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Mobile CRM (mCRM)

A CASE STUDY OF MOBILE CRM STRATEGIES

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Abstract

Mobile technology has evolved drastically over the years, and so has the customer's perception of and expectations on mobile services. Mobile phones have become the essential part of customer's life style and they expect consumer services to be available on mobile phone. In this saturated market, providing better customer experience through the channel preferred by customers is as important as selling the actual product or services. In the quest to retain existing customers as well as attracting new, companies are developing innovative mobile customer relationship management (mCRM) strategies to strike a balance between its investments and fulfilling of customers need to generate maximum profit. However, not all mCRM strategies succeed leaving customers dissatisfied and switching to competitors providing better mobile services. The purpose of this study is to understand the dynamics between the customer acceptance, customer satisfaction and customer loyalty in the context of mCRM services. Thus, answering the following research questions:

a) What are the factors behind customer acceptance?
b) Do mCRM services have any effect on customer loyalty?

Qualitative research method were utilized to closely study two different mCRM strategies from different industries with costumer in focus. Data for the study was gathered from a costumer survey as well as from interviews with informants within the company. In addition, external data from public domain was used to validate the findings of the study. Furthermore, a research model was developed by identifying the constructs adopted from literature study of technology acceptance model (TAM3) and customer loyalty. The research model was the basis for developing the customer feedback survey. In addition, the constructs helped in identifying the impact on customer acceptance and customer loyalty for the respective mCRM strategy.

This study confirms previous findings and contributes to our understanding of technology acceptance as well as customer loyalty. The study reveals that mCRM services are mostly useful to urban customers with busy and on-the-go lifestyle. Furthermore, the study shows that through well practice use behavior customer develops a habit based on the prior evaluation of perceived usefulness and perceived value. In addition, the study indicates that customers build up a new trust towards the mCRM services through the usage of the service. Finally, the results of the study indicate that the mCRM services have an impact on company's net customer loyalty.

Keywords

Customer relationship management (CRM), mobile CRM (mCRM), mobile services, customer loyalty, customer acceptance, technology acceptance model

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Abbreviations

B2B	Business to Business
CIC	Customer Interaction Centers
CRM	Customer Relationship Management
GPS	Global Positioning System
HD	High Definition
IT	Information Technology
MBA	Mobile Banking App
m-commerce	mobile commerce
mCRM	mobile CRM
mLoyalty	Mobile loyalty
m-shoppers	mobile shoppers
NFC	Near Field Communications
OLAP	Online Analytical Processing
PC	Personal Computer
POS	Point of Sales
PR	Public Relations
QR	Quick Response
ROI	Return Of Investment
SMS	Short Messaging Service
TAM	Technology Acceptance Model
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
TQM	Total Quality Management

1 Introduction

Mobile telephone during the early stages were capable of only voice communication but it has very rapidly grown much more than just voice communication: now along with voice and data communication it has become a prime medium to socially connect to other people and businesses. Mobile technology is one of the fastest growing technology; Year 2010 was the year when number of mobile (smartphones) shipped surpassed total number of PC's shipped globally (IDC Research 2011, Weintraub: Fortune, 2011).
Mobiles have just not reduced in size and increased in its computation ability, it has also changed the social behavior of humans (Fortunati, 2002; Geser, 2006). The first thing in the morning after getting up from bed and last thing before going to bed for most of the people, is checking their mobile phones (Böhmer, 2011).
This unique adaptability and attachment of humans to mobile technology has opened new frontiers for companies to communicate with their customers through mobile channel providing them mobile services anytime, anywhere.

1.1 Background

The essence of customer relationship management (CRM) for a company is the ability to provide differentiated relationship value and to communicate continuously with customers on an individual basis (Park and Kim, 2003). It is also increasingly imperative to provide CRM activities through media that customers are interested in interacting with the company. In principle, this thinking is well founded, while in practice it can be excessively difficult to implement (Sinisalo, 2007).
Most of the companies were slow in realizing this unique channel to interact with their customers through mobile and create an intimate relationship with their customers. The companies who did realized the opportunity of communicating through mobility channel were the early adaptors and were in exploratory phase with apps mostly providing entertainment or basic CRM activities adapted from their web services. The initial CRM apps lacked the mobility context and hence the apps were redundant to their websites making it not suitable for mobile usage. It was not until recent years that companies seriously started thinking mobile as a serious communication channel and started investing heavily in new mobile services (m-service) by opening up and integrating their enterprise solutions with mobile apps for enabling customer relations, and reaping the benefits from their investments. Many of these benefits were never realized because customers did not use these m-services. These m-services are also known as mobile CRM services (mCRM) which will be defined in detailed in following chapters. In this thesis the terms m-services and mCRM will be used interchangeably as the scope of the thesis is limited to mobile CRM.
Companies providing the m-services have the responsibility of increasing their customer base while retaining their old customers to ensure return of investment (ROI) thus building a loyal customer base for the business. There are many reasons behind customer acceptability, loyalty and understanding the factors behind it is one of the important management questions. There are

research studies done to understand customer acceptance (Sinisalo, 2007; Hsu, 2008; Mann, 2010) and customer loyalty (Lin, 2005; Uncles, 2003; Mascarenhas, 2006) but done either in isolation of each other or real business cases. However there is a lack of research studies focusing on the dynamics between customer acceptance, satisfaction through usage of a mobile service and customer loyalty.
This thesis aims to analyze two case studies in depth in attempt to understand the mCRM strategy from customer perspective and find the dynamics between customer acceptance, satisfaction and loyalty. As mobile technology is continuously and rapidly evolving, it is also changing human behavior and mindset, thus this thesis is more relevant now than before.

1.2 Problem area and related research questions

Every company wishes to have a successful and well-functioning customer relationship management (CRM). It is one of the main key strategies of every company in almost any industry. Companies wish to make an intimate relationship with their customers by exploring new channels of communication to create value for their customers, and transforming the customer relationship into one of solution finding and partnering rather than one of selling and order taking (El Sawy, 1997). Companies would like to be able to provide service anywhere and at any time fulfilling customer demands. They want to outright their competitors and aid their customers in decision making. With the arrival of mobile and the changing human behavior to adapt to the mobile technology it has become imperative for the companies to provide mobile services (m-service) which cater to their customer's needs. In the effort of reaching to their customers even before the customer realizes the need, companies are employing various CRM strategies targeting mobile devices to partner with the customers by providing them mobile services. Even though many companies are investing heavily in their mobile CRM (mCRM) strategies very few reap the benefits of their investments. There are various reasons behind customers' acceptance and satisfaction through mobile service (m-service) which can lead to customer loyalty and the topic is open for debate and research. This thesis aims to take a holistic view rather than narrowing down to specific technology or service and will attempt to take a deeper understanding on customers' acceptance factors and factors that can lead to customer satisfaction and loyalty through usage of m-service.
CRM means different things to different people. For some, CRM means direct e-mails. For others, it is mass customization or developing products that fit individual customers' needs. For IT consultants, CRM translates into complicated technical jargon related to terms such as OLAP (online analytical processing) and CICs (customer interaction centers) (Winer, 2001). However main goal of all CRM strategy is to attract new customers while retaining their old customers and in the process generating more sales and having a continuing strong relationship and direct communication with their customers. Companies employ various mobility programs as part of their mCRM strategy, this thesis will study in deep two widely used CRM strategies with support of a real business cases for:

a. mLoyalty programs

b. CRM through m-Services

Researchers have debated over the aspects of customer acceptance of IT service, many studies have been done to understand customer loyalty phenomenon, and various models has been suggested for these phenomenon but there is a lack of research to understand if customer loyalty can be achieved through customer acceptance and satisfaction. This thesis study aims to find the interrelation between these phenomenon and in the process answer the following research questions:

a. Why do customers accept or reject m-service? What are the factors behind customer acceptance?
b. Does mCRM services has any effect on customer loyalty?

1.3 Scope

mCRM can be approached from two perspectives, one from the supply side viz. companies providing the m-services, second from the demand side viz. The customers who are consuming these services. The scope of this thesis is limited to the demand side i.e. customers perspective towards the mCRM services. Although there might be references to company's internal CRM strategies, any organizational CRM process or framework is out of scope for this thesis study. The thesis aims to understand how the mCRM services provided by the firms are perceived, accepted and interpreted by the customers.

1.4 Contribution

This thesis will study in depth the emerging phenomenon which is commonly recognized as mCRM with the help of a real business case. The focus is to understand the dynamics behind mCRM's acceptance, satisfaction and loyalty from costumer perspective.

The results should provide insight into what are costumer's expectations and perception when choosing a mCRM service, factors behind their acceptance as well as satisfaction through usage of these services. Additionally, the thesis will investigate if the satisfaction and usage of mCRM services has any effects on customer loyalty.

Giving all credit to the research studies and investigations done in this field, this thesis study with the help of a case study attempts to add to this research stream the understanding of the dynamics between customer acceptance, satisfaction and loyalty.

1.5 Outline (Disposition)

The purpose of this thesis is to study the dynamics between customer acceptance and customer loyalty in the context of mCRM services. The disposition is as follows.

Chapter 2 provides a detailed literature study. It gives a background on how mobile phones have become central to companies CRM strategies. This chapter introduces various key concepts along with its definition and origins. These key concepts are the foundation of this thesis project. Furthermore, this chapter gives an overview of related prior researches conducted in the field of customer relationship management and mCRM and also introduces the mCRM strategies

which are core of the case studies. The chapter then leads to the research gap which this thesis project intends to investigate.

Chapter 3 discusses the methodology being used in this thesis project along with the details of data collection methods. This chapter later discusses the Technology Acceptance Model (TAM) and Loyalty model which is adopted and extended in this thesis to propose a research model. Additionally, this chapter introduces various constructs used in the research model as well as the analysis method to validate the research model.

Chapter 4 introduces the two case studies with some background of their mCRM strategy as well as the data collection methods utilized for each case study.

Chapter 5 include two analytical sections, first focusing on the banks mCRM strategy to help retain and enhance customers banking experience through mobile. And second focusing on mLoyalty program as part of mCRM strategy of a convenient store.

Finally, chapter 6 concludes with discussion on the findings made from the results of the case studies and reflecting over the research questions. The chapter then ends with the limitations and future research recommendations.

2 Literature study

2.1 From mobile phones to smartphones

Mobile handsets have evolved very rapidly and are much more than just a wireless voice communication medium. The first generation of mobile handsets supported only voice and text-messaging with other limited features like camera, large colored screen with no touch capabilities, limited office tools like calendar, organizer etc. However the current generation of mobile handsets which are known as smartphones are capable of performing tasks similar to personal computer (PC), laptop, camera, navigator, music player, e-reader and much more. Based on the survey done in Sweden by .SE (Findahl, 2013) it is apparent that smartphones are becoming the one-stop device as it fulfills most of the needs of a common individual.

Smartphones are equipped with large high resolution touch screens and offers consumers a wide array of features, including mobile web browsing, thousands of apps, e-mail, instant messaging, picture messaging, video and audio playback, global positioning system (GPS), games, a video camera, picture and video editing, and much more. In addition, telecom carriers are encouraging smartphone users to take advantage of all of these features by offering consumers data plans that persuade them to use their smartphones more often (Ajax Persaud, 2012). With this smartphone eco-system the full capabilities of smartphones are yet to be exploited, and is left to the new innovative services designed by the companies and the way consumers use these services.

2.2 Mobile for e-commerce

Smartphone shipments globally is at its highest and it is predicted to grow at the rate of 71.1% for 2013 – 2017 according to IDC 2013, 2014 predictions. Gartner (March 2015) claims smartphone sales has surpassed 1 billion units in 2014 representing two-third of global phone market in 2014. In Sweden the smartphone penetration among the population aged between 15 – 64 years is estimated to be 86% placing Sweden at 3rd position globally in most smartphone penetrated countries in the world after Singapore 92% and Hong Kong 87% (Arnkvist, 2014).

Surveys and studies indicate rising trends, in Europe the mobile commerce(m-commerce) is predicted to grow from 7.6 million in year 2011 to more than 79 million in year 2017 (Gill, 2012). Not only is the population of mobile shoppers (m-shoppers) expected to increase worldwide at the same time, but also the volume of mobile purchases is expected to increase. Additionally, Forrester Research (Gill, 2012) predicts that the mobile channel-share will constitute 5.7% of the e-commerce revenue by 2017, compared with 3.5% in 2012 (Zanox 2013). The outlook in other countries within Europe is also quite similar (Gill 2012; Zanox, 2013), indicating a high potential for the Smartphone in terms of m-shopping.

The surveys and estimations from the well-known establishments have made the managements of companies to reconsider their outlook towards their mobile strategies and the level of interactivity their m-services provides to their customer. Many companies have now realized that mobile channel is one of the important medium to interact with their customers and they should be

available for their customers whenever wherever they need them before their competitors do.

2.3 Definition and History of CRM

The term customer relationship management is not new, it has existed since long and the exact origins of it is difficult to pinpoint. There are many views on this and most believe that it originated from relationship marketing (Sinisalo, 2007; Baran, 2008). The relationship marketing concept was first introduced by Berry in 1983. In 1983 the author presented a paper entitled simply "Relationship Marketing" at the American Marketing Association's Services Marketing Conference. The paper was published in the conference proceedings and for the first time the phrase "relationship marketing" appeared in the marketing literature. The paper defines relationship marketing as attracting, maintaining and in multi-service organizations enhancing customer relationships (Berry, 2002). However (Baran, 2008) suggest in his book that other possible origins of CRM might be in marketing research's customer satisfaction studies of late 1970s, and its relationship with total quality management(TQM) in the late 1980s. Or in B2B relationships, material resource planning (SAP), enterprise resource planning, customer contact center, sales force automation, campaign management tools, direct response marketing, relational databases and industrial and service marketing. But most researchers believe CRM is the result of the ongoing evolution and integration of marketing ideas and novel available data, technologies, and organizational forms with the goal of engaging in a meaningful dialogue with individual customers (Boulding, 2005; Campbell, 2003). There is a common consent that CRM utilizes information technology (IT) in implementing a company's marketing strategies in effort to build a relationship with their customers.

As discussed above CRM can mean different to different people (or in different settings) hence it is important to look into some widely used definition in the literature and the ones that relates to this thesis study.

(Schierholz, 2007) defines CRM as a complex set of interactive process that aims to achieve an optimum balance between company's investments and the fulfilling of customer needs in order to generate maximum profit. They further elaborate that the CRM design and management strategy's main aim is to strengthen a company's competitive position by increasing customer loyalty. They explain that although this extends beyond the use of IT, IT is still an important enabler of modern CRM. Furthermore, they suggest that CRM process not only require transactional data, which can be automatically collected and stored in relational databases, but also a significant amount of knowledge. They claim that besides developing an integrated view of CRM processes, it is critical to address the management of knowledge flows from and to the customer across all the communication channels as well as to enable the use of knowledge about the customers. Additionally, they argue that in past, advances in IT had a significant influence on CRM and these were mainly focused on the IS layer and neglected their connections to CRM processes and strategy. On the whole the goal of legacy CRM was to support the existing, isolated approach to dealing with customer relationships. They classify CRM systems into following three sub-categories:

a. Operational CRM systems improve CRM delivery's efficiency and support processes, compromising solutions for marketing, sales and service automation.
b. Collaborative CRM systems manage and synchronize customer interaction point and communication channels.
c. Analytical CRM systems store and evaluate knowledge about customers for a better understanding of each customer and his behavior.

Many researchers (Camponovo, 2005; Gebert, 2003; Levitt, 1983; Liang, 2010; Campbell, 2003) share similar views as (Sinisalo, 2007) that CRM is not just confined to IT but it spans over entire customer life cycle incorporating sales, marketing, customer service activities, campaign management, customer contact and lead management, offer creation and delivery, contract management, customer complaint and retention management as well as after sales service. Moreover, (Campbell, 2003) claims that implementing a software tool alone to manage customer relationship does not guarantee satisfying results, based on the research studies done by the Gartner Research Group in North America which found that 55% of all CRM projects fail to produce results (Rigby, 2002).

The above definition by (Schierholz, 2007) is considered for this thesis as it represents the holistic view of CRM rather than just limiting it to IS layer.

2.4 CRM through mobile channel (mCRM)

(Sinisalo, 2007) states based on existing literature that there is a common view that CRM requires company to manage and interact with their customers across different communication channel (Thomas, 2005; Payne, 2005). Every customer is different and has his individual personality and behavior; they have different needs and more specifically how they want to be communicated and by whom. Hence companies need to treat every customer differently (Boulding, 2005) based on their individual preference. However, in this multi-channel eco-system it has become a major challenge for companies to get the time and attention of their customers (Davenport, 2000).

Companies can interact with their customers through variety of communication channels through snail mail (Post), e-mail, telephone, short messaging service (SMS) and push messaging in mobile apps. However every customer has different tolerance level and expectations when it comes to which channel they want to be communicated, when they want to be communicated and how often they would like to be communicated by whom. The customer's communication channel preference also changes based on time of the day/week and company communicating with them. This individual varying preference of every customer pose a major challenge on the companies to target the right message through right channel to the right customers without sending same message over different channel or irritating them, and it is one of the crucial concern of companies implementing their CRM strategies. Nonetheless there is a common consensus in the existing literature that companies need to communicate with the customers across different communication channel.

Out of all the above available channels, internet and mobile as communication channels are considered more dominating as it is more personal and interactive, providing companies a platform to communicate with their

customers individually and treating them differently. Henceforth providing them a unique and positive experience by blending aspects of brand, product, services and communication. Despite the huge potential of mobile channel widely agreed among academics (Kannan, 2001; Barnes, 2004; Aungst, 2005), (Liang, 2010; Sinisalo, 2007) suggest that it hasn't gained much attention among academics and there is lack of research into this phenomenon. However there is abundance of publications on distinctive benefits of mobile technology for businesses and why companies should consider mobile as an important channel to interact with their customers. (Schierholz, 2007) summarizes the existing literature and suggest that it has been approached from both, technology as well as from business perspective. They classify the literature into two categories:

Technical benefits of mobile services over web based e-commerce:

Benefits	Description	Literature
Ubiquity	Mobile technologies allow anytime, anywhere access to information systems/services.	Clarke (2001), Wohlfahrt (2001), Anckar and D'Incau (2002a, b), Balasubramanian et al. (2002), Lehner (2003, 11ff.), Pousttchi et al. (2003), Laukkanen (2005) and Laukkanen and Lauronen (2005)
Context sensitivity	Mobile technologies allow contextualization of Information systems/services by enriching the customer information with unique identity, geographical location, and the physical environment of the customer.	Clarke (2001), Wohlfahrt (2001), Lehner (2003, 11ff.), Pousttchi et al.(2003, 11ff.), Wamser (2003), Siau et al. (2004b), Laukkanen (2005), Laukkanen and Lauronen (2005) and Skelton and Chen (2005)
Interactivity	Mobile technologies allow greater interactivity in Information systems/services as they are constantly connected.	Clarke (2001), Hartmann and Dirksen (2001), Anckar and D'Incau (2002a, b), Lehner (2003), Laukkanen (2005, 11ff.) and Laukkanen and Lauronen (2005)
Convenience and familiarity	Mobile technologies provide higher degree of convenience for certain tasks compared to desktop and laptops. Due to their limited capabilities they are well suited for simple tasks hence reducing complexity and making it easy to use.	Kenny and Marshall (2000), Perry et al. (2001), Wohlfahrt (2001), Anckar and D'Incau (2002a, b), Gebauer (2002), van der Heijden and Valiente (2002), Lehner (2003, 11ff.), Gebauer and Shaw (2004) and Siau et al. (2004b)

Multimediality	Mobile technologies provide high end multimedia experience equipped with high resolution touch screens, digital cameras and high quality sound output.	Pousttchi et al. (2003), Wamser (2003), Han et al. (2005), Wolf and Wang (2005) and Kung et al. (2006)

Table 1. Technical benefits of mobile

Business benefits of mobile services:

Benefits	Description	Literature
Flexibility	The ubiquity and interactivity benefits of mobile services described above allows breaking-up of complex and lengthy business processes into smaller and easy activities/tasks. The location and time bound activities in old legacy processes can now be dispatched more flexibly. Since decision makers and action takers of the processes can be informed and take actions immediately, unforeseeable events can be handled in more flexibly and timely manner.	Fleisch (2001), Hartmann and Dirksen (2001), Perry et al. (2001), Wohlfahrt (2001), Anckar and D'Incau (2002a, b), Fleisch and Bechmann (2002), Fleisch et al. (2002), Gebauer (2002), Humpert and Habbel (2002), Reichwald and Meier (2002), van der Heijden and Valiente (2002),Wamser (2003), Gebauer and Shaw (2004), Nah et al. (2004), Siau et al. (2004b), Laukkanen (2005), Laukkanen and Lauronen (2005) and Nah et al. (2005)
Organizational efficiency	The ubiquity and interactivity benefits of mobile services also allows for higher operational efficiency since the point of information creation and point of action taking are bridged together. Information is available instantly and can be used in geographically dispersed processes and activities.	Hartmann and Dirksen (2001), Perry et al. (2001), Wohlfahrt (2001), Anckar and D'Incau (2002a, b), Fleisch and Bechmann (2002), Fleisch et al. (2002), Gebauer (2002), Humpert and Habbel (2002), van der Heijden and Valiente (2002), Wamser (2003), Gebauer and Shaw (2004), Nah et al. (2004), Siau et al. (2004b), Kadyte (2005), Laukkanen (2005), Laukkanen and Lauronen (2005), Nah et al. (2005) and Skelton and Chen (2005)

Individual productivity and effectiveness	Context sensitivity, interactivity along with convenience and familiarity of mobile services allow for a greater level of effectiveness of business processes and a higher individual productivity. These benefits can also increase the effectiveness of marketing campaigns.	Perry et al. (2001), Wohlfahrt (2001), Anckar and D'Incau (2002a, b), Gebauer (2002), van der Heijden and Valiente (2002), Wamser (2003), Gebauer and Shaw (2004), Nah et al. (2004), Siau et al. (2004b), Kadyte (2005), Nah et al. (2005) and Skelton and Chen (2005)
Transparency	Ubiquity and interactivity of mobile services allow for the increase of process and information transparency leading to higher market and customer transparency.	Wohlfahrt (2001), Reichwald and Meier (2002), Wamser (2003), Chen (2005), Kadyte (2005), Laukkanen (2005) and Laukkanen and Lauronen (2005)
Entertainment	Multimediality enhances the customer's entertainment gained from mobile services. Due to customers increase mobilization the need for spontaneous entertainment through mobile services can be satisfied with right blend of information in form of pictures, video and sound.	Anckar and D'Incau (2002a, b), Humpert and Habbel (2002), Reichwald and Meier (2002), Han et al. (2005), Wolf and Wang (2005), Wong and Hiew (2005), Dickinger et al. (2006) and Park (2006)

Table 2. Business benefits of mobile services

2.5 Definition of mCRM

Mobile CRM is a very new phenomenon and has only recently attracted academic interest, additionally it lacks a formal conceptualization (Liljander, 2007; Sangle, 2011; Sinisalo, 2007). Furthermore, the mCRM concept is very closely linked to the technology, so there is a tendency of mistaking technology with the concept (Balasubramanian, 2002). Henceforth, it is essential to distinguish concept from its underlying technologies, as technology changes over time with latest innovations. This separation is essential for preventing the concept to change over time along with the technology. (Camponovo, 2005) defined mCRM as "services that (1) aim at nurturing customer relationships, acquiring or maintaining customers, (2) support marketing, sales or service processes, and (3) use wireless networks as the medium of delivery to the customers". However, (Sinisalo, 2007) disagrees with above definition claiming

first; it does not emphasize enough on the critical role of communication in establishing and maintaining profitable customer relationships even though communication is the kernel of every interaction. Secondly, (Sinisalo, 2007) claims the terms mobile and wireless are used interchangeably although they doesn't mean the same; clarifying wireless access can provide limited mobility to desktop computer over a wireless local area network which in the sense is not a true mobility. Alternatively, (Sinisalo, 2007) proposes another definition of mCRM: "communication, either one-way or interactive, which is related to sales, marketing, and customer service activities conducted through the mobile medium for the purpose of building and maintaining customer relationships between a company and its customer(s)." In context of this thesis study the above definition will be applied as it represents the mCRM from the perspective of customer, and gives much needed emphasis on mobile interactivity.

2.6 Loyalty programs as part of CRM strategy

Similar to CRM, customer loyalty can mean different to different people, it is conclusively agreed by researchers that there is no universally agreed definition, however there are three popular conceptualizations (Uncles, 2003). As illustrated in Fig. 1, they can be categorized into three models:

a. loyalty as primarily an attitude that sometimes leads to a relationship with the brand or company
b. loyalty mainly expressed in terms of revealed behavior (i.e. pattern of past purchases)
c. buying moderated by the individuals characteristic, circumstances, and/or the purchase situation

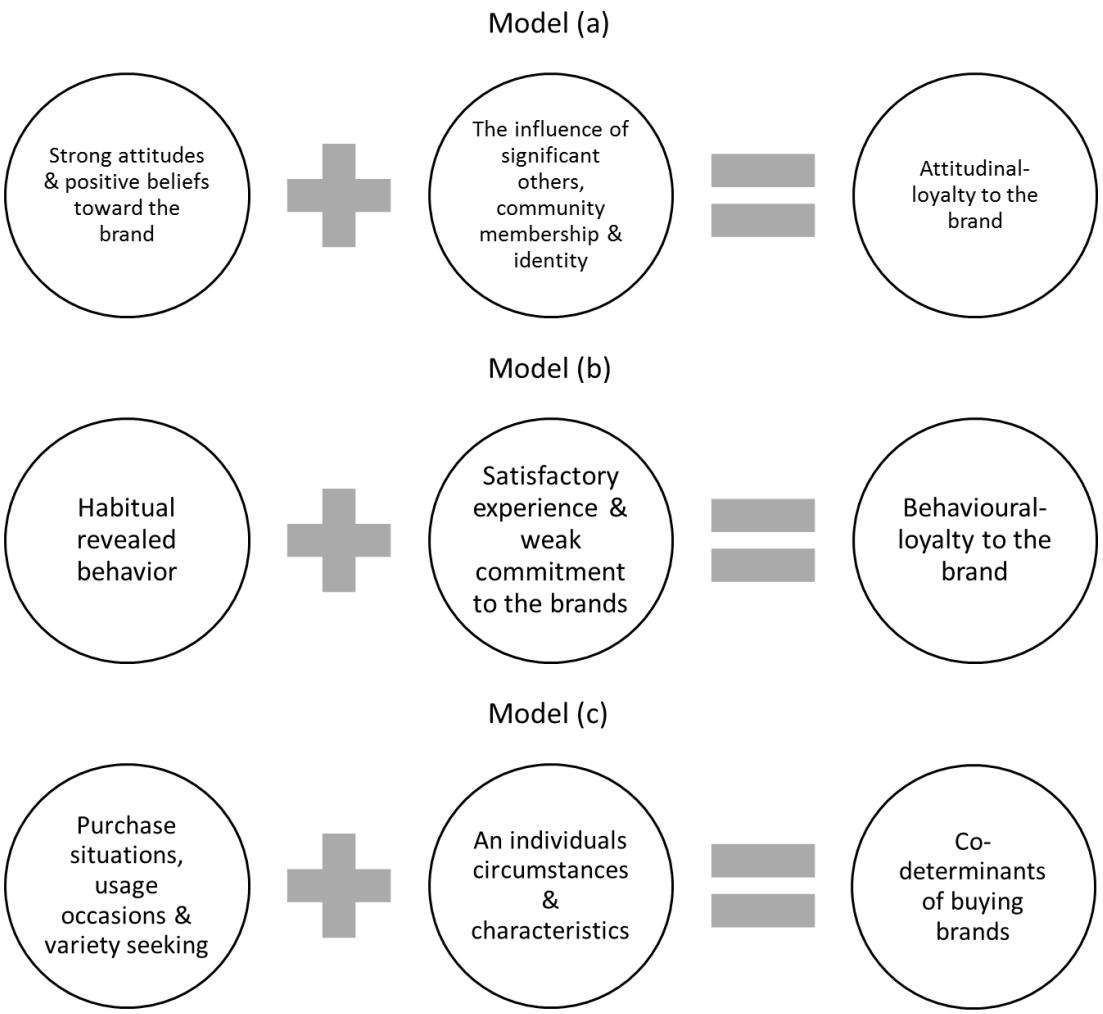

Figure 1. Conceptualization of customer loyalty, source data (Uncles, 2003)

However, at very general level, loyalty is something that consumers may exhibit to brands, services, stores, products categories, and activities (Uncles, 2003). In the context of this study, this conceptualization of customer loyalty from (Uncles, 2003) is considered most favorable.

In times of saturated market and fierce competition the most important tools a company has to survive is customer loyalty and customer relationship management (CRM). As discussed earlier, the core of any CRM strategy is to retain existing customer through engaging them continuously, and to make sure they get a positive customer experience with the intention to create a long lasting customer relationship. In order to achieve a long lasting relationship, companies need to reward the valuable customers, however they have no means of tracking individual customers purchase history in the absence of customer loyalty programs. Customer loyalty programs helps companies with the individual customer knowledge which helps companies to evaluate the value of individual customer relationship and is simultaneously the basis for a more refined customer segmentation and target group formation (Cortiñas, 2008).

IT-supported CRM systems enables companies to precisely x-ray the relationship and to purposefully employ resources to manage the customer relationship (Payne, 2006)

2.7 Mobile loyalty programs as part of mCRM strategy

As more and more companies are initiating traditional card based loyalty programs, it has become increasingly difficult for the customers to carry all these cards in their wallet. Henceforth, this has put additional decision burden on the customer every time they leave their home, as they now have to think ahead and plan for the day in order to choose which cards they will need to carry with them for specific purchases. This minimizes the risk of losing their loyalty points. According to a survey conducted in 2006, on average a German consumer already has anywhere between four to five cards in the wallet (e.g. Credit card, debit card, medical insurance card, train pass, etc.) (T.N.S., 2006). Henceforth, customer struggle to fit additional loyalty cards in the wallet which is already full. It has been conclusively shown by numerous studies that many loyalty programs have not been successful due to customers not carrying their cards during the purchases. This results in both customer loosing loyalty points and thus loosing on discounts and offers, as well as company losing the critical information of customer purchase behavior. According to a study conducted by (FridayFriday.com, 2012), on average a customer carries around 17 cards in wallet which includes, credit cards, debit cards, library membership, driving license, national insurance, organ donor and loyalty cards. The study found women carrying bit more cards (18) compared to men (16 cards) as illustrated in the Fig. 2

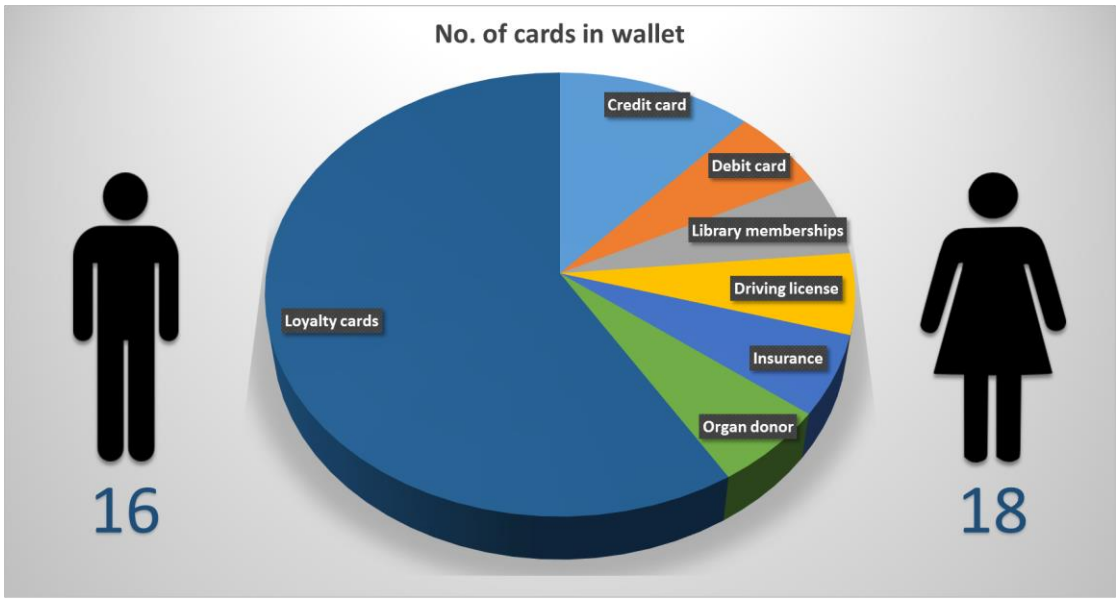

Figure 2. No. of cards in wallet, data source: (FridayFriday.com, 2012)

Contrary to the physical loyalty program cards, customers usually carry their mobile phones everywhere and is readily available at the time of purchase at point of sales (POS) counter. Additionally, even a simple, low cost smartphones are capable of providing the mobile loyalty services, and the smartphones

penetration is generally broader with both even the younger and older customers own smart phones. Hence providing loyalty programs through mobile service is win-win for both customers as well as companies to have enhance and sustain their customer relationship. Moreover, mobile phones are very personal, unlike paper card which can be shared, this gives companies more accurate customer purchase behavior enabling companies to precisely target their marketing campaigns based on individual customers need.

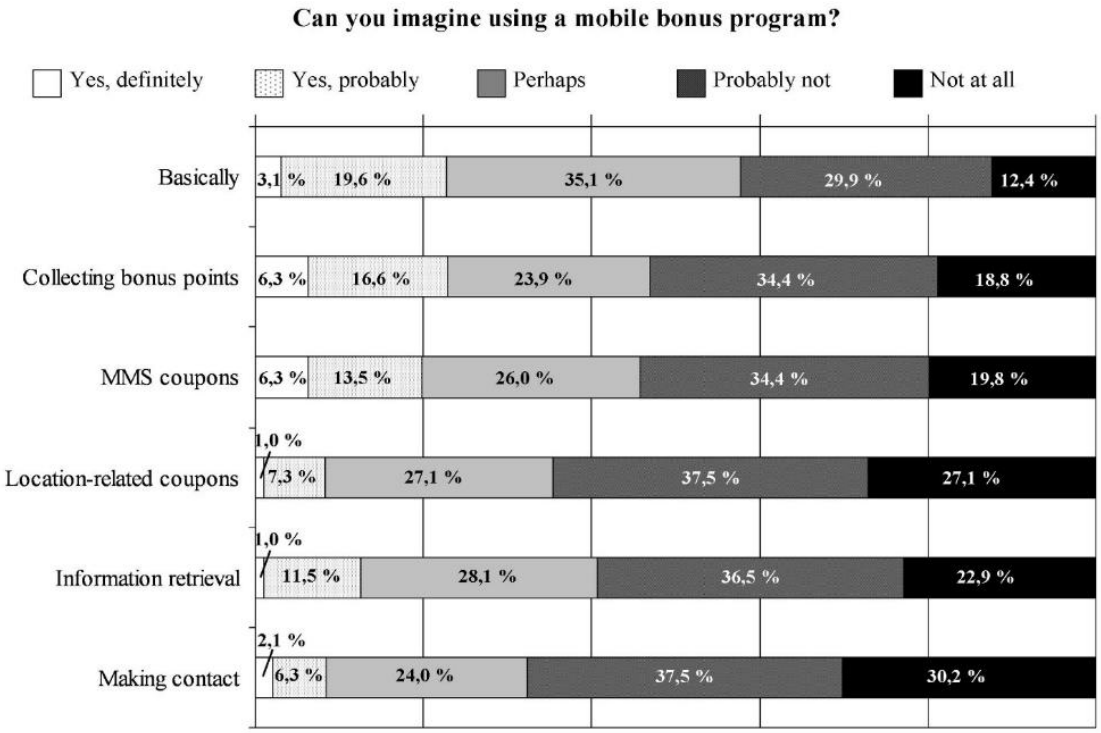

Figure 3. Empirical findings on the acceptance of mobile loyalty program, source: (Mann, 2010)

Although the study was done in 2010, the findings from an empirical study done by (Mann, 2010) gives insights into customer behavior in the context of mobile loyalty programs. As the mobility loyalty programs were infancy in 2010, and it is only until recently that companies have seriously initiated mobile loyalty programs as part of their mCRM strategy. The results can still be viewed as a starting point to understand customer behavior intention. The results would not have been the same if the study was conducted now, as customers are now more experience with mCRM services and have got comfortable using mobile services in their daily life. As shown in the Fig. 3, the empirical study revealed that 45.8% of the respondents found mobile customer card as interesting, while 39.2% evaluated it as good service. It was also found that only 22.7% of the respondents intended to use mobile loyalty programs, while 35.1% had no interest, however 42.3% were skeptical about the mobile cards. Considering the literature study and the latest consumer trend, it can be assumed that out of these 42.3% respondents who were skeptic about the mCRM services might have over the time gained experience and would have a positive attitude towards mCRM services like mobile loyalty programs. The results also revealed

that collecting bonus points for the most attractive aspect of mobile customer card and 22.9% would use the bonus points. This shows a positive customer attitude towards the mobile cards and in general mCRM services.

2.8 Research gap

As discussed earlier in this chapter, most of the research studies aimed either to study possible benefits of mCRM to the customers (Wohlfahrt, 2001; Lehner, 2003, 11ff.; Laukkanen, 2005) and/or to the businesses (Humpert and Habbel 2002; Reichwald and Meier 2002; Kadyte, 2005; Wohlfahrt, 2001; Anckar and D'Incau, 2002a, b; Laukkanen and Lauronen, 2005; Wamser (2003)) or the challenges within the organization that companies face while designing and developing a mCRM strategy (Sinisalo, 2007; Park, 2003).
The understanding of the dynamics behind a customer's mCRM service usage, acceptance and satisfaction, and if it leads to customer loyalty is still sparse in academics. However there have been few research studied done to understand customer acceptance (Groß, 2014), satisfaction (Hsu, 2008) and loyalty (Lin, 2005) aspects but they have been done in isolation or were done few years back hence they lack the connection to the new advancement in this area.
As discussed earlier in this chapter, there is large amount of research already done to study various aspects of mobile services from technical as well as business perspective. However very little is been published regarding customer acceptance of mobile services from customer relationship management perspective. (Hsu, 2008) argues that customer satisfaction in m-services is not formally conceptualized and existing literature doesn't explain the phenomenon in depth. Henceforth, they analyze the customer satisfaction in mCRM service from the companies' point of view with the help of a real use case. However, the study lacks the customer perspective and a holistic view towards a customer experience while using a mCRM service. Additionally, (Lin, 2005) claims that although customer loyalty is recognized by academics, the development and empirical validation of a customer loyalty model in m-commerce is still not addressed. Henceforth their research study was to develop and validate a loyalty model for m-commerce mainly including mCRM services. Their research study spanned across various consumer services like sending/receiving emails, routine bank services, booking cinema/theatre tickets, restaurant table reservations, the reading and receiving of news, booking travel tickets, buying products online, receiving personalized offers, consulting fortune tellers, listening to/downloading music, downloading graphics/animation, playing online games, online chatting with strangers, stock trading, taking part in internet auctions, map services and mobile learning. Hence the research was more widely spread across the various m-services rather than focusing on single m-service use case to analyze in depth the customer behavior for that specific m-service. Accordingly, the research didn't had focus on customer acceptance factors and its overall effect on the customer loyalty model.
On the other hand, (Sangle, 2011) empirically explores costumer's expectations from a mCRM service in banking domain. They argue that the customer's perception and expectations towards mCRM services are yet to be explored in detailed. However the study is not focused on single use case, it is rather based

on survey conducted on consumers of banking services in general. On similar lines, (Camponovo, 2005) gives an overview of mobile CRM services to consumers in Italian market, eventually concluding that future research is needed to study the highly important aspects of demand side i.e. consumer's attitudes and intentions towards mCRM as well as their actual adoption and usage. Additionally literature review also identified very little academic interest and activity in recent years within mobile CRM domain, in contrast to rapid advancement in mobile technology as well as positive costumer attitude towards mobile services provided by the companies.

As mobile technology has evolved and customers' perception and expectations towards mobile services have changed drastically over the years there is a need to restudy this phenomenon and based on current real business scenario. There is a need to explore the customer's perception and their expectations from mCRM services (Liljander, 2007) that support the latest technological advancement. The understanding of the dynamics behind a customer's mCRM service usage, acceptance and satisfaction, and if it leads to customer loyalty is still sparse in academics.

3 Methodology

The thesis project will apply case study methodology. Considering the aim of this study, the case study methodology is seen as an appropriate choice mainly due to two reasons. First, the purpose of this study is to investigate in depth the dynamics of this complex subject, and the case study method aids to get a holistic and thorough picture of the case. Second, as the information available on this kind of topic is often latent and confidential, the researcher must have access to an organization (Sinisalo, 2007; Yin, 1994). Two different mCRM strategies from two different companies working in different industries will be studied and analyzed in detail:

a. Convenience stores m-loyalty program
b. mCRM strategy to help retain and enhance customer banking experience through mobile

The above two companies were selected based on two criteria, first the case study represented the problem that the study intend to investigate, second access to the organization and insights of the mCRM strategies.

3.1 Holistic and contextual qualitative method

Holistic and contextual qualitative methods will be utilized as they are designed to assist the study and develop a broad, detailed picture of complicated phenomena. The study will focus on the customer acceptance and loyalty phenomenon from multiple perspectives, building a big picture and giving more attention to various aspects of the phenomenon.

Unit of analysis:

a. Customer acceptance of a mCRM service
b. Customer loyalty through mCRM service

According to (Recker, 2013):

> Qualitative methods have distinct advantages in exploratory research because they can possibly uncover complex, multifaceted, or even hidden phenomena and can lead to a more comprehensive, multi-perspective view. They are used for theory building purposes because of their exploratory nature and because they can faithfully be applied to domains or phenomena where little knowledge or theory and hence constructs and measurements exist.

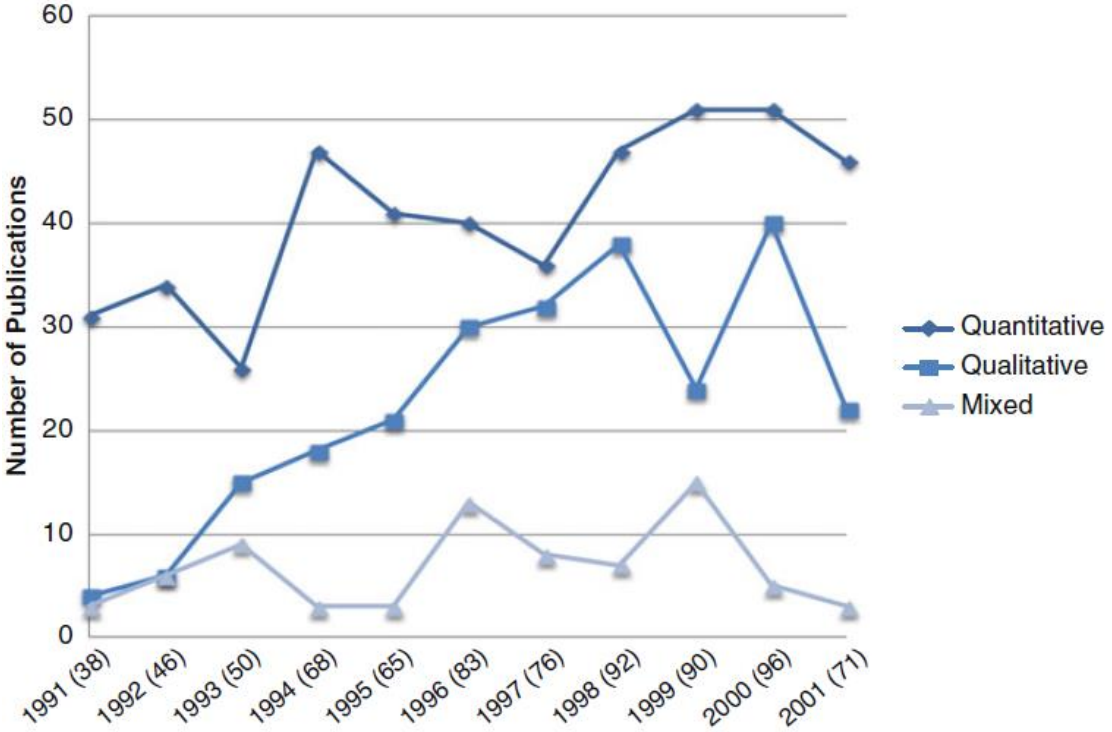

Figure 4. Trend of research methods used in publications in selected top IS journals. Source: (Recker, 2013)

Fig. 4 shows the trend of research methods used in publications in selected top IS journals, although qualitative is not most widely used, it is still one of the preferred research methods. Based on literature study, qualitative method was selected for this research. Hence qualitative methods will be used to make an empirical enquiry to investigate the customer acceptance, satisfaction and loyalty phenomenon within a real business context. Qualitative methods are better suited for such exploratory research as the phenomenon of customer acceptance is not yet fully understood and it is an emerging area where more research needs to be done.

3.2 Data collection

Qualitative research usually utilize various techniques to gather data, and interviewing is the most widely used technique (Recker, 2013). To increase the reliability of measures, data was collected through various sources in order to triangulate the respondents answers (Yin, 1994). The following sources were used:

- Primary data:
    a. Customer feedback through online survey
    b. Interviews with informants in the company
- Secondary data:
    a. Annual reports as well as other data available in public domain
    b. Customer feedback/review available through Facebook, Google play and Apple store pages.
    c. Other external survey results available online

The identities of respondents and the company are not revealed for reasons of confidentiality. Additionally, due to confidential nature of the customer usage and sales/marketing figures collected by the bank, it wasn't appropriate to present the data in this thesis report hence, secondary data from the external survey available in public domain was used wherever it was needed to support the findings of this thesis. However, the findings were independently validated by the informants in the bank to identify deviations if any, in the results compared to the actual bank data.

3.2.1 Interview with the organization

The selection of the key informants within the organization was based on three criteria. First, the role of the informant in the overall mCRM strategy under which the mobile services were developed and also responsible for the mobile services. Second, the informant's availability and third, their willingness to share the critical information. Using multiple informants increases the reliability of the information, and it also validates the information. Both, marketing director and product owner was chosen to be interviewed because of their ability to provide holistic picture of the mCRM services, as they are involved in developing as well as has complete status of the current situation of the services. Interviewing architect and senior business developer helped gain insights on the origins and requirements of the mCRM services. The details of the key informants are summarized in the Table 3 below.

Company	Position	Type of contact	Duration
Leading grocery retail company	Marketing Director	Interview, telephone calls and e-mail correspondence	1 hour 40 minutes
Leading grocery retail company	Architect for mobile app	Interview, telephone and chat correspondence	1 hour 30 minutes
Bank	Product Owner	Interview, telephone calls and e-mail correspondence	1 hour 10 minutes
Bank	Senior Business Developer	E-mail correspondence	

Table 3. Interview data

3.2.2 Customer feedback through online survey

Customer feedback was one of the most important aspects of this study, hence a web based questionnaire was prepared to help gather as much information as possible from the consumers of mCRM services. The data used to validate the research model was collected from a sample of customers using the mCRM service provided by the company. To increase the credibility of the results, the

respondents were spread across different cities including cosmopolitan as well as remote areas, with different professions including students and parents on parental leave. Additionally the respondents also include customer who were customers of other banks and were using their mobile banking services.

Survey questions

The questions were based on the constructs from the research model with the purpose of validating the model. The wordings of the questions were appropriately selected and was targeted with the intention of gathering as much information as possible for the selected construct in order to validate the research model. The questions are listed in Appendix A. Initially, the questionnaire was based on interview format to capture as much information as possible with open end questions. However, after receiving response from first few customers, it was apparent that open end interview format does not suit web based questionnaire, as customers have to spend more time and effort on writing descriptive details there experience and feelings about the particular mCRM service. As most of the customers using mCRM service have busy life style and mostly access information through mobile, the questionnaire had to be amended to their needs. Open ended questions were rephrased into multiple choice questions along with various possible answers to assist the customers. The questionnaire was also tailored to the requirements of mobile devices, hence a simpler and easy to use mobile version was also available for those using smartphones. In order to handle the situation where customers would have a different feedback than available options, or would like to give additional information, an extra text field was provided for appropriate questions.

Selection criteria

The survey was conducted independently with limited number of customers, as the marketing department of the company did not agree to send the survey request on their behalf to their large number of customers. Hence the survey request was send independently to friends and family and was publically shared on social networks. The selection criteria was broad and the survey was open for everyone who were customers and users of mCRM services offered by the company being studied. The age group of respondents were between 22 – 60 years with experience of using mCRM service varying between 1 – 4 years.

3.3 Research model

3.3.1 Extending Technology Acceptance Model (TAM)

A considerable amount of literature has been published proposing technology acceptance models such as Technology Acceptance Model (TAM) (Davis, 1989), the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) and the Theory of Planned Behavior (TPB) (Ajzen, 1985). These models conclusively attempt to study and investigate an individual's intention to adopt a specific technology. Among these model, TAM is most widely accepted model for understanding behavioural intention. Numerous researchers have adopted and extended this model in the quest to validate user acceptance of technology. Data from several studies have identified TAM as

being robust and accurate in predicting technology acceptance and adoption. The TAM proposes that a person's performance of specified behaviour is determined by his or her behavioural intention to perform certain tasks. Additionally, it identified two factors to be primary determinants of user acceptance i.e. perceived ease of use and perceived usefulness. Eventually, (Venkatesh, 2003) extended the TAM model and found attitude construct to be less significant in actual acceptance and it rather acts as a partial mediator between persons beliefs and adoption behaviour or intention hence proposing TAM2. Recently, (Venkatesh, 2013) has proposed TAM3 which is a revised version of TAM2, which also puts focus on interventions like usability, playfulness, prior experience and enjoyment. The newly added interventions are highly influential in the mCRM service context, hence TAM3 model is adopted as a starting point. This study also found few other interventions that are influential in mCRM service context hence TAM3 is adopted and extended in the current study research model as shown in the figure 5.

3.3.2 Loyalty Model

Compared to technology acceptance model, there has been relatively little literature published on customer loyalty (Lin, 2005). Additionally, the literature lacks a single widely accepted loyalty model in contrast to acceptance model. As (Lin, 2005) proposed a customer loyalty model identifying perceived value, trust and habit as the determinants for customer satisfaction and loyalty. The literature study suggests loyalty model proposed by (Lin, 2005) to be robust and precise in predicting consumer satisfaction and loyalty in the mCRM context, hence it is adopted in the research model as depicted in figure 5.

3.3.3 The research model

Although technology acceptance and loyalty are the most critical factor in success of any technology or product, much of the recent literature lacks linkage between customer acceptance and loyalty phenomenon in the mobile CRM context. The literature study shows a positive correlation between customer use behavior and loyalty with satisfaction as most influential mediating construct. This study aims to investigate this correlation between customer use behavior and loyalty in the context of mCRM services. Hence, in the context of this study, the research model was designed combining the extended TAM as well as loyalty model as depicted in figure 5

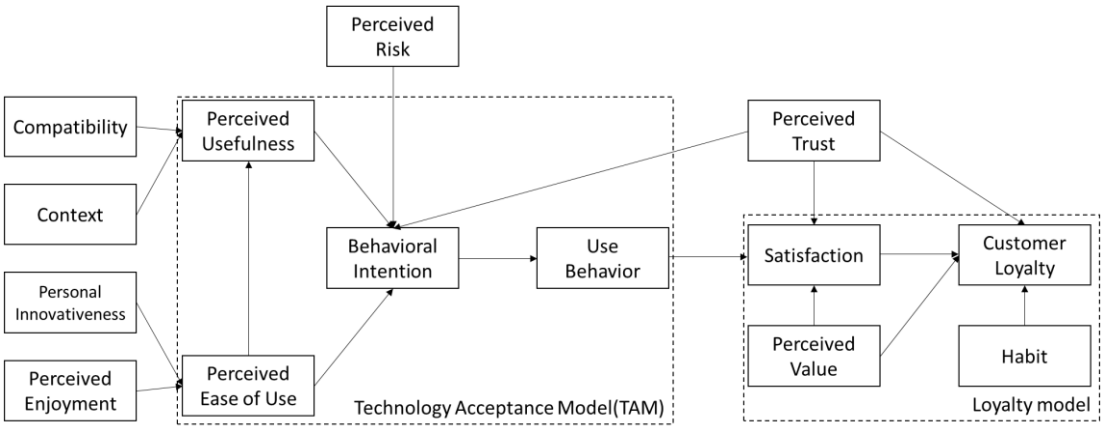

Figure 5. The research model

3.3.4 Constructs

The study has identified a set of constructs that impacts the customer acceptance, satisfaction and loyalty. These constructs were adopted from Technology acceptance model (TAM) 3 (Venkatesh, 2013), as well as other studies and investigations done by researchers to demonstrate their importance in field of customer behavior. In order to understand the dynamics between customer acceptance, customer satisfaction and customer loyalty it is critical to understand in depth each of these construct and how it impacts the customer behavior. The study has identified following variables:

3.3.4.1 Personal innovativeness (PI)

Definition: *"the willingness of an individual to try out any new information technology"* (Agarwal, 1998)

Personal innovation has been used widely by academics in diffusion research to study user behaviour with information technology. This construct was used by (Rogers, 1995) to segment users based on the time of adaption. Later on, (Agarwal, 1998) found personal innovativeness to be an indirect factor with moderate influence on use of technology, hence they incorporated it in the technology acceptance theories. The core concept is individuals with high levels of personal innovativeness are presumed to develop more positive attitude towards new technologies and will have a greater intention to use them despite of high level of uncertainty (Rogers, 1995).
In the context of mobile technologies and services, personal innovativeness is a customer characteristic that influences his/hers behavioural intention towards new mobile services. As is the case with most of the mobile services their introduction to market is usually in infancy and experimental in nature, it is assumed that customers with innovative attitudes towards technology, have higher chances compared to others to intend to utilize new mobile services. Hence although not directly, innovativeness does have a significant influence on customers perceived ease of use towards a mCRM services.

3.3.4.2 Perceived risk (PR)

Perceived risk has always being seen as barriers of adoption, and researchers

> Definition: *"The user's subjective expectation of suffering a loss in pursuit of the desired outcome of using mobile CRM services on mobile phone"*, (Pavlou, 2003)

have applied the concept in order to study consumer behaviour. Nevertheless, since the emergence of e-commerce it has taken another dimension. Before e-commerce existed, consumer's primary risks were product quality or fraud. However, today when consumers make an online purchase their decision is influenced by financial, product performance, social, psychological, physical or time risks. In the mobile services context, privacy concerns and financial loss from immature technology or service tops the list. There is a risk of changing or stealing sensitive information like personal information, credit card, bank balances and financial data.

Cognitive and affective factors are important variable that prevent consumers from trusting online services (Wu, 2005). However, Technology Acceptance Model (TAM) doesn't not take into consideration the barriers of adoption, henceforth, (Wu, 2005) extended the model by including perceived risk.

The literature study demonstrates that e-commerce and privacy are integral part of mobile services, hence perceived risk was adapted in this study as one of the constructs affecting customer's behavioural intention to use mCRM services.

3.3.4.3 Perceived trust (PT)

> Definition: *"It is defined as user's beliefs or faiths in the degree to which a specific mobile application can be regarded to have no security and privacy threats"*, (Pavlou, 2003)

Although risk and trust are intermutual, nonetheless the meagre fact that mobile services involve at least two parties the service provider and the consumer of the service, the trust between the parties is critical factor. In order to provide a convenient and satisfactory mCRM services, company requires customer's sensitive personal information such as telephone number, credit card details and in countries like Sweden, social security number (personal number), bank information as well as their purchase transactions, etc. Henceforth consumers need to put their trust in the company as well as in the mCRM service believing it is free of bugs or spyware, and that their private information will be confidential and will not be shared with any other person or organization. Additionally, it has been suggested by (Lin, 2005) that, customers trust in the mobile service provider could lead to customer satisfaction, which in turn has influence on customers intention of repeated business i.e. customer loyalty.

Hence it has been conclusively shown that customers trust on the mCRM service provider influences customer's behaviour intention of the mobile

service as well as customer satisfaction and loyalty to the provider/company. However, trust is something that cannot be built in a day or month, it is build up gradually over the years based on the customer's prior experience with company providing the mobile service. Research has proved that a reliable and efficient self-services by the bank builds up customers trust with the banks (Menon, 2007).
Although trust might not be very important factor for many mobile services, nonetheless it is one of the influential factor for mCRM as well as mobile banking services, hence trust as one of the construct was adopted in this study.

3.3.4.4 Perceived ease of use (PEU)

Definition: *"the degree to which an individual believes that using a particular technology will be free of effort"*, (Davis, 1989)

Although it is viewed as the effort perceived by the customer in learning to use a technology or service, it still has a significant impact on customer's behaviour intention on using a particular service during the initial days of customers service utilization. Even though, the impact of 'ease of use' diminishes as customers get accustomed with the service, nonetheless it still plays a significant role in customer's perceived enjoyment while using the service in the later stages.
Considering the infancy and experimental nature of mobile service, perceived ease of use poses a significant impact on customer's intention to use mCRM services, hence it was adopted in the study.

3.3.4.5 Compatibility

Definition: *"Compatibility is the degree to which the innovation matches with the potential adopter's existing values, previous experiences and current needs",* (Rogers, 1995)

Several studies have revealed compatibility as one of the most influential factor in customer's intention to use a mCRM services. An individual whose life style involves latest technology and has prior experience with internet and online transactions will have higher chances of accepting mCRM services especially mCRM services in banking. Additionally if the individual has a busy life style with lot of travelling involved it is more likely he or she will be attracted to mCRM services for their needs. It has been suggested by (Laforet, 2005) that the primary reason costumers tends to use mobile channel for their banking needs is because it caters their specific service needs.
Considering the importance of compatibility of mCRM service with a costumer's lifestyle it was included in the study.

3.3.4.6 Context

Although context and compatibility at times might complement each other

Definition: *"It is defined as any information that can be used to characterize the situation of entities (i.e. whether a person, place, or object) that are considered relevant to the interaction between a user and an application, including the user and the application themselves",* (Mallat, 2006)

nonetheless, they are the two most factors that's influences customers choice of mCRM cervices. Central to the discipline of mobile technology is the context in which services are needed and used by consumers. A considerate amount of literature has been published on recent trends on, how individuals feel attached to mobile devices/technology, and the mobile devices are accompanying them virtually 24/7. It has been demonstrated by (Wendel, 2005) that consumers prefer to use multiple media channels, and their selection of channel is based on the value they derive from the channel depending on their current environment i.e. context. Henceforth, considering the importance identified from numerous studies context was incorporated in the studies as a construct.

Definition: *'degree to which an individual believes that using a particular system would enhance his or her job performance'*, (Davis, 1989)

3.3.4.7 Perceived usefulness

The research to the date has tended to focus on the above definition by (Davis, 1989) due to the fact that most of the IT services until recently were very enterprise oriented. However since the introduction of online and consumer oriented services, it has been conclusively shown by the several research that 'perceived usefulness' tend to have more significant impact on consumers behavioural intention towards using mCRM services. Hence considering the significance of usefulness it was included in the study.

3.3.4.8 Perceived Value

Definition: '*the consumers overall assessment of the utility of a product or service based on perceptions of what is received and what is given',* (Kim, 2007).

In the mCRM service context both usefulness and value are seen as intermutual by the consumers as they view usefulness and benefits as two sides of a coin. However findings of (Lin, 2005) demonstrate that perceived value has significant impact on customer satisfaction and loyalty which was mostly ignored in the past. Recently, there has been growing interest both by the companies and marketing firms in the role of customer perceived value as an influential determinant in boosting repeated purchase behavior as well as brand loyalty and customer engagement. Data from several studies has

identified perceived value to contribute to customer loyalty. Additionally it has been conclusively suggested that decline in perceived value usually results in customers switching to competitors in the search for better value, thus affecting customer loyalty negatively. Detailed examination of perceived value by (Lin, 2005) also showed that perceived value has a positive effect on customer satisfaction.
Considering the influence of perceived value on customer satisfaction as well as customer loyalty it was adopted in the study.

3.3.4.9 Perceived Enjoyment (PE)

Definition: '*The extent to which the activity of using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use.',* (Venkatesh, 2013)

Recent development in personal computing as well as mobile technology has put focus on consumer enjoyment (defined by perceived joy, perceived playfulness and flow) through usage of a service or product. In the mCRM service context it can be seen as enhancing customer experience with the help of personalization, localization and entertainment. Until recently very less focus was given on the customer's enjoyment as CRM services were very business and process oriented. However, mobile technologies are getting better and are equipped with high end multimedia technologies like high definition(HD) touch screens, high quality sound system, digital cameras, GPS, etc. Hence it is very essential for mCRM service to utilize this mobile features to provide consumers a positive service experience. Additionally, there is increase in customer's mobilization and they expect spontaneous entertainment not only through videos and games but through the mobile services they are consuming on regular basis. In order to give a positive costumer experience through mCRM services, the services has to be designed keeping the costumers enjoyment needs in focus, by presenting information through rich blend of pictures and videos and providing a user interface which is fun to use and interact with.
Considering the influential nature of enjoyment perceived through mCRM service on customers behaviour intention it was adopted in the study.

3.3.4.10 Behaviour intention

Definition: *'The degree to which a person has formulated conscious plans to perform or not perform some specified future behaviour.'* (Venkatesh, 2013)

Behaviour intention is the most imminent construct to predict consumer behaviour, and it is the behaviour of the consumers that most companies aim to influence. Although behaviour intention is the most influential construct, for some behaviours especially in the context of mobile services it must be considered as immediately antecedent to the actual usage also termed as 'use behaviour' in TAM2 and TAM3.

3.3.4.11 Use behaviour

Use behaviour refers to the actual usage behaviour of the consumers of mCRM services. Consumer's actual usage of the services is significantly driven by their intentions towards the usage of the service. It has been conclusively shown by numerous studies that a consumers strong or positive behaviour intentions towards a particular service generally tends to have better or frequent usage of the mCRM services.

3.3.4.12 Habit

Definition: *"something that you do often and regularly, sometimes without knowing that you are doing it",* Cambridge Advanced Learner's Dictionary

Several studies has revealed that habitual behaviour leads to carrying on the same type of behaviour (Aarts, 1998, Gefen, 2003). Detailed examination of habit by (Ouellette, 1998) showed that when a behaviour becomes a habit, in later stages that behaviour comes automatic and is performed without conscious decision. Hence as the customer use behaviour for a mCRM service gets frequent, the customer gets accustomed and experience with the mCRM service and it becomes a habit and hence it has a positive effect on customer loyalty (Lin, 2005). Considering the influence of habit on the customer loyalty, it was included in the study.

3.3.4.13 Satisfaction

Definition: *Satisfaction is a consumer's post-purchase evaluation and his/her feelings to the overall product or service experience,* (Oliver, 1992)

Studies have revealed satisfaction to be a convincing predictor for various customer behaviours like continuous engagement, recommendations and reviews on social media and word-of-the-mouth, and repetitive business i.e. customer loyalty (Eggert, 2002). Additionally, it has been suggested that the chances of dissatisfied customer searching for mCRM services elsewhere i.e. offered by competitors are higher (Anderson, 2003), and his/her response on social media might influence the company's net gain, reputation and loyal customer base negatively. Additionally, satisfaction is derived from customers experience from the mCRM service, hence customers use behaviour is antecedent for customer satisfaction either positive or negative.
Hence satisfaction is adopted from (Lin, 2005) loyalty model as determinant of a mCRM service success influencing the total benefit or individual impact to the company offering the service.

3.3.4.14 Customer Loyalty

Data from several studies have related loyalty to customers use behaviour as

> Definition: "*A deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour.*", (Oliver, 1999)

well as behaviour intention or attitude. Loyalty based on customer use behaviour in the context of mCRM results in repeated usage of the mCRM service either for purchase or engagement whereas, loyalty based on attitude results in 'dispositional commitment' due to some unique characteristic of the mCRM service (Lin, 2005). Therefore, for present study purpose, taking into consideration both attitudinal as well as behavioural loyalty, in the context of mCRM, loyalty is defined as customers favourable attitude toward an mCRM service resulting in repeat buying or engagement behaviour.

The relationship between satisfaction and loyalty is ambiguous, a comparative study by (Oliver 1999) has revealed that satisfaction-loyalty relation is not well specified. However, the most widely used possible associations of satisfaction and loyalty can be categorised into six different relationship as shown in figure 6.

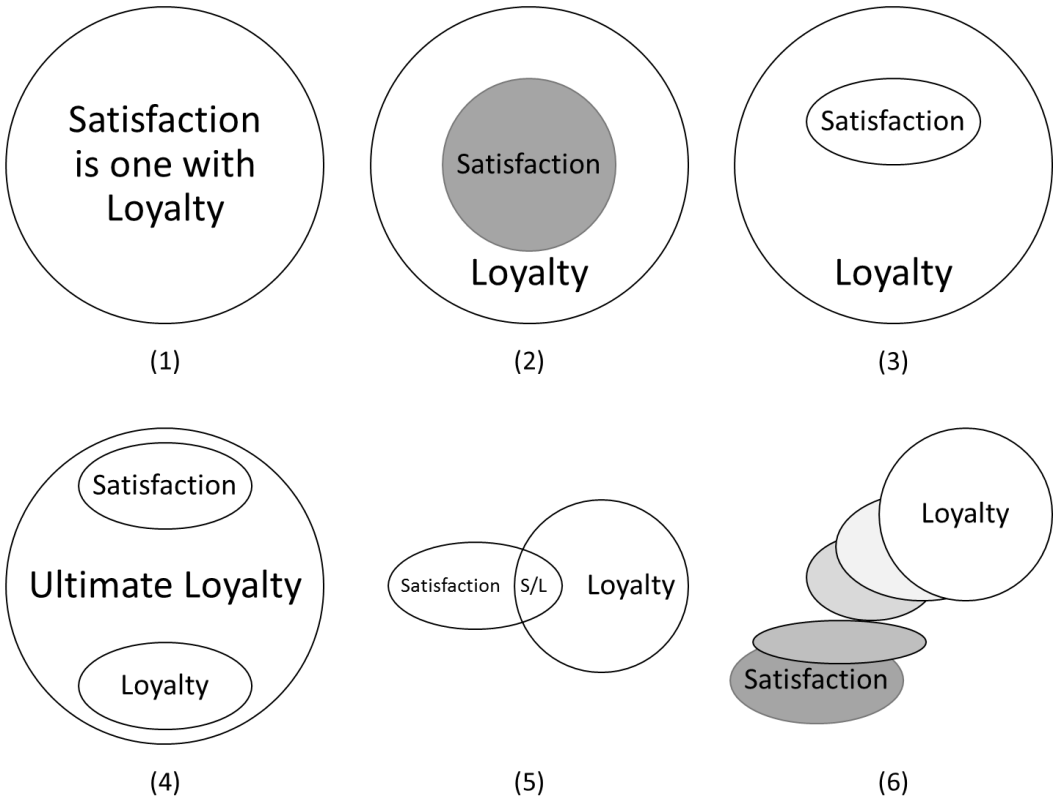

Figure 6. Representation of Satisfaction and Loyalty, adopted from (Oliver 1999)

Category 1 is based on the assumption that satisfaction and loyalty are determinants of same concept, however referring to various prior studies

(Oliver 1999) dismisses this concept and suggests they are two different concept. Category 2 is based on the argument that satisfaction is core element while, category 3 argues it's not a core but an essential element for customer loyalty. However, (Oliver 1999) dismisses both the concepts citing that even though satisfaction is not a core element, it is difficult to sustain loyalty development without satisfaction. Category 4 suggests ultimate loyalty which is achieved through satisfaction and loyalty, again the concept can be dismissed because to achieve ultimate loyalty both satisfaction and loyalty needs to be developed mutually. According to (Oliver, 1999), compared to all the previous categories, category 5 seems to be most accurate as it shows the mutual relationship between satisfaction and loyalty however, it can be dismissed as the amount of overlap between them cannot be constant and changes with the situation. Lastly, category 6 suggests that satisfaction is gradually transformed into loyalty which (Oliver, 1999) argues to be most accurate relationship between satisfaction and loyalty. However, the perspective taken by (Oliver, 1999) is just another variant of satisfaction-loyalty relationship and considering the uncertain nature of the relationship doesn't make the other variants discussed above void. For the purpose of this research, the category 6 relationship of satisfaction-loyalty is favored in the context of mCRM services, as it is the satisfaction through customer use behavior and the experience they gain that gradually transforms into customer loyalty, either affecting loyalty positively or negatively.

3.3.5 Impact Analysis

The developed research model needs to be analyzed, evaluated and validated in the context of the case studies under investigation. Every construct defined in the research model will be assessed for its impact on the customer acceptance as well as customer loyalty, and will be assigned a grade on a scale of high, medium, low. The overall assessment of the construct will be done using data triangulation method. The results from customer survey will be validated with the help of informant interview in addition, the results will be validated against the secondary data gathered through external sources. The impact analysis of each of the constructs will assist in identifying various trends and key findings exclusive to the respective use case. In addition it will help us identify any similarities between both the cases and general customer behavior for mCRM services.

4 Case studies

The following two case studies were selected based on two criteria, first the case study represented the problem that the thesis intend to investigate, second access to the organization and insights of the mCRM strategies.

4.1 mCRM strategy to help retain and enhance customers banking experience through mobile

One of the leading and largest bank in Sweden has its vision and mission to give positive customer experience by putting customers in focus, by understanding individual customers' needs and by creating long lasting relations with the customers. However, customers lifestyle have changed with times and with the influx of mobile technology in their daily life, they need banking service on the go, whenever, wherever at their fingertips. To keep pace with the technology and increasing customer demand, the bank started offering banking services through mobile. Although not the leaders in mobile banking services they soon realized that their customers are more technology savvy than they assumed. Hence, to retain their customers and give them a positive banking experience through innovative mobile banking services they initiated a mCRM strategy, wherein they had prioritized mobile as a channel to provide the banking services. Mobile was selected as one of the channel through which they could engage their customers which would give the bank much needed boost to their customer relationship, and in the process create loyal customers through mCRM services.

The bank developed a mCRM strategy which would iteratively provide all the banking services they had on web through easy to use mobile services and eventually adding even the possibility for costumers to communicate with bank through mobile. The mobile app has gone through various iterations and updates and with the current/latest version available to download on Google play and App store customer have the following m-services on their fingertips 24/7:

a. Transfer money and make payments
b. Payments through QR code scanning
c. View, edit and pay e-invoice payments and e-loans
d. View accounts
e. View loans
f. View cards
g. Open and close card
h. Swish
i. Send e-mails to the bank
j. Mobile Top up
k. View holdings in various investment accounts and portfolio funds
l. View Market information and create watch lists.

With every new release the bank is coming closer to their mission of providing a complete banking experience through mobile for their customers. However, the bank still have to keep a watch on latest and future technology trends in

mobile to give their customer a positive mobile banking experience and to retain and increase their loyal customer base.

Data collection:
Interview with product owner and senior business developer, Mobile Banking app, Sweden

Data was collected mostly through the telephone interview as well as email correspondence with the product owner of mobile banking app (MBA), he is responsible for development and maintenance of Swedish mobile app. Even senior business developer was consulted in order to get a complete overview of their mCRM strategy. Unfortunately considering the confidential nature of banking domain, detail statistics of mobile usage although available, cannot be revealed. Additionally data was collected through Google play, App store and Facebook page.

Online survey:
An online customer survey was conducted with limited amount of consumers, to get the customers feedback on the mCRM services provided through mobile app, please see Appendix A for the questions. The total number of customer responses for survey were 25, comparatively more than the other case study, as the bank has more customers using their mobile service compared to the convenience store, additionally, convenience store business is limited to 6 stores located only in Stockholm, while bank has approx. 11 million customers with 700 branches operating in the remotest town of Sweden.

4.2 Mobile loyalty (mLoyalty) through mCRM services for convenience store:

In the spring of 2010, one of the Nordic regions leading grocery retail groups had launched pilot stores. The concept of the stores is to offer wide range of high-quality fresh and healthy ready-prepared meals to take out and eat straightaway at competitive prices for the people on the go. The business model is to operate a chain of convenience store similar to the players such as Pret a Manger in UK and 7-eleven. Market research clearly showed a rise in sales of healthy, on-the-go food in Sweden as consumers are opting for more convenient solutions, such as salad bars in supermarkets and on-the-go ready prepared foods in convenient stores. There was a growth of 2.4% in Swedish ready meals market during 2009-2012 giving convenience stores the second biggest jump in ready meals market behind food and drink specialist, as convenience stores have a much higher market share (Caul, 2013), the concept was too lucrative for the company to overlook.
The company had launched 2 pilot stores in the center of Stockholm and although the sales of the stores were on the rise, the problem the company faced was lack of market presence, very few people knew about the stores or that the company had entered the on-the-go ready to eat food market. The company did a market research in order to improve their marketing and CRM strategies. The outcome was that the consumers of on-the-go food were health conscious with

busy lifestyle, they had access to latest mobile phones, and they wanted to spend least amount of time waiting for food or for paying for it. The results of the market research helped the company to develop a Customer relationship strategy and mobility was on management's top priority. Hence with the launch of a their third store in Kista, a technology hub also known as Silicon Valley of Scandinavia, the company decided to launch a mobile loyalty program through a mobile app, in quest to boost public relations (PR) and attract the tech savvy consumers.
The new store in Kista was the first store in Sweden to offer a digital reward card (loyalty stamp card) using a near field communications (NFC) hence making the customer experience of collecting loyalty points contact less and faster. Along with NFC, the mobile app also supported quick response (QR) code as an alternative solution for customers not using NFC technology. Costumers could now access various offers and discount coupons through mobile app on-the-go, and they could now have multiple stamp cards such as one for breakfast, lunch, snacks etc. without worrying about not carrying the physical card. They spend less time searching for what they want in the store and had a complete overview of their reward points in the mobile app which helped them in making quick and better decision while they were in the store.

Data collection:
Interview with marketing director, Nordic regions leading grocery retail groups
Data was collected mostly through the telephone interview as well as email correspondence with marketing director, who initiated the mCRM program. She was leading the initiative from start and was the final decision taker for the features and technology to be incorporated in the mobile app. She also had the complete overview of the programs results and had contact with the store managers and staff. She was also engaged with the customers through physical interviews as well as through email and phone. Furthermore, the lead architect responsible for designing the solution for the mobile app was also interviewed. Although the development phase of a mCRM service is out of the scope of this study, nonetheless the architects inputs from his experience from the services launch was insightful. Additionally data was collected through Google play, App store and Facebook page. Unfortunately statistics feature wasn't build-in the app, however marketing director did get daily/weekly report from the store managers which is used to derive conclusion on the actual customer usage and success of the mCRM service.

Customer interview:
Unfortunately, the number of customers for the convenient store wasn't large enough as compared to the bank, as they have in total only 6 stores limited to Stockholm region. This made it difficult to find a decent amount of costumers to have accurate results for the survey. Therefore, the approach was changed to interview the customers instead of survey, in total 5 customers were interviewed.

5 Analysis and Results

The customer feedback questionnaire was based on the constructs defined in the research model which were adopted mostly from TAM (Davis, 1989; Venkatesh, 2003; Venkatesh, 2013) as well as loyalty model (Lin, 2005). The purpose of the customer feedback was to validate the developed research model on the case study under investigation. The information gathered through interviewing the informants and other sources helped in triangulating the data, hence assisting in validating the information. Additionally the data helped in grading and identifying the overall effect of the construct on the customer acceptance and loyalty in the mCRM service context. The analysis and results of both the case study is presented differently as follows.

Case study analysis:

5.1 mCRM strategy to help retain and enhance customers banking experience through mobile

The results of the customer feedback survey are presented in the Appendix B. The figure 7 below summarizes the impact of each of the construct from the research model on the customer acceptance and customer loyalty in the context of the current use case.

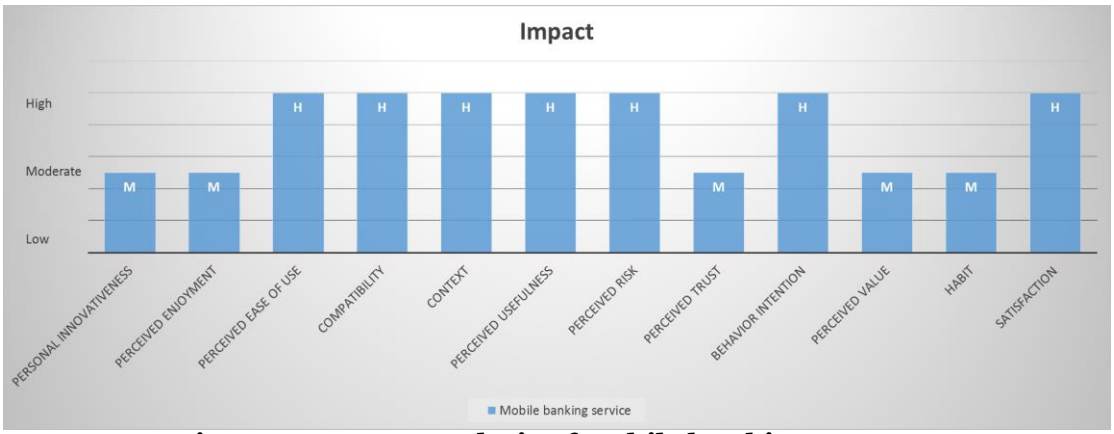

Figure 7. Impact analysis of Mobile banking use case

The response for the customer feedback on the mobile banking services were more in numbers considering the number of customers as well as the Sweden wide operations of the bank.

5.1.1 Moderate on personal innovativeness

According to the bank informants the survey results indicate a higher number of early adaptors, however this might not be the case as they have large number of elderly and above 40-45 years old customers who generally tend to be slow adapter and rather wait for others to try the new service first. This might be true, as the respondents of the survey was only the users of mobile banking, additionally respondents of survey doesn't completely represent the banks

entire customer demography. However, none of the respondents felt they are hesitant to try new technology. The data complied might be biased as it lacks the response from non-mobile customer who would be hesitant to try new technology at first place.
The results can be interpreted as the customers of mCRM services generally tend to be have greater personal innovativeness compared to non-mobile users. However, in banking context, personal innovation although an important aspect is not a critical factor, as banks generally tend to play safe when it comes to new trends and technology before adopting them in the mobile banking services. Based on the available data and assuming that banks usually try to implement easy to use mobile services, the overall effect of personal innovativeness can be assessed as MODERATE.

5.1.2 Moderate on perceived enjoyment

Although the respondents does not represent the entire customer base of the mobile banking customers, the results can be interpreted as customers do enjoy using the mobile banking service however they expect more out of the service. It is very difficult and complex to break down the customer enjoyment into exact feelings of customers, and is in itself a research subject. The bank informants did mentioned that after not being rated in top 3 mobile banks for consecutive 2 years, they have put great effort in making the mobile banking user experience as user friendly and enjoyable as possible, they still need to put more effort to make it to the first place. The reviews from Facebook, Google play and App store also reflect the same view, there are instances where customers have complained about features that confusing or does not work due to various reasons, e.g. QR code payments. In context of perceived enjoyment it also worth mentioning the survey results of CFI group revealed that *around 4% of customers don't use the mobile banking services due to app being too confusing or not having enough features* (xcube LABS, 2014). This findings can be supported by the instances where customers have commented on Google play/app store/Facebook that they might think of switching bank if a particular feature was not fixed or improved or was lacking.
Considering the above information along with the customer feedback the overall effect of perceived enjoyment can be assessed as MODERATE.

5.1.3 High on perceived ease of use

Although the sample of customers do not represent the banks actual mobile customer base, the results suggests respondents have a positive attitude towards behaviour intentions of mobile banking service even before they have started to consume the mobile services. Additionally, the bank statistics reveal that since the launch of MobilBankID login feature, the usage has gone up as the customer no longer has to carry the security token generator which makes the mobile services easy to use. The informants in the bank have also noticed, whenever they have launched a new service using a latest technology, example QR code scanner or updated the user interface making it simpler and pleasant for the customers to use the mobile banking service, the customer usage has increased. A strong evidence was found validating the TAM theory that personal innovation and perceived enjoyment directly influence customer's perceived

ease of use. Based on the results and data gathered, the overall effect of perceived ease of use can be evaluated as HIGH.

5.1.4 High on compatibility

The results indicates that a small group of respondents (10%) don't see mobile banking service compatible to their lifestyle. There might be several reasons for this and one plausible assumption would be these respondents lifestyle doesn't involve great deal of travelling and they might have easy access or frequent access to personal computer (PC), or they might prefer using netbanking over mobile banking. However majority of respondent see mobile banking service compatible to their lifestyle or see it as a normal to their other mobile usage. This findings means that most of the customers prefer mobile banking service over other channels because it suits their mobility needs and purpose. Additionally, individual's daily mobile usage in general has been gradually increasing and customers are demanding consumer services to be available through mobile, and banking services are one of the top used consumer services. A positive correlation was found between the results and the consumer trend globally, according to Javelin Strategy & Research, *'70 % of mobile banking customers say that digital banking is sufficient for their needs, replacing the branch'* (xcube LABS, 2014). This positive trend can also be verified from bank statistics which confirms approx. 60% of all logins were done on mobile.

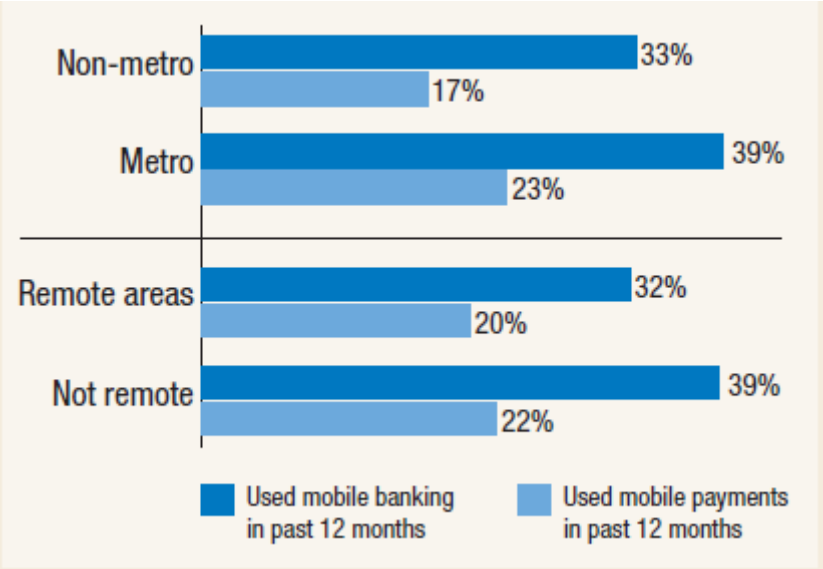

Figure 8. Mobile banking and mobile payments, by geography. Source: (Board of Governors of the Federal Reserve System, 2015)

Additionally, Consumer and Mobile Financial Services 2015 report also found that residents of more rural areas have a lower intentions of using mobile banking than residents of more urban areas (Board of Governors of the Federal Reserve System, 2015), figure 8 illustrates the results from the study. This fact validates the assumption that urban customers with busy, on-the-go life-style, have more reasons to use and have positive attitude towards mobile services.

Considering the literature review which conclusively suggests compatibility to be one of the key factors in success of mobile service, as well as validation of results through data triangulation, compatibility can be rated as HIGH.

5.1.5 High on context

It is very difficult to speculate exact circumstances in which customers are using mobile services, however the results indicates that responded mostly use mobile service to check account balance/transactions and to transfer and make payments. These findings were independently verified by the informants in the bank against the actual customer usage statistics, which reveals most of time, the customers have just login and bank assume it is for account balance check as that's the information they get immediately after logging in. Additionally it can was also verified that transfers and payment were most used services after login. Customer usage statistics from bank also confirms usage of mobile services are at peak between 8-9 am and 5-6 pm as well as on weekends, pay day i.e. 25th of every month and end of the month which indicates a positive correlation between the actual customer usage and the results of the survey findings. Hence the results indicates that mobile banking services has enabled customers to perform their banking activities while they are on-the-go as well as access to their bank balance whenever and wherever needed, in order to take better decisions.

Figure 9. U.S. mobile banking consumer report, source (Board of Governors of the Federal Reserve System, 2015)

As shown in the figure 9 above, the U.S. consumer report also reveals similar pattern where 94% of mobile banking customers in U.S. used the mobile service to check account balance and or recent transactions (Board of Governors of the Federal Reserve System, 2015).
Considering all the information gathered, it is clearly visible context is one of the influential factor in customer usage behaviour hence it is rated as HIGH.

5.1.6 High on perceived usefulness

This data must be interpreted with caution because, it might be biased, as the feedback is from the customer who are using the mobile banking services because they find it useful, the results however lack the feedback from the customers not using the mobile banking services.

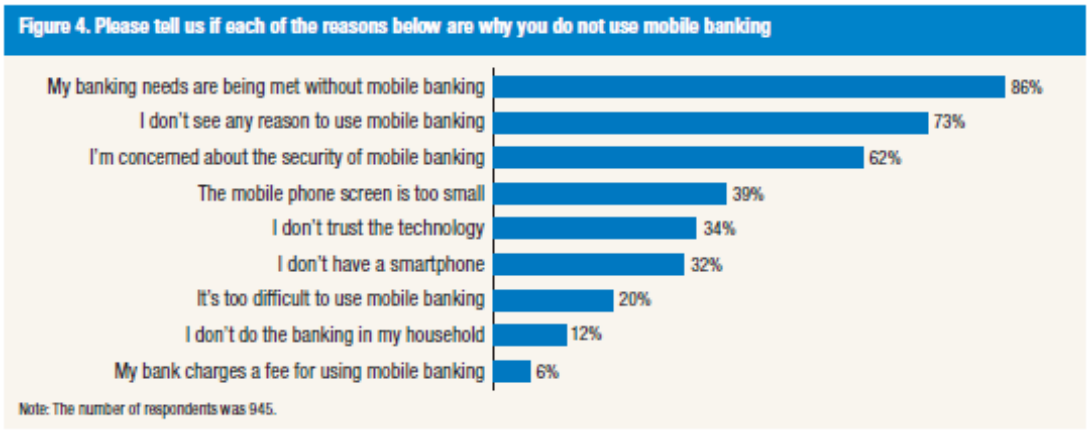

Figure 10. Reasons for not using mobile banking service, source: (Board of Governors of the Federal Reserve System, 2015)

As the survey lacked feedback from the non-mobile banking users, the survey conducted by U.S. Federal Reserve Board was referred. Their findings revealed that 60% of their survey respondent didn't use mobile banking in past 12 months and 86% of non-mobile banking users believe that their banking needs were being met without use of mobile banking (Board of Governors of the Federal Reserve System, 2015). The figure 10, illustrated the findings from the report.

The results from this thesis survey indicate that customers are finding ways to save time and effort spend on their banking activities, and they find mobile banking services useful in their busy and on-the-go lifestyle. A positive correlation was found between compatibility, context and perceived usefulness. The informants from bank has noticed whenever they have new feature which eliminates extra efforts, e.g. saving of customer profile for easy and quick access, the usage of the mobile banking service has gone up. Another instance was when bank launched the Financial contacts (saving of beneficiary) the usage of mobile payment and transfer service increased. Similarly when e-invoice was launched customer started using mobile banking service more often for paying their invoices. Based on the survey results as well as data gathered it can be evaluated that the effect of perceived usefulness is visibly HIGH on the customer use behaviour of mCRM service.

5.1.7 High on perceived risk

The results indicate that risks in forms of security is still a major hurdle in mobile banking service acceptation which was confirmed by the bank informants. However bank informant also noticed that the mobile service usage has gone up since the launch of MobilBankID which is a shared user login database administered by a federation of government as well as bank organisations. There are several possible explanations for this increase in usage, one might be due to customer convenience, as they now have one only one universal login for their various banks, as well as various public service offered by government. Second, with MobilBankID, customer's mobile device is registered and used as a security measure during login process, hence making it more difficult for someone else to login without access to actual mobile device.

These findings can further be supported with the finding of Federal Reserve Board, U.S. which found that around 62% of customers not using mobile services citied security as their major concern in accepting the mobile banking service (Board of Governors of the Federal Reserve System, 2015). The Figure 11 below illustrates the results from their findings. Additionally, study done by CFI group found that 36% of customer using mobile bank services are not comfortable with the security mechanism in their app (xcube LABS, 2014). The concerns of customers cannot be overlooked as security study revealed that around 90% of mobile banking apps from top banks have security vulnerabilities (Sanchez, 2014). However, it was confirmed by the bank informants they take security issues as high priority and assist customer to mitigate the risks if it was a genuine bug in the mobile app. They have also confirmed, all the known vulnerabilities including the ones demonstrated by (Sanchez, 2014) has been fixed and the latest version available for download doesn't have any known issues.

Figure 11. Perceived risk by customers of mobile banking services, source: (Board of Governors of the Federal Reserve System, 2015)

As all the information from several survey and studies reveal, security is a major hurdle in mobile banking service acceptance and should be considered very critical in success of any mobile banking service. This findings suggest that perceived risk is the most critical factor in acceptance of mobile banking services, hence it is reasonable to evaluate perceived risk as HIGH in the banking context.

5.1.8 Moderate on perceived trust

The results indicate that trust is an influential factor in customer attitude towards using the mobile banking services and eventually leading to customer satisfaction and loyalty. As seen in the results, 14.8 respondent with a negative reply, this finding was unexpected and is contradictory to their response on other constructs such as perceived enjoyment, perceived ease of use, perceived usefulness and perceived risk. It is possible to hypothesize that this set of respondent had a negative experience with the bank in past, however, they found the mobile banking service to be useful and this helped in building their trust and positive attitude towards the mobile banking services rather than bank in general. This findings, while preliminary, suggests that trust from prior bank experience does have a positive customer attitude towards acceptance as

well as usage of mobile banking service, however, customer could develop a new trust towards the mobile banking service which is separate from the trust in the bank as an organisation. This finding suggests that although perceived trust is essential for customers positive attitude towards usage intentions, however, in the absence of trust, weightage of other constructs might be influential, and might help in building a new trust towards the mCRM services through customer satisfaction and thus leading to customer loyalty limited to only usage of mCRM service. Hence, overall effect of perceived trust towards customer acceptance can be evaluated as MODERATE however, the effect of trust towards the customer satisfaction and loyalty cannot be neglected.

5.1.9 High on behaviour intention

The results indicate a positive correlation between the customer feedback and the bank official statistics which also indicates that among all the customer logins, 60% are through mobile banking app. The positive trend of customer attitude towards intentions of using mobile banking app was also found by U.S. Federal Board Reserve in their annual Consumer and Mobile Financial services report. They found, overall mobile banking usage increased from 33% in 2013 to 35% in 2014, revealing that 11% of respondent who reported to be non-mobile banking users in 2013 became mobile banking customers in 2014. However, 14% of respondents who were mobile banking customers in 2013 didn't use the mobile banking service for a year citing various reasons as illustrated in figure 12.

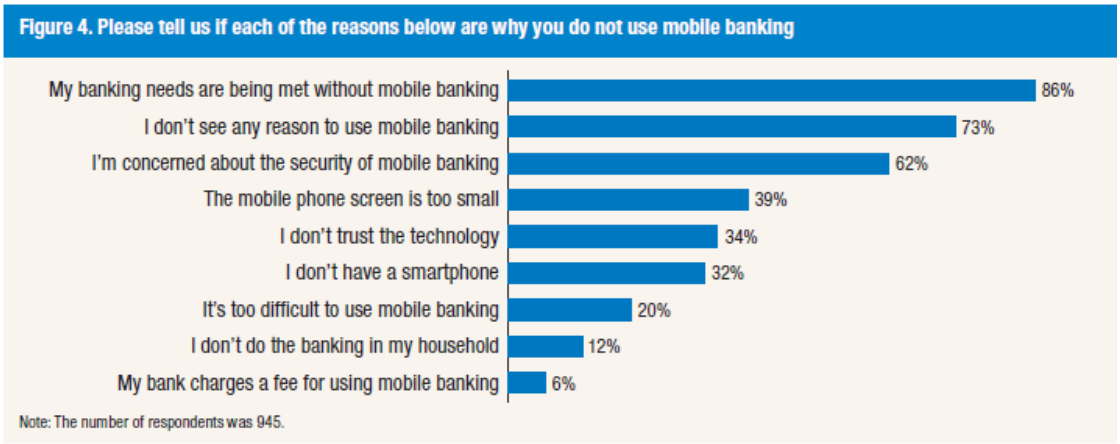

Figure 12. Reason for negative trend of mobile banking customers, source: (Board of Governors of the Federal Reserve System, 2015)

There can be several possible explanations for this result. For example, 7% of respondents who see their needs being met without mobile banking might have a significant change in their lifestyle and they might have access to PC more frequently or they might find web based service more convenient. Other possible explanation would be they switched the bank and either there bank has no mobile services or charges customers for the mobile banking services. Another less probable explanation would be they had significant losses, lost their jobs, etc. hence have no or very less money in the bank left to do any transactions.

These findings suggests that behaviour intention which in turn is influenced by perceived risk, perceived usefulness, perceived ease of use and perceived trust is critical factor in customer acceptance and usage of the mobile services, hence the overall effect of behaviour intention can be rated as HIGH.

5.1.10 Moderate on perceived value

Although literature review indicates a positive correlation between perceived usefulness and perceived value however, the major difference is the value customer gets out of the mobile service in return of their efforts (time required to carry the activity, time required to learn the activity). Even though some banks charge customers for the mobile services however, this was not the case in the current bank being investigated, hence that expense parameter is not valid for this case study.

This results can be interpreted as majority of customers are satisfied using the mobile banking services however, they expect more of it, they expect to have all the services in the mobile that are available through Netbanking. This finding was unexpected and suggests that although perceived usefulness and perceived value appear to be correlated however, they have different impact on the customer behaviour and customer satisfaction. These finding suggests that even though customer finds a mobile banking service useful, it cannot be always treated as they are satisfied with the service. Based on the results, the overall assessment of perceived value on customer loyalty can be rated as MODERATE because even though customer perceived value is not high, they tend to use the service out of necessity as they still benefit by using the service.

5.1.11 High on satisfaction

There are several possible explanations for this findings. For example looking at the results for perceived trust there were 14.8% of respondents who replied negatively based on their prior experience with the bank, which might influence the overall customer satisfaction resulting in 6.7% of respondent feeling somewhat unsatisfied. Another possible explanation would be the customers who use Netbanking as well as mobile banking services expect all the services from Netbanking should be available in order for them to have a satisfactory experience.

However the results of customer recommendations must be interpreted cautiously for two reason, first it cannot be considered separately to measure satisfaction as other factor must be considered too. Secondly the set of respondent no way represent the entire bank customer base and in social context individuals personal traits play a big role, it might be possible the respondents of this survey are socially active which might not be the case for the most of the customers of the bank. It has been suggested by academics that an unsatisfied customer is mostly likely to search for other better alternatives and also convey the dissatisfaction socially which might have overall negative impact on the company's customer loyalty. Figure 13, shows the results from report published by Adobe System, the survey findings reveal that 53% of mobile service customers share opinions in person, while 21% share via Facebook and 19% through email (Berland, 2013).

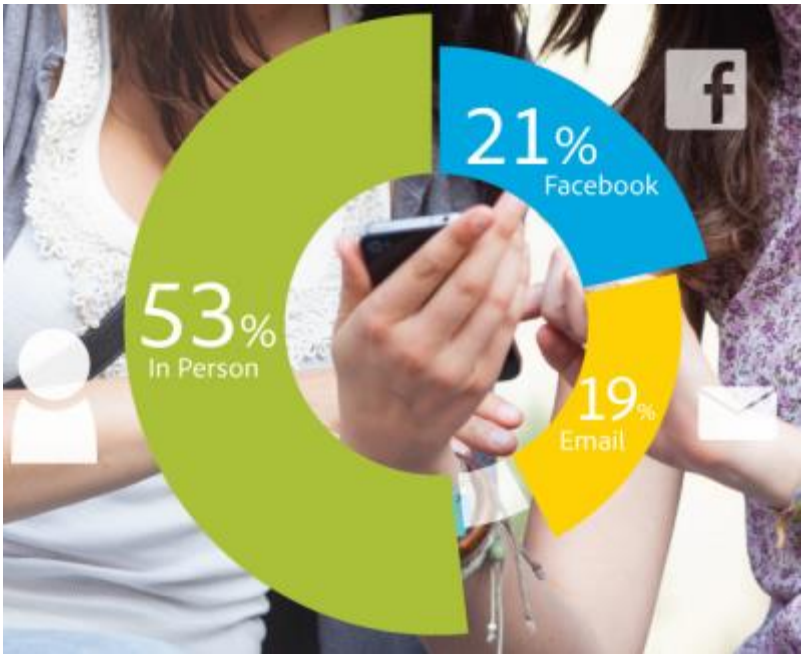

Figure 13. Customers sharing opinions on app in social media, source: (Berland, 2013)

Findings from another survey done by AlixPartners indicate that 48% of customers think mobile banking services were either 'important' or 'extremely important' in their decision to switch bank accounts (xcube LABS, 2014). Hence, it has become an important action point for companies offering mobile services to keep the customers satisfied through giving them a satisfactory mobile experience, in order to retain as well as attract new customers. Observation of the banks Facebook, Google Play and App store pages also reveals similar trend, dissatisfied customers have strongly put forward their opinions and have also mentioned of thinking or intend to switch to another bank due their poor mobile experience.
These findings indicate that satisfaction has positive effect on customer loyalty towards mobile banking service and hence can be rated as HIGH.

5.1.12 Moderate on habit

Literature review suggests that customer habit plays an influence role in customer loyalty (Lin, 2005). In order to validate the claims, respondents were asked several questions to determine their actual habit to see if there is any positive correlation between customer habit and loyalty.
The findings suggest that the 46.7% of respondents who had choice of using other mobile banking services had made an unconscious intention of using the mobile services provided by the bank under investigation. However, literature study reveals that although it is an unconscious decision it is based on prior customer's experiences with the company as well as their prior conscious evaluation of perceived usefulness and perceived value. Hence customers have fallen into a well-practised use behaviour which is based on their prior evaluation of comparing the perceived usefulness and value of mobile banking services provided by the bank. Based on the findings, the overall effect of habit on customer loyalty can be rated as MODERATE.

5.1.13 Use behaviour

The results indicate a positive correlation perceived usefulness which in turn effects the customer behaviour intentions towards using mobile banking service, it was found that customers usually use the services with specific purpose under specific context expecting some benefits (usefulness) from the mobile banking services.

Above figures were independently validated by the informants from the bank, although they have different figures considering this survey is just a subset of their entire customer base, their statistics follow the same pattern. They also believe the reason for other mobile services being so less frequently used was because these services were recently launched and most of the customers rarely notice the new features unless, they have the need or they get to know it from external sources.

Figure 14. Mobile banking service usage in past 12 months, source: (Board of Governors of the Federal Reserve System, 2015)

The survey conducted by Federal Reserve Board, U.S. also indicate similar trend, as indicate in the figure 14, the most used mobile banking service is checking account balance or recent transactions followed by payments and transfers. The informants within the bank have noticed the usage of mobile banking has gone up, with majority of logins (approx.. 60%) made through mobile, and the number of payments done through mobile banking services are gradually increasing while the other channels has seen substantial decline. The mobile banking service is gradually gaining traction among the customers however, majority of customers are still using Netbanking as well as other channels for their banking needs.

5.1.14 Customer Loyalty

In order to validate customer loyalty respondents were asked several questions. The finding suggests that respondents of this survey are satisfied with their usage of mobile banking service and have created a strong bond with the service which would be difficult to break or change through on external influences, hence impacting banks net customer loyalty in a positive direction. The informants from the bank have noticed that out of all the login, mobile logins are highest around 60%, they have also seen trend with increasing number of e-invoices been paid through mobile banking service. Additionally banks image as old and slow in innovation is gradually changing as customers are getting a positive mobile experience with mobile services which are new and not

available with the competitor banks. The positive trend of customer loyalty as seen from the results can be credited to mostly to customer satisfaction and then to the comparatively less influential constructs like perceived value, perceived trust and habit. It is also important to note that a based on perceived value and satisfaction a new trust might be build up towards the mobile banking service which in turn would lead to increased customer loyalty towards the mobile banking services.

5.2 mLoyalty through mCRM services for convenience store

The information gathered for the convenience store use case was mostly through interview with marketing director, lead architect and customer feedback store managers received. The survey method to collect customer feedback didn't suit this case study due to lack of large number of respondents, hence the analysis and results is narrative in style rather than in figures and statistics compared to the bank case study.

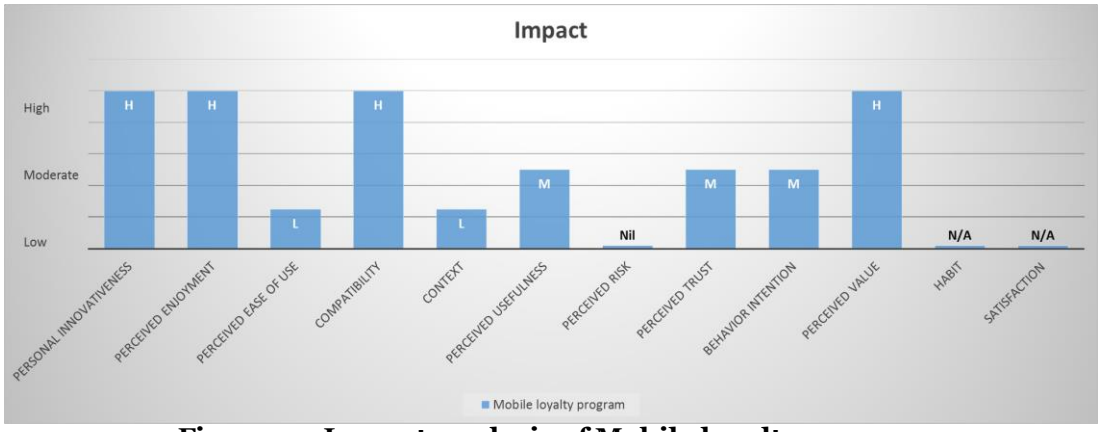

Figure 15. Impact analysis of Mobile loyalty use case

5.2.1 High on personal innovativeness

One of the main drivers of the mLoyalty program was the PR strategy to target high tech customers for their 3rd store in Kista which is also known as the IT hub of Scandinavia. The idea was to integrate the latest technology in the mobile app in order to create a digital stamp card as part of the company's mobile loyalty program. After reviewing the latest technology available in the mobile phones as well as anticipating popularity of the technology in future, near field communication (NFC) and quick response (QR) code technology were selected as alternatives for scanning the coupons and also receiving digital stamps. As NFC was still in infancy and many mobile handsets didn't supported the technology, passive NFC stickers that can be pasted on the back of the mobile were used for customer identification of non-NFC mobile handsets. Thus the whole process of customer registration was little complicated which required some level of personal innovations on the customer part. Additionally, QR code used as alternative for NFC also required personal innovativeness as it did required customers to know how the technology works. The digital stamp card for collecting loyalty points on every purchase was one of its kind in Sweden when it was launched in 2011 and it quickly gained customer traction. Customers loved the concept and most of them were eager to use the mobile

app and the store got the much needed PR boost as well as large number of customers signed up for the mLoyalty program.

5.2.2 High on perceived enjoyment

The feedback from store manager indicates customers enjoyed using mobile app, especially the collecting digital stamp as it was the default function when they opened the app. The graphics used for the digital stamps were of high quality and was simple giving customers an instant graphical feedback on the number of stamp collected or number of stamp remaining for the free item. Customers also enjoyed the way the received the stamp which was contact less and faster and simpler than paper cards. They enjoyed the concept of having more than one digital stamp card e.g. for coffee, for lunch, snacks etc. without ever worrying about forgetting the card or losing the cards with stamps. The digital discount coupons available in mobile app were graphically appealing with less information and customers instantly get to know current discounts and offers.

5.2.3 Low on perceived ease of use

Although, customers loved the mLoyalty program for its innovative way of collecting digital stamps and for its graphically appealing user interface, it was however limited to technology savvy customers. Customers who were new or introduce to the technology through the mobile app were lacking the motivation and found the mobile app complicated to use and they felt the process of collecting stamp was slow as they were not experienced with the technology. Moreover the store staff wasn't technology savvy and hence found NFC solution to be slow and complicated and preferred the QR code method. Although the personal innovativeness worked positively for limited number of customers however, for majority of customers as well as for store staff it had a negative influence on perceived ease of use.

5.2.4 High on compatibility

Customers with busy life style found the mobile app to be very useful. They didn't had to remember about carrying the paper stamp card for collecting points and hence receiving the item free once they have collected required number of stamps. The app helped them find the nearest store while they were out searching for fast and healthy lunch or snacks. The app also saved customer time in the store as they had all the offers and discount in the app which they could look while they were on the way to the store. The stamp collecting process was quick and contact free as all they had to do was either scan QR code or simple show mobile to the NFC reader. The statistics shared by the informants reveal that the most used digital stamp card was for the lunch boxes, this result can be interpreted as customer were looking for quick and healthy lunch in order to save time during their work day. This claim can further be verified by the customer usage pattern which indicated that total digital stamps went drastically down during the period of July as well as Christmas i.e. when most of the customers are on vacations and hence are not working. It is apparent from the data gathered that store targeted customer who had busy lifestyle and

wanted to have fresh and healthy food and the mobile app was highly compatible with their targeted customers life style.

5.2.5 Low on context

Compared to the mobile banking use case, the situations or context in which the convenient store mobile app could be used was very few. Once the customers were not looking for food, they had no need of the app. Hence influence of context on perceived usefulness was low.

5.2.6 Moderate on perceived usefulness

Customer found the mLoyalty app useful only in the light of compatibility. The app was helpful to find the right food as they could now see the details in the mobile app instead of spending time and trying to read the contents on the food box. Additionally, the mobile app helped them collect stamps which was quick and simple, without bothering about the paper stamp card which they usually forgot and the process of stamping on paper was cumbersome and time consuming at the point of sales. Other than compatibility, customers didn't find the mobile app useful.

5.2.7 Zero perceived risk

Customers hardly had any concerns regarding security or privacy concern as the mobile service doesn't need any sensitive information except name and birthday, and these information is publically available in Sweden.

5.2.8 Moderate on perceived trust

Customer's prior experience with the store hardly mattered as they were fairly new in the market and very few customer knew about their existence. However the credibility of Nordic regions leading grocery retail group owning the convenient store did influence the customer in positive direction. Some customers has high trust that they called the stores when they realized they missed to collect their birthday gift coupons as it expired and to their surprise they did get the gift after contacting the store.

5.2.9 Moderate on behaviour intention

The main constructs influencing the customers behavior intention in positive direction were first, their personal innovativeness to experience new technology and be part of mLoyalty program, and their perceived enjoyment to be part of something that's was launched first time in retail industry and the appealing nature of the mobile app. Second, customers perceived usefulness which was heavily influenced by the mobile services compatibility with their busy life style and stores offering of healthy food, which was properly messaged through the mobile app. In contrast to the bank use case, all other constructs such as context, perceived ease of use, perceived risk and perceived trust has minimal or no influence on customers behavior intentions towards usage of the mCRM service.

5.2.10 High on perceived value

The marketing directory had realized from start that in order to attract customer and increase their customer loyalty through mobile services they had to provide better value than already existing channel such as paper stamp cards and Rabble (a mobile app providing offers and discounts from different stores subscribing its service). In pursuit of providing better value to their mobile customers they offered one less stamp to receive the free item e.g. for paper stamp cards customer had to buy 7 lunch box to received 8th lunch box free, while mobile customer with digital stamps had to buy 6 lunch boxes to receive 7th free. They also had welcome gifts for new customers signing up for the mloyalty program. Another unique value for mobile customers was they received a surprise gift coupon on their birthday which was not available for customers using other channels. Feedback from store managers reveals birthday coupon was popular among customers, in fact unhappy customers who missed to use the coupon on birthday contacted the customer care for possibly claiming it back this reveals the customers perceived value had a very positive effect on the net customer loyalty of the convenient stores.

5.2.11 Satisfaction and habits

Due lack of statistics and customer survey on individual level, it is hard to evaluate if the customer felt into an unconscious habit of using the mobile service and hence indulging into repeated purchases through well-practiced use behavior. Similar is the case with satisfaction, it is difficult to evaluate customer satisfaction in the absence of individual customer feedback. However, from store manager's observations it is believed that loyal customers who used mobile app shopped at the store on average 3-4 times a week.

5.2.12 Use behaviour

It is apparent from the figure 15, that personal innovativeness, perceived enjoyment, compatibility and perceived value had the greatest impact on the customer use behavior in context of this case study. The usage statistic shared by the informants revealed, on average they had 100 digital stamps per day making up to 400-500 digital stamps per week, while on a very busy week they had 2500 digital stamps given to the loyal customers. However, 10-15% of customers were still using paper card and store manager wanted to keep the paper card mainly due to two reasons. First, most of the customers were using work mobile provided by their employers and they didn't wanted to/were not allowed to install personal apps on those mobile phones. Second, they have a customer base of elderly group who found the NFC, QR technology too advance and complicated to use, hence paper card was the alternative for these customers. It was also revealed the usage went up during the initial launch as well as when they have a marketing campaign on subway etc. However, it was also noticed that lots of customers signed up for the mLoyalty program, collected few digital stamps but not enough to get receive a free item. It is possible to hypothesize that it was customer's curiosity as well as personal innovativeness that influenced them to sign up and try the mCRM service however, few customers didn't find it useful or compatible with their lifestyle or the customers didn't perceived enough value in return to have a repeated purchases in the store.

5.2.13 Customer loyalty

The results, as seen in the figure 15, indicate that perceived value is the most influential factor in customer loyalty leading to repeated purchases with the aid of mCRM service. Although customers perceived trust did had a positive effect on customer loyalty however the impact wasn't significant. In absence of individual customer feedback, impact of satisfaction and habit on customer loyalty could not be evaluated. However, the marketing director feels that the mCRM loyalty program was a success. Her evaluation is based on the several factors one, steady download of the mobile app as well as usage of the digital stamps and the discounts offers customers using. Second, the mCRM service has boosted their customer engagement, the staff now has reasons to connect to their customers and treat them individually based on their shopping pattern. Customers have shown trust by contacting the customer center and for claiming the expired mobile birthday vouchers, this has also helped the store to show courtesy and reward their loyal customers increasing the satisfaction which has led to positive review and recommendation on social platforms by the customers. Third, the success of the mLoyalty program can be evaluated from the evidence that their competitors initiated similar mLoyalty program in an attempt to attract new customers. Similarly, the retailer group owning the convenient store was impressed by the success of the convenient stores mLoyalty program and has initiated a large scale mCRM strategy across Scandinavia to integrate the mLoyalty program into its already existing loyalty program for the grocery store customers.

6 Conclusion

In the quest to understand the dynamics between the customer acceptance, customer satisfaction and customer loyalty in the context of mCRM service, the thesis study developed and proposed a research model. Furthermore it adds to the body of knowledge around customer acceptance and customer loyalty in the IT service context especially in the context of mCRM services.

6.1 Key findings

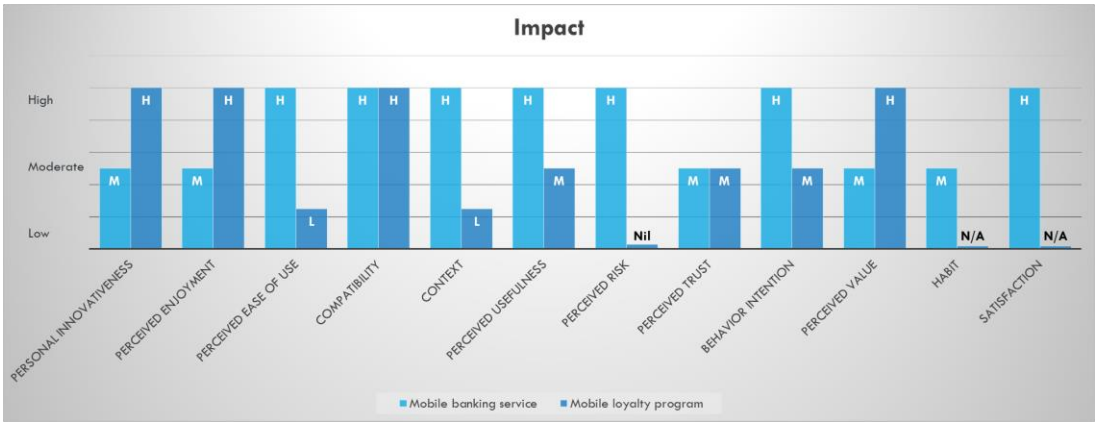

Figure 16. Impact analysis of both the case studies

The thesis, whilst analyzing the impact of various constructs on customer acceptance and customer loyalty, has shed light on some interesting issues. This section highlights some key findings of the study, findings which can be of use and of particular importance to the companies implementing mCRM strategies.

a) Urban customers with busy-on-the-go life style find mobile services to be most useful, as it helps them to perform their activities on the move 24/7, regardless of their contextual situations.
b) In the absence or prior weak trust towards the company offering the mCRM service, customers build up a new trust through positive mCRM service usage experience. However, this trust is limited to the mobile services in most of the cases.
c) Customers develop a well-practised habit which is based on their prior conscious evaluation of the perceived usefulness and perceived value derived through usage of mobile services. This habit seems to have a positive impact on the customer loyalty as it results in repeated customer usage of mobile services habitually.
d) The findings indicate that the net customer loyalty the company achieves is limited to usage of the mCRM services and does not influence other channels.

6.2 Discussion

Although the phenomenon studied in this thesis is too complex to be addressed completely in the scope of this thesis. However, the crux of the phenomenon has been revealed by showing the interrelation between customer acceptance,

customer satisfaction and customer loyalty. The thesis project was initiated with the intention to find answers to the following research questions:

a. Why do customers accept or reject m-services? What are the factors behind customer acceptance?

The customer acceptance phenomenon cannot be standardized and the reasons for customer acceptance or rejection is very subjective and varies from case to case. Hence, this thesis has systematically investigated the existing literature and proposed a research model which to some extend can be standardized for majority of the mCRM services. The research model proposes various influential factors which companies must take care in order to have successful customer acceptance. The thesis studied two case study very closely which are from totally different business area and are outcome of two different mCRM strategies, one intending to increase the customer loyalty and generating repeated business through mLoyalty program, while other intending to strengthen the customer relationship by giving a positive customer experience through m-services.

b. Does mCRM services has any effect on customer loyalty?

This thesis confirms previous findings and contributes to our understanding of customer relationship in the context of mCRM services. In contrast to earlier findings, however, the evidence of prior trust was found to have moderate effect on customer behavior intention as well as customer loyalty. An important finding to emerge in this study is although perceived trust is essential for customer's positive attitude towards usage intentions, however, in the absence of prior trust, weightage of other constructs might be influential. The findings revealed an unexpected trend, whereby a new trust can be build up through positive customer experience from the usage of the mCRM service which might have a positive influence on company's net customer loyalty. However, this customer loyalty is limited to only usage of mCRM service in this scenario. The findings from the study also reveal that customers of mCRM services might fall into a habit by developing a well-practised use behaviour which is based on prior customer experiences with the company as well as their prior conscious evaluation of perceived usefulness and perceived value through usage of mCRM service.

The findings from this research study can be useful, and of particular importance to the companies who are developing mobile services as part of their mCRM strategies. In addition, the research model proposed in this study is useful for companies in measuring the impact of their mCRM strategies on their net customer loyalty. The research model identifies key factors that influences customer acceptance and behaviour intentions, as well as customer loyalty. Companies especially the ones who are struggling with customer acceptance of their mobile services, or having low customer loyalty, should realign their mCRM strategies. Their mCRM strategies should take into consideration the constructs identified in the research model, in order to improve the customer acceptability and loyalty through their mobile services.

6.3 Limitations

This thesis project, however, was limited in several ways. First, access to the confidential and sensitive company reports and customer usage statistics was

limited and difficult. Second, the available sensitive information could not be presented in this thesis report due to its confidential nature hence, the results of the study had to be validated by the informants within the companies. Third, due to lack of willingness from the higher managements in the company to request feedback from all the customers of mCRM service, the results does not represent the views of larger customer base.

6.4 Future work

Future research in this area should concentrate on tracking the phenomenon of customer behaviour, satisfaction and loyalty right from the inception of the mCRM service. Additionally, efforts should be made to on board the higher managements of marketing department in order to get feedback from large number of customers giving a big picture of their entire customer base. Considering the research model presented in this thesis as the starting point and extending the model if needed, the future studies should focus on observing how the dynamics between customer behaviour, customer satisfaction and customer loyalty matures gradually over the time and what effect it has on the overall customer relationship and the net customer loyalty of the company over the years since the inception of the mCRM service.

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Appendix A: Customer survey questions

Constructs	Questions
Personal innovativeness	How do you feel about trying out new technologies, for example a new app?
Perceived enjoyment	Do you enjoy using XYZ mobile banking app?
Perceived ease of use	What did you believed before installing or using XYZ mobile app?
Compatibility	Does XYZ mobile banking app suits your lifestyle and your mobile usage?
Context	In what situations or when do you use the XYZ mobile banking app?
Perceived usefulness	Does XYZ mobile banking app makes your life easier?
	Do you find XYZ mobile banking app useful?
	In which ways is XYZ mobile banking app useful?
Perceived risk	How do you feel about doing banking/monetary transactions using XYZ mobile bank app?
	Do you feel safe/comfortable accessing and performing your banking tasks using XYZ mobile app?
Perceived trust	What or how were your past experience dealing with XYZ bank?
Behavior intention	In future do you intend to use more of XYZ mobile app for your banking tasks?
Use behavior	Do you use or have used mobile banking services from other banks?
	Which mobile services you use most frequently?
Perceived value	Do you feel XYZ mobile banking app: • delivers you a good value • is worthwhile to use instead of web/Net banking

	• is beneficial to you compared to the effort you need to put in • delivers the services the way you would expect
Habit	Do you usually use XYZ mobile banking app instead of web/Net banking? Do usually prefer mobile for your banking related activities? If you have accounts with different banks, is XYZ mobile banking app your first choice?
Satisfaction	Are you satisfied with your usage of XYZ mobile banking app? Will you recommend XYZ mobile banking app to others? Do you feel XYZ mobile banking app ... • is successful • has met your expectation • will be popular • None of the above
Customer loyalty	If given other alternatives like personal bank manager/priority telephone banking, will you still intend to use XYZ mobile app instead of offered alternatives? Customer loyalty feelings for XYZ mobile app: • It will be difficult to change your beliefs/ attitudes about XYZ mobile app • Even if close friends recommended another mobile banking app, website, your preference for XYZ mobile app would not change • You intend to keep using XYZ mobile app for your banking activities • None of the above

Appendix B: The results of customer survey

B.1 Personal innovativeness (PI)

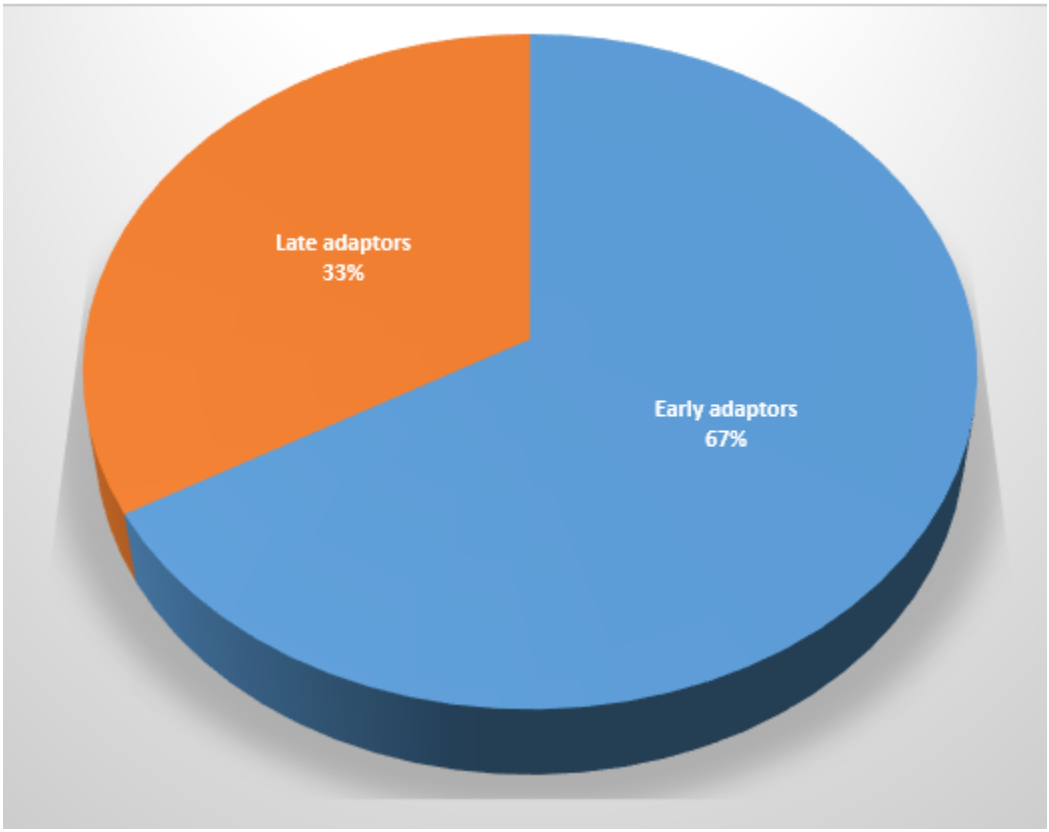

Figure 17. Personal innovativeness

66.7% of the respondents feel that they are early adaptors when it comes to new technology and they feel they are the first among their social circle to try out new mobile services in general, while 33.3% respondent say they rather wait for others to try new services.

B.2 Perceived Enjoyment (PE)

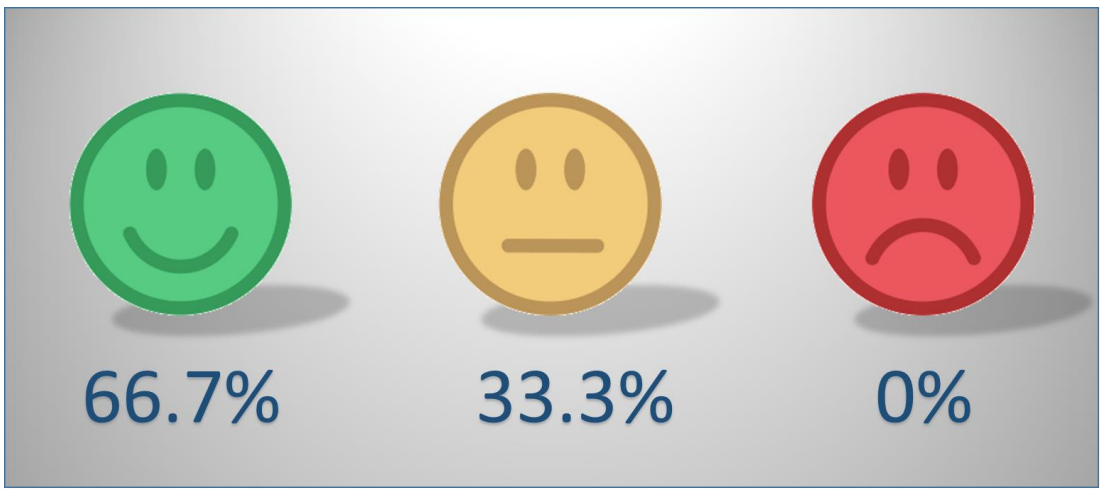

Figure 18. Perceived Enjoyment

66.7% of respondents enjoy using mobile banking services, while 33.3% of them agree that to some extend they enjoy using mobile banking services. It was however unexpected to see none of the respondents had negative feedback on perceived enjoyment.

B.3 Perceived ease of use (PEU)

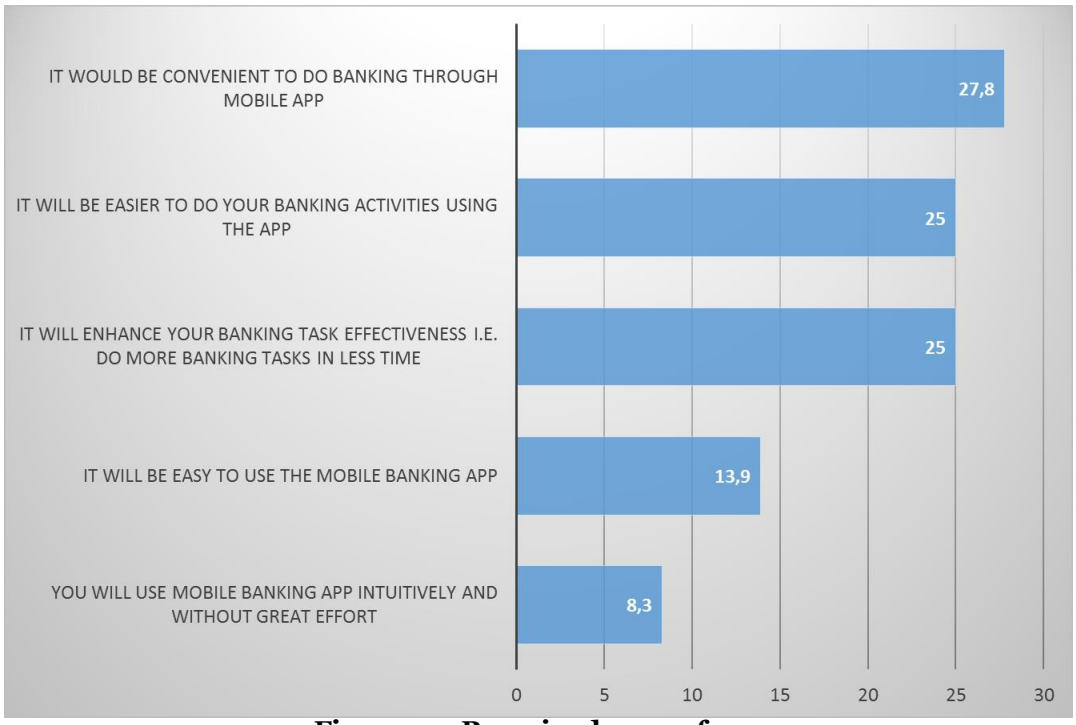

Figure 19. Perceived ease of use

None of the respondents had negative feedback on perceived ease of use before installing or using the mobile banking services. Majority 27.8% believed it will be convenient to do banking through mobile app, while 25% of respondent believed the mobile banking service will enhance their banking task effectiveness. 25% of respondents also believed it will be easier to do banking using an app compared to Netbanking or visiting branch.

B.4 Compatibility

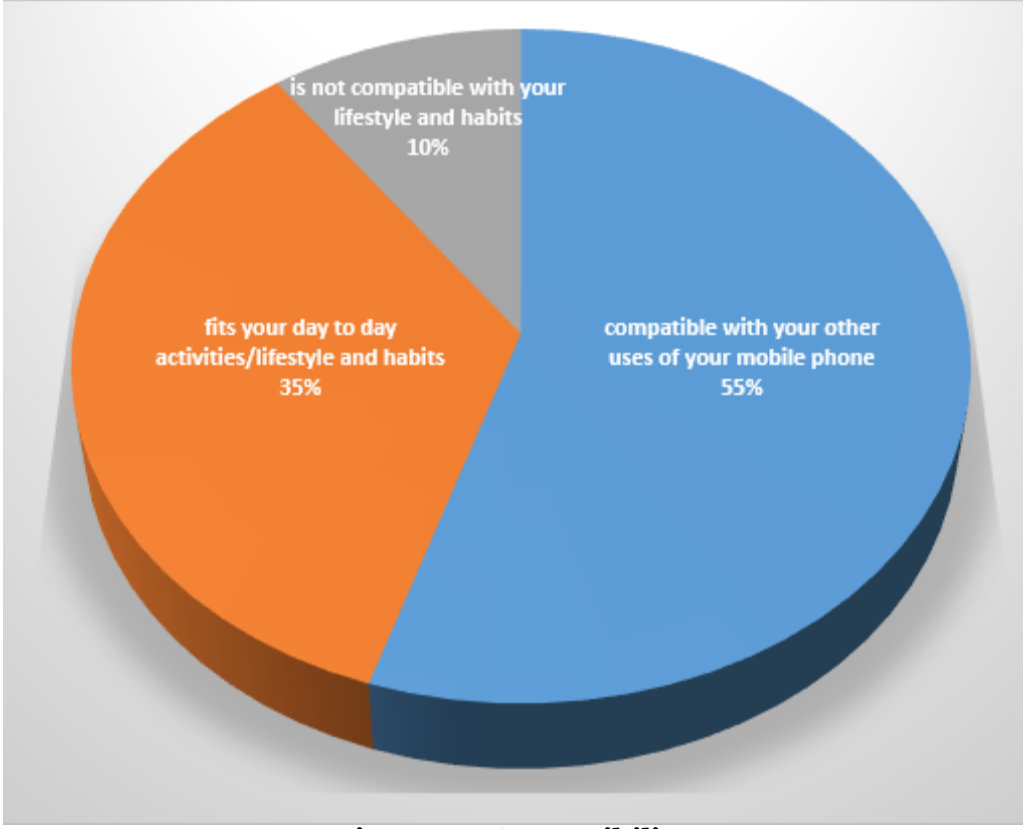

Figure 20. Compatibility

Majority of responded positively on compatibility question, 55% of respondents feel that the mobile banking service is compatible with their mobile usage, while 35% feel that mobile banking services fits their lifestyle, except 10% who feels that the mobile banking service doesn't fit their lifestyle or habits.

B.5 Context

Context	Percentage
To check your bank balance	14.5%
To transfer money to others	14.5%
To check your card/account transactions	14.5%
To pay your bills	9%
To check your salary	8.7%
While you doing shopping	8.2%
When you travelling to or from work	5.8%
Every now and then	5.8%
When you planning to buy something bit expensive	5%

When you at work	2%
To contact bank	2%
To find nearest branch/ATM	2%
Everyday	2%
On pay day	2%
When you planning your vacations, trips, etc.	2%
When you out with friends	1%

Table 4. Context under which mobile banking services are used

Various possible context under which customers would be using mobile banking services are listed above in the table 4, it also list the percentage of respondents for each of them.

B.6 Perceived usefulness

Does mobile banking service make life easier?

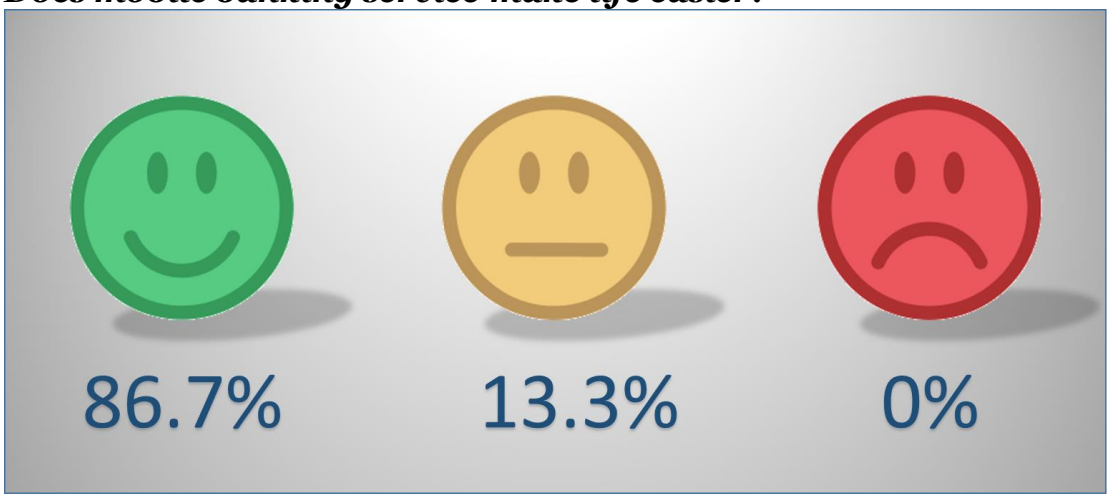

Figure 21. Perceived usefulness: Does it makes life easier?

It's worthwhile to note that none of the respondents gave a negative feedback, assuming they use the mobile banking services because it does help them in some ways. 86.7% responded that it makes their life easier, while 13.3% responded it does make it easy to some extent.

Is the mobile banking service useful?

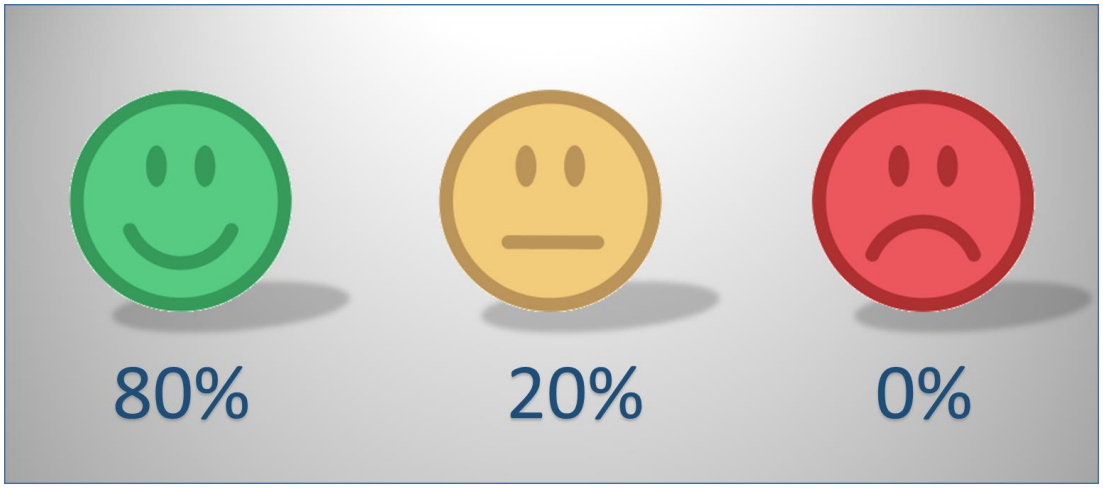

Figure 22. Perceived usefulness: Is mobile banking service useful?

All the respondents had positive feedback, with majority (80%) feels it us useful while a small number (20%) find it somewhat useful.

In which ways is mobile banking services useful?

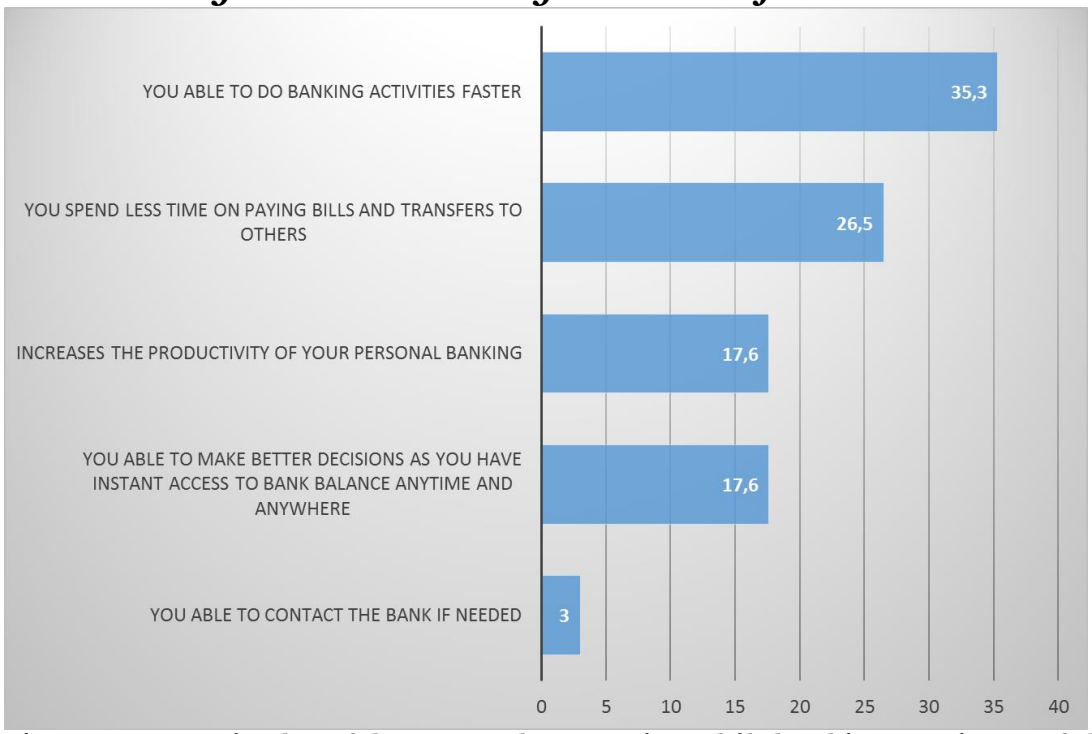

Figure 23. Perceived usefulness: In what ways is mobile banking service useful?

Figure 23 summarizes in the ways in which customer find mobile banking to be useful.

B.7 Perceived risk (PR)

If customers are comfortable/feel safe performing banking activities using bank app?

Figure 24. Perceived risk: Do customers feel comfortable using mobile banking service?

Majority of respondents (80%) felt comfortable using mobile bank app, while 20% of respondents not always feel safe or comfortable to perform banking activities using mobile app.

How do customers feel doing banking/monetary transactions using the mobile bank app?

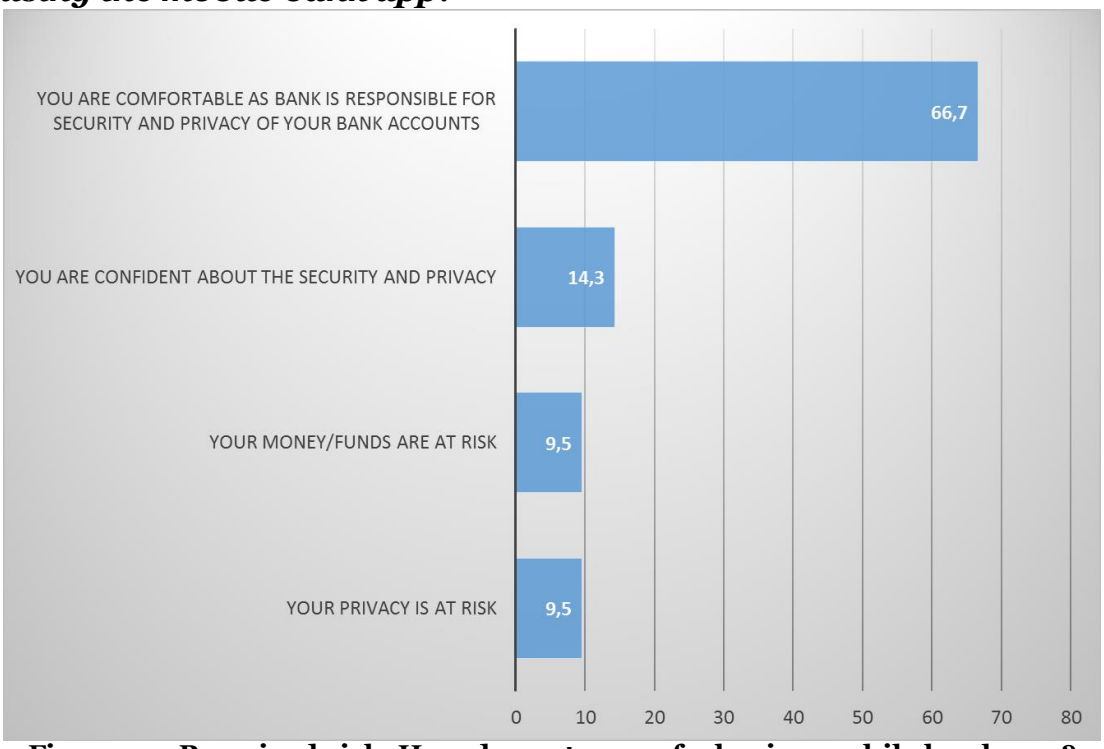

Figure 25. Perceived risk: How do customers feel using mobile bank app?

The results, as seen in figure 25 indicates, 66.7% are comfortable as they believe the bank has taken measures for security and privacy of their information.

While 14.3% are totally confident of using the app, these are the customers who are risk takers and are comfortable in using any mobile services even from other companies for payments, shopping, banking etc. However, 9.5% feel some concerns about their money/funds as well as their privacy.

B.8 Perceived trust (PT)

Perceived trust	Percentage
are honest	22.2%
are trustworthy	22.2%
provide good customer services	14.8%
none of the above	14.8%
care about their customers and take their concerns seriously	11.1%
keep their promises and commitments	7.4%
keep customers' interests in mind	3.7%
other	4.8%

Table 5. Perceived trust

The results, as seen in table 5, indicate that the majority of respondent had positive trust in the bank as general from their prior experience deal with the bank.

B.9 Behaviour intention

Do customers intent to use and probably increase their usage of the mobile banking app in future?

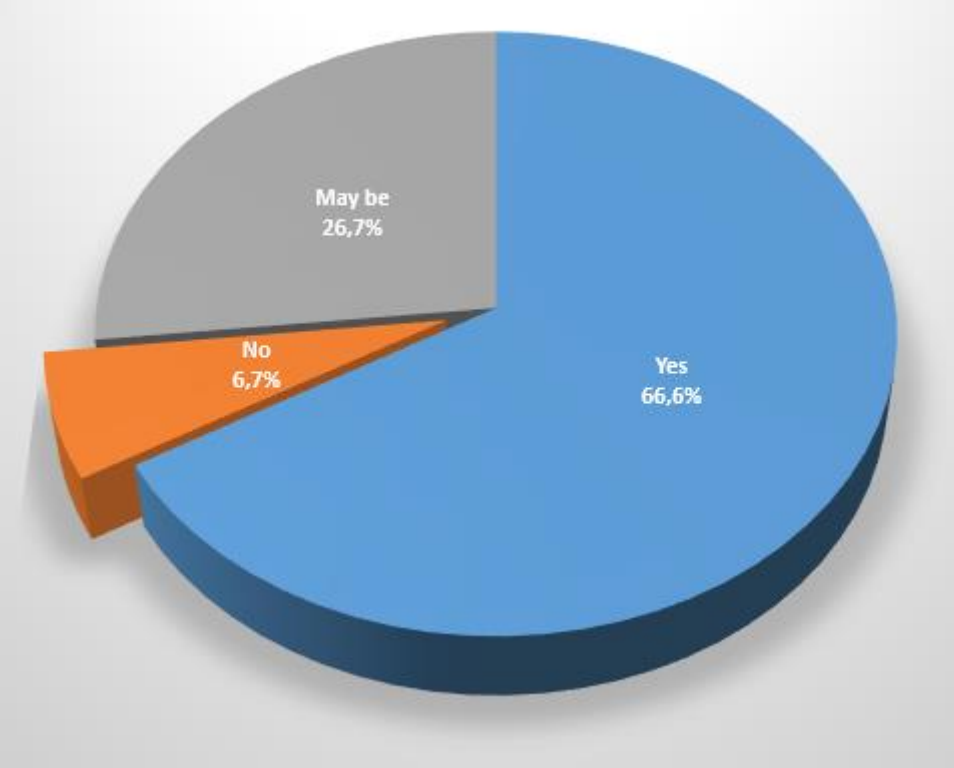

Figure 26. Behaviour intention: Do customer intend to increase usage of mobile banking service?

The majority of respondent (66%) felt that they will continue and probably increase their usage of mobile banking services in future, while 27% wasn't sure and respondent with may be, however 7% of respondent choose not use the mobile banking services in future.

B.10 Use behaviour

Do customer use or have used mobile banking services from other banks?

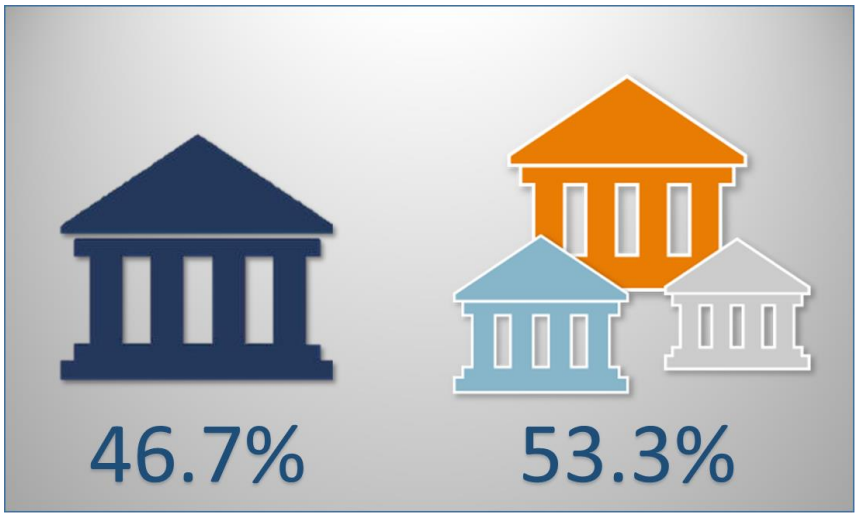

Figure 27. Use behaviour: Do customers use mobile services from other banks?

It is apparent from the figure 27, that almost half of the respondents (53.3%) use or have used mobile banking services from other bank. However, these data must be interpreted with caution because respondents might have accounts in multiple banks but in there day to day life they use one bank account more

often, while the other bank they might have downloaded the mobile bank app, but never used it or use it very rarely. More details about customer preferences will be analysed in habit construct.

Which mobile services customers use it frequently?

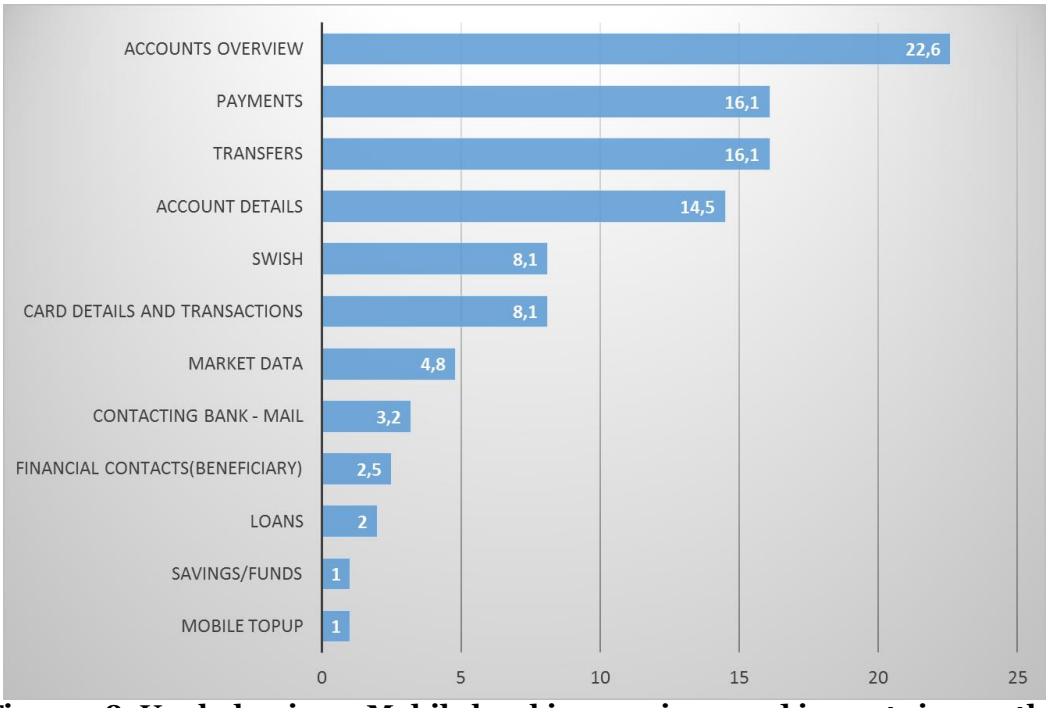

Figure 28. Use behaviour: Mobile banking services used in past six months

The results, as seen in figure 28, indicate that majority of respondents (22.6) are using mobile banking service (accounts overview) for quickly accessing their bank balance. This hypothesis was validated by the respondent's feedback on other question where majority of the respondents (93.3%) agreed that they used the mobile bank app because they have instant access to their bank details, whenever and wherever needed. The results also indicate that payments (16.1%) as well as transfers (16.1%) are most widely used mobile banking service after account overview. Comparatively, account details (14.1%) is not so often used as it is indicated by the results, however other mobile banking services are even less frequently used.

B.11 Perceived Value

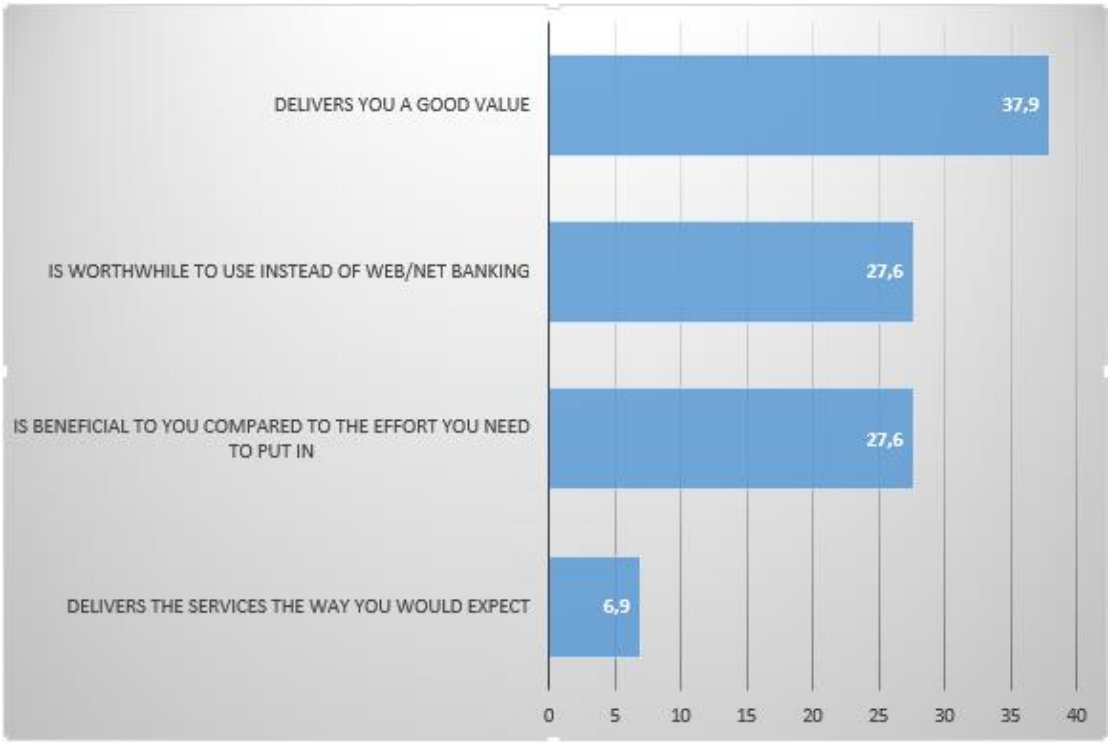

Figure 29. Perceived value

Referring back to the perceived usefulness figures, 86.7% of respondents found the mobile banking services to be useful, however investigating into details of perceived value, 37.9% of respondents felt that the mobile banking service delivers good value to them, these are the customers who are overall satisfied with the service provided and are assumed to be using only mobile services. While 27.6% of respondents feels its gives more value for their efforts in comparison to Netbanking, this are the customer who are assumed to be using both Netbanking as well as mobile banking service and they find mobile banking services to be valuable compared to Netbanking under some context. Another 27.6% of respondents believe mobile services to be more beneficial in comparison to the effort they put to do the activity. However only 6.9% of respondents feel the mobile services are up to their expectations.

B.12 Satisfaction

Customer satisfaction

As seen in figure 30, indicate 26.7% of respondents are very satisfied, while 46.7% are satisfied using the mobile banking services. These two set of customers can be correlated to top two set of customers who felt mobile banking service delivered good value, and it is worthwhile to use instead of Netbanking.

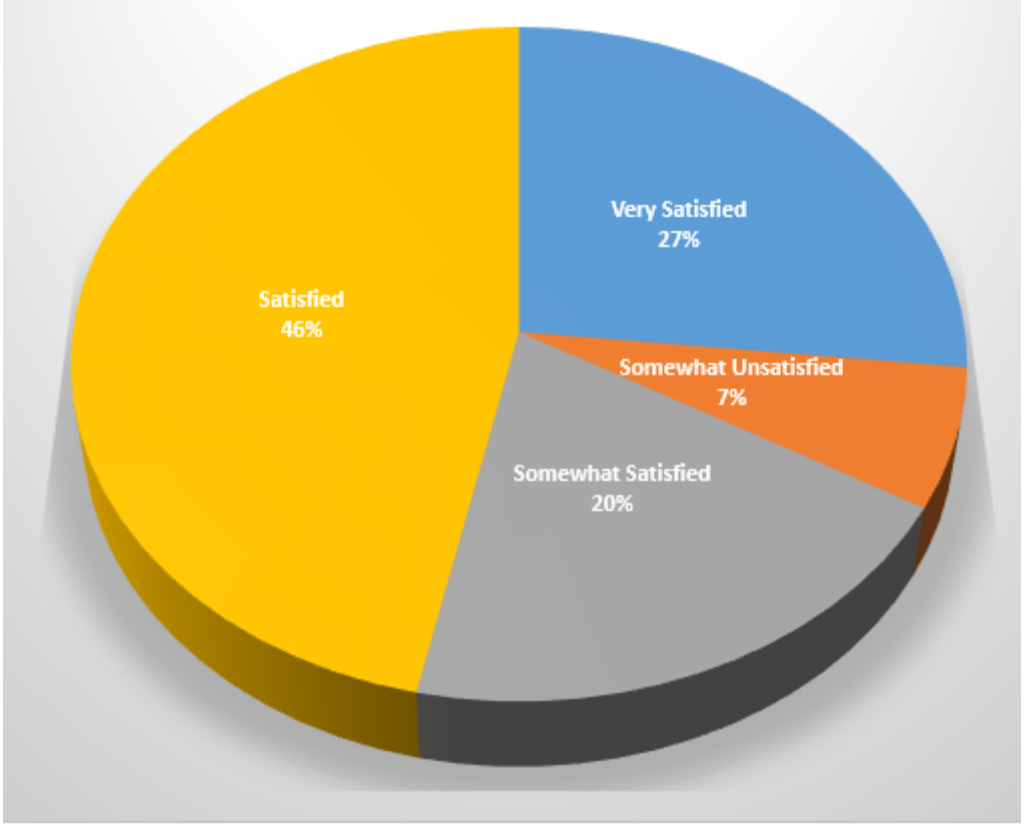

Figure 30. Satisfaction: Customer satisfaction rating

However, 20% of respondents feel they somewhat satisfied while 6.7% feel they are somewhat unsatisfied.

Would costumers recommend the mobile banking service to others?

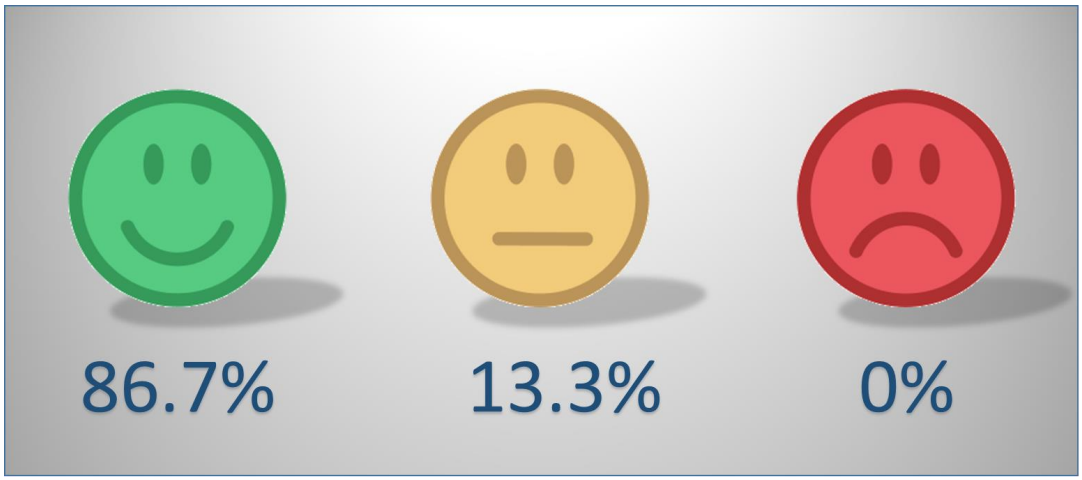

Figure 31. Satisfaction: Customer recommendation

Another way to measure satisfaction, is to find what customers feel about the mobile service in social context, if they would recommend it to other. As the figure 31 indicates, 86.7% would recommend the mobile app to others while, 13.3% feel they might recommend.

Customer satisfaction feeling

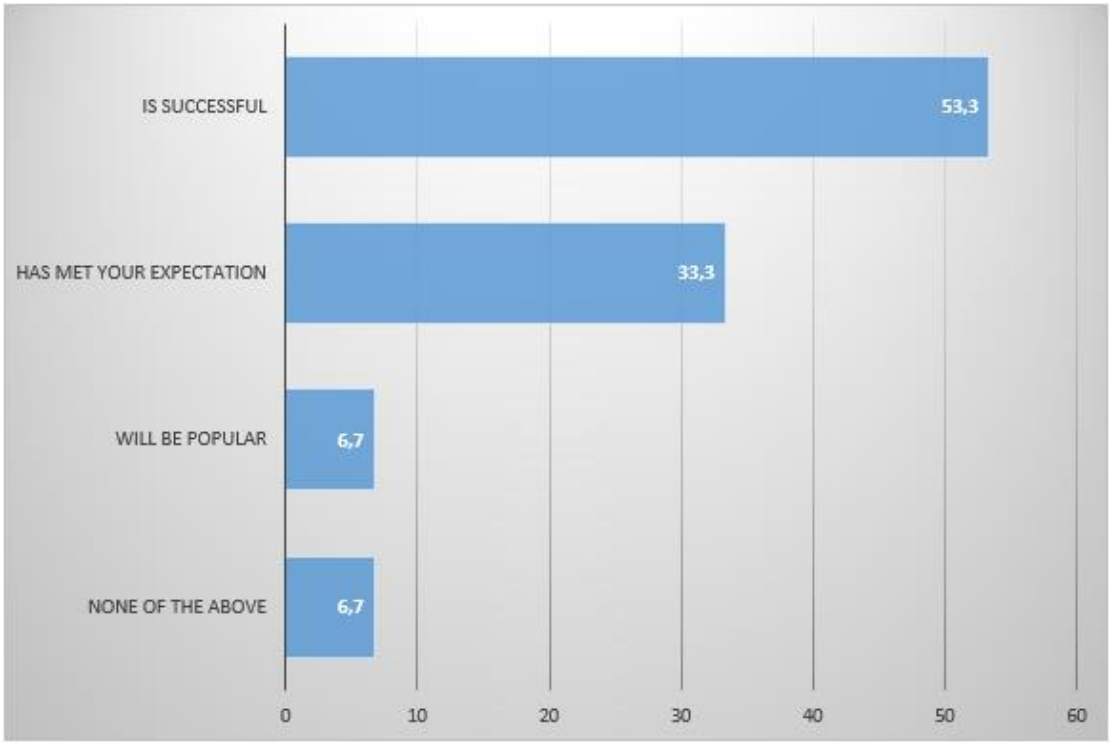

Figure 32. Satisfaction: Customer satisfaction feeling

53.3% of the respondents felt that mobile bank service was successful and 33.3% feel it has met their expectations, while 6.7% feel it will be popular among other customers and other 6.7% had no feedback or negative feedback.

B.13 Habit

Do customer usually use mobile banking app instead of web?

80% respondents used mobile banking app instead of web while 20% didn't used mobile banking app so often. This results were validated by the informants from the bank and they too see similar pattern as now they noticed among all the logins, 60% of login is from mobile banking app.

Do customers prefer mobile for banking related activities instead of PC, laptop, desktop etc.?

66.7% respondents preferred mobile while 33.3% still prefer to use PC for doing important banking task or if they want detail information. Even in the U.S. banking customers, mobile channel for banking activities is gaining traction. As reported by Federal Reserve Board, U.S. the number of mobile banking users have increased by 15% between 2011 and 2014, as seen in the figure 33, however other banking channel are still preferred over mobile banking service (Board of Governors of the Federal Reserve System, 2015).

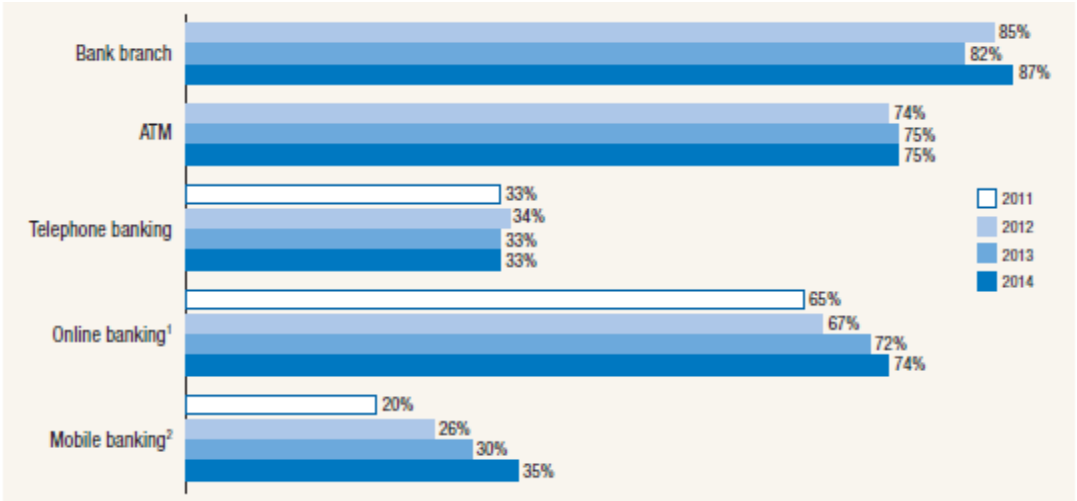

Figure 33. Usage of different banking channels, source: (Board of Governors of the Federal Reserve System, 2015)

It was also important to know in situations when customers are using mobile banking services from other banks, which banking service they prefer.

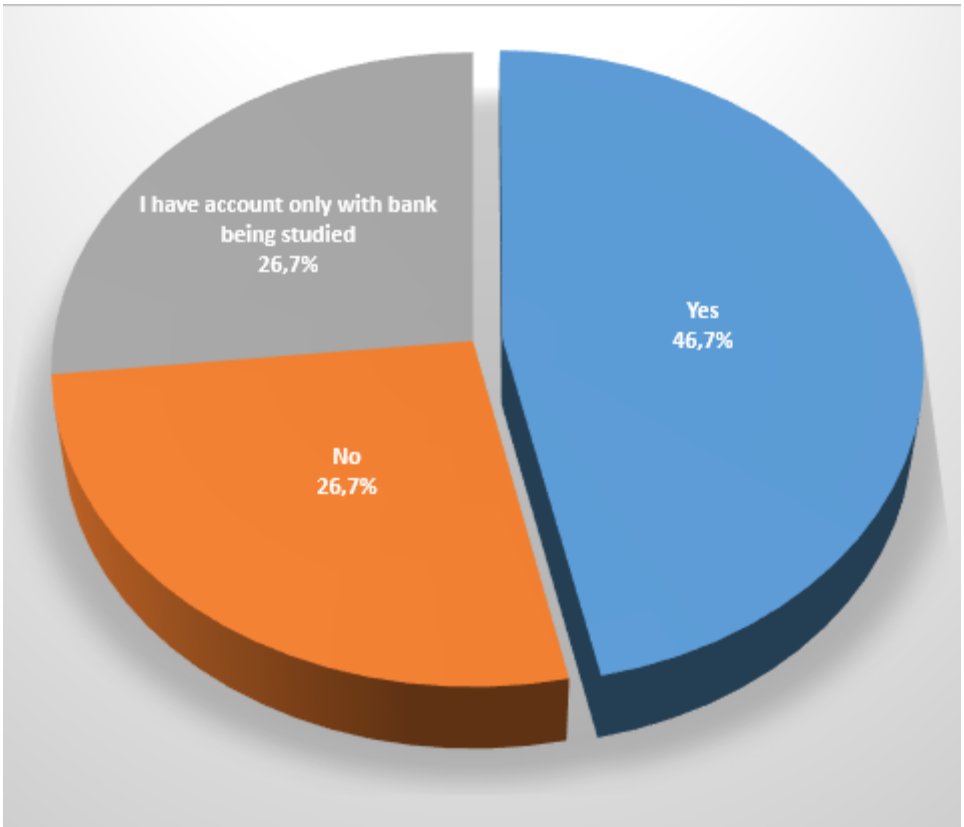

Figure 34. Habit: Customer preference of mobile banking service

46.7% responded that mobile services from the bank being studied in this thesis is there first choice. While 26.7% responded that the other banks mobile service is their first choice however, 26.7% had accounts only with the bank being studied.

B.14 Customer Loyalty

In order to validate customer loyalty respondents were asked several questions, the results are as below.

Preference over mobile banking, if given other better alternatives like personal bank manager, priority telephone banking

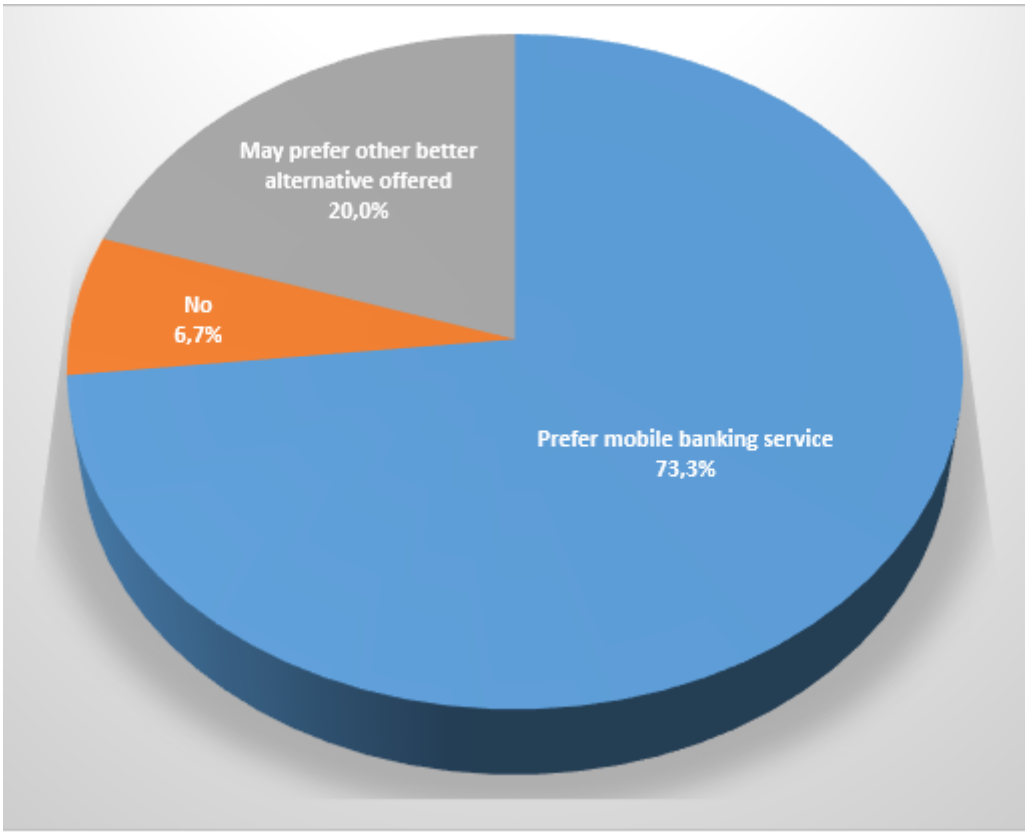

Figure 35. Customer Loyalty: Customer preference if given better alternatives

It is apparent from figure 35 that majority of respondents (73.3%) preferred mobile banking services over other better options, while 20% of respondent were reluctant however it seems they would like to try offered alternatives, and 6.7% would like to switch from mobile banking services to offered services. The results indicate strong customer bonding with the mobile banking services which indeed is leading to customer loyalty.

In order to validate the results further, customers were asked further questions, figure 36 shows the results.

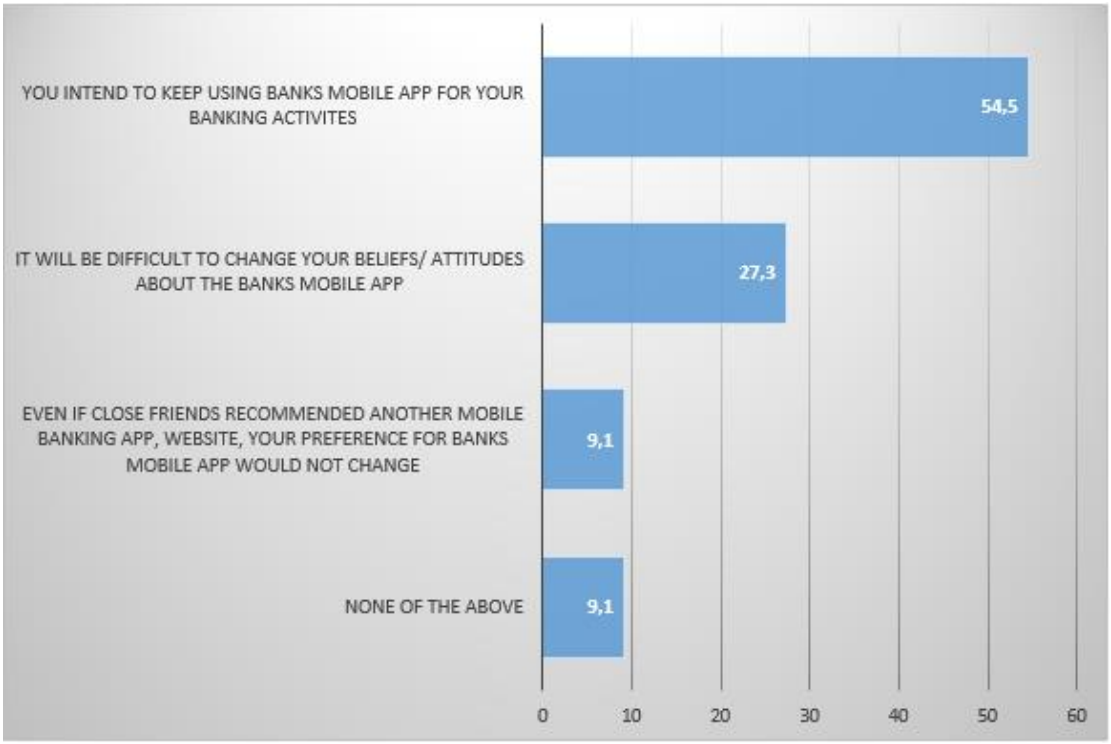

Figure 36. Customer loyalty: Customer feelings

Majority of respondents (54.5%) intend to keep using mobile banking services in future for their banking needs, 27.3% of respondents felt it would be difficult to change their beliefs or attitude towards mobile banking service, while 9.1% of respondent felt they would not switch to another bank or app through social influences from friends and family and 9.1% of respondent didn't respond.

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