Summary of Wireless@KTH small project: MOBIMER

General about the project

Background and objectives

In general the objective of the project is to provide a framework for development of a business eco-system for mobile payment services and related added value services. A key issues is that mobile payment services often are seen as just another way to handle the “transaction”, i.e. the use of the mobile phone as a personal channel to the consumer before, during and after the actual purchase is not considered, see figure 1.

The project focuses on problems, conditions and services for public transportation services. However, another objective is to increase the understanding about mobile payment services integrated with other services (ticketing, information services and loyalty programs) that can be used in other sectors like retailing, hotels, restaurants and tourism.

Figure 1. The mobile phone can be used as a personal channel to the consumer before/during and after “the purchase”.

Project partners

The project participants are Dr. Jan Markendahl from Wireless@KTH, Docent Niklas Arvidsson from KTH Industrial Dynamics. Active industrial partner at the time of application was Samtrafiken AB. Other interested partners, but formally not committed, were the local public transport companies in Stockholm and Uppsala (SL and UL).

Progress of the project

The project started according to plan during the autumn 2012. The partner Samtrafiken run into problems since the main contact person left the company. However, SL and UL did participate more actively so the project could run more or less as planned. Spring 2013 a number of meetings with SL, UL and Samtrafiken led to a “re-start” of the project leading to a unified view on problems&solutions. An initial round of interviews with different traveler groups was done autumn 2013 providing key results for the project. Interviews with SL and UL travelers have been delayed but will now be done with UL 2014, i.e. after the end of project. Interviews with retailers and restaurants have been done 2014 by our PhD student Tatjana Apanasevic providing initial results for other sectors.

1 project website http://wireless.kth.se/mpp/projects/mobimer/
Research results and findings

The main research findings regarding mobile payment services are the following:

1. Mobile ticketing using SMS has decreased due to increased complexity for end-users. The operator phone bill cannot be used after February 2013, the need to register with new payment providers has resulted in a substantial decrease of SMS tickets (50-80%).
2. New smart phone apps are taken into use by public transport for customers not using “monthly cards”
3. Public transport companies look into new solutions where the “travel planner” is extended with a "buy ticket" button. This is an example of integrated information, ticket and payment service as envisaged when the project started.
4. For retailing initial results say that mobile payment as a standalone service offer low added value to end-users since card payments is widely used and accepted almost everywhere.
5. All in all, the research so far supports the hypothesis that the combination of mobile payments and other added value services need to be combined in order to offer any substantially larger value to end-users.
6. In order to be able to offer payment service in combination with other services the payment provider needs to develop competence about transport, parking, retailing, loyalty programs, etc.

Publications

During the project time 10 research papers and 5 master thesis project reports have been submitted, see appendix A. For 2014 we have another 10 submitted or accepted research papers based on the findings of the project.

Other results and benefits

Establishment of research collaboration

The project has strengthened the collaboration with Docent Niklas Arvidsson at Industrial Dynamics at KTH. The Mobimer project benefit from the research done by Niklas about the cashless society (Det kontantlösa samhället).²

Establishment of contacts with industry actors and “reputation”

During 2012 and 2013 contacts were taken and meetings were organized with payment providers like WyWallet, Seamless and Payex, parking companies, and other public transport companies like X2AB, Skånetrafiken, Västrafik and Östgötatrafiken. 2014 contacts with retailers were established.

Another result is that Niklas, Tatjana and Jan have been interviewed in media and invited to give presentations and/or to be moderator at different public events, see appendix B. Wireless@KTH also benefit from the competence and reputation of Niklas as a researcher, see Appendix B for Niklas actitivites as invited speaker or as “expert”.

² http://www.hur.nu/MediaBinaryLoader.axd?MediaArchive_FileID=3b2e7ff7-5d2f-4f8e-ab28-ec050f5b5d09&FileName=2013+Det+kontant%C3%B6sa+samh%C3%A4llet+N+Arvidsson+INDEK+KTH.pdf
**Resources and financials**

The research funding was shared by Wireless@KTH and KTH Industrial dynamics.

Table to be inserted
Appendix A - List of publications

Journal and conference publications


J. Markendahl, T. Apanasevic, Mobile operator strategies to enter or stay in the market of mobile payment services (Teaching Notes), 29th annual IMP Conference 2013, Atlanta, September, 2013

J. Markendahl, T. Apanasevic, Trends towards fragmentation of the mobile payment market in Sweden, 29th annual IMP Conference 2013, Atlanta, USA, September, 2013

T. Apanasevic, J. Markendahl, The mobile payment in retail (Teaching case and notes), 29th annual IMP Conference 2013, Atlanta, September, 2013

J. Markendahl, Change of market structure for mobile payments services in Sweden - the case of SMS tickets, 12th International Conference on Mobile Business (ICMB), Berlin, Germany, June 2013


J. Markendahl, T. Apanasevic, Lessons from Swedish mobile payments market, The Second Cashless Society Roundtable, Dublin, Ireland, April 2013

J. Markendahl, T. Apanasevic, N. Arvidsson, Mobile ticketing: It is not only about 'cashlessness", The Second Cashless Society Roundtable, Dublin, Ireland, April 2013

Master of Science thesis reports


Tidebrant, P. Disruptive innovation in the Swedish payment market: A supply-side perspective, 2013

Toma I. A.; Role of third party actors for mobile wallet services, December 2013

Singh Sambhy, G.; Study of Mobile Payment Services in India; Distribution of the roles, responsibilities and attitude amongst actors of the payment system, January 2014; http://kth.diva-portal.org/smash/searchlist.jsf?searchId=3

Other publications about mobile payments can be found at: http://wireless.kth.se/mpp/publications/
Appendix B - Invited talks, workshops, interviews

Organized workshops and panel sessions

Niklas Arvidsson and Jan Markendahl organized a small workshop on mobile payment services and ticketing for the Board of X2 Kollektivtrafik AB and Samtrafiken i Sverige AB, April 12, 2013

Jan Markendahl organized and chaired the panel session “Mobile payment services and application” at the 12th International Conference on Mobile Business (ICMB), Berlin, Germany, June 2013, http://www.wi-mobile.org/en/icmb/icmb2013/program.html

Niklas Arvidsson and Jan Markendahl organizes the third Cashless Society Roundtable to be held in Kista May 13 1-4 as a wireless@KTH event,

Invited talks by Tatjana Apanasevic

Invited talk at Nordic Payment Forum March 14-15, 2013, giving presentation together with Riikka Murto (SSE) on “Lesson learned from NFC pilot projects”

Invited talk at Retail Forum Store, Göteborg, 13 November 2013 with the title: “Future of Payment for Retailers and Consumers”

Invited talk at NFC Symposium, January 24, 2014 giving a presentation about overview of mobile payment solutions in the retail industry and main barriers to NFC service penetration.

Invited talks and media appearances by Jan Markendahl

“Tjänsteinnovationer och marknadsomvandling – Fallet mobila betalningar”, presentation (together with Per Andersson) at a public SSE seminar presenting the Yearbook 2011, August 30, 2012


“Business models and actor cooperation for mobile payment and NFC services”, Invited talk at NFC Symposium, January 24, 2013

Interview in Swedish TV4 evening news about mobile payments, February 21, 2103


Member of panel discussion on mobile payments solutions at the seminar “Next generation banking” organized by Affärsvärlden, May 30, 2013

Invited as “expert” and interviewed at the “Retail day” event September 24, 2013 organized by Computer Sweden. The main topic of the interview was “What are the obstacles for mobile payments?”
Invited talks and media appearances by Niklas Arvidsson

I was interviewed on merchants’ views on cash and other payment services by Swedish television (SVT) on April 17, 2014. http://www.svt.se/nyheter/sverige/trots-foretagens-protester-manga-fortsatter-betala-kontant


I participated in a hearing on digitalization and growth organized by the Swedish Agency for Growth Policy Analysis (Tillväxtanalys) on April 1, 2014.

I was interviewed about the possibilities of new types of transaction fees for the payment service Swish in Swedish Television on December 31, 2013. http://www.svt.se/nyheter/sverige/swish-ska-kosta-pengar

I was interviewed about who is responsible for providing cash-based payment services and how consumers should act when the access to such services is reduced in P4 Jönköping on January 2, 2014. http://sverigesradio.se/sida/artikel.aspx?programid=91&artikel=5746292

I was interviewed about the cashless society by the newspaper Smålandsposten on December 12, 2013. http://www.smp.se/

I was interviewed by Radio Sweden on Wednesday, October 23, 2013, on whether Sweden will become a cashless society. Radio Sweden sends international broadcasts about news in Sweden. http://sverigesradio.se/sida/avsnitt/271138?programid=2054

I gave a presentation on innovations in the payment system on a conference organized by the payment service provider Teller on October 22, 2013, in Stockholm.

I gave a presentation on innovations in the payment system on a conference on internationalization and competitiveness organized by Department of Industrial Economics and Management and George Mason University on October 4, 2013, in Stockholm.

I gave a presentation on mobile payment services at the EFMA conference (Investing in the payments world of the future: connecting innovation with cards, contactless and mobile payments) in Paris, France, September 25-27, 2013. www.efma.com

I was interviewed about the question if Sweden may become cashless in Kvällspressen / Expressen, September 16, 2013. http://www.expressen.se/kvp/forskare-om-fem-ar-ar-kontanter-doda/

I was interviewed about the development of the Swedish payment system in the German magazine brand eins (http://www.brandeins.de/; nr 08/13; pages 86-89).

I was invited as a VIP guest to the event Digital Horizons organized by The Economist and KTH on June 12-13, 2013, in Stockholm. http://www2.economistconferences.com/event/digital-horizons-0

I was invited as a panel discussant of the future of the mass payment system organized Sveriges Riksbank on June 11th, 2013. http://www.riksbank.se/en/Calender/2013/#m6


I was invited as an expert to present my views on the future of the payment system at Round Table meetings organized by Sveriges Riksbank on November 26th, 2012, and March 8th, 2013.

I was speaker and moderator during the conference called Nordic Payment Forum in Stockholm 2013 as well as 2012. The conference was organized by the Swedish business magazine Affärsvärlden and Talentum Events.

I presented my study The Cashless Society in a seminar hosted by Handelns Utvecklingsråd and Sparbanksstiftelsen Nya for almost 80 persons at Nalen in Stockholm on February 22, 2013.

I was interviewed in Sydsvenskan about the mobile wallets and payment services launched in Sweden by banks and telecom operators (January 28, 2013). http://www.sydsvenskan.se/ekonomi/mobila-planbocker-innebar-nya-kostnader/

I was part of a panel discussion on NFC technology in relation to mobile payments and other services at the NFC Symposium in Stockholm, January 23-25 (www.nfc symposium.com).

I was part of a panel discussion on mobile payments at a conference in Stockholm organized at Grand Hotel by EVRY on November 30, 2012.

I was interviewed in Swedish Television (SVT) about mobile payments and mobile wallets. The interview was shown on December 31, 2012 (www.svt.se/nyheter/ekonomi/mobilen-den-nya-planboken).

I was interviewed in Swedish Television (SVT) about the cashless society. The interview was shown on December 19, 2012 (http://www.svt.se/nyheter/sverige/forskare-kontanter-borta-pa-20-ars-sikt).

I was interviewed in the newspaper Svenska Dagbladet about the emergence of mobile wallets in an article published on September 19, 2012. http://www.svd.se/naringsliv/hard-kamp-om-att-fa-vara-din-planbok_7509812.svd

I made a presentation for around 50 bankers about the emergence of a new business landscape for payments Thursday, September 13, 2012, that was hosted by Tieto at Holmen Fjordhotell outside Oslo, Norway.

I made a presentation for 14 executives about the business landscape for bank in the Executive Program for Infraservice Management at the Royal Institute of Technology on September 5, 2012, at Lejondals Slott outside Stockholm.

I made a presentation for close to 300 bankers about the emergence of a new business landscape for payments on Bankdagen, Wednesday May 30, 2012, that was hosted by Tieto at Berns Salonger in Stockholm. http://bankdagen.se