A paper submitted to the 25th European Regional Conference of the International Telecommunication Society, Brussels, 22-25 June 2014

Mobile Payments: Main Trends in the Retail Industry

(Work in Progress)

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Abstract

The main objective of the ongoing study is to investigate obstacles and driving forces affecting organization adoption of innovation. In order to that an example of the mobile payments applied in the Swedish retail industry has been used. The main analyzed factors are: adopter characteristics, supplier marketing activity, perceived innovation characteristics, social network, and environmental influences.

The analysis of case study findings helped to estimate some common trends in the adoption of mobile payment services by retailers. As a result, the analyzed factors were categorized as obstacles or driving forces to adoption of the mobile payments.

Keywords: Mobile Payment Services, Organizational Acceptance of Technology, Service Adoption, Mobile payments, Mobile payment services, Retail, Merchants

1 Introduction and Background

A rapid innovation in ICT area leads to an increasing number of new disruptive services and products that become available in the market. One of examples of such a development is the mobile payments. The mobile payments can be defined as "*a type of payment transaction processing in which the payer uses mobile communication techniques in conjunction with mobile devices for initiation, authorization, or completion of payment*" (Goeke and Pousttchi, 2010). When implemented on a mobile phone, the mobile payments can be combined with additional services, for example, public transport and event ticketing, loyalty programs, and so on. This is a way to develop a mobile wallet including all items that people usually hold in their physical wallets.

It needs to be mentioned, that a provision of a mobile payment service merges representatives of different industries like information technologies and software development, financial services, mobile communication industry, retail industry, transport, and so on. Thus, a provisioning of new services sets such challenges as a need to change or adapt existing business models, a need to cooperate with new partners, a need to accept a new disruptive technology.

However, despite mentioned challenges, currently in Sweden different market actors look into opportunities of the mobile payments. New payment services are provided by different actors including banks, mobile network operators, mobile payment service providers, merchants, and others. Developed solutions are targeting different application areas: mobile ticketing, person-to-person transactions, mobile parking payments, and mobile payment services for retail. This paper is focused on the latter services.

When adopting the mobile payments, retailers (or merchants) expect: a quicker and easier payment process; lower investment and service costs; compatibility and integration of a new payment service with the existing infrastructure (like point of sale terminals (PoS)); a reliable, secure and trusted service; and a customization of service (like adding loyalty schemes) (Karnouskos and Fokus, 2004). In addition, the mobile payments provide to retailers a direct channel for communication with consumers, which can be used for personalized offers, further improvement of services and assortment, better understanding of consumer needs and preferences.

The main focus of this paper is on the main trends in acceptance of the mobile payments by retailers. More specifically, the following questions have been addressed:

What are the obstacles that affect retailers' decision to adopt the mobile payments?
What are the driving forces that affect retailers' decision to adopt mobile payments?

One of the main contributions of the paper is in the focus on the organizational acceptance of the innovation, which is insufficiently addressed by previously implemented researches. The Swedish retail industry is used as an example. Another contribution is in the analysis of main drivers and obstacles for organizations to adopt the mobile payments. Finally, the paper presents analysis and description of the current trends related to solutions applied for the retail industry in the Swedish mobile payment market.

The paper is organized as follows: the next section presents the overview of related literature and discussion of the analysis framework. Section 3 is dedicated to methodology and research approach. An overview of mobile cases is presented in section 4, and their analysis is presented in section 5. Finally, discussion is in section 6, and conclusions and suggestions for further research are proposed in section 7.

2 Literature Review and Contribution

An organizational decision to invest in mobile payment services and development of a needed infrastructure mainly depends on the levels of the service adoption and diffusion of the technology in the market. The overview of related studies and theoretical background is presented in this part.

2.1 Review of Empirical Studies

A vast majority of implemented studies have been focused on adoption of the mobile payments and related mobile services (e.g. m-commerce, mobile ticketing, mobile banking, and so on) by consumers (Dahlberg and Öörni, 2007; Goeke and Pousttchi, 2010; Hayashi, 2012; Kim et al., 2010; Mallat, 2007; Mallat et al., 2008; Ratten, 2009, Shin, 2009; Wu and Wang, 2005). The following most popular streams of research works can be identified:

1. Studies utilizing the technology adoption model (TAM) (Goeke and Pousttchi, 2010; Kim et al., 2010; Wu and Wang, 2005) or the unified theory of acceptance and use of technology (UTAUT) (Shin, 2009);
2. Researches based on a theory of diffusion of innovations (Mallat, 2007);
3. Some researchers tried to overcome the limitations of existing models by combining several models, for example, the theory of planned behavior (TPB) and the diffusion of innovations theory (Dahlberg and Öörni, 2007); or by development of own analysis framework extending existing models, for example, UTAUT model extension (Amoroso and Magnier-Watanabe, 2012);
4. Some of the implemented studies use different frameworks for analysis, for example, a social cognitive theoretical framework applied to study of m-commerce acceptance in the banking industry (Ratten, 2009).
5. A number of studies look into specific problems related to network externalities, switching costs, and customer behavioural barriers (Van Hove, 1999; Klemperer, 1995; Constantiou et al., 2006).

It needs to be said, there has been implemented a limited amount of studies addressing a problem of organizational technology acceptance in the mobile payments, m-commerce, and related areas. A literature review on potential benefits of mobile marketing for consumers and retailers was performed by Ström (2012).

Other related works address several levels of technology acceptance by organizations: at the organizational level and intra-organizational level, that is the adoption of technology by individual employees. The example of the latter researches is presented in a study carried out by Lapierre and Denier (2005). The researchers have investigated ICT adoption by salespersons.

One of the earliest researches on technology acceptance at organizational level and a role of critical mass in the diffusion of the telecommunication services was performed by Mahler and Rogers (1999). The authors investigated the problem using an example of German banks. A study on information technology adoption by both individual customers and organizations has been performed by Chwelos et al. (2001). The researchers tested the adoption of electronic data interchange using three factors: readiness, perceived benefits, and external pleasure.

Obstacles to the adoption of business-to-business applications using the example of e-markets are explored in works implemented by Johnson (2009; 2010). Grandón et al. (2011) have performed a comparison of the theory of planned behaviour (TPB) and the theory of reasoned action (TRA) applied in analysis of adoption rate of e-commerce by small and medium sized business in Latin America.

A number of previously implemented studies explore the role of marketing in m-commerce, for example, analysis of the role of marketing in the context management for m-commerce applications (Benou et al., 2012). This study contributes to the understanding of a relationship existing between consumer behaviour and context information used in m-commerce applications, and highlights the critical role of this information. The implications of m-commerce for marketing and retail pricing are discussed in another study carried out by Balasubramanian et al. (2002). The major findings are a

discussion of a dynamic mobile price, an opportunity to leverage location and time based consumer targeting, possible implications to retail price competition, and ways to gain competitive advantage.

Advantages and obstacles for m-commerce adoption by both businesses and customers were analyzed in research carried out by Frolick and Chen (2004). Potential barriers and advantages for mobile payment adoption by merchant at the organizational level were addressed in research implemented by Mallat and Tuunainen in 2005, when mobile payment solutions still were in the early development stage. The main identified barriers are perceived incompatibility of m-commerce with existing business model, higher costs, lack of common standards, a confusing big number of available m-commerce solutions, and their perceived complexity.

An overview of obstacles affecting organizational acceptance of mobile payments and services that were addressed by previously implemented studies is provided in *Table 1*. It is possible to conclude that organizational adoption of mobile payment services is mainly undiscovered area. The main contribution of this paper is in a better understanding of the most significant driving forces and obstacles for mobile payment adoption by retailers.

Table 1. Obstacles preventing organizations from adoption of mobile payment services addressed by previous studies.

Obstacle	Sources	What is solved	Aspects to address (my contribution)
Costs	Mallat and Tuunainen, 2005; Johnson, 2009; Frolick and Chen, 2004	Partly addressed	
Network externalities Critical mass	Mallat and Tuunainen, 2005; Mahler and Rogers, 1999	Partly addressed	Addressing this factor from retailers' perspective
Incompatibility of mobile payments with existing business model	Mallat and Tuunainen, 2005	Partly addressed	
Lack of standards	Mallat and Tuunainen, 2005	Partly addressed	
Security issues	Mallat and Tuunainen, 2005; Frolick and Chen, 2004	Partly addressed	
Trust in mobile payment service provider	Mallat and Tuunainen, 2005; Johnson, 2009	Partly addressed	
Firm size	Johnson, 2009	Identified as an important factor	Addressing this factor from retailers' perspective
Risk	Johnson, 2009	Under-researched	Partly addressing this factor from retailers' perspective
Uncertain profitability/ Return on investment (ROI)	Mallat and Tuunainen, 2005; Frolick and Chen, 2004	Partly addressed	Partly addressing this factor from retailers' perspective
Several competing mobile payment solutions	Mallat and Tuunainen, 2005	Under-researched	Addressing this factor from retailers' perspective
Environmental obstacles		Unaddressed	Addressing this factor from retailers' perspective
Financial resources	Chwelos et al., 2001	Under-researched	
Complexity (for personnel) / IT sophistication	Mallat and Tuunainen, 2005; Chwelos et al., 2001	Partly addressed	Addressing this factor from retailers' perspective
Learning time	Johnson, 2009	Under-researched	
Resistance to organizational change	Johnson, 2010; Lapierre and Denier, 2005	Partly addressed	

2.2 Theoretical Background

In order to investigate acceptance of the mobile payments by retailers, the theory of diffusion of innovations (Rogers, 2003) can be use. The process of diffusion can be defined as communication of an innovation "through certain channels over time among the members of a social system" (Rogers, 2003:5). In this case, an innovation is "an idea, practice, or object that is perceived as new by an individual or other unit of adoption" (Rogers, 2003:12).

A decision to adopt an innovation consists of five stages (Rogers, 2003:169): (1) *knowledge* about the innovation and its functionality; (2) *persuasion* occurs with positive or negative attitudes formed towards the innovation; (3) at the next step a *decision* is made to adopt or reject the innovation; (4) *implementation* is actual use of the innovation; (5) *confirmation* is a decision to continue or to stop using the implemented innovation. Adoption of an innovation in the markets can be measured using a rate of adoption. This is "the relative speed with which an innovation is adopted by the members of a social system" (Rogers, 2003:221).

An integrated model of organizational adoption and diffusion of innovations was developed and proposed by Frambach and Schillewaert (2002). The model addresses both levels of innovation adoption in the organization: organizational and intra-organizational. For the purposes of this research, only organizational level has been addressed (see *Figure 1*).

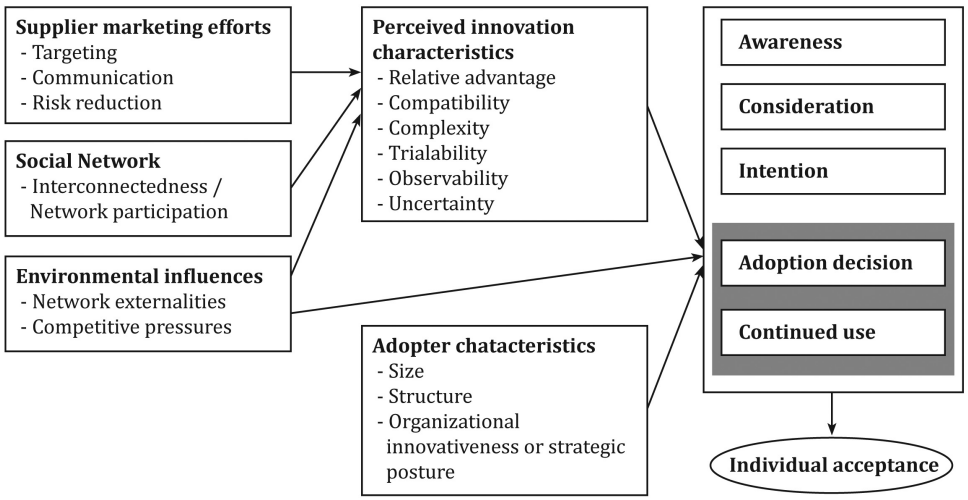

Figure 1. A conceptual framework of organizational level of innovation adoption (Frambach and Schillewaert, 2002).

The main factors affecting innovation adoption at organizational level are: adopter characteristics, supplier marketing activity, perceived innovation characteristics, social network, and environmental influences (Frambach and Schillewaert, 2002).

2.2.1 Adopter Characteristics

The characteristics of an organization are important for innovation adoption (Frambach and Schillewaert, 2002). A *size* of the organization is one of criteria affecting decision to adopt a new technology. However, there is no single opinion, if that are large organizations that tend to adopt innovation first, or that are small and flexible firms being the first technology adopters in the market (Frambach and Schillewaert, 2002).

An organization *structure* by a big degree influences the process of innovation adoption. So, a decision about the adoption of an innovation is more likely to be skipped in formalized and centralized organizations. Organizations that are complex, or specialized, or where employees have different professional background, are more likely to facilitate the adoption of an innovation (Frambach, 1993; Frambach and Schillewaert, 2002).

Organizations with strategies focused on *innovativeness* are more open to adopt new products or services.

2.2.2 Supplier Marketing Efforts

The innovation supplier's marketing activity can affect the positive organization's decision about the adoption of an innovation. The main factors to consider are (Frambach, 1993; Frambach and Schillewaert, 2002):

- Thoughtful *targeting* of potential innovation adopters;
- *Communication* and creating awareness and positive consumer perception, and this way affecting the adopter decision about the deployment of the innovation;
- Different *risk reduction* measures can be considered, for example, a trial period, a low introduction price, which can result in a quicker acceptance.

2.2.3 Perceived Innovation Characteristics

The decision to adopt a new technology depends on its perception by members of organization's department responsible for making such decisions (Frambach and Schillewaert, 2002; Rogers, 2003). When making decision, the following criteria of innovation should be considered (Frambach, 1993):

- *Potential benefits* of innovation;
- *Relative advantage* achieved due to the deployment of the innovation;
- *Compatibility* with existing values and needs of adopters;
- *Complexity* which defines ease of use of the innovation;
- *Trialability* is the opportunity to try or test the product or developed solution;
- *Observability*; and
- *Uncertainty of innovation*, which is related to an uncertainty about the promised innovation relative advantage and an uncertainty about implementation of the innovation within the organization and bringing it to the needed level.

2.2.4 Social Network

Social networks, where members of organization participate, are additional channels for information spread about the innovation (Frambach, 1993; Frambach and Schillewaert, 2002). This can facilitate its quicker adoption.

2.2.5 Environmental Influence

Different external factors can play a significant role when making a decision to adopt an innovation (Frambach, 1993; Frambach and Schillewaert, 2002):

- *Network externalities* might become reasons for innovation adoption. In terms of the theory of network externalities, each new user increases a value of "network goods" (Van Hove, 1999). A deployment of the mobile payments deals with an infrastructural dilemma also known as the "chicken and egg" problem (Van Hove, 1999). On one hand, merchants are not willing to invest in the development of infrastructure without a critical mass of consumers, however, consumers will not adopt mobile payment substituting currency if it cannot be used everywhere (Mallat, 2007).
- *Competitive pressures*. A situation in highly competitive markets might motivate adoption of innovation in order to keep current market position (Frambach, 1993; Frambach and Schillewaert, 2002).

This model has been used for the research purposes. The methodology used for this research is presented in the next section.

3 Methodology

The research is based upon a qualitative method utilizing a multiple case study approach. This implies using archives, interviews, questionnaires, and observations as data collection methods (Eisenhardt, 1989). One of benefits of a case study is an opportunity to perform analysis on different levels for example within case and cross-case analysis (Eisenhardt, 1989; Yin, 1984).
The main focus of this research is on mobile payment services applied in the Swedish retail industry. Selected services are SEQR, Bart, and Payair. These are examples of successful and less successful service implementations.

Both *primary* and *secondary* information sources have been used. The *secondary information* in a form of press releases, web sites, and newspapers' articles was collected during a desk-top research stage. This information helped to understand the overall situation in the market, to identify the main business actors in the mobile payment market, and to prepare for interviews with representatives of these companies.

Primary information has been collected in different ways. A number of events dedicated to retail have been attended (for example, Retail day 2013 (Retaildagen) and Retail Forum 2013). Some preliminary conversations about motives to deploy mobile payment solutions with representatives of several retail chains have been carried out.

In 2014, a number of in-depth personal semi-structured interviews with executives and top-level managers representing companies participating in the selected cases (Axfood, the third largest Swedish retail network; and mobile payment providers Seamless and Swedbank) have been carried out. Each interview lasted between one hour and hour and a half. All interviews were recorded and transcribed. The discussed questions were related to the analysis framework's factors: perceived innovation characteristics, adopter characteristics, supplier marketing activity, social network, and environmental influences (Frambach and Schillewaert, 2002).

More over, a questionnaire covering the same questions has been sent to a number of retailers. McDonalds', a fast-food restaurant chain, and Davids, an e-shop, have provided their responses. An example of a questionnaire is presented in *Appendix A*.

The issue of mobile payment adoption by retailers has been analyzed using the analysis framework specified in sub-section *2.2 Analysis Framework*. A description of cases and research findings are presented in the next section.

4 Research Findings

4.1 Mobile Payments in Sweden

The Swedish market of mobile payments is quickly developing. During 2010–2012, new solutions were introduced by different actors, including Swedish banks and new Swedish companies, such as Accumulate, iZettle, Payair, Seamless, and 4T Sweden.

Moreover, there is a high level of penetration of mobile smartphones, accounting for about 68% of all mobile phones in use (Telenor, 2012). This means that a big segment of consumers can access and use mobile payment services.

A number of developed mobile payment solutions were tested in pilot projects and later deployed by different retail chains, coffee shops, and restaurants during the last couple of years. A brief overview of analyzed cases is presented in *Table 2*.

Table 2. Mobile payment solutions used in the retail industry.

Mobile payment service	Retailers	Mobile payment service provider	Payment type	Other parties involved
SEQR	Axfood, McDonalds'	Seamless	Monthly bill	Collector and Gothia (billing)
Bart (Ceased in spring 2014)	Axfood	Swedbank	Bank account	
Payair	Davids	Payair	Bank accounts, credit card	

4.2 Mobile Payment Service: SEQR

The provider of the SEQR service is Seamless. During the interview, the representative of the company has described the idea behind the service. It was decided to develop own service network, hence, the solution is not linked to any bank account, Visa or MasterCard. This means that there is no dependence on consumers' affiliated banks. The solution is QR-code based.

The SEQR service is provided in cooperation with financial service and credit companies Collector and Gothia. These companies handle all questions related to payment transfers and issue monthly bills to the consumers (Sellebråten, 2013). Hence, all SEQR users have to register a credit account at one of the financial service companies. In order to pay with SEQR, a corresponding app should be downloaded to a user's smartphone. When performing a payment at a PoS terminal, customers have to scan a QR-code and approve a payment using a personal PIN code. Retailers' issued bills are saved in the mobile payment app. As mentioned, a sum of expenses is provided in a monthly bill by Collector or Gothia. Finally, the mobile operators and the banks are not directly involved in the payment process.

In 2013, SEQR mobile payment service was integrated with one of the most popular cashier systems LS Retail. So, the service installation does not require any additional equipment in stores.

SEQR was launched in spring 2012 (Seamless, 2012; Sellebråten, 2013). Since then, Seamless was focused on the development of a network of merchants. In order to attract the retailers, the service roll out is free of charge, so, retailers do not have to invest money in SEQR service infrastructure. In addition, Seamless offers the transaction fee that is 50% less compared to credit card fees. So, in the case of a big database of customers, this offering allows retailers considerable money savings. In addition, the service roll out is free for retailers. Now, the service is adopted by a number of grocery, fast food, and pharmacy chains, such as Hemköp, Willy:s, Ur&Penn, McDonalds', Apoteksgruppen, and so on.

Starting from the end of 2013, Seamless started targeting consumers by different types of media. In addition, the SEQR service was improved with additional options. First of all, loyalty accounts and coupons of several big retailers (i.e. Hemköp, Willy:s, and Apoteksgruppen) have been integrated with

the payment application. For consumers this is an added value of the service and for retailers this means an increased visibility of their brands and brands of goods. Another new feature is a cachback payment: when a consumer pays with SEQR for some certain products, he gets money back. This service is promoted by the credit companies, merchants, and brands. Some other additional values proposed by the service to the consumers are digital bills, P2P payments, parking payments, p-commerce (purchases in printed advertisements), and public transport ticketing in one region of Sweden.

Representatives of Seamless promote the SEQR service during different events dedicated to retail and by this create awareness and positive consumer perception. The awareness is also created by usual marketing and promotional campaigns and by direct contacting of potential retailers. Now the service is getting popularity, so more retailers are contacting Seamless through the website. Currently, more than 100 restaurant, retail, and coffee shop chains are accepting SEQR solution. Two retailers were selected as examples for analysis. They are Axfood and McDonalds'.

4.2.1 The case of Axfood

The description of the case is based upon the interviews with representatives of Axfood and Seamless.

Axfood is the third largest Swedish retailer that was established in 2000. Currently, Axfood owns the following retail shop chains: Hemköp, Willys, a grocery chain PrisXtra; a convenience store wholesaler Axfood Närlivs; 50% of Direkten chain; and a centre of logistics Dagab[1]. Retail stores of Hemköp and Willy:s chains are distributed all over Sweden. Axfood is a stably performing company, with more or less the same profit from year to year. The organizational structure is hierarchical[2].

The vision of the company accents innovative thinking and growth as means to become "the best retail company in the Nordic region"[3]. The company has a strong focus on consumer needs[4] and seeks to develop loyalty programs, improve shopping experience, and customer offerings[5]. As it was mentioned during the interview: "the main area of innovation is re-definition of the store concept" which is caused by the market changes. Regarding the adoption of mobile payments services, Axfood decided to be the first retailer that introduced them.

Axfood perceived the mobile payments as a future form of payments and came in contact with Seamless for the service provision. There were several reasons for Axfood to deploy mobile payment services. First of all, these are the expectations of lower payment transaction fees compared to the transaction cost of credit/debit cards. Secondly, Axfood would like to reduce the amount of cash because of safety perspective. Due to the fact that the company was the first that introduced the mobile payments, there was a lot of media attention. This worked as a massive advertisement. Another first mover's advantage in adoption of the mobile payments is an opportunity to get more experience and to offer customers the best way of doing it.

There was a prior trial of the SEQR service at several Axfood stores in 2012. The technical side of the service was tested. After the trials, the service was rolled out in Hemköp and Willy:s chains.

The SEQR service is compatible with existing values and needs of Axfood. The service meets retailer's expectations. The integration of loyalty accounts and coupons of Hemköp and Willy:s have increased visibility of brands of the retailer and goods. This meets needs of the company.

The solution is easy to use for personnel. The integration of SEQR with the cashier system means appearance of an additional button in the cashier terminal next to such payments option as cash or a credit/debit card.

The use of the SEQR service was promoted in Axfood's marketing campaign in the stores and in direct advertising. The information about SEQR is on the Axfood websites. Axfood has accepted the

[1] Axfood. About Axfood. http://www.axfood.se/en/About-Axfood/
[2] Axfood. Organization - Axfood. http://www.axfood.se/en/About-Axfood/Organization/
[3] Axfood. About Axfood. http://www.axfood.se/en/About-Axfood/
[4] Axfood. The Brand. http://www.axfood.se/en/About-Axfood/The-Brand/
[5] Axfood. Strategy. http://www.axfood.se/en/About-Axfood/Strategy/

SEQR coupon service, but the main responsibility of this service belongs to Seamless. There are QR-codes next to a cash register terminals at Axfood stores. This is a very good visible place for customers. However, the number of the service users is still not that big.

4.2.2 The case of McDonalds'

The description of the case is based upon the answers to the questionnaire provided by a representative of McDonalds' and data received during the interview with a representative of Seamless.

McDonalds's is a leading global foodservice retailer. There are approximately 220 franchise-based restaurants throughout Sweden. The organizational structure is mainly hierarchical with lots of cross-functional project teams. The strategy of McDonalds' can be characterized as customer focused. In the company's website it is stated: "At the restaurant level, <…> We are dedicated to innovation and improving our operations in order to build an even more sustainable, environmentally friendly, and profitable business."[6] From this perspective, the company is open to adopt new products and solutions.

Seamless contacted McDonalds' regarding the service deployment. The awareness about SEQR was created mainly by online communication.

The decision to deploy SEQR was affected by the overall trend in the market. The McDonalds' has defined the following potential benefits of the service: (i) an opportunity to reduce the amount of cash; (ii) an option of lower transaction cost compared to credit/debit card payments; and (iii) an opportunity to get experience in mobile payment acceptance. The main relative advantage is related to a perception of the company's brand as modern.

SEQR was tested at four of McDonald's restaurants in Stockholm during summer 2012 (Seamless, 2013a; Thoresson, 2012). The pilot project was successful. The service was easy in terms of integration with existing infrastructure and easy to use for the personnel. So, in March 2013, Seamless and McDonald's reached an agreement about the introduction of SEQR solution in other 220 chain's restaurants all over Sweden (Seamless, 2013a).

The SEQR service is compatible with existing values of McDonald's that seeks to bring the best experience to customers. Now they can pay using different means: cash, debit/credit cards or mobile payment services. For McDonalds' it was also important that the service (i) does not require installation of additional hardware, and (ii) offers a lower cost per transaction. However, the service does not correspond to needs of McDonald's, since it is "just another way of paying". However, it was stated that the solution is performs well and is easy to learn and use for personnel.

In order to make the SEQR service visible digital lobby screens, leaflets, and other promotional material are used. SEQR is also promoted as a payment option in own McDonalds' app. But the number of users is still not big. Consequently, the number of transactions is not big as well. Hence, the company is going to watch how the service will develop and how the SEQR payment market share will grow. Then the final decision about acceptance of the service will be made.

4.3 Mobile Payment Service: Bart

Swedbank is one of the biggest Swedish banks with a long history. Currently, it has 306 branches in Sweden and 178 in the Baltic countries[7]. The developed mobile payment solution, Bart, was initially dedicated to the retail industry. The service was directly related to consumer's bank account, acted as a bank card on mobile phone, and performed payment transactions via QR-codes (Swedbank, n.d.; Sellebråten, 2013).

The consumers could make payments using the separate payment application directly connected to their bank accounts. So, in order to start using the service, Bart app had to be downloaded to a user's smartphone. When performing a payment at the PoS terminal, customers had to scan a QR-code and

[6] http://www.aboutmcdonalds.com/mcd/our_company/mcdonalds_system/what_we_do.html
[7] SwedBank. Quick facts. http://www.swedbank.com/about-swedbank/quick-facts/index.htm

approve a payment using a personal PIN code. Bills issued by merchants were saved in the electronic form within the payment app.

Bank representatives considered a clear strength of this solution the fact that transfers and payments were directly linked to customers' bank accounts. In addition, this service was open: it was possible to register credit cards issued by other banks. This was considered as an added value to customers and a low barrier to start using the service.

The solution was presented in the market in 2011 and launched at Axfood in 2012 (Swedbank, n.d.). However, due to a low number of users (about 20000) and a need to focus on more advanced payment solutions, the Bart service was ceased on the 28th of February 2014 (SvD Näringsliv, 2014).

4.3.1 The case of Axfood

The description of the case is based upon the interview with a representative of Axfood and a developer of the conceptual idea of the Bart service at Swedbank. Axfood company in more details was already presented in *section 4.2.1 The Case of Axfood*.

Axfood has been a customer of Swedbank for a number of years and there is a close cooperation between the two companies. The initiative of the service deployment came from Axfood side. This was the only retailer that deployed the service. As mentioned, the reasons to adopt mobile payments are expectations of lower payment transaction fees and a reduction of the amount of cash.

Axfood became the only retailer that rolled out Bart in stores of its grocery chains. In November 2012, there was a pilot project trying the technical side of the Bart service in three shops in Stockholm (Axfood, 2012; Swedbank, 2012). The service worked well and by June 2013, the service was rolled out in 400 Axfood's stores (including Hemköp, Willys, Willys Hemma, and PrisXtra) all over Sweden (Swedbank, 2013).

The Bart service was compatible with existing values and needs of Axfood. The service met retailer's expectations. But the only implemented option of the service was just payment, no additional value services were provided. In addition, the service was not easy to use for personnel. Due to a small number of transaction, cashiers were forgetting or were unsecure how to accept a Bart payment. So, there were informational and educational problems in the stores.

The use of the Bart service was promoted in Axfood's marketing campaigns in the stores and in direct advertising. The information about Bart service was on the Axfood website. Despite that, the Bart service did not attract many customers. This became a reason to close the service down.

4.4 Mobile Payment Service: Payair

Payair developed mobile payment solution uses QR-codes for payment transfers. The Payair application is linked to the user's bank account or credit card. The payment service provider (i.e. Payair) handles the relation with the consumers. The mobile payment application is directly linked to the bank accounts of the users; so, a relation exists between the service provider and the banks. The solution is used in physical shops and in online shops. The retailers issue bills via the mobile payment app.

Payair promotes the mobile payment solution in different trade journals and by using direct advertisement. Additionally, some creative promotional campaigns were implemented. For example, giving away movie tickets after spending a certain amount of money for purchases (100 SEK) using Payair payment service[8].

[8] Webhallen. Payair och Webhallen bjuder på bio. [In Swedish] http://www.webhallen.com/se-sv/spel/kampanjer/payair_och_webhallen_bjuder_pa_bio/

4.4.1 Case of Davids

The use of Payair was mainly applied for payments in online shops. The description of the case is based upon the answers to the questionnaire provided by a representative of Davids.

Davids is a Swedish electrical retailer. The company has two large stores and online shop. In January 2013, the company in cooperation with Payair introduced a mobile payment solution in its online shop (Payair, 2013). By this step, company expects to make a purchase process quicker and easier (Payair, 2013). There also is an opportunity to purchase products by scanning QR-codes printed in media and billboards. The organizational structure of Davids is flat and flexible with short decision paths. The main focus of Davids' strategy is on creation of a unique store environment, good customer service, and provisioning of high quality products. The company has positive attitudes towards the innovation deployment.

Payair contacted Davids regarding the service deployment. Representatives of Davids liked the idea of a simple payment method that is connected to an existing bank card. Moreover, the decision to deploy Payair was affected by the overall trend in the market: the two other big online stores webhallen.com and siba.se have integrated mobile payment services in their online stores.

The potential benefit of the Payair service for Davids is the opportunity of a quick, easy, and spontaneous order entry and placement by customers in the online shop without a need to enter a lot of data. When payments are connected to bank cards, there is no need to send out invoices. In addition, there is a marketing value of the introduction of new innovative services. This expectation of the company is met. There is a lot of attention in various forums and media, but the number of payment transactions has however been disappointing. The main relative advantage is to target the customers that are adopters of this new payment solution (Payair).

The service integration with Davids' e-Commerce platform was implemented and financed by Payair. The fist half a year the service was provided for free.

Overall, Payair is compatible with existing values of Davids that seeks to be at the forefront of development. The service also corresponds well to needs of Davids by provisioning of an easier method of payment for online shop users. It can also be used for p-commerce.

In order to make the Payair service visible, information about it is placed on every product's webpage and in the top of the checkout page. In the beginning, Payair was marketed in the Davids blog, Facebook page, and company's start webpage.

Davids wants to check what impact the service has on its online store before investing in the service deployment in the physical stores. However, the number of the service users is "disappointing" so far. So, the company has no future plans to invest more time or money in other mobile solutions before there is a clear leader in the market.

Summing up, there are a number of mobile payment services available in the Swedish market. Retailers selecting to introduce mobile payment services in their chains perceive these solutions as options to improve customers' purchasing experience making it easier, simpler, and quicker. An analysis of the overviewed cases is presented in the next section.

5 Analysis

There are several competing mobile payment services in the Swedish mobile payment market that can be applied in the retail industry: SEQR, Payair, and Bart. The main mobile payment network parties in the analyzed cases are: retailers (that includes retail and restaurant chains, and online shops), mobile payment service providers (Seamless, Payair, and Swedbank), and banks or financial institutions that handle payment transfers. Banks are mainly excluded from the direct service provisioning.

Currently, the infrastructure of SEQR solution is the most extended. The service is accepted by nearly 100 large and small retail and restaurant chains and online shops at nearly 800 stores and restaurants[9] all over Sweden. Other competing solution, Payair, is accepted on a smaller scale mainly by online shops and used in p-commerce by come retailers. Finally, Bart service was accepted by only one retailer. The service was closed down in spring 2014.

5.1 Adopter Characteristics

The following retailers were taking part in the analyzed cases: Axfood, McDonalds', and Davids. Axfood and McDonalds' are large companies with considerable number of stores or restaurants distributed all over Sweden and globally, and Davids is a big company. The companies have hierarchical or flat organizational structures. Most of them have positive attitudes towards innovative services related to improvements in customer services and organizational performance. McDonalds' and Davids have deployed one mobile payment service, while Axfood adopted two services. The summary of characteristics of retailers is provided in *Table 3*.

Table 3. Characteristics of retailers adopting mobile services.

	Axfood (SEQR)	**McDonalds' (SEQR)**	**Axfood (Bart)**	**Davids (Payair)**
Size	- The third largest Swedish retailer - **SEQR**: Installation of 2400 PoS in about 400 stores in Hemköp and Willy:s grocery chains	- A large transnational company - **SEQR**: Installation of PoS in 220 restaurants[10]	- The third largest Swedish retailer - **Bart**: Installation in about 400 shops in Hemköp, Willy:s, and PrisXtra grocery chains	- A big Swedish company - **Payair**: Integration with the online shop
Organizational structure	Hierarchical	Hierarchical with cross-functional project teams	Hierarchical	Flat and flexible
Organizational innovativeness or strategic posture	- Innovation is related to the concept of the store - The company decided to be the first introducing the mobile payments	- Innovation is related to improvements in performance - Open to adopt new solutions	- Innovation is related to the concept of the store - The company decided to be the first introducing the mobile payments	- Strategy is focused on improvements of customer service and performance - Open to adopt new solutions

5.2 Marketing Efforts of Mobile Payment Providers

The mobile payment providers (Seamless and Payair) are actively developing the network of retailers that accept their payment services. For these purposes they target retailers of different sizes. The services are installed in physical stores, integrated with online stores, or used for p-commerce purposes. Swedbank had the agreement with only one retailer. The service deployment can be initiated by both sides either retailer or mobile payment service provider.

[9] https://www.seqr.com/se/handla-med-seqr/
[10] https://www.seqr.com/se/2013/03/08/gott-att-ata-gott-att-betala/

The mobile payment providers use different channels in order to create awareness about their services. The most common communication channels are conferences, retail industry events, and promotional campaigns.

The mobile payment providers usually provide some kind of risk reduction measures. The most common are trial of a service and free service roll out. The summary of marketing efforts of mobile payment provides is provided in *Table 4*.

Table 4. Marketing efforts of mobile payment service providers.

	Seamless (SEQR)	**Swedbank (Bart)**	**Payair (Payair)**
Targeting	- Large and small retailers, online shops - Initiative about the service deployment: * Axfood contacted Seamless * Seamless contacted McDonalds'	- One retailer – Axfood - Initiative about the service deployment: * Axfood contacted Swedbank	- Large and small retailers, online shops - Initiative about the service deployment: * Payair contacted Davids
Communication	**Main channels**: conferences, retail industry events, marketing and promotional campaigns, online communication	**Main channels**: conferences, retail industry events	**Main channels**: specialized journals, direct advertisement, promotional campaigns
Risk reduction measures	- Trial of a service for first deployments - Service roll out free of charge	- Trial of a service	- Free service during the fist half a year - Payair financed integration of the payment service with Davids e-Commerce platform

5.3 Perceived Characteristics of a Mobile Payment Service

The summary of the perceived characteristics of mobile payment services is provided in *Table 5*. It is possible to specify some similarity in potential benefits of mobile payment services perceived by retailers. They are expected lower transaction costs, a reduction of the amount of cash in the stores, getting experience in providing mobile payment services, and a better customer service experience.

Relative advantage caused by the acceptance of the mobile payments is the increased attention of media and the opportunity to target the users of the adopted mobile payment service. In addition, Axfood could leverage the first mover's advantage being the first retailer that deployed several mobile payment services.

It is possible to notice a different approach of the mobile payment providers regarding the compatibility of the mobile payment service with values and needs of retailers. The service of Swedbank had only payment functionality and served as a replacement for a credit/debit card. The two mobile payment services (SEQR and Payair) ensure quick and easy payment process for both retailers and customers. Seamless updates the service with new options that are corresponding to the needs and values of retailers, for example, loyalty accounts, coupons, opportunity to use the service for p-commerce purposes. These functionalities provide additional value for retailers, serve for promotion of their brands, and make the SEQR service more attractive for customers. The Payair service can be used for payments and p-commerce. The service makes order placement process easier for customers.

Several important trends affecting mobile payment adoption can be specified. Retailers tend to prefer mobile payment services that can easily be integrated with the existing infrastructure, do not require additional hardware and investment, and the transaction fee can be lower than credit/debit cards' transaction fees.

The SEQR service is easy to use for personnel and for customers. Payair is easy to use for customers. Bart was a complicated solution to use for both personnel and for customers.

In most of the analyzed cases, there was an opportunity for retailers to try the service. However, Seamless was making trials in the beginning, when service was only introduced in the market. Now,

the service is being rolled out without prior trials. In the case of online shops, a mobile payment provider is responsible for integration of a payment service with an online shop payment system. In addition, this is usually free for retailers.

Table 5. Perceived characteristics of mobile payment services.

	Axfood (SEQR)	**McDonalds' (SEQR)**	**Axfood (Bart)**	**Davids (Payair)**
Potential benefits of innovation	- Lower transaction cost of payments - Reduction of the amount of cash - Experience in providing mobile payment services	- Lower transaction cost of payments - Reduction of the amount of cash - Experience in accepting mobile payments	- Lower transaction cost of payments - Reduction of the amount of cash - High security - Experience in providing mobile payment services	- Simple payment method connected to existing bank card - Quick, easy, and spontaneous order entry and placement by customers - No need to send out invoices
Relative advantage	- The first mover advantage - Attention of media	- Perception of the company's brand as modern	- The first mover advantage - Attention of media - The only retailer accepting the service	- Targeting Payair customers - Attention of media
Compatibility	**SEQR** options: - Payment, loyalty accounts, coupons, p-commerce - Easy integration - No additional hardware - Low cost per transaction - Compatible with values and needs of Axfood - Meets retailer's expectations with added value services	**SEQR** options: - Payment, loyalty accounts, coupons, p-commerce - Easy integration - No additional hardware - Low cost per transaction - Compatible with values of McDonald's - Does not correspond to needs of McDonald's	**Bart** options: - Just payment - Additional hardware - Compatible with values and needs of Axfood	**Payair** options: - Payment, p-commerce - Easy integration with online shops - Compatible with values and needs of Davids
Complexity	SEQR is easy to use	SEQR is easy to use	Bart was not easy to use	Not used by personnel
Trialability	Prior trial in 2012	Prior trial in 2012	Prior trial 2012	- Payair financed and integrated the service with the online store - Free service for half a year
Observability	SEQR was promoted in Axfood's: - Marketing campaigns - Direct advertising - Website SEQR QR-codes are next to cash registers in stores	SEQR visibility was increased by: - Digital lobby screens - Promotional material - SEQR is a payment option in McDonalds' app	Bart was promoted in Axfood's: - Marketing campaigns - Direct advertising - Website	Information about the Payair service is placed: - On every product webpage - In the top of the checkout page
Uncertainty of innovation	- SEQR provides the promised relative advantage - Service is implemented at the needed level	- SEQR provides the promised relative advantage - Service is implemented at the needed level	- Bart partly provided the promised relative advantage - Service was implemented at the needed level - There was uncertainty of innovation	- Payair partly provids the promised relative advantage - Service is implemented at the needed level - Postponed plans of Payair deployment in physical stores - No plans to invest in other mobile payment services - There is uncertainty of innovation

All retailers to one or another degree make the adopted mobile payment service visible to their customers. Information about the mobile payment service becomes a part of marketing campaigns and promotional materials. Moreover, information about availability of a new payment service is visible in the stores and on web pages of online shops.

Finally, there are some differences between the analyzed cases regarding the uncertainty of innovation. SEQR provides the promised relative advantage and is implemented at a needed level. Bart was implemented at the needed level from technological perspective, however, it was just a mobile payment not providing any additional value. By this it only partly provided the promised relative advantage meaning some uncertainty of innovation. Payair is implemented at the needed technological level, but it partly provides the promised relative advantage, since the number of used is small. Hence, Davids has postponed further service deployment in physical stores and has no plans to invest in other mobile payment services. This way, some uncertainty of innovation can be identified.

5.4 Social Network

The representatives of the three retailers (Axfood, McDonalds', and Davids) stated that social networks as an additional channel for information spread about mobile payment services did not play a significant role. The summary is provided in *Table 6*.

Table 6. Importance of a social network.

	Axfood (SEQR)	**McDonalds' (SEQR)**	**Axfood (Bart)**	**Davids (Payair)**
Social network	Not important	Not important	Not important	Not important

5.5 Environmental Influence

In the analyzed cases, the network externalities mainly do not affect retailers' decision to adopt the mobile payments. This can be explained by the fact that the service roll out is free and retailers do not need to invest in additional infrastructure or to upgrade existing PoS terminals. These are the main factors driving adoption of the mobile payments by retailers.

The main issues are related to low numbers of users and a small number of transactions. This partly could be explained by a presence of several competing mobile payment services in the market. Hence, it is unclear which one will be a market leading solution. In addition, availability of the competing payment solutions can lead to problems reaching a critical mass of consumers needed for mobile payment to take off. It might also become a source of a market fragmentation.

Table 7. Importance of the environmental influence.

	Axfood (SEQR)	**McDonalds' (SEQR)**	**Axfood (Bart)**	**Davids (Payair)**
Network externalities	Network externalities are not a problem: - Free service roll out - No need to invest in infrastructure But: - Small number of users - Small number of transactions - Network of retailers is growing	Network externalities are not a problem: - Free service roll out - No need to invest in infrastructure But: - Small number of users - Small number of transactions - Network of retailers is growing	Network externalities' problems: - A need to invest in infrastructure - Only one retailer - Small number of users - Small number of transaction	Network externalities are not a problem: - Free service integration But: - Small number of users - Small number of transaction - Network of retailers is growing
Competitive pressures	No competitive pressures for the first mover	Competitive pressures: - Market trend	No competitive pressures for the first mover	Competitive pressures: - Market trend

Moreover, part of retailers decides to adopt a mobile payment service because of competitive pressures. The deployment of mobile payments is a common trend in the market and companies competing in the market start accepting it. The summary of the marketing efforts of the mobile payment providers is provided in *Table 7*.

The discussion of analysis is presented in the next section.

6 Discussion

The main objective of the ongoing research is to estimate both the main obstacles and driving forces affecting the retailers' decision to accept mobile payment services. The analyzed factors that can affect adoption of innovation by an organization are: adopter characteristics, supplier marketing activity, perceived innovation characteristics, social network, and environmental influences. The performed study has been focused on adoption of mobile payment services by Swedish retail companies. Overall, the analysis has been based upon the case studies of the four retailers that have adopted different mobile payment services. The findings of the case studies have been discussed, analysed, and generalized. Based on the analyzed cases, the summary or the main obstacles and driving forces is provided in *Table 8*.

Table 8. Summary of the main obstacles and driving forces.

	Obstacle	Driving force
Adopter characteristics		
Size	–	Yes
Organizational structure	Not identified	Not identified
Organizational innovativeness or strategic posture	–	Yes
Marketing efforts of mobile payment providers		
Targeting	Yes	Yes
Communication	–	Yes
Risk reduction measures	–	Yes
Perceived characteristics of a mobile payment service		
Potential benefits of innovation	–	Yes
Relative advantage	–	Yes
Compatibility	Yes	Yes
Complexity	Yes	–
Trialability	–	Yes
Observability	Not identified	Not identified
Uncertainty of innovation	Yes	–
Social network	Not identified	Not identified
Environmental influence		
Network externalities	Yes	Yes
Competitive pressures	–	Yes

It is argued that organizational characteristics influence the organizational decision to adopt an innovative service. The main characteristics that have been analyzed are size, organizational structure, and organizational innovativeness or strategic posture.

So, large organizations have positive attitudes towards adoption of new solutions in order to "improve their performance" (Frambach, 1993; Frambach and Schillewaert, 2002). This corresponds to the findings of the current research. The retailers that were in the focus of analyzed cases are large or big organizations, and most of them see mobile payments as opportunity to improve customer experience of a purchasing process or a purchasing order placement making it easier and simpler.

The analyzed companies specialize in the retail or food industries and have hierarchical or flat organizational structures. However, it is difficult to define dependence between the company's organizational structure and attitudes to about the acceptance of an innovation due to a small research sample.

The strategies of the analyzed companies are focused on innovativeness and improvement of the key activities. These makes these companies open to accept an innovation, hence, can be seen as factor driving acceptance of the innovation.

It is stated that marketing efforts of mobile payment providers can positively affect organizational decision to adopt an innovative service (Frambach and Schillewaert, 2002). The important factors are targeting, communication, compatibility, and risk reduction.

The analyzed types of the mobile payment services are dedicated to the retail. Hence, the mobile payment providers specifically target large and small retailers, restaurant and coffee shop chains, and online shops in order to develop a more expensive network of merchants accepting their services. Targeting only one retailer, even if it is a large company, might be a wrong strategy leading to withdrawal of the service (the case of Bart). So, right targeting is driving acceptance of a new service, and wrong targeting can become an obstacle.

The most common communication channels used by the mobile payment providers are conferences, retail industry events, and promotional campaigns. An important factor is contacting retailers directly.

Finally, the risk reduction measures seem to be very important for quicker service adoption by retailers. The retailers more likely to deploy the mobile payment service if the service roll out is free of charge and if there is a service trial opportunity.

The perception of the characteristics of an innovation by managers responsible for making decision to adopt it is also an important factor (Frambach and Schillewaert, 2002; Rogers, 2003). Hence, potential benefits, relative advantage, compatibility with the existing value and needs, complexity, trialability, observability, and uncertainty of an innovation should be considered.

It is possible to specify some common trends. So, the retailers are willing to adopt a mobile payment service if it provides some benefits like lower transaction costs, reduction of the amount of cash in the stores, getting experience in providing mobile payment services, and better customer service experience. The relative advantage is associated with the increased attention of media, improved perception of the retailer's brand, and the opportunity to target the users of the adopted mobile payment service.

Compatibility of the mobile payment with the existing needs and values of retailers can serve both as an obstacle or a driver. The analyzed mobile payment services mainly correspond with the existing needs and values of retailers and meet their expectations. The retailers are more likely to adopt mobile payment services that can easily be integrated with the existing infrastructure, do not require additional hardware and investment, and their transaction fees are lower than credit/debit cards' fees. Moreover, additional values and services provided by mobile payment services facilitate their adoption (SEQR and Payair examples). Such options of a mobile payment service as loyalty accounts, coupons, opportunity to use the service for p-commerce purposes are attractive for retailers and help to promote their brands, brands of goods, and to increase volumes of purchases. As the case of Bart shows, a provisioning of just payment functionality is not enough for service adoption.

As analyzed cases show, the retailers are satisfied with mobile payment services if they ensure quick and easy payment process for both retailers and customers, and are easy to use for personnel (SEQR and Payair examples). A complicated and not easy to use payment solution will not be adopted by both retailers and customers (Bart example).

In the analyzed cases, there were some prior trials of the mobile payment services. A positive experience gained during the trails led to full-scale rollouts of SEQR and Bart services in Axfood and McDonalds' chains. All retailers make the adopted mobile payment service visible to their customers through marketing campaigns and promotional materials, place the information about mobile payments in the stores, home web pages, and on web pages of online shops. These are the examples of cross-marketing.

The uncertainty of innovation is related to its ability to provide the promised relative advantage and to be implemented on the needed level (Frambach, 1993). The analyzed mobile payment solutions are implemented on a needed level. In the case if they do not fully ensure the promised relative advantage, the retailers have concerns about the uncertainty of innovation and are not willing to deploy the solution on a bigger scale (Bart and to some degree Payair ezamples).

The prior studies have highlighted the importance of social networks for a quicker spread of information about the innovative solution (Frambach and Schillewaert, 2002). However, this was not confirmed by the results of the current research.

The environmental influence is considered important for the adoption of an innovation by organizations (Frambach, 1993; Frambach and Schillewaert, 2002). The influence of the environment was identified in the current research in terms of both network externalities and competitive pressures. So, for example, the availability of several payment solutions in the market to some degree results in a fragmentation of the market and sets a barrier reaching a critical mass of customers. In addition, there is no clarity which mobile payment service will be a market leader.

A problem of network externalities does not seem important because retailers do not have to invest in the infrastructure of a mobile payment service. This fact together with free service deployment and rollout without make the process of adoption much quicker. One more factor positively affecting adoption of mobile payments by retailers is a common market trend. However, the retailers are disappointed about low number of mobile payment users and small number of transactions.

7 Conclusions

The main objective of this study is to look into organizational adoption of innovation. This was done using the example of the mobile payments applied in the Swedish retail industry. More specifically, the study was aiming to define the main obstacles and driving forces affecting the retailers' decision to accept mobile payment services.

The analysis was performed using the framework of organizational adoption of innovation proposed by (Frambach and Schillewaert, 2002). The main analyzed factors are: adopter characteristics, supplier marketing activity, perceived innovation characteristics, social network, and environmental influences. The analysis of four cases helped to estimate some common trends in the adoption of mobile payment services by retailers. In addition, analyzed factors were categorised as obstacles or driving forces to adoption of a new payment service.

The main contribution of this paper is in addressing a problem of the organizational acceptance of the innovation, which is insufficiently addressed by previously implemented researches in the mobile payment and retailing domains. Another contribution is estimation of main drivers and obstacles for retailers to adopt mobile payment services. Finally, the paper presents analysis and description of current mobile payment market trends related to solutions applied for retail in Sweden.

The main limitation of the current research is in analysis of small number of cases. This might affect and inflate the research results. The future work would be looking into a bigger number of cases of mobile payment adoption by retailers. This would provide a bigger picture of the problem.

8 Acknowledgement

The research has been performed as a part of Mobimer project, which is funded by Wireless@KTH. Another funding source has been Handelsbanken's Research Foundation.

I am very grateful to Associate Professor Jan I. Markendahl from Wireless@kth at KTH Royal Institute of Technology for valuable and useful comments on the draft of this report.

I would like to express sincere gratitude and to thank representatives of the companies (Seamless, Axfood, Davids, and McDonald's) that kindly agreed to provide information and to contribute to this research. In addition, I would like to thank the developer of the conceptual idea of Bart service for his input to the research by sharing insights about the service.

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Appendix A: Questionnaire

What is the size of a company?

Organizational structure:
1. What are main characteristics of company's organizational structure?

Organization strategy:
1. How could be company's overall business strategy characterized?
2. Is it open to adopt new products or solutions?

Characteristics of mobile payment solution
1. When making decision about mobile payment solution deployment, what kind of potential benefits of mobile payment were seen?
2. What king of relative advantage does deployment of mobile payment solution give to your company?
3. Does deployment of mobile payment solution meet company's expectations?
4. How does deployment of mobile payment correspond to values of your company?
5. How does deployment of mobile payment correspond to needs of your company?
6. Is mobile payment solution used for payment in the physical shops?
7. If yes, were there any problems for personnel to learn and start using this mobile payment solution?
8. What is the economic factor of mobile payment deployment?
9. Do you make option to pay with mobile payment solution more visible to customers? How?
10. What are the results of mobile payment solution deployment in e-shop/store? Do you notice expected relative advantage of using this mobile payment solution?
11. Does company feel any uncertainty about mobile payment solution?

Marketing efforts of the mobile payment provider
1. Who was the main initiator of the idea to deploy mobile payment solution at your company?
2. What were the main factors behind selection of X company as a mobile payment provider? Why was it selected?
3. How a mobile payment provider was communicating about mobile payment solution? How the awareness was created?
4. Were any risk reduction measures proposed by a mobile payment provider?

Social Networks
1. How important different social networks were for your company as additional channels for information spread about the mobile payment solution (before its selection and deployment)?
2. Has it any impact on the decision to finally select this solution?

Influence of Market Factors
1. Was "chicken and egg" dilemma considered as an important problem when considering deployment of a mobile payment solution?
2. Was decision to deploy a mobile payment affected by similar decisions of competitors?
Or by overall trend in the market?