MOBILE TOURISM SERVICES
Experiences from Three Services on Trial

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Abstract: For this study a field trial was conducted to identify the determinants for tourists' intentions to use three trial services targeting tourists on tour, in this case on the Åland Islands in Finland. We identified that the major barrier for the non usage of the trial services was linked to the type of travel that the trial group participated in. Also price transparency and ease of use especially ease to take new mobile services into use should be highlighted in mobile tourism service development. Moreover, we came across some basic reminders to take into account when commercializing mobile services, such as carefully define a customer target group, estimate potential usage volume and plan marketing / sales tactics. These aspects are not necessarily realized enough in technology development.

1 INTRODUCTION

The use of the Internet for doing commerce or interacting with customers has been growing rapidly in the world wide tourism industry. Mobile commerce, or e-commerce over mobile devices, on the other hand has had many conflicting predictions on its future popularity. Most predictions have been overly optimistic. However, the benefits that arise from mobile technology have not yet been fully delivered, which to some extent is explained by the fact that mobile applications, due to complexity or lack of relevance, fail to meet customers' expectations (Carlsson et al. 2006). Travel and tourism is an industry in which several different projects have been conducted where mobile applications have been developed, tested and implemented, some even with moderate success (e.g. Ardissono et al 2003, Kramer et al 2005, Schmidt-Belz et al 2003, Repo et al 2006). Some of these pilot projects (e.g. Kramer et al 2005, Schmidt-Belz et al 2003) have been focusing on GPS which the average tourist doesn't yet have in his/her handheld mobile device. Therefore it seems relevant to build and test services that actually can be used by the average tourists. Nevertheless previous pilots have given us valuable information on the potential of mobile technology.

The New Interactive Media (NIM) project, with funding from the European Union and the regional government of the Åland islands, is a development programme of increasing knowledge, production and use of new interactive media on the Åland Islands[1] in Finland. Within the project several mobile applications have been developed for the travel and tourism sector on the islands. Three of these services will be presented more in detail in this paper: MobiPortal, TraveLog and MobiTour. A field trial of these services with real incoming tourists to the Åland Islands using their own mobile phones has also been conducted. Findings and experiences from this trial will be reported. Possible determinants for consumers' intentions to use mobile tourism services will be discussed as well.

2 SERVICE DESCRIPTIONS

The services have been planned with a common logic namely the Braudel rule: freedom becomes value by expanding the limits of the possible in the structures of everyday life (as presented by Keen & Mackintosh 2001). The rule is then translated into a tourism setting which means that tourists' real or perceived need has to be met by the services and

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[1] Åland is an autonomous and unilingual Swedish region in Finland with its own flag and approximately 26.700 inhabitants. Åland is situated between Finland and Sweden and consists of 6 500 islands. (www.visitaland.com)

moreover, the services need to profoundly change the way a tourist does or experience something – and to the better (Harkke 2007).

MobiPortal is a mobile version of an information portal www.visitaland.com which is the official tourist site of the Åland Islands. The portal includes search for events, restaurants etc., a map service and facts on the Åland Islands.

TraveLog is a mobile community for incoming tourists to share experiences from the Åland Islands with each other. The virtual meeting place includes stories, pictures, tips and interactions.

MobiTour is a guide for attractions such as the Bomarsund fortress which is downloadable / streamable to the visitors' own devices. The guide includes voice and/or video guidance.

All these three services ought to expand the limits of a tourist to the Åland Islands according to the Braudel rule by enabling 1) instant access to local information, 2) enhanced communications with other people with the same interests and 3) experience enhancement for certain unmanned attractions. Especially experience enhancement features are generally seen as key drivers for successful customer satisfaction in tourism (Pine & Gilmore 1999). The determinants for consumer usage of mobile tourism services are, however, a complex issue which will be discussed next.

3 POSSIBLE DETERMINANTS

Several models of technology adoption have been developed. One of the most used models is the technology acceptance model (TAM) by Davis (1989) which is based on the theory of reason action (TRA) by Fishbein et al. (1975). Other often used models in technology adoption research are the diffusion of innovations theories (DIT) by Rogers (1995) and the unified theory for the acceptance and use of technology (UTAUT) by Venkatech et al. (2003) which combines TAM with other acceptance model e.g. DIT. Here different components of these models will be discussed, together with relevant research theories for adoption of electronic and mobile services, to identify possible determinants for consumer intentions to use mobile tourism services.

The TAM model proposes two determinants, perceived usefulness and perceived ease of use, which impact the acceptance of technology and adoption behavior as a result (Davis 1989). Perceived usefulness is defined as "the degree to which a person believes that using a particular system would enhance his or her performance".

Perceived ease of use is defined as "the degree to which a person believes that using a particular system would be free of effort". The two TAM determinants are proposed to identify the intended usage behavior of a system and are widely used as a backbone for research in adoption of technology. However, the first TAM variable perceived usefulness is foremost designed to research work performance improvements in organizational contexts. In consumer markets consumer behavior is also influenced by other factors. It is typical that non-efficiency factors impact consumer adoption of technology, e.g. good tourist technologies are not only those that make tourists more efficient, but that also make tourism more enjoyable. Thus tourism can be characterized as wandering, where tourists attempt to enjoy the city environment and chance upon things of interest, rather than optimizing (Brown & Chalmers 2003). As the mobility (on the move) capability is generally seen as the key value driver in m-commerce (Anckar & Eriksson 2003), mobile technology clearly has the potential to support the wandering aspect of tourism. A word like flexibility has commonly been used to describe the independence of time and space that is provided by mobile technology. According to Kim et al. (2005) the hedonic motivation or the enjoyment aspect of tourism has, however, not been clearly defined in mobile technology acceptance models. The perceived type and degree of perceived value of a mobile service depend on the other hand on the situation or context of usage (Mallat et al 2006, Lee & Jun, 2005). Anckar & Dincau (2002) introduced an analytical framework that identifies the potential value creating features of mobile commerce. Mobile value elements in the framework for consumers on the move are: Time-critical arrangements, Spontaneous needs, Entertainment needs, Efficiency ambitions and Mobile situations. Time-critical arrangements refer to applications for situations where immediacy is desirable (arise from external events), e.g. receive alerts of a changed transport schedule while on tour. Spontaneous needs are internally awakened and not a result of external events, e.g. find a suitable restaurant while wandering around. Entertainment needs, killing time/having fun, especially in situations when not being able to access wired entertainment appliances, e.g. kill or fill time in transportation. Efficiency ambitions aim at productivity, e.g. use dead spots during a travel to optimize time usage. Mobile situations refer to applications that in essence are of value only through a mobile medium (e.g. localization services), which ought to be the core of

mobile commerce. Consequently *perceived mobile value* represent the degree to which a person perceives value arising from the mobility of the mobile medium.

Nevertheless not only the medium creates value for the consumer but the essence of the services as well. We refer to such value as *perceived service value*. For example for a tourist in a planning or booking situation the key to successful satisfaction would be timely and accurate information relevant to the consumer's needs (Buhalis 2003). Equally important for a tourist visiting a historical attraction may be the satisfaction of educational and entertainment (edutainment) needs (HyunJeong & Schlisser 2007). Similarly a person with a mission to share experiences with others may find satisfaction when a community responds (Arguello et al 2006). The three examples refer to the essence of the three services on trial.

The second TAM determinant *perceived ease of use* has been widely discussed in mobile commerce. Limitations of mobile devices (e.g. screen size) cause consumers to hesitate whether to adopt mobile commerce or not. According to Cho et al (2007) device limitations suggest that focusing on easy to use mobile applications could enhance the consumer acceptance of mobile commerce. Kaasinen (2005) points out that mobile services need to be easy to take into use as well as mobile services are typically used occasionally and some services may be available only locally in certain usage environments. As a consequence, information on available services should be easy to get and the services should be easy to install and to start using. The ease of taking a service into use may in fact have a direct impact on the adoption behaviour of a mobile service (Kaasinen 2005). On the other hand when problems arise, users in the consumer market are often expected to solve the problems on their own (Repo et. al 2006). Consequently the use may rely on proper instructions or on a helping hand from someone. Proper support conditions also in a consumer market may therefore be important especially for advanced mobile services. Nevertheless consumers many times expect to take a new product or service into use without instructions or help.

According to Rogers (1995),"The innovation-decision is made through a cost benefit analysis where the major obstacle is uncertainty". *Perceived risk* is commonly thought of as felt uncertainty regarding possible negative consequences of using a product or service and has been added to the two TAM determinants as a negative influencer on

intended adoption behaviour (Featherman & Pavlou 2003). Trust, as trust in the service vendor to minimize the risks, has also been added to the TAM model (e.g. Cho et al 2007, Kaasinen 2005) and pointed out as a strong influencer on the intended use of mobile services due to that mobile commerce is still at its initial stage (Cho et al. 2007). We refer to trust as the perceived risk defined by Featherman & Pavlou 2003. They divide the perceived risk for electronic services into the following elements; performance risk, financial risk, time risk, psychological risk, social risk and privacy risk. Performance risk refers to the possibility of a service to malfunction and not performing as it was designed and advertised. The financial risk refers to the potential monetary outlay associated with the initial purchase price as well as the subsequent maintenance cost of the product and the possibility of fraud. Time risk refers to that the consumer may lose time when making a bad purchasing decision e.g. by learning how to use a product or service only to have to replace it if it does not perform to expectations. Psychological risk refers to the potential loss of self-esteem (ego loss) from the frustration of not achieving a buying goal. Social risk refers to potential loss of status in one's social group as a result of adopting a product or service, looking foolish or untrendy. Privacy risk refers to the potential loss of control over personal information, such as when information about you is used without your knowledge or permission. At least security and privacy issues have been highlighted as barriers to mobile commerce (O'Donnell et al. 2007). Also financial risks in form of high costs, including operating costs and initial costs, have been highly ranked by consumers as hindrances for m-commerce in its early stages (Anckar et al. 2003).

In UTAUT *social influence* among other constructs is added to the two TAM components and defined as the degree to which an individual perceives that important others believe he should use the new system (Venkatech et al., 2003). Social influence is also known as subjective norm in the theory of reason action (Fishbein et al 1975) and in its extension theory of planned behavior (Arjzen 1991). In consumer markets image and social status have been proposed to impact consumers' adoption of mobile services (Teo & Pok 2003). Also the number of users may influence, especially for community services which usefulness heavily depend on activity of different participants (Pedersen et al 2006). Furthermore other external sources such as media reports and expert opinions

may influence consumers' perception of electronic services (Bhattacherjee 2000).

Demographic variables such as gender and age are commonly used in consumer research. For example gender and age might through other constructs influence the intended adoption behavior of mobile services (Nysveed et al. 2005). According to the theory of planned behavior (Ajzen 1991) control beliefs constitute individuals' belief that they have the necessary resources and knowledge to use an innovation. For example skills or earlier *experience of using mobile services* may influence the adoption intentions of new mobile services. When discussing consumer behavior in tourism and the impact of information and communication technologies (ICTs) a clear distinction should also be made between experienced and inexperienced travelers (*travel experience*). The first group mainly feels more comfortable organizing their holidays and thereby taking advantage of ICT tools available to them more easily (Buhalis 2003). Moreover inexperienced destination travelers usually need a lot more local information. Innovations also need to comply with the existing values and needs of the individual in an everyday life setting (Moore & Benbasat 1991), in this case while on tour. For example the values of the individual may differ depending on the *type of travel* they are on: leisure or business, where the former ought to call for services with enjoyability rather than efficiency. In consumer markets mobile services also compete against existing and constantly developed alternatives. Thus consumer habits are usually quite slow to change from known alternatives (Dahlberg & Öörni 2007). People are on average risk-averse. But that is not true for everyone as we have individuals who are earlier to adopt new ideas than others (Rogers 1995). Such personal characteristics make diffusion of innovations possible. *Personal innovativeness* is the willingness of an individual to try out and embrace new technology based services. Individuals' limited mobile *device readiness* has as well been seen as a great negative influencer of the usage of more advanced mobile services (Carlsson et al. 2004). We refer demographic variables, experience of mobile services, travel experience, destination experience, type of travel, personal innovativeness and user device readiness as discussed here to *tourist characteristics* as they illustrate key characteristics of an individual that may influence the intended use of mobile tourism services.

Based on the literature discussion possible determinants for consumer intentions to use mobile tourism services are: perceived mobile value and service value, perceived ease of use, social influence, perceived risk and tourist characteristics. Mobile value and service value replace perceived usefulness as presented in the TAM model. Ease of use is defined as in the TAM model where also ease of taking a service into use is included. Social value is defined as in UTAUT and perceived risk as presented by Featherman & Pavlou (2003). Tourist characteristics constitute key characteristics of an individual on-tour. The defined determinants are summarized in table 1.

Table 1: Possible determinants for consumer intentions to use mobile tourism services.

Mobile value: the degree to which a person perceives value arising from the mobility of the mobile medium
Service value: the degree to which a person perceives value arising from the essence of the service.
Ease of use: the degree to which a person believes that using a particular service would be free of effort
Risk: the degree to which a person feels uncertainty regarding possible negative consequences of using a service.
Social influence: the degree to which an individual perceives that important others believe he should use the service
Tourist characteristics: Demographics, Experience of mobile services, Travel experience, Destination experience, Type of travel, Personal Innovativeness, Device readiness

4 THE FIELD TRIAL SETUP

According to Repo et al. (2006) TAM theories and similar approaches have little relevance in the real product development process. Product developers need first hand user feedback in form of personal interaction rather than by reading research reports. The arguments are based on experiences from piloting a mobile blog service for tourists, where the user gave direct feedback to the developers orally and through survey forms. Involving the consumer in the development process of products or services can be very rewarding indeed (von Hippel 2005). With the theoretical foundation (Table 1) in mind and with the idea of directly interacting with the consumers to receive direct and spontaneous feedback to the product developers we designed a field trial which included oral, observed and survey data collection.

The trial was conducted during a conference in the capital of the Åland Islands Mariehamn 21 –

22.9.2007 at the legislative assembly where the main activities of the conference were held. The conference was arranged by the local Junior Chamber of Commerce organization and it was called WestCongress2007. Members of similar organizations in the western regions of Finland were invited to attend the conference. A total of 191 participants had registered in advance for the conference. The trial was coordinated in cooperation with the conference director who offered assistance with e.g. stand preparations and informing the participants in advance of the mobile services in conference guides, online and during registration.

Our stand was set up at the main entrance of the building where the main activities were held. The main entrance was the place that we anticipated would be the busiest during the first parts of the conference when we were invited to promote and demonstrate our services. The stand was equipped with a video projector showing animated picks of the services and also flyers, tables and chairs for comfortable discussions with the conference attendants.

At our stand the conference participants were informed more in detail of the services. The services were also demonstrated, which gave us a chance to observe peoples first time reactions. The stand also provided for us a good place to freely discuss different issues regarding the services with the participants. Participants filled out voluntarily a questionnaire which also was an agreement to contact them by e-mail after the conference to follow up on their own independent use of the mobile services during their stay on the Åland Islands. Each phone and operator connection (device readiness) was checked by the stand representatives to ensure that the participants actually were able to use their own phones for the services.

In the questionnaire the participants were asked to fill out questions according to the constructs defined for tourist characteristics:

- *Demographics*: Gender and age
- *Experiences of mobile services*: Commonly used services were listed with the alternatives: [1] continuously using [2] have tried [3] have never tried.
- *Travel experience*: How often they travel for more than one day*:* [1] several times a month [2] ~ once a month [3] 3 – 9 times a year [4] < three times a year.
- *Destination experience*: If they have visited the Åland Islands before: [1] Yes, > 5 times [2] Yes, 2 – 5 times [3] Yes, once [4] Never and their knowledge of the Åland Islands [1]

Excellent [2] Good [3] Satisfactory [4] Not at all.
- *Type of travel*: if they consider WestCongress2007 to be: [1] a leisure trip [2] a business trip.
- *Personal Innovativeness*: Three statements were proposed on a five point scale: [5] definitely agree - [1] definitely disagree: I want to get local information through my mobile phone when… 1. I plan my program e.g. in the hotel 2. I'm on my way to a local place with e.g. bus 3. I get acquainted with a local place on foot. The statements were developed based on the kind of mobility situations tourists may experience. Kristoffersen & Ljungberg (2000) distinguish between three types of mobility: visiting, traveling and wandering. Visiting, an actor performs activities at different locations (e.g. a hotel). Traveling, an actor performs activities while moving between different locations usually inside a vehicle (e.g. bus). Wandering, an actor performs activities while moving between different locations where the locations are locally defined within a building or local area (e.g. on foot).

For the follow up a semi-open web questionnaire was used to receive feedback on the participant's actual use of the three services. The web questionnaire was sent to the participants by e-mail two days after the conference finished ensuring that their service experience would be fresh in their minds. A reminder was sent a week later. The participants were asked to state for each of the three services whether they had used it or not. Their answer was followed up with an open question on their primary motivation for using or not using the service. In the analysis the answers were interpreted according to the theoretical foundation on determinants for the intended use of mobile tourism services. Additionally the participants were asked to state what kinds of problems they had run into if problems occurred. The participants were also to state on a five point likert scale (*[5] Yes, definitely - [1] Definitely not*) for each service what their intentions are to use similar services in the future while visiting a destination. Finally the participants were free to comment on the service.

5 THE PARTICIPANTS

Members signed up in advance for the conference were 191 in total. However, about thirty persons

didn't register. We estimated that about 50 persons visited our stand. Out of these 50 persons voluntarily and without a prize draw 23 filled out the questionnaire and allowed us to contact them after the conference for the follow up. 20 out of 23 persons had a mobile phone and an operator connection (device readiness) that allowed them to use the services. Thereby it was relevant to send the follow up by e-mail to these 20 persons. Two mail addresses did not respond. Out of the 18 persons that the follow up went to 9 answered it.

Of the 23 that filled out the questionnaire 12 were men and 11 women. The average age was 35. The majority (66%) stated that they travel about once a month for more than one day. Most of them (66%) had visited the Åland Islands before at least two times or more. However, a majority (66%) answered that they know the Åland Islands satisfactory or not at all. Almost all (96%) felt the WestCongress2007 to be a leisure trip. Of the 23 participants all had at least at some point tried to use a mobile service and a clear majority (66%) used at least one mobile service continuously. A total of 74% (17) of the participants answered that they want to get local information with their mobile phone for at least one of the statements in table 2.

Table 2: Local information with mobile phone.

I want to get local information through my mobile phone when...	N Tot 23	%*
I plan my program e.g. in the hotel	10	43
I'm on my way to a local place with e.g. bus, car	14	61
I get acquainted with a local place on foot	11	48

5 = definitely agree and 4 = partly agree

6 EXPERIENCES FROM THE TRIAL

To draw peoples' attention to our stand we really needed to sell the services. As people were moving for different things in the building and to other locations in the surrounding area a major job was to get them to stop by the stand. Very few participants stopped without a few sales lines from the stand representatives, although they were informed in advance of the services and the stand was strategically placed at the main entrance.

Most people who visited the stand expressed a positive response by the first sight of the services. Comments like "that seems practical" and "I already use mobile news services so why not use these

services" were given. Especially MobiPortal awakened concrete interest as it was bookmarked by a couple of stand visitors. A few persons also praised the visual design of the MobiTour guide. However, some people were spontaneously skeptic about the long download times for MobiTour. Nor did anyone ask for transactions over Bluetooth although it would have been possible at the stand. Several persons instantly also asked for the price of the services. The services were not charged for and it seemed like the transaction costs were obvious to most visitors and not a hindrance to use, except for the large files of MobiTour. Connection problems occurred with at least one network operator which interestingly led to that a few thought there was something wrong with the trial services.

None of the nine respondents to the follow up had on their own used any of the trial services. All reported that their primary motivation for the no use was that they didn't experience a need to use the services during their stay at the conference on the Åland Islands.

The future intended use of similar services as the ones on trial were reported as shown in table 3. Services similar as MobiPortal received the highest score.

Table 3: Intended use of similar services.

When visiting a destination in the future I intend to use …	N	Mean*
Similar services as MobiPortal	9	3,33
Similar services as TraveLog	9	2,89
Similar services as MobiTour	9	2,89

[5] Yes, definitely – [1] Definitely not

7 DISCUSSION

A customer target group needs to be defined for each mobile service developed (Hoegg & Stanoevska-Slabeva 2005). The primary target group for the three mobile services on trial is visitors to the Åland Islands. The trial targeted participants of WestCongress2007 who visited the Åland Islands. When analyzing the trial group it can be said that it was both right and wrong. It ought to be the right group based on the fact that most participants who filled out the questionnaire had a device readiness (87%) that allowed the services to be used on their own phone. The group already continuously used mobile services to a great extent (66%) and thereby the barrier to take on new services ought to be lower. Their knowledge of the Åland islands was only

satisfactory or none (66%) which ought to create a need for local information. Also their willingness to get local information in different situations (74%) with their mobile phone was positive. Moreover the group was an experienced group of tourists (66%) which generally is found to be positive regarding usage of information and communication technology. On the other hand the group had a ready made program during the weekend and we observed that they also asked their hosts for tips and directions. The need for local information and guidance may therefore have been satisfied. Moreover they had their conference group who they met with continuously to share their experiences with. Consequently the service value of the three services on trial was already met by other means of interaction.

The analyses of the trial group indicate that the same people but with another mission to visit the Åland Islands could be a potential user group of the services on trial. The mobile value of using mobile services is, as discussed in the theoretical foundation, very much situation based. Moreover, the proposed value needs to comply with the user's existing on-tour values. In this case self arrangement values by using a mobile phone necessarily didn't exist due to the packaged set up of the conference. Consequently the type of travel, as packaged or non-packaged, is therefore to be taken into account as an influencer of the intended use of mobile tourism services. A non-packaged tour ought to comply better with an individual's values of self arrangement / service. Nevertheless customized mobile services aimed at specific needs of packaged groups such as conference attendants may indeed generate value.

The trial also shows that we cannot forget that new technology innovations very seldom sell themselves. Much of our efforts at our stand were sales related. Launching new mobile services certainly need to be pushed by creating awareness among the potential consumers as for any other new product. Similar pointers have been presented by Collan et al. (2006): "Hot technology doesn't sell itself, it has to be marketed to the consumer in the shape of value adding services that are easy to use". Therefore marketing / sales tactics influence needs to be set as a determinant for consumer intentions to use mobile tourism services.

Questions on the prices of the trial services were the most frequent ones asked during the trial. Therefore it seems that the financial risk is carefully accounted for by the consumers in their intentions to use a mobile tourism service. In this trial the services were free of charge and the transaction costs didn't seem to be a barrier. Nevertheless our experience from this trial is that the service price and potential transaction costs must be transparent to the consumers to minimize uncertainty of the monetary layout. The monetary aspect may be even more important for foreign visitors as transaction cost may rise noticeably.

Even though many participants expressed a general interest in the services it is also a fact that no one reported that they actually used the services on trial. Thereby questions are raised from a business point of view on the potential usage volumes of the services on trial at this time and place. We certainly need to be very realistic when we launch mobile services on the potential volume of usage, especially when setting the business logic (Collan et al. 2006). Moreover product developers need to remember to look at things from a consumer perspective. For example in this trial the consumers thought the trial services didn't work because of an operator problem. In the eyes of the consumer this means a malfunctioning product which is useless. Similarly long download times to access a service for a temporary use may cause the consumer to view the service as too time consuming to take into use. Neither can we expect consumers to install services in advance as according to Kaasinen (2005), "users are not willing to spend their time on something that they do not get immediate benefit from." Consequently the ease of use aspect must be highlighted by product developers as mobile tourism services may be only temporarily used during a visit to a destination or a local place.

8 CONCLUSIONS

This paper presented possible determinants for consumer intentions to use mobile tourism services. A major driver according to the six identified determinants; mobile value, service value, ease of use, risk and social influence and tourist characteristics couldn't be determined as no one used the trial services on their own. The major barrier for the non usage of the three services among the trial group seemed to be linked to the value aspect of the packaged tour (type of travel). Based on the experience from this trial we propose that researchers and practitioners especially take the following into account:

- The type of travel is a key aspect in designing mobile tourism services

- Marketing / sales tactics influence should be highlighted as a determinant for consumer intentions to use mobile tourism services
- Price transparency is an important aspect to minimize consumers' perceived risk of mobile tourism services
- Ease of use aspects should be highlighted even more for mobile tourism services as they may be only temporarily used

These pointers can also be seen as reminders in technology development where basic commercialization routines sometimes aren't realized enough. As for any other product defining a customer target group, estimate potential usage volumes and plan marketing are vital steps in launching mobile tourism services.

It needs; however, to be kept in mind that the experience is based on only one field trial and therefore further research in evaluating mobile tourism services and similar mobile services is needed. The recruitment of trial users could as well be done differently. According to Kaasinen (2005) ideally users should be allowed to use the trial services freely but it may lead to, as in this trial, to a no usage. Therefore some rules on minimum trial times should be set up, where additional usage to the minimum can be considered as real usage. Logs can also be helpful in data collection to receive prompt service usage data in addition to follow up data from the respondent. Moreover, phone interviews may give more extensive answers and better response rates in a follow up data collection of the same character as in this trial.

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