob your Swish, since you have to insert your code using BankID.

“It would be safer with Swish than having cash on you ... I mean being robbed of swish sounds unlikely really, you have to have BankID and you have to have codes and everything to fix it after all. If you have your code in your head and not written down nearby, I don’t think it can be so simple.”- Interview D.

Some of the interviewees explained that by taking their own precautionary measures, they can protect themselves and minimize safety risks, even though the safety risks are somewhat unidentified.

“I never sit down and make payments like that in the public but pay bills and stuff on the phone I do at home. And Swish is, after all, in private spaces”- Interview C.

“There are risks, of course, there are risks with everything, I am quite vigilant and investigate a little before and so... if I handle it with common sense and apply it wisely then... it is clear that things can happen, it can.”- Interview E.

5.2.9 Attractiveness of alternatives

An overall theme through all interviews is that card payment, together with cash to some extent, is the preferred means of payment. Card payment is seen as the easiest and fastest option. The interviewees answers indicate that different payment methods are used. Most use the payment method that best suits the moment. Invoice, card payment, mobile payment, cash payment and direct debit are mentioned as alternatives. Attractiveness of alternatives seems to be a huge obstacle for mobile payment adoption among the respondents, mainly because of the popularity of card payments. A simpler payment process was the main reason for card payments being a more attractive alternative, and with NFC activated cards becoming more common it is likely that card payments will keep their advantage over Swish if they do not adopt the same technology.

“I think it is easier to pay with card”- Interview B.

“Card payment is what is most frequent for me, I have to say. And cash I rarely actually use. I pay with cards even though I buy a newspaper for 20-30 SEK, which is the most common.”- Interview D.

5.3 Additional Findings

When analyzing the empirical data, three new phenomena were found in addition to the variables from the model from the theoretical framework. These variables did not seem to be working on their own, but rather being underlying factors affecting the existing variables in the theoretical model.

5.3.1 Situation

Situation or setting was commonly mentioned when discussing the ease of use of Swish. There seemed to be a consensus that the service was easy and convenient to use peer-to-peer, as mentioned earlier. Apparently though, the service was inconvenient and slow to use in a store. One of the respondents said when asked if Swish was easy to use:
“Yes, it is [easy to use]” - Interview B.

The same person said when asked about using Swish when paying in a store:

“I think that with Swish there are a bunch of digits that you have to input and all that. I use it if they ask for it. Otherwise I have my cards, my bank cards.” - Interview B.

When asking interviewee C if it is easy to use Swish she replies:

“Yes. If I make a payment to someone, I’ll add them as a favorite, so I have like most people that I need to do payments to.” - Interview C.

When asked if she still find Swish easy to use if she has to write in the telephone number by hand she said:

“Yes, it is, no problem.” - Interview C.

On the topic of in store use she claimed to feel embarrassed when going through the mobile payment process in a queue with people waiting behind her.

“I would think, how embarrassing, is the whole queue going to stand behind and wait for me to do this [input of store number in Swish]” - Interview C.

It seems to be that ease of use is not a consistent attribute of the service, but can change depending on the situation in which the service is used. One of the participants seemed to state situation as being the main factor determining her choice of payment method.

“...in some way it is the situation that determines which method to use. It is a little bit like that. Sometimes you can feel that now is probably a good situation to pay by card, and then you do that. So, it’s kind of an intuitive feeling that, now is a good situation to use this [payment method].” - Interview E.

5.3.2 Lack of knowledge

As mentioned earlier the respondents seemed to perceive the security and privacy of mobile payment services as quite high. When discussing the topic, it was common for them to motivate this high level of perceived security with a lack of knowledge about the subject. This contradicts many studies on risk perception compared to the knowledge of the participants about the riskful event. In these kinds of studies, it is common for the perceived risk to be higher for people with a lower level of knowledge (Sjöberg & Drottz-Sjöberg 1991). It might be that the participants in this survey have less knowledge about technology in general and thus makes IT-threats hard to grasp. It can also be that the level of trust that the interviewees have for Swish in particular is so high that they do not feel the need to think about risks, security- and privacy concerns.

“That I do not really have any knowledge about. But I don’t think it has...I mean you get so much unjustified commercials here and there... My address gets out there. But if it is because of Swish or something else I can’t answer. So about Swish, I haven’t thought about it.” - Interview D.
“Well...Truthfully I have not thought much about the security. I count on them to be secure” - Interview C.

5.3.3 Support
When getting mobile payment services, it was very common among the respondents to be in need of support and help from others. Setting up the service for use was usually done by having a family member do it for you or receiving assistance from staff at the bank. Even though it was common among the respondents to need help during the initial setup, most of them did not see themselves as reliant on others when it comes to using mobile payment services. It could be that, among this group of elders, the need for assistance in the initial phase of trying service is big. But when the service is up and running, they can rely on experience from other application to be able to navigate the graphical user interface.

“I just went to the bank and told them that I wanted Swish, and how do I do that? Then they just helped me.” - Interview A.

“That I have learned from my son and grandson. They had to instruct me at first, but then it works, then it is great.” - Interview C.
6. Discussion

After analyzing the data from the interviews, four of the variables from the theoretical model were mentioned more frequently than the others. Trust, social influence, perceived ease of use and attractiveness of alternatives appeared to be the main factors influencing the adoption of mobile payment methods in this test group.

6.1 Main factors

All of the interviewees claimed to have trust in the mobile payment app Swish. This might be due to that they are used to using the peer-to-peer service. This is the most common way of using Swish and whatever experience the subjects have with that service is going to have an impact on their trust of the whole company. A common theme throughout the interviews is that the respondents do not have any inherent mistrust towards Swish and they all claim that their trust is based on their previous experience with the services, previous experiences of friends and family and reported cases of the service not living up to expectations. The elders in this group seemed to have trust in Swish until proven otherwise, and this might be a good sign for the adoption of mobile payment methods among elders in Sweden.

There is however a problem that interviewees have much less trust in tech companies compared to banks. This puts Swish in a clear advantage compared to Apple Pay, Samsung Pay and Google Pay, but as these services have other advantages it does not necessarily mean that they will have to struggle to establish a user base among Swedish elders. As this was not a concern that elders expressed on their own, but merely a response to a direct question about if they would have the same trust in a service backed by tech companies as they have towards Swish, it might not even be an obstacle. The interviewees did not seem to put much own thought into who provides the services and their trust or mistrust in tech companies might not affect the adoption of mobile payments to any larger extent.

These individuals’ use of mobile payments seems to be dependent on whether or not the individual has an affecting environment, often existing of family or friends. In many cases, the interviewee explained that they came to adopt and download a mobile payment method due to pressure and influences from relatives and friends. A clear theme in the interviews was that the interviewees did not endeavor to learn the new technology, but instead assumed that younger family members would do it for them. Without the perceived external pressure from people who motivates you to acquire new technologies, and explains its purpose and value, it is much likely more difficult for a person to come to the realization that a need for the technology exists.

Almost all of the participants answered that they received help to install and use the mobile payment application. It was only one of the five participants that downloaded the application by herself. The other ones received help by family or by an advisor at the bank. This leads to the perception that senior citizens might be dependent on other individuals’ help to adopt a mobile payments system, especially in the initial phase. Senior citizens on the outskirts of society, without the access of family or friends, may not adopt mobile payment methods to the extent needed. This may have a negative effect on the acceptance of mobile payment in the society.

Since Swish was the only mobile payment application the interviewees knew about and had experience of, the questions about the ease of use was based on Swish. All of the participants
felt that Swish was an easy and simple application to use. However, one significant finding was that the perceived ease of use was affected by the environment and certain situations.

Even though the process of using Swish was unchanged depending on time and place, several of the participants said that it was far too complicated to use Swish in stores. The participants gave the impression that using Swish in stores was complicated, time-consuming and even embarrassing. In the case of Swish, one has to type in the stores ten-digit number together with the amount, followed by verification using BankID and then show the cashier a payment verification. Using Swish in stores would for the participants mean that they are being slow at the checkout causing other people to queue for a longer time. Meanwhile, the participants find the use of the application smooth and easy when using it at home or in smaller gatherings. This indicates that the participants experience the application as less convenient to use when in a stressful environment. The place or situation seems to be an underlying variable that affects the ease-of-use.

It is not unlikely that this change of opinion could be affected by the Swedish culture and the law of “jante”. This implies that one should not be in the way of others or think too much of oneself. Taking up more time than necessary when paying for something, when quicker alternatives are available, could be considered rude in the Swedish culture.

As the input method of Swish is seen as inconvenient to use in a store setting, it might affect the adoption of the service as a mean of paying in-store. Although this might be a good thing for competing services as most of them use contactless technologies to make payments.

The interviews show that card payment is extremely well established in this group, and it could be a contributing factor to why mobile payments are not an equally obvious payment option at present. Card payments were seen as a convenient way to pay for goods and services and most of the respondents also viewed it as the quickest payment method.

It seemed to be common among the interviewees to carry cash, though none of them claimed it to be their preferred or most frequent payment method. Even though cash was seen as unsafe compared to other means of payment, most of the interviewees liked to have it as an alternative. This might be due to habit or it could be that carrying cash brings a sense of security, knowing that in the event of technical issues one can usually still pay with cash. A few of the respondents also claimed that they liked using cash for smaller purchases and reserved card payments for larger sums. This is likely an old habit because store owners previously had a minimum sum for card payments as many small card payments would cost them more.

NFC-enabled cards were not an obvious payment method for most of the respondents. When asked about it a few of them expressed security concerns, due to the fact that NFC enabled cards can be used without a pin code for smaller purchases. It was also perceived that these kinds of cards did not bring enough extra value, as the time saved using NFC compared to using cards with a chip or magnetic strip is too low. Some also said that they rarely think about NFC when they are in the process of making a payment and claimed that this is due to habit combined with the fact that it is a bit unclear where you need to put your card in order to make an NFC payment.

Attractiveness of alternatives could be a huge obstacle if mobile payments are to be adopted by elders in Sweden, as card payments are clearly still the favorite payment method. There
could however be room for mobile payments as a means of making smaller purchases, with cash becoming less frequent and some of the interviewees claiming to like using mobile payment methods for smaller purchases.

### 6.2 Other factors

When analyzing the interviews, it is obvious that, in this test group, the perceived value of mobile payment methods is quite low. The interviewees do not see much to gain from using this kind of service, but they do feel that they need to sacrifice both time and convenience when using it. As Swish was the only mobile payment method that the interviewees were aware of, Swish strengths and weaknesses got to represent mobile payment methods as a whole. When using Swish in a store the customer usually needs to input the store number, input the sum, authorize themselves in BankID and then show the store clerk that the payment is done. This process was seen as too time-consuming compared to card payments. The input method is the main problem when it comes to the perceived value. This can come to change as Swish has started implementing QR code scanning and services such as Apple Pay and Samsung Pay are using NFC to make payments. This could clearly bring a lot more value to the proposition to use mobile payment methods.

It is clear that the respondents’ opinion of Swish affects their perception of mobile payment services overall. This is also true for the perceived usefulness of mobile payments among the interviewees, as most of them see it mainly as a peer-to-peer service. They all like having the possibility to split bills with their friends with help from Swish or to simply transfer money much quicker than through bank transfer. But as with ease of use, the usefulness of the service is also lower when asked specifically about using the service in-store. Perceived usefulness seemed to have a close relationship with attractiveness of alternatives as the respondents mostly talked about other payment methods as a comparison to motivate their own opinion about the usefulness of mobile payment methods. The respondents that perceived the service as somewhat useful did so by talking about it as a useful alternative to their preferred payment method. Mainly it was perceived as a good option if the interviewee would forget to bring their wallet when going shopping.

In general, Swish was perceived as a secure application. Most of the interviewees motivated their lack of security concern with them not having any personal experience of the security being breached, people close to them having similar experiences or news outlets reporting on security breaches, much like with their trust in Swish. When some security concern was voiced, it was mainly due to the interviewee having experienced lacking security in other information technologies. It was common during the interviews that appreciation was shown for the authentication and non-repudiation in Swish. The subjects liked that the application used BankID for authentication as it was viewed as safe. They also liked that you could clearly and quickly verify that a payment had been done, to whom and the sum of the payment.

Privacy concerns were almost non-existent in this group, where only one of the respondents claimed to take any precautions to protect her privacy, though this was mainly when using web browsers. Another subject said that privacy could be an issue in these kinds of services, but that it could not really cause that much harm.
The main cause for the lack of concern about security and privacy in this group was likely due to a lack of knowledge. The same was true for the risks associated with using mobile payment methods, where the respondent could not think of what risks could exist. The risks were also deemed low because the interviewees felt that they could directly mitigate any risks by using the service in a responsible manner. Perceived security, privacy and risks did not seem to have much effect on mobile payment adoption in this group due to the lack of evidence proving a cause for concern.

The availability of the mobile payment infrastructure in-store was not something that the participants had put much thought into. When questioned about the availability of the infrastructure all of the participants answered that the service seemed well spread, but that they had not actively searched for it. Only one of the participants mentioned the importance of having access to the internet and having reception on your phone to be able to perform mobile payments. Since it was not mentioned by the other participants, it does not seem to be a problem that they have encountered, and thus nothing that has adversely affected the mobile payment adoption.

In today's society, the mobile phone is used frequently and it affects the battery life of the phone. If the battery runs out, it is not possible to use mobile payments. This could be a problem for mobile payment adoption, but for the participants in this research, it does not seem to be a problem since none of the participants mentioned it.

6.3 Usage

There seems to be a slightly positive attitude towards using mobile payments in-store among the participants. All of the respondents are frequent users of Swish’s peer-to-peer service and enjoy using it, and most of the variables that affects the attitude towards using are positive. The perceived risk when using mobile payment methods are low, the perceived security and privacy, the facilitating conditions and the trust are all high. However, ease of use and usefulness were perceived a bit lower in a store environment, though both were perceived as high when used peer-to-peer. The main cause for the attitude not being very positive is the perceived value, as gains from using the service did not outweigh the sacrifices.

When looking at the behavioral intentions to use mobile payment methods in-store, no specific question was asked in order to measure it. One could, however, assume that if the attitude towards using it was slightly positive, the inclusion of attractiveness of alternatives as an affecting variable would make the intention low, as card payment was seen as a much better payment method.
7. Conclusion

The goal of this study was to identify the main factors affecting mobile payment adoption among elders in Sweden. In order to reach this goal, a qualitative case study was conducted, which gave a deeper insight into which the main contributing factors for mobile payment adoption are in this group. The interview guide was based on Amoroso and Magnier-Watanabe’s (2012) model for mobile wallet adoption and the empirical data from the interviews were analyzed using a simplified model, with the goal to answer the question:

**Which are the main factors affecting mobile payment adoption among elderly smartphone users in Sweden?**

After mapping the empirical data to the theoretical model four of the variables were more frequently occurring than the others in the interviewees’ answers. In addition, three more themes were found when analyzing the remaining data that did not fit into any of the existing variables. The four most frequently occurring variables were: Trust, social influence, perceived ease of use and attractiveness of alternatives, with the additional three being underlying factors in the form of lack of knowledge, situation and support.

Although trust was a frequently mentioned in the interviews, it seemed that it did not have much impact on the adoption of mobile payments in this group, as the interviewees had trust in the service by default. There was some mistrust mentioned towards tech companies, but as this was a response to a direct question and not something the respondents thought of on their own, one cannot know if this mistrust would appear if not directly asked to reflect on it. This leads to the conclusion that it might not be suitable to consider trust as one of the main factors influencing mobile payment adoption among elderly smartphone users in Sweden.

Social influence appeared to have a large impact on mobile payment adoption in this group. All of the interviewees claim this to be their main motivation to get the service in the first place. Another interesting finding was that, unlike previous research (Mallenius, Rossi & Tuunainen 2007), younger relatives was not as important as expected. Most claimed to have some influence from younger relatives, but the main influence differed from relatives to friends to significant others. Most of the respondents seemed to be dependent on others when initially getting started with the service, but gained confidence in doing things themselves at a later stage. This means that personal support and help might be an important factor in mobile payment adoption, but only in the initial phase.

Ease of use was a huge obstacle for the adoption of mobile payments in stores. The most interesting thing about this was that ease of use was not solely dependent on how easy the service actually was to use, but on the setting as well. All of the respondents thought that peer-to-peer transfers in Swish were very easy to use, but when asked about an in-store setting, most claimed the exact same process to be inconvenient. This led to the conclusion that situation or use case might be an underlying factor affecting ease of use of mobile payment services.

The main reason for the interviewees not adopting mobile payments to any larger extent is the attractiveness of alternatives. One can conclude from the answers that the subjects failed to see any gain from using mobile payments compared to card payments. It is not likely that mobile payment methods are going to become the main payment method of this group any
time soon, though they seemed to be accepting that cash is slowly disappearing. This might lead to mobile payment methods taking over the function cash has for elders today.

Lack of knowledge was the most frequently occurring theme when analyzing the remaining empirical data after the initial data analysis. However, it did not seem to have any direct influence on the attitudes, behavioral intention or actual usage. Any influence lack of knowledge had was in extension through other variables. During the interviews, lack of knowledge was used as a motivation for the subjects’ low perception of the risks associated with using mobile payment methods and their positive perception of the security and privacy of such services. As lack of knowledge had such high impact on perceived risk and perceived security and privacy, it is likely that it will have an impact on actual usage in extension.

The conclusion made from this study is that the main factors affecting mobile payment adoption among elderly smartphone users in Sweden are attractiveness of alternatives, social influence and ease of use.
8. Evaluation

In this chapter, the thesis will be critically evaluated to ensure the trustworthiness of the findings.

8.1 Dependability

A common way to ensure dependability of a qualitative study is conduct an inquiry audit. This has not been done in this study. However, to ensure the dependability of the findings made during the study, the coding of the collected data was done separately by the authors. The code was then analyzed collectively by the authors to draw conclusions. An extensive description of the process of the study has been presented in chapter two, to ensure that the methodology can be assessed by the reader.

8.2 Credibility

In order to ensure internal validity, the authors have presented extensive quotes from the interviewees to provide evidence for the interpretations later discussed in chapter 6 and 7. Analyst triangulation was made since the two authors analyzed the data individually and came to the same conclusions.

8.3 Confirmability

As the participants of the interviews has not been asked to read and verify the accuracy of the statements made during the interviews, the credibility is somewhat lacking. The interviewers did however ask the interviewees to verify that the interpretation of the previous question was correct.

8.4 Transferability

As the subjects for the study were all members of the same board at SPF, the transferability of this study would be quite low. The fact that they are members of a board, could mean that they are more active than the average senior citizen and have a larger social group. This makes any findings about social influence less significant. However, as the description of the process of this study is comprehensive, it makes it easy for another researcher to apply the same methodology on a more diverse group of elders.
9. Future research

This study is a contribution to the senior citizens’ aspect of the mobile payment research field. Since this study investigated the attitudes of mobile payment of five participants that only knew and had used Swish, other mobile payment services are not represented in the study. More research may be needed where the participants have used other mobile payment methods alternatively where the focus is put on the concept of mobile payment, and not on particular mobile payment services.

It could be of interest to other researcher to take the same methodology used in this thesis and apply it on a more diverse test group. This would mean a higher degree of transferability in the findings.

Another interesting future research would be to perform a comparative research on the attitudes of mobile payment where different age groups are compared to each other.

Since this research found out that the individuals’ relatives and/or friends were of importance to the person’s mobile payment adoption, it would be interesting to perform research where individuals without an influential environment where to be interviewed.

Since this study found three additional variables of importance, situation, lack of knowledge and support, it could be interesting to test them in a quantitative study in order to verify their validity and test if there is any correlation between them and the already existing variables in the Model of mobile payment method adoption (Amoroso & Magnier-Watanabe 2012).
10. References


Appendix

Interview guide: English

Introductory questions

1. Hello, we are students from Högskolan i Borås. We are doing a study about mobile payments adoption among senior citizens of Sweden. We are interested in the attitudes towards this technology of people aged 65 and older.

2. The interview will be anonymous and recorded. If you are interested, the finished essay will be sent to you as a thank you for participating.

3. How old are you?

4. What do you use your smartphone for?

5. What kind of payment method do you use today?
   a. What do you use the most/least?

Questions about mobile payment methods

1. What do you know about mobile payment methods?
   a. When did you first hear about these payment methods?
   b. Do you know how they work?
      i. How did you find out how they work?

2. Have you ever used your smartphone to pay for something?
   a. When was the last time you payed with your smartphone?
   b. Can you tell us about that experience?
   c. Why did you pay with your phone?

Questions based on mobile payment study


1. Perceived usefulness:
   • Do you think mobile payment methods are useful?
     a. What do you think is useful about it and what do you think is not useful?

2. Perceived ease of use:
   • Do you feel that mobile payment methods are easy to use (including getting the service and to get started)?
     a. What do you find easy?
     b. What do you find hard?
3. Facilitating conditions
   ● How do you experience the availability of the technology?
     ○ Availability of the infrastructure in stores?
     ○ Availability of the applications in app markets?

4. Perceived security and privacy
   ● What do you think about the security of mobile payment methods?
   ● What do you think about the privacy of mobile payment methods?

5. Perceived risk
   ● Do you feel that there is a risk with mobile payment methods?
     ○ What kind of risks?

6. Social influence
   ● Do you know someone who are using mobile payment methods?
     ○ Are they affecting your attitude towards mobile payment methods?
     ○ How?

7. Trust
   ● Do you have confidence in these mobile payment methods?
     ○ Why/why not?

8. Attractiveness of alternatives
   ● Do you feel that there is a lot of payment alternatives in the marketplace?

End questions
   ● If the person does not use mobile payment methods:
     ○ What would make you use mobile payment methods?
   ● That was all questions, do you have anything to add?

Intervjuguide: Svenska

Inledande frågor
1. Hej, vi skriver vår kandidatexamen i informatik på Högskolan i Borås. Vi gör en studie om antagande av mobila betalningar bland äldre i Sverige. Vi är intresserade av attityderna för denna teknik för personer i åldrarna 65 år och äldre.


3. Hur gammal är du?

4. Vad använder du din smartphone till?

5. Vilken typ av betalningsmetod använder du idag?
   a. Vad använder du mest / minst?

Frågor om mobila betalningsmetoder
1. Vad vet du om mobila betalningsmetoder?
   a. När hörde du först om dessa betalningsmetoder?
   b. Vet du hur de fungerar?
      i. Hur fick du reda på hur de fungerade?

2. Har du någonsin använt din smartphone för att betala för något?
   a. När var sista gången du betalade med din smartphone?
   b. Kan du berätta om den erfarenheten?
   c. Varför betalade du med din telefon?

Frågor om mobila betalningsmetoder baserat på studie


1. Upplevd användbarhet:
   ● Tycker du att mobila betalningsmetoder är användbara?
     a. Vad tycker du är användbart med det och vad tycker du är inte användbart?

2. Upplevd enkelhet att använda:
   ● Tycker du att mobila betalningsmetoder är lätt att använda?
     a. Vad tycker du är lätt?
     b. Vad tycker du är svårt?

3. Stödjande infrastruktur
   ● Hur upplever du tillgängligheten av tekniken?
     a. Tillgängligheten av infrastrukturen i butikerna?
     b. Tillgängligheten av applikationerna i appmarknader?

4. Upplevd säkerhet och integritet
   ● Vad tycker du om säkerheten för mobila betalningsmetoder?
   ● Vad tycker du om sekretess för mobila betalningsmetoder?

5. Upplevd risk
   ● Upplever du någon risk med att använda mobila betalningsmetoder?
     a. Vilka typer av risker?

6. Socialt inflytande
   ● Känner du någon som använder mobila betalningsmetoder?
     a. Påverkar de din inställning till mobila betalningsmetoder?
        i. På vilket sätt?

7. Förtroende
   ● Har du förtroende för dessa mobila betalningsmetoder?
     a. Varför/varför inte?

8. Attityd av alternativ
Tycker du det finns flera olika slags betalningsmetoder att välja mellan?

Avslutande frågor

- *Om mobila betalningsmetoder ej används:*
  - Vad skulle få dig att använda mobila betalningsmetoder?
  - Det var alla frågor, har du något att lägga till?