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An Empirical Study of Mobile Information Services Adoption
at a Norwegian University

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Abstract

This study aims at investigating the adoption of mobile information services at a Norwegian University. By expanding the Technology Acceptance Model (TAM), a research model, called mobile services acceptance model together with seven research hypotheses is presented. The proposed research model and research hypotheses were empirically tested using data collected from a survey of 46 users of a mobile service called extended Mobile Student Information Systems (eMSIS) at a Norwegian university. The findings indicated the fitness of the research model is good and strong support was found for the seven research hypotheses. Among all the factors, the personal initiatives and characteristics had the most significant influence on the intention to use eMSIS.

Introduction

Along with the popularity of mobile devices and advances in wireless technology, mobile services have become more and more prevalent. Despite all the technological possibilities, the number of successful advanced mobile services in the commercial market is still limited [1] and the adoption of mobile services has been slower than expected [2]. Full bloom of mobile services depends on both user adoption and technology improvement. While there has been an increasing amount of mobile services, little attention has been given to user adoption of mobile services, particularly with newly developed advanced mobile services.

Building successful strategies for promoting mobile services stems from a good understanding of users' expectations and preferences on mobile services. Key factors for the success of mobile services are to identify the actual and potential customers, to investigate how they are influenced and how they behave (i.e., people's behavior) and to uncover what they really expect (i.e., needs, and preference) [3]. Therefore, it is essential to understand the potential users and their requirements to develop mobile services [4]. In this study, we are not focusing on mobile services development techniques. Rather, we are interested in examining the impact of some potential factors on users' adoption intention in mobile services.

Based upon prior analysis of technology diffusion and acceptance of mobile services using existing technology acceptance theory, a research model, which is called mobile service acceptance model in [5], by expanding the original Technology Acceptance Model (TAM) proposed by Davis [6], was created to investigate the adoption of mobile services. To operationalize the research model, a measurement instrument developed in [7] was used to measure each of the constructs.

The university student subjects can be viewed as one of the major target markets of mobile services. Our particular interest in this study is to investigate students' perspectives on the adoption of mobile information services at a Norwegian University. The objective of this paper is to examine how well the proposed research model are able to explain mobile information services adoption in an empirical study with a mobile service called eMSIS. The research model is tested by using Partial Least Squares (PLS) analysis.

The remainder of this paper is organized as follows. The next section shortly discusses the theoretical background of this study. Then, the research model and hypotheses are presented. After that, the method and process of our empirical study are described. This is followed by a discussion of the findings and limitations of this study. The last section concludes this research work and points out directions for future research.

Theoretical Background

An important and long-standing research question in information systems research is how we can accurately explain user adoption of information systems [8]. Several models have been developed to test the users' attitude and intention to adopt new technologies or information systems. These models include the Technology Acceptance Model (TAM) [6], Theory of Planned Behavior (TPB) [9], Innovation Diffusion Theory (IDT) [10], Unified Theory of Acceptance and Use of Technology (UTAUT) [11]. Among the different models that have been proposed, TAM, which is the extension of the Theory of Reasoned Action (TRA) [12], appears to be the most widely accepted model.

TAM focus on the perceived usefulness (PU) and perceived ease of use (EOU) of a system and has been tested in some domains of E-business and proved to be quite reliable to predict user acceptance of some new information technologies, such as intranet [13], World Wide Web [14], electronic commerce [15], and online shopping [16].

However, TAM's limitations relative to extensibility and explanation power have been noted [17]. Many researchers have suggested that TAM needs to be extended with additional variables to provide a stronger model [18]. Some researchers have also indicated that the major constructs of TAM cannot fully reflect the specific influences of technological and usage-context factors that may alter users' acceptance [19]. Therefore, PU and EOU may not fully explain people's intention to adopt mobile services. We believe that TAM has limitations when investigating user adoption of mobile services, which is also confirmed by prior research work in [20]. Moreover, although UTAUT unifies more factors and consolidates the functions of the technology acceptance model with the constructs of eight prominent models in IS adoption research, it increases the complexity, so that it is more complicated to test its applicability. While the acceptance and adoption of IT services has been one of the most prevailing IS research topics (e.g. [21], [22]), the pervasiveness of mobile services raises new questions in exploring the adoption of mobiles services, such as what are the key factors driving the adoption of mobile services, and how do usage context affect users' adoption of mobile

services. All the findings above motivated us to create the mobile services acceptance model which is described in next section.

Some studies (e.g., [20, 23-26]) based on TAM and the other theories have explored factors affecting consumer adoption of mobile services. However, we found that the number of studies using individual consumer samples to investigate people's intention to use newly developed advanced mobile services is small. Most previous mobile services diffusion studies focus on general mobile services like voice, data services and messaging. To the best of our knowledge, we have not found any studies which are completely focused on students' adoption of mobile information services at universities. Therefore, we believe that the suitability of the mobile services acceptance model for predicting students' adoption behavior with a newly developed mobile information service at a university campus setting is worthy of examination.

Research Model and Hypotheses

A research model that identified some major factors as significant antecedents of users' intention to use of mobile services was developed in [5]. The proposed mobile services acceptance model (see Figure 1) is an extension of TAM, with a consideration of trust, context, and personal initiatives and characteristics factors in addition to perceived ease of use and perceived usefulness, to study the user adoption of mobile services. Table 1 summarizes the definition of the constructs in the mobile services acceptance model.
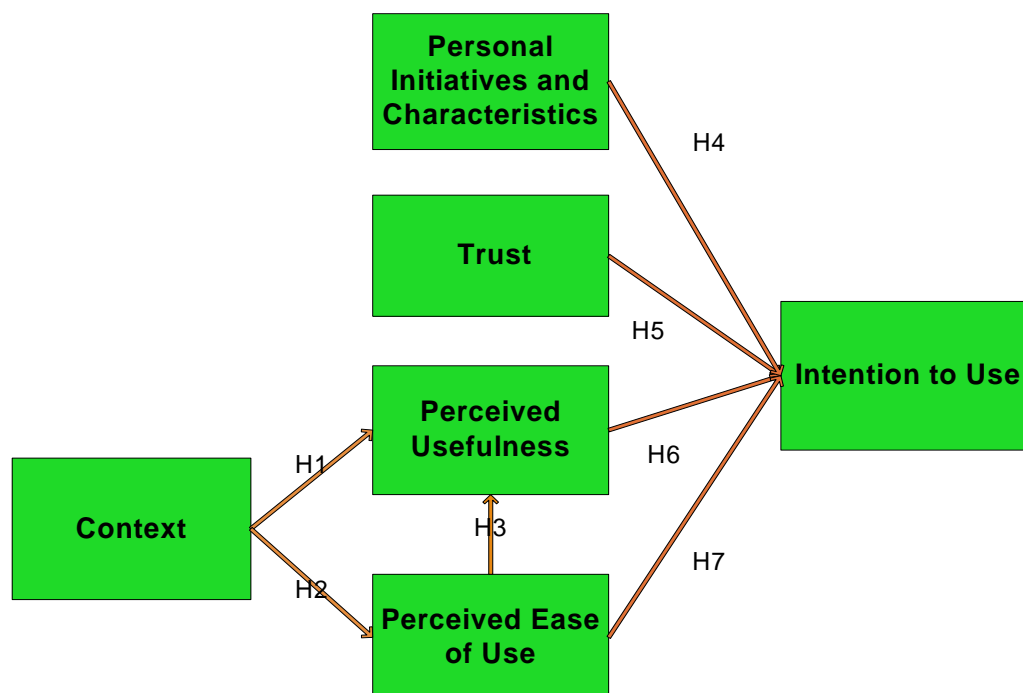

Figure 1. Mobile Services Acceptance Model

Table 1. The definitions of the constructs

Construct	Definition	Reference
Context	Any information that can be used to characterize the situation of entities that are considered relevant to the interaction between a user and an application, including the user and the application themselves.	[27]
Personal Initiatives and Characteristics	The user's willingness to experiment with new services.	[5]
Trust	The user's beliefs or faith in that a specific service can be regarded to have no security and privacy threats.	[5]
Perceived Ease of Use	The extent to which a person believes that using a particular system would be free from effort.	[6]
Perceived Usefulness	The degree to which a person believes that using a particular system would enhance his or her task.	[6]
Intention to Use	The user's likelihood to engage the mobile service.	[6, 12]

Research Hypotheses
We developed seven research hypotheses based on the research model. Each hypothesis as labeled in Figure 1 is elaborated below.

Context
A unique attribute of mobile services is that it can be used in varieties of contexts, which can deliver some services that traditional E-business couldn't provide. Users' perception on mobile services varies in different contexts. In [28], the authors argued the importance of context towards mobile services adoptions. With various contexts, a mobile service will be perceived differently with regard to ease of use and usefulness. Users see more potential to use mobile services on mobile devices in an ever changing environment or an emergent situation. Thus, they should perceive a mobile service as more useful in this context. This is in line with the research finding [29] that enabling mobile devices and services which can adapt to the changing environment will enhance user experience. Mallat et al. [30] found that the use situation of the mobile ticketing services has a significant effect on users' intention to use such services. In [24], the author proposed a new concept contextual perceived usefulness by combining context and perceived usefulness to investigate mobile commerce acceptance. In our research, we investigate to what extent context affects perceived usefulness and perceived ease of use directly. Thus, we propose the following hypotheses:
H1. The appropriate context has a direct positive effect on Perceived Usefulness of mobile services.
H2. The appropriate context has a direct positive effect on Perceived Ease of Use of mobile services.

Personal Initiatives and Characteristics
Prior research indicated that personal innovativeness is an important indicator for user acceptance of IT/IS [31] [32] [33]. By extending the concept of personal innovativeness, we proposed a new construct, named personal initiatives and characteristics, aiming to better

address the effects of individual difference toward user acceptance of mobile services.

With regard to adoption of mobile services, many people may not want to take the initiative in trying advanced mobile services since they do not have any knowledge or experience with such services. Personal initiative is also closely associated with individual characteristics. Individual characteristics, such as curiosity and perceived enjoyment, may strongly enhance users' perception of mobile services and lead to positive attitudes toward mobile services. Generally, people with strong positive personal initiatives and characteristics are more likely to try new technologies, thus it is reasonable to expect them to have positive intentions to use mobile services. Moreover, people's attitudes toward innovations have been used to predict the adoption of mobile commerce [34]. Therefore, it is believed that personal initiatives and characteristics may well serve as a key determinant for acceptance decision of mobile services and have the potential to directly affect intention of use. Based on this, we posit the following hypothesis:
H4. Personal Initiatives and Characteristics have a direct positive effect on Intention to Use of mobile services.

Trust
Users may feel threatened when the technology has the capability to track users' actions and store personal information outside the users' control. Several factors can lead to unauthorized access of users' personal information: hacking, security defects, accidental disclosure, etc. A potential adopter usually wants to maximize benefits and minimize risks. On one hand, in order to provide personalized services, mobile services provider may need to locate users' position and collect users' profiles. On the other hand, users would like to obtain desired mobile services by disclosing minimum personal information. Therefore, we believe trust concerns represent a great issue towards mobile services adoption. In other words, trust is a significant antecedent of participation in

the activities involved in mobile services. Trust can help reduce the uncertainties a user faces when using mobile services.

In [35], Gefen et al. extended TAM with trust in the service provider to study user acceptance of online shopping. They found that trust-related issues have a considerable effect on user acceptance of online shopping. Since context-aware mobile services often need to collect information about the user, it is crucial for users to pay more attention to trust related issues, such as privacy, security, etc. Building users' trust is also a continuous process. As users get used to mobile services, the reliability of mobile services become more important to accumulate users' trust or believability in such services. Consequently, to better explain the importance of trust towards mobile services adoption, we propose the following hypothesis:

H5. Trust has a direct positive effect on Intention to Use mobile services.

Perceived Usefulness (PU)

Perceived usefulness originally refers to job-related productivity, performance, and effectiveness [6]. A number of researchers have examined the TAM model for various information systems and technologies, including the World Wide Web (WWW) [36], Intranet [13], wireless internet [37], desktop video conferencing in virtual workgroups [38], etc. In those studies, PU was found to have a strong effect on technology adoption. The empirical findings in those studies demonstrate the importance of PU on intention to use the technologies. Assuming that the TAM model is viable for explaining adoption perception, we thus hypothesize:

H6. Perceived usefulness has a direct positive impact on intention to adopt mobile services.

Perceived Ease of Use (EOU)

Borrowed from TAM, perceived ease of use refers to "the degree to which the prospective user expects the target system to be free of effort". This belief associates to an individual's assessment of the mental effort involved in using a system. EOU reflects how difficult it will be to use a new technology or system. Venkatesh [39] proclaimed that for any emerging IT/IS, perceived ease of use is an important determinant of users' intention of acceptance and usage behavior. According to a survey [40] done by Embedded Solutions among 800 professionals in England, ease of use is among the top five factors for determining the use of wireless handheld devices. This was also confirmed by other studies on mobile data services and mobile commerce [31] [41].

Further, in the original TAM model, Davis [6] proposed that perceived ease of use affects perceived usefulness. There is extensive empirical evidence that perceived ease of use positively influences perceived ease of use [18]. In [42]. The author also found that this relationship holds true for website usage in an internet environment.

Mobile services are provided on mobile devices such as smart phones and PDAs. The limitations of mobile devices may have the potential to affect users' perceptions of ease of use of mobile services. The limitations include the small keyboard, the small screen, battery capability, slow network connections, CPU speed. Improved ease of use of mobile services by taking these limitations into consideration would have positive impacts on both perceived usefulness and users' acceptance of mobile services.

To keep in line with the existing literature in mobile services diffusion, we thus hypothesize:

H3. Perceived Ease of Use of mobile services has a direct positive effect on Perceived Usefulness of mobile services.

H7. Perceived ease of use has a direct positive impact on intention to use mobile service.

An Empirical Study in eMSIS

eMSIS [43] is an extended system built upon MSIS [44] which was developed at a Norwegian University. The main purpose of eMSIS is to offer a number of mobile services that can assist students in their daily study-related activities on the university campus.

Some main functions provided by eMSIS are listed as follows:

- Twitter: Allow students to follow courses updates, student activities and fellow students in a university setting. Users can share and discover what's happening with studying-related matters through the Twitter Service of eMSIS.
- Feeds: Allow students to keep updated with university news and course announcements by subscribing feeds provided by the university and the course instructor.
- Project Collaboration Service: Allow the students of a project/assignment to communicate with each other anytime anywhere.

Figure 2 shows screenshots of the feeds service and the project collaboration service of eMSIS as they appear on a Windows Mobile 6 Professional emulator.

eMSIS is selected as the mobile information service in this experiment for at least three reasons: first, some testing scenarios have been prepared for individual testing, which is unlike most previous mobile services diffusion studies which focused on people's perceptions on general mobile services. Second, eMSIS is more or less similar to some other mobile information services on the

commercial market. Third, this study use students who are using technology by their own free will in a university campus setting, which is unlike some

previous studies on technology diffusion, where the use is mandatory and in an organizational setting.

Figure 2. The Screenshots of eMSIS

Sample

A lottery with two HTC Touch devices were included as incentive to attract students to participate in this experiment. We recruited the experiment subjects by posting announcements to a number of student mailing lists. Students from several departments, studying for an undergraduate program or a graduate program, were invited to participate in the experiment of using the eMSIS mobile service running on a HTC Touch Mobile device. Our postings explained who we were, what they are supposed to do during the eMSIS experiment, and the purpose of the experiment. The participants were also informed that the results would be reported only in aggregate and that their anonymity would be assured. We got responses from 46 students that confirmed to participate in the experiment. The demographic information of the respondents is summarized in Table 2. The subjects in this test were from different cultures and educational backgrounds. This diversity among the subjects was expected to produce a more balanced view.

Survey Instrument

The validated instrument measure in [7] were used as the foundation to create the instrument for this study. In order to ensure the instruments better fit the specific mobile service experiment, some minor words changes were made to ensure easy interpretation and comprehension of the questions in the instrument. In addition, we also included three additional items in this study based on

suggestions from some fellow researchers in the technology diffusion community.

As a result, 25 measurement items (see Appendix 1) were included in the instrument survey. Seven-point Likert scales, with 1 being the negative end of the scale (strongly disagree) and 7 being the positive end of the scale (strongly agree) were used to examine participants' responses to all items in the survey.

Table 2. Demographic Information of the Subjects

	Amount	Percent
Gender		
Male	36	78.3
Female	10	21.7
Age		
Less than 20	1	2.1
20-29	36	78.3
30 or Over	9	19.6
Department		
Science or Engineering	39	84.8
Others	7	15.2
Educational Level		
Undergraduate Students	8	17.4
Graduate Students	38	82.6
Experience with Mobile Services		
0-1 Year	11	23.9
2-5 Years	16	34.8
More than 5 Years	19	41.3
Geographical background		
Norway	18	39.1
Africa	6	13.1
Asia	22	47.8

Data Collection Procedure

A paper based survey questionnaire was created to enable rapid onsite distribution during the experiment. Prior to completing the questionnaire, all participants were provided with an information sheet describing the mobile service - eMSIS and a mobile device having eMSIS installed. In this manner, all participants got some basic ideas about the mobile service. After using the eMSIS system in two of the four specified realistic scenarios in the university campus environment for 45 minutes, the questionnaire was distributed to all participants. The first scenario uses the twitter service. The second scenario uses the feeds service at the university. The third one uses course related documents downloading or uploading. The last scenario is using project collaboration service in a specific project based course. After filling out the questionnaire, the participants returned the completed survey to us.

Descriptive Results

Some key findings from the descriptive results is summarized here. The mean value for the measurement item (PU4) was 5.52. 38 respondents agreed that the eMSIS system would be useful for them as students, while six respondent did not know if it would be useful and two respondents somewhat disagreed that the eMSIS system would be useful.

According to the results, most respondents thought that they did not have any problems with learning to use the eMSIS system (EOU 1). 21 of the 46 respondents (45.7%) strongly agreed that it would be easy for them to learn how to operate the eMSIS system. According to our observation on participants' behaviour during the experiment, we found that most Norwegian students were able to finish the assigned tasks quite quickly without asking any help from the instructors.

The most important factor in the construct 'Trust' concerns the privacy issues (TU 3). The least important item in the construct 'Trust' is the system provider and service provider (TU2). This can be partially attributed to the fact most students thought that the reputation of the system provider (the university) is good.

Among all measurement items, the students were least concerned about the measurement item "using the eMSIS can be considered as a social status symbol among friends" (PIC 5). But it is still worth to notice that some respondents from Asia and Africa strongly agreed with this statement. The mean value for this item might have turned out differently if the mobile service is tested in Asia or Africa. In many Asian countries, young people often treat using smart phones and mobile services as a new fashion show-off in public. Owing high-end smart phones can also be considered as a symbol of high social status.

It is also interesting to note that 39 respondents agreed that they do need encouragement from the university to use the eMSIS system.

Data Analysis

To test the reliability and validity of each construct in the mobile service acceptance model, the Internal Consistency of Reliability (ICR) of each construct was tested with Cronbach's Alpha coefficient.

For the purposes of testing the research hypotheses, partial least squares (PLS) analysis was used. PLS is a regression-based technique, with roots in path analysis [45-46]. It has emerged as a powerful approach to studying causal models involving multiple constructs with multiple measures [47]. PLS allows people to do a combined regression and principal components factor analysis within the same statistical technique. In this study, the collected data was analyzed using the statistical software Smart PLS 2.0 and SPSS Version 17.

Test of Measures

The Internal Consistency of Reliability (ICR) of the measurement model was accessed by computing Cronbach's Alpha coefficient. Table 3 displays the reliability coefficients for each of the constructs in our measurement model.

The Cronbach's Alpha values range from 0.652 to 0.916. All the constructs but the construct Trust is above 0.700. The lower reliability for the construct Trust can be partly attributed to the large number of measurement items in the scale. According to previous research work [48], a reliability coefficient of 0.6 is marked as a lowest acceptable limit for Cronbach's Alpha for exploratory research. Moss [49] also suggested that an alpha score of 0.6 is generally acceptable. All Cronbach's Alpha values of the constructs in our model are above threshold 0.6. Consequently, the scales were deemed acceptable to continue.

Table 3. Reliability Analysis of Constructs

Constructs	Number of Items	Cronbach's Alpha
Context	4	0,732
Intention to Use	2	0,916
Perceived Ease of Use	4	0,805
Perceived Usefulness	4	0,827
Personal Initiatives and Characteristics	5	0,842
Trust	6	0,650

Structural Measurement Model

Figure 3 presents the structural measurement model using the PLS algorithm. The number in the circles in Figure 3 means R^2 (R square), which denotes to coefficient of determination. R^2 provides a measure of how well future outcomes are likely to be predicated by the model, the amount of variability of a given construct. In our PLS analysis, the R^2 coefficient of determination is a statistical measure of how well the regression coefficients approximates the real data point. The amount of variance in Intention to Use explained by the model was 0.663. The explained variance of Perceived Usefulness factor is 32.5%. The percentage of variance explained for Perceived Ease of Use is 21.4.

Table 4 shows the path coefficients, which are standardized regression coefficients, generated from the PLS analysis. As such, the seven hypotheses were supported. In addition, all the seven hypotheses were statistically significant ($p<0.05$ or $p<0.01$).
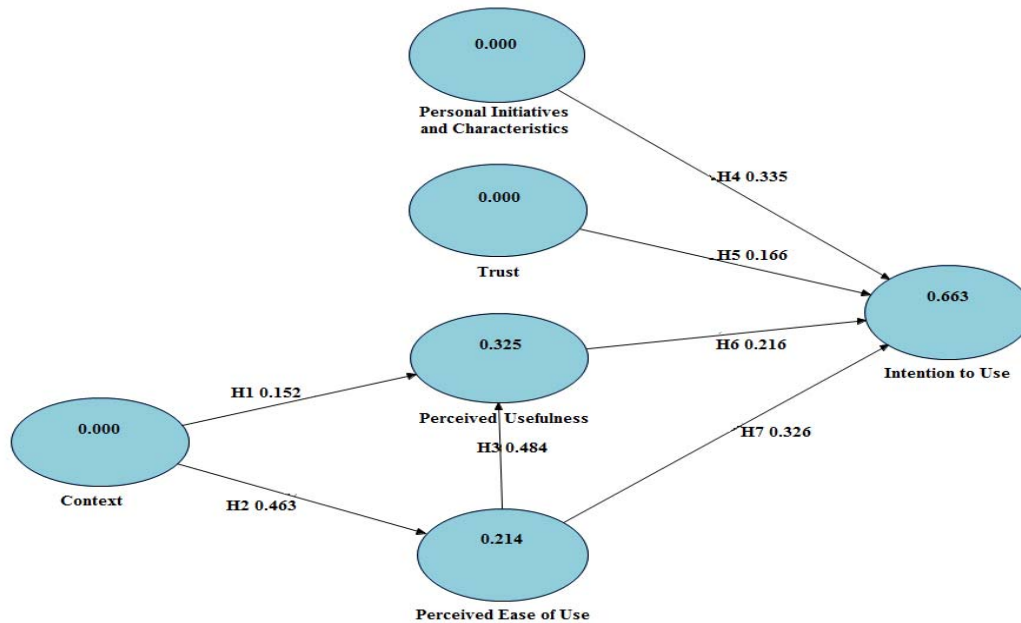

Figure 3. The Structural Model

Table 4. Test of Hypotheses based on Path Coefficient

Hypothesis	Path Coefficient	T value	Hypothesis Result
H1. Context to Perceived Usefulness	0.152**	8.335	Supported
H2. Context to Perceived Ease of Use	0.463**	7.828	Supported
H3. Perceived Ease of Use to Perceived Usefulness	0.484**	5.623	Supported
H4. Personal Initiatives and Characteristics to Intention to Use	0.335**	3.927	Supported
H5. Trust to Intention to Use	0.166*	2.607	Supported
H6. Perceived Usefulness to Intention to Use	0.216*	2.104	Supported
H7. Perceived Ease of Use to Intention to Use	0.326**	6.850	Supported

* $p < 0.05$
** $p < 0.01$

Discussion

The findings of this empirical study provide some insights to both researchers and practitioners. On one hand, from an academic perspective, this study contributes to the literature on mobile services adoption and diffusion by identifying and validating the potential factors affecting the adoption of mobile information services. The findings demonstrated the appropriateness of the research model and hypotheses for measuring mobile services adoption. On the other hand, from a business perspective, the statistic results of the research model also provided some insights for practitioners to better design and develop mobile services with higher user acceptance.

With regard to the mobile information service used in our pilot study, most previous empirical studies on mobile services adoption and diffusion focus on simple mobile services, such as mobile instant messaging, voice communication, and mobile web browsing. What sets us apart from previous studies is that we empirically tested our research model and

hypotheses in a relatively advanced mobile information service with the possibility to provide personalized services and location-based services, which were supposed to provide some new implications for mobile service providers and developers to develop better mobile services to attract more users to adopt the services.

The result showed that the most important determinant for intention to use is Personal Initiatives and Characteristics. Since most subjects in this study have certain level of mobile computing knowledge and experience with mobile services as shown in the statistics in Table 2, it seems easy for them to obtain the willingness to adopt newly developed mobile services. And this construct played a more important role then perceived usefulness in predicting students' adoption of eMSIS. The possible reasons are as follows. A number of advantages in using mobile services (such as convenience, fun, etc) might entice users to adopt them even though some functions in the mobile service are perceived not to be very useful. For instance, during the course of the experiment, some participants expressed excitement and joy while using the eMSIS system. They might conceived that the entertainment factor which is one of candidate items in the construct Personal Initiatives and Characteristics was more important than actual usefulness of the system. However, this does not mean that the eMSIS system is not useful. It is merely an indication that the perceived usefulness might not be a deterministic factor to the intention to use for the specific respondents in this test. This is also in line with the ideas behind our research model that some other factors in addition to perceived usefulness and perceived ease of use may also strongly affect users' adoption of mobile services.

Another finding indicated that the construct Trust has a positively direct effect on intention to use. This demonstrated that trust is one of the most important factors to positively influence customer's intention to use mobile services. The higher the user trust the system and provider of the system the higher the intention to use will be.

It was also found that the relevant context positively affects perceived usefulness and perceived ease of use directly. This finding was in accordance with the results of [50], which pointed out that context has a significant effect on both perceived usefulness and perceived ease of use.

This study also provided some practical implications. The results of this empirical test can provide guidelines and suggestions to mobile services providers and developers in providing appropriate services to users in various contexts. The findings suggested that users need the right mobile service in the right context at the right time. Mobile services providers and developers should improve their understanding of trust-related concerns and personal preferences and characteristics of the target users and users in order to fulfill the users' expectations. Being aware of the proposed factors affecting mobile services

adoption in our research model would help the mobile service providers to set them apart from their competitors in developing mobile services.

However, we are also aware of some limitations of this work. Firstly, we only tested the research model and hypotheses on a single mobile information service. Therefore, the generalizability of the results to other mobile services remains to be determined. In addition, the findings of this study may be limited due to the relatively small sample size. Last but not least, the subjects in this study were students, so that this sample may not fully representative of the entire population.

Conclusion

This study was designed to explore mobile information services adoption from university students' perspective. A research model based on previous technology acceptance models and seven research hypotheses were presented and empirically tested. From a survey with 46 users of eMSIS, we found that personal initiatives and characteristics, trust, perceived usefulness and perceived ease of use are key determinants for the users to adopt eMSIS. Context via perceived usefulness and perceived ease of use has an indirect affect on intention to use. The results indicated that the fitness of the research model is good and all the seven research hypotheses were supported.

Concerning future research, a longitudinal study is another opportunity to re-validate the research model. By choosing a longitudinal method, the research can more closely examine the change in user reaction over time. Another possible extension to this research is to examine the applicability of the research model to other mobile services.

Appendix 1

Measurement Items
Perceived Usefulness (PU)
PU1. Using the system would increase the efficiency of my daily work.
PU2. The system would allow me to retrieve relevant events and news at NTNU.
PU3. The system would allow me to better plan and organize my activities at NTNU.
PU4. The system would be useful for me as a student.
Perceived Ease of Use (EOU)
EOU1. Learning to operate the system would easy for me.
EOU2. I would easily find the information I am looking for using the system.
EOU3. I would find the system to be flexible to interact with.
EOU4. I would find the system to easy to use (user-friendly).
Trust (TU)
I could use the system…
TU1. if I have a clear conception of the functionality of the system.
TU2. if the system provider(e.g. NTNU) and the software developers is widely acknowledged.
TU3. if the system protects the privacy of its users .
TU 4. if I feel confident that I can keep the system under control.

TU 5. if I feel confident that the data returned by the system is reliable.

TU 6. if I believe it is risk-free to use the system.

Personal Initiatives and Characteristics (PIC)

PIC1. I have fun using the system.

PIC2. I prefer to be the first one using the system.

PIC3. Using the system gives me an advantage over those who don't.

PIC4. I find it rewarding to use the system.

PIC5. Using this mobile system can be considered as a social status symbol among my friends.

Context (CT)

I could use the system…

CT1. if I am being out of home or the office.

CT2. if the University encourage students to use the system.

CT3. if it is meaningful/relevant to my daily tasks.

CT4. if I did not have access to a desktop computer or laptop.

Intention to Use (IU)

IU1. Assuming I have access to the system, I intend to use it.

IU2. Given that I have access to the system, I predict that I would use it.

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