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THESIS:

Factors of Adopting Mobile Commerce in Kosovo

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Tetovo, March 2018

I hereby declare that I am the sole author of this thesis. All sentences cited in this thesis from other articles and books have been properly cross-referenced.

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DECLARATION

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Abstract

In recent years, use of smart phones has had enormous growth. With this we realize that mobile commerce or purchasing online through smart phones has become a very important field around the world. In the Republic of Kosovo adoption of mobile commerce is still low. Many different factors have influence on mobile commerce. The purpose of this study is to find the most important factors that influence the adoption of mobile commerce in Kosovo's context. Service providers, businesses and organizations need to pay special attention to these factors before taking adoption decisions. The results obtained in this study were made through a questionnaire where the 159 participants were surveyed and statistical analyses have confirmed three hypotheses based on the literature review. We identified three most important factors: Ease of use, Trust and Usefulness which are statistically significant on mobile commerce adoption. From results we have seen consistence with some factors that have been identified in different places around the world, but also contrasts with other factors that affect mobile commerce adoption.

Abstrakt

Në vitet e fundit, përdorimi i telefonave të mençur ka një rritje të madhe. Me këtë ne kuptojmë se mobile commerce ose blerja online përmes telefonave të mençur është bërë një fushë shumë e rëndësishme në mbarë botën. Në Republikën e Kosovës miratimi i mobile commerce është ende në nivel të ulët. Shumë faktorë të ndryshëm kanë ndikim në mobile commerce. Qëllimi i këtij studimi është gjetja e faktorëve më të rëndësishëm që ndikojnë në miratimin e mobile commerce në kontekstin e Kosovës. Ofruesit e shërbimeve, bizneset dhe organizatat duhet të i kushtojnë vëmendje të veçantë këtyre faktorëve para marrjes së vendimeve për miratim. Rezultatet e mbledhura në këtë studim janë bërë përmes një pyetësori ku 159 pjesëmarrës u anketuan dhe analizat statistikore kanë konfirmuar tri hipoteza bazuar në shqyrtimin e literaturës. Ne identifikuam tre faktorë më të rëndësishëm të cilët janë: Lehtësia e përdorimit, Besimi dhe Dobia, të cilët janë statistikisht të rëndësishëm në miratimin e mobile commerce. Nga rezultatet ne kemi parë përputhje me disa faktorë që janë identifikuar në vende të ndryshme

anembanë botës, por gjithashtu ndryshim me faktorë të tjerë që ndikojnë në miratimin e mobile commerce.

Абстракт

Во последно време, користењето на паметни телефони доживеа огромен развој. Базирано на претходното, мобилната комерција или купувањто преку Интернет стана многу важно поле во целиот свет. Во Република Косово усвојувањето на мобилната комерција е сеуште на ниско ниво. Различни фактори влијаат на мобилната комерција. Целта на оваа студија е да се најдатм најважните фактори кои влијаат на усвојување на мобилната комерција во контекст на Косово. Обезбедувачите на сервиси, бизнисот и организациите треба да обрнат посебно внимание на овие фактори пред да донесат одлуки усвојување. Резултатите добиени од оваа студија се добиени од прашалници од 159 учесници, и статистичка анализа потврди три хипотези базирани на постоечката теорија. Идентификувавме три најважнифактори: лесно користење, доверба и корисност кои се статистички сигнификантни во прифаќањето на мобилната комерија. Резултатите се конзистентни со фактори кои се идентификувани во други истражувања, но се во контраст со други фактори кои влијаат на усвојувањето.

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1 INTRODUCTION

1.1 Introduction

With the development of Internet and users experience with the mobile devices, mobile commerce market seems to be the most profitable and promising market (Lee & Wong, 2015).

The development of mobile commerce nowadays has a big influence in different kind of industries. The term Mobile commerce was created by Kevin Duffey in 1997 by presenting on the Global Mobile Commerce Forum: "the delivery of electronic commerce capabilities directly into the consumer's hand, anywhere, via wireless technology" (Jain, 2015, p. 712).

In this research I will present factors and problems that affect the development and acceptance of Mobile commerce in Kosovo, whereby data will be collected from ordinary users. Knowing that the use of mobile phones nowadays has become the most useful device in our lives, I am trying to study the technological achievements of mobile commerce and the possibilities of increasing the usage by providing and offering services via mobile technology in Kosovo.

Number of active users in Kosovo who were accessing the Internet or have completed an event data with smartphones and during that time have been connected to the 3G network were 244.166 in 2014 (Regulatory Authority of Electronic and Postal Communications-(RAEPC), 2014, p. 14).

Kosovo is a new country and development of the economy and e-commerce has begun to develop in recent years. Still the implementation and usage of Mobile commerce is on a lower level compared to other Balkan countries, such as Macedonia. According to Sanja Bozik (2013) from the Agency of electronic communication in Macedonia, in 2012 mobile internet users (2G/3G) was 446.288, or 20% of the total population in Macedonia.

Based on Figure 1 we can see the number of Macedonian mobile users in 2010 and end of the 2011 (Ivanovski, 2011).
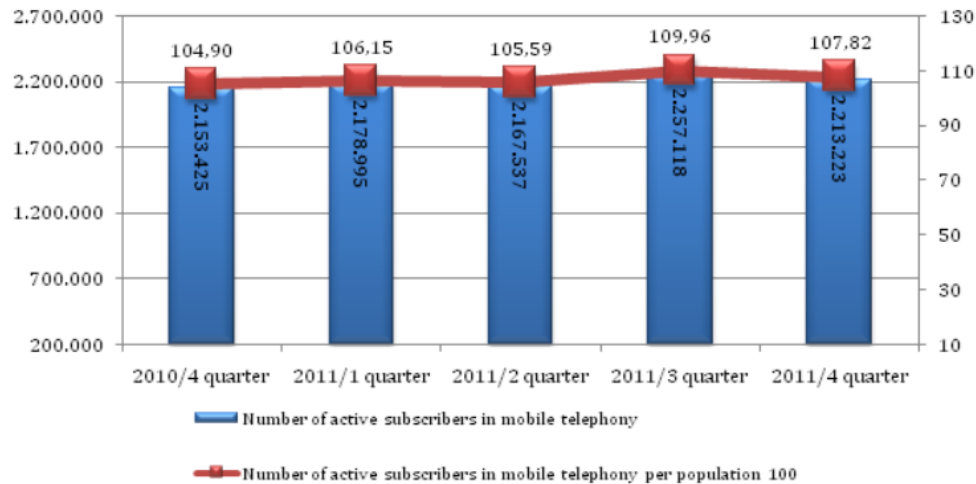
Figure 1. Macedonian mobile users 2011

It is expected that in 2018 the Internet traffic will exceed from users of different types of computers to the mobile users for the first time in history (Cisco Visual Networking Index, 2016). Therefore, all this means that mobile commerce will be an important factor in economic and business developments in the future.

The number of Internet users in Kosovo is 1,102,999 users, while the number of users of mobile phones in 2016 has reached 1,762,611 users. While Mobile Internet access (Mobile broadband) - Internet via 3G and 4G has reached 878.703 users and Internet via GPRS/EDGE has reached 474.888 users who marks an increase from previous years (Regulatory Authority of Electronic and Postal Communications, 2016).

1.2 Aims of the Research

Main objective of this study is to analyze and describe factors and obstacles that affect the adoption of mobile commerce in Kosovo. Another purpose of this study is that after I have completed the analysis, I will have the opportunity to present the possibilities and factors that affect adoption of mobile commerce for any organization or company which has interests in this area, while considering the gaps and priorities in this field to develop further.

Mobile commerce is a network connection derived from e-commerce services, which is used by mobile phones, PDA-s, tablets etc. The idea of developing Mobile commerce is to make it easy for usage and speed up the procedures of the various types of shopping and services, offering customers ease of use and high security in their transactions. I will explain the latest technology developments in Kosovo, ranging from expansion of internet users, mobile users, internet mobile users, the use of e-commerce and explore mobile commerce in Kosovo.

I want to find the significant factors that have influence on adopting the mobile commerce, therefore I want to compare and contrast the results with the other studies in different countries. The focus of this research is in the ordinary users in Kosovo's context. To fulfill the research aims I have used mixed-method for assembling and gathering statistics extracted from survey and conducting interviews with ordinary users in Kosovo.

1.3 Importance of the thesis

The results from this study offer information to mobile commerce service providers in Kosovo about factors which may affect the adoption of mobile commerce. Results present insights into the mobile commerce environment in Kosovo with comparison to other countries. Also it help businesses to adapt their business or their IT strategies to increase the effectiveness and efficiency of mobile commerce.

This study also presents the section on prediction, which is very important for adopting mobile commerce, where this study is useful for different type of organizations or companies that need information about adoption of mobile commerce and think of implementing mobile commerce, such as to increase knowledge more on this field and finally to have different benefits starting from gaining customers and increasing profits. In this study companies and organizations will be able to find the most important factors that influence mobile commerce, tips that should be taken and the gaps on this field.

The topic of mobile commerce adoption is very important and adequate for the countries such as Kosovo which is developing every day, and knowing that this study is conducted in a timely manner to the Kosovo's environment. On the material below is described the theoretical part in a wide context which explains factors of mobile commerce adoption around the world.

2 LITERATURE REVIEW AND HYPOTHESES

The model that we propose to help in answering the research questions, about factors that influence mobile commerce adoption, is based on the extant literature. For each factor I present theoretical background that supports the stated hypotheses. I will present first the dependent variable that is focus of my research, i.e. behavioral intention to adopt mobile commerce. Then, based on the literature, I adopt a few factors that are relevant for my study.

2.1 Dependent variable

Behavior intention explains consumer willingness and readiness to use services of mobile commerce. Based on Peña & Brody (2014) and Ajzen (1991), I have decided that behavior intention will be one of the dependent variables in this study. Behavior intention is defined as "a perceived notion between oneself and some action" (Liang, Illum, & Cole, 2008, p. 13).

Theory of Reasoned Action (TRA) suggests that attitude is able to affect the human behavior intention. Therefore based on TRA, attitude contains attitudinal beliefs about decisions that users take to explain behavior intention, which is oriented toward the final selections of the users (Ajzen, 1991). In some of the studies the attitude was not included for example in Davis (1989), and Davis, Bagozzi & Warshav (1989), because attitude in the different type of situations had a less influence on behavior intention.

Based on the previous studies from different authors, it is found that personalized products and services are linked together to achieve the consumers requirements, which could enhance consumers intention (Tong, Wong, & Lui, 2012). As above I have found that effect of personalized services in the area of the mobile commerce, where perception of consumers are more expected to influence behavior intention than attitude for using mobile commerce (Ko, Kim, & Lee, 2009).

Articles of electronic commerce described that consumer's satisfaction or affect gained while shopping online can influence consumer's attitudes to online shopping (Childers, Carr, Peck, & Carson, 2001). Also attitude while shopping online is defined as "consumer's positive or

negative feelings related to accomplishing the purchasing behavior on the Internet" (Jusoh & Ling, 2012, p. 2).

Consumer attitude is one of the important factors for using online shopping (Balabanis & Reynolds, 2001). It is described that consumers attitude can be influenced by frequency and duration of mobile devices for using mobile commerce (Bigné, Ruiz, & Sanz, 2007).

Ko et al. (2009) published an empirical study for the relationship between attitude and behavior intention related to mobile commerce. Users who are familiar with mobile commerce are more expected to influence attitude of mobile commerce adoption (Khalifa & Cheng, 2002).

Based on the previous literature review, for my research I adopt behavioral intention to adopt mobile commerce as a dependent variable.

The next section explains the independent variables.

2.2 Independent variables

Usefulness was used by Davis (1989) as an instrumental form in Technology Acceptance Models (TAM). TAM is a theory of information system adoption which models how users will use and accept technology. It is defined as the degree to which a person believes that engaging in online transactions via mobile commerce would increase his or her performance (Davis, 1989). Two factors are part of the TAM: usefulness and ease of use.

Usefulness also was used as a model in different types of technologies and systems, like in technology acceptance models (Im, Kim, & Han, 2007; Sun, Wang, & Cao, 2009; Wang, Lo, & Fang, 2008; Wu & Wang, 2004), on mobile commerce (Min, Ji, & Qu, 2008) and also in mobile payments (Chen, 2008).

Usefulness has a positive effect on mobile commerce (Kim, Chan, & Gupta, 2005). Usefulness is one of the most important factors in technology adoption, while intention and ease of use increase the usefulness to the users (Cheong & Park, 2005; Luarn & Lin, 2005; Wu & Wang, 2004; Wang, Lin, & Luarn, 2006). Therefore, we state the following hypothesis:

H1: Usefulness has a positive impact on user's intention to use mobile commerce.

Another important factor is the ease of use, hence the management of firms that use mobile commerce services should orient the software developers to create a good interface for easy use rather on technical issues, where users will have difficulties by using it.

As usefulness, the ease of use has been used in different technology acceptance models. Davis (1989, p. 2) defines ease of use as "the degree to which a person believes that using a particular system would be free of effort".

Based on the articles above I have found a relation between usefulness and ease of use as a crucial factor that can increase consumer's behavior intention. In different articles, adoption models seem to have positive influence on usefulness and ease of use starting from Aldas-Manzano, Ruiz-Mafe, & Sanz-Blas (2009), Sun, Wang, & Cao (2009) and Wu & Wang (2004), and also in different technology acceptance models (Im, Kim, & Han, 2007; Polancic, Hericko, & Rozman, 2010; Wang, Lo, & Fang, 2008; Yi, Jackson, Park, & Probst, 2005). Also ease of use has been used as a model in different types of technologies and systems, like in technology models (Im, Kim, & Han, 2007; Sun, Wang, & Cao, 2009; Wang, Lo, & Fang, 2008; Wu & Wang, 2004), in mobile commerce and mobile payments (Min, Ji, & Qu, 2008; Chen, 2008).

Based on the studies above, the ease of use has positive influence on behavior intention to use specific technologies. Therefore, referencing to behavior intention to use mobile services we state the second hypothesis:

H2: Ease of use has a positive impact on user's intention to use mobile commerce.

Compared to e-commerce, mobile commerce is exposed to a higher danger of security. Thereby, trust is a very important factor in mobile commerce (Min, Ji, & Qu, 2008; Wei, Marthandan, Chong, Ooi, & Arumugam, 2009).

Pavlou (2003) declared that trust in e-commerce is the belief that allows consumers to voluntarily become reachable for online retailers after having the retailers' characteristics and involving their personal selections to trust and belief.

As described on mobile commerce user acceptance in China, trust was separated in two parts: in technology and service providers (Min, Ji, & Qu, 2008). Trust in technology is linked with

payment systems (standards of transactions, protocols and security of mobile devices) (Misra & Wickamasinghe, 2004). Trust in service providers is linked with the ability of users perception to service providers competencies, integrity (users perception of service providers rules and principles of exchanges) (Bhattacherjee, 2002).

Trust, in this study, sometimes refers to security in mobile payments for example where sending credit card names and numbers which is called confidentiality, or to the integrity of using mobile services, which means that only authorized users can access or modify the data.

Trust has a positive influence on consumer's behavior intention based on a few articles (Min, Ji, & Qu, 2008; Pavlou, 2003; Wei, Marthandan, Chong, Ooi, & Arumugam, 2009; Suh & Han, 2002; Gefen & Straub, 2003). Separately from the other authors Pavlou (2003, p. 7) described that "trust reduces behavioral uncertainty related to the actions of the Web retailer, giving a consumer a perception of some control over a potentially uncertain transaction". Ha & Stoel (2009) showed that trust has influence on intention to electronic shopping through usefulness. In this study I state the following hypothesis:

H3: Trust has a positive impact on user's intention to use mobile commerce.

Privacy is defines as "the ability of an individual to be able to determine for themselves the circumstances and extent that information about them is exposed to others" (Kruelle, Swatman, Rebne, & Hampe, 2002, p. 6).

Privacy is one of the obstacles to electronic commerce which represents the control of transaction between users and others which are usually the websites (Lallmahamood, 2007). Different type of studies such as Dinev & Hart (2006) described that privacy is very important variable of behavior and online usage. Privacy has appeared as a critical factor for systems in areas as e-commerce (Cranor, 2003).

Privacy priorities and concerns are influenced by social circumstances and sometimes difficult to merge, where the circumstances are examined and referenced from a specific situations (Iachello & Hong, 2007).

When a company or a government loses sensitive data, personal records or information, it is an incident of a security breach which is described as privacy (Bishop, 2003). Therefore, users will not use the mobile commerce services if the privacy protection it is not in a proper security (Sadi & Noordin, 2011).

Based on the previously presented theory, I want to test the following hypothesis:

H4: Privacy concerns have negative impact on user's intention to use mobile commerce.

The term security gives organizational and technical maintenance for mobile commerce and prevent manipulations and frauds, secures transactions and saves authentication (Siau & Shen, 2003).

Some of the elements that security consists in Mobile commerce are: confidentiality, integrity and availability. Confidentiality prevents exposure of information's to unauthorized systems or individuals (Trivedi, Kim, Roy, & Medhi, 2009). Integrity is when all the information's or data's are stored and transferred as intended, where any modification to the data or information's would be identified and detected as breach of integrity (Boateng & Osei, 2013). Availability means that information is accessible by authorized users, where systems and networks are available all the time (Boateng & Osei, 2013).

Based on article Taha (2011) and Ho and Lin (2010), security concerns affect negatively intention of electronic shopping. Based on the findings from the article by Feng et al. (2006) done in Thailand analysis were made about WAP service and security using 3G Internet services. The results have shown that core obstacles were on the WAP services, on slow speed of transfers and low usage. Also in this article the key success factors are shown starting from payment methods, data transfers speed, price of mobile devices, customer knowledge of using mobile commerce, applications and its development and marketing. Necessary infrastructure for making a good working mobile commerce technology is using at least 3G of internet.

I state the following hypothesis related to the factor security:

H5: Security concerns have negative impact on user's intention to use mobile commerce.

Compatibility is defined as the degree to which an innovation is consistent with the past experiences and needs of potential adopters. Compatibility as a variable is a critical factor for consumer adoption decision (Manzano, Mafé, & Blas, 2009, p. 4). Compatibility is the possibility of any service or system which is provided for users, being adaptable or offered for different type of devices.

Compatibility is described as an advantage and having positive impact for the consumer's behavior while using electronic commerce (Chen, Gillenson, & Sherrell, 2002). Chen et al. (2002) and Langley et al. (2012) defined the compatibility as a degree to which using mobile commerce is supposed to deal with the users preferences, needs, values and lifestyle.

Based on the literature and presented articles, I state this hypothesis:

H6: Compatibility has positive effect on user's intention to use mobile commerce.

My goal is to find the most important factors which are significant for mobile commerce adoption. Based on the literature review, I have proposed hypotheses. Figure 2 below presents the conceptual model that I have adopted and proposed for this thesis.
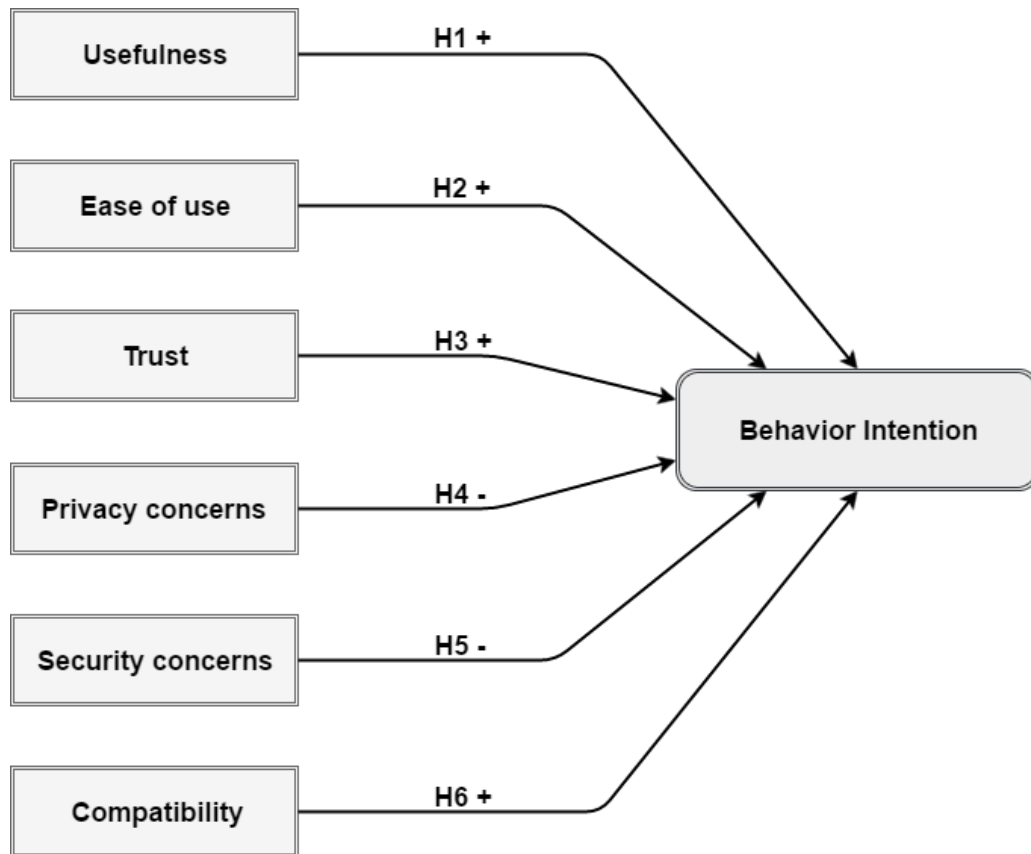
Figure 2. Research Model

The previous section presented this study's theoretical background. In the following sections I will describe research methodology that I have used to test hypotheses and results from the conducted research.

3 RESEARCH METHODOLOGY

3.1 Introduction

In this study the objective was to study the adoption of mobile commerce and its factors in Kosovo. The questionnaire has been developed in order to check the factors that influence the mobile commerce adoption. In this study we used mix-method to answer the research questions.

Therefore, the use of mix-method research was conducted in two phases. Firsts one was developing and conducting interviews with individuals who have knowledge or are users of mobile commerce technology in Kosovo. Second one was creating and developing the questionnaire, which included individuals ranging from those who have IT background, marketing, economy and other fields. Questionnaire distribution was done through social media and email.

Purpose of the survey was to study or explore the factors of adopting mobile commerce in Kosovo, where the target were all individuals who have smart phones and have Internet connection in their phones, regardless of their profession or position. In other words, the respondents were selected based on their accessibility by the researcher for this method and it is known as a convenience sample. The total number of respondents was 159. Since the convenience sample consisted of people who I generally knew, it was not necessary to translate this questionnaire from English into Albanian language, because all the respondents knew sufficient English to understand the questions on the survey.

3.2 Research Methodology

Mixed method is an approach study that combines qualitative and quantitative forms of research, which includes theories of qualitative and quantitative approaches, and then mix or integrate them in a study (Creswell, 2014).

Mixed method research is a technique for gathering data from qualitative and quantitative approaches, to analyze their operations at the same time or one after the other, but does not merge them with each other. Therefore, this means that qualitative data are analyzed qualitatively, and quantitative data are analyzed quantitatively (Saunders, Lewis, & Thornhill, 2009).

In research design there are three types of research approaches: qualitative, quantitative and mixed methods. We used mixed-method. In this research qualitative design was related with interviews, while quantitative design had to do with questionnaires. Thus, the used mixed method includes all items from qualitative and quantitative researches.

Mixed methods include assembling and mixing or integrating data from qualitative and quantitative researches (Creswell 2014).

Qualitative research is exploring and understanding the options of persons or different type of groups to a study or a problem. This procedure contains questions section and performing interviews starting from collecting data from the respondents, then analyzing the data, and then data interpretation (Creswell 2014).

Quantitative research in this study tested the theories and hypotheses of factors and their relationships. These factors and variables were measured and analyzed with the help of SPSS statistical software.

Choosing to use mixed methods has the advantage as different methods can be used for various purposes in this research. In this study with the qualitative research we have created a model from literature including factors that are most influential in adoption of mobile commerce, and in quantitative research we have checked whether these factors have influence in mobile commerce from selected sample.

In this research I have used mixed methods approach because I wanted to have the correct conclusions, not only to present the different questions from qualitative analysis or some numbers or digits emerged from the quantitative analysis. Therefore, with the combination of these two methods in this study, we had greater power of results.

Section of quantitative research contained hypotheses derived from the literature review, where we performed a questionnaire to check relations between behavior Intention to adopt mobile commerce as a dependent variable, with usefulness, ease of use, trust, privacy concerns, security concerns and compatibility as independent factors, with 159 participants from different profiles or different backgrounds.

Qualitative research was conducted through interviews with people who were users of mobile commerce technology or persons who have knowledge about mobile commerce in general or buying through electronic commerce.

After quantitative analysis, we also provided some interviews with some of the questionnaire respondents in comparison with the first qualitative research with interviews in the beginning, because we wanted to understand and explain the results of quantitative research for adoption of mobile commerce in Kosovo's environment.

This study was done in deduction manner, which implicates that the research is done in a way from theory to the data. Thus, concept of deduction is that need to operationalize in order to measure the factors quantitatively.

Exploratory sequential mixed methods is a mixed methods strategy which contains two sections in our study, where first we need to collect qualitative data's and then analyze the data's, after that follows up the second section which is quantitative data collection and then analysis of quantitative data's (Creswell 2014). The exploratory sequential method is a design where first explore the qualitative data and then analyze them, then after that uses the results or findings from quantitative research.

Therefore, this means that we first started with a qualitative research and explore the views of interviewers, then with the quantitative research we identified the factors that should be included in the survey and by using the instrument to check the results.
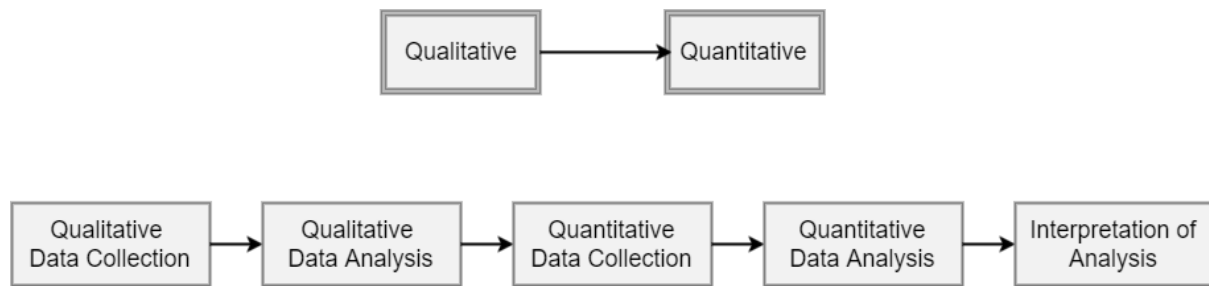
Figure 3. Exploratory Sequential Mixed Methods

The exploratory sequential mixed methods is to develop better measurements with a specific sample of populations, which in our study was convenience sample, to see if the data from qualitative research can be discovered to a large sample of a quantitative section.

3.3 Data Collection

The data collection procedure in this research is based on survey by questionnaires and interviews. The first part was held with 15 interviews. In all 11 of them were users of mobile commerce and others although they were not m-commerce users, knew about electronic commerce in general. Therefore, the interviews conducted the opportunity to understand interviewers' thoughts to mobile commerce. Interviews were conducted mostly in the interviewers' workplace, but also in public places. Explaining mobile commerce procedures was very simple since most of them were users and had mobile commerce applications on their smart phones.

Therefore, until we came to the final version of the questionnaire, we have developed up to five versions of this questionnaire which then have been distributed to participants by email or through social networks. The survey questions were designed as 5-Likert-type scale. The questions posed to respondents were adapted from published articles related to mobile commerce. Questions were submitted in order to adapt Kosovo's context.

An online version of the questionnaire was sent to 39 respondents via email and 164 others through social networks. The total collected number of respondents was 159 collected in period of 2 weeks from 01 March to 15 March 2017. Respondents were from different fields ranging from Information technology, economy and accounting, banks, education, arts,

engineering, governmental and non-governmental Institutions, private and public companies, up to healthcare and medical.

During the first week we received most of the responses, while in the second week we observed a decrease of respondents. It should be noted that social networks have carried out an extensive work in terms of connecting with the respondents, contacting with respondents was very easy when explaining about the questionnaire and sending to them, although some of respondents have received the questionnaire but they did not complete it, but in general they submitted the questionnaire. From 203 requests sent for filling the questionnaire, 78.33% of responses received from target's respondents.

3.4 Sampling and Sample Design

Sampling is a procedure of quantitative research for selecting the participants. This means that each of the persons has its probability of being selected from the total population, which provides that the sample will represent the population in general (Creswell 2014).

In this study qualitative and quantitative research techniques were combined and the scheme of this study is designed for both elements of qualitative and qualitative research. Considering that Kosovo has almost 2 million people, it means that we did not have the opportunity to access all of them in order to obtain information or responses for mobile commerce, but we made a sample which is convenience sampling.

Convenience sample was selected as participatory in this study because access to respondents was easy and considering that most of them would submit the questionnaire and their responses would be real. The respondents were from different categories of their professions. The participants' profiles in this study are presented in the following table.

Job profile	Percentage (%)
Agriculture	0.7
Arts	4.3
Bank	2.9
Construction	1.4

Economist/Accounting	20.9
Education	6.5
Engineering	8.6
Fashion/Make-up	-
Gastronomy	2.9
Governmental institutions	4.3
Healthcare/Medical	12.2
Information Technology	10.1
Law enforcement	4.3
Manufacturing	-
Musician	2.9
Non-governmental organizations	1.4
Public company	0.7
Private company	11.5
Sales and marketing	3.6
Sports	0.7
Transportation	-

Table 1. Profile of sampling

3.5 Developing the Questionnaire

The questionnaire was developed after the literature review and conducted interviews, where the purpose was to collect opinions of respondents for mobile commerce or otherwise the factors that may influence the adoption of mobile commerce.

To include all factors in a correct way, the first version of the questionnaire contained 72 questions in total which were separated for each factor. After that the questions were reduced while analyzing them. In order to be acceptable by the respondents the final version had 45 questions.

The response options were 5-Likert-scale type, starting from: Strongly disagree, Disagree, Neutral, Agree, Strongly agree. This was the favorite format of survey based in the articles, books and researches that are used for this study. The questions on the survey were generally adapted from published articles which are used for this study. Some of the questions have been improved in order to fit Kosovo's context.

The questionnaire was divided in two parts. The first part contained general information of the respondents as name, gender, age, academic degree, occupation and job profile. The next section was based to collect up the data and thoughts of respondents for adoption of mobile commerce that contained 45 questions that were separated for seven factors.

Most of the questions on this study are adapted from articles that their questions were adapted from different studies that are related to factors that influence mobile technology and users acceptance.

Questions obtained for Behavior Intention are adapted from studies that explore adoption and factors that have influence on mobile commerce across countries such as Korea or Malaysia.

As far as the factors of usefulness and ease of use, questions have been taken from article (Aldas-Manzano, Ruiz-Mafe, Sanz-Blas 2008), where the purpose of this research was to evaluate how different factors related to technology acceptance could affect adoption of mobile commerce and adaptation of questions was made by Davis (1989) and Wu and Wang (2004). Trust questions have been taken and adapted from articles that have studied trust as important factor and as a factor which affect users acceptance for mobile commerce. Privacy concerns and security concerns are taken and adapted from articles that specifically study these factors and their impact on adoption to use mobile commerce. This implies that these questions are designed to study users' social awareness, concerns and intentions to use mobile technology. Compatibility questions were taken and adapted from articles that explore different models regarding consumer acceptance and mobile technology acceptance.

Appendix A describes the development and design of the questionnaire and the source.

All questions and the questionnaire format were thoroughly checked by the mentor before it was released for completion and were controlled by three of my colleagues in master studies to clarify or to take different opinions, ideas or comments from them.

3.6 Pilot Test

The pilot test is important to prove the validity of results of the questionnaire and to improve questions, formats and scales. (Creswell 2014). Before sharing the questionnaire to collect data first it is good practice to perform a pilot test.

Pilot test purpose is to test the questionnaire, to test whether the respondents will have problems while filling the questionnaire, to test that the data will be recorded without problems and allow some evaluation of questions' validity and reliability (Saunders 2009).

The intent of the pilot test was to see how results will be collected and whether there exists any mistakes. Initially I asked two professors that have knowledge about developing surveys, and methods or techniques that should be used to have a better questionnaire. I held two short interviews with them since they have professional degree and I may call them as experts on this field, therefore I took into consideration their comments for presenting and questions suitability for mobile commerce adoption.

Therefore, with this pilot test I wanted to know if I will achieve the purposes of this study, the time that was allocated for this survey if it was well planned and how well questions are designed in this survey. The questionnaire was in Google forms, and it was shared through email and social networks.

We have collected 159 responses from different industries that respondents belong starting from: Agriculture, Arts, Bank, Construction, Economist/Accounting, Education, Engineering, Fashion/Make-up, Gastronomy, Governmental institutions, Healthcare/Medical, Information Technology, Law enforcement, Manufacturing, Musician, Non-governmental organizations, Public Company, Private Company, Sales and marketing, Sports and Transportation.

Total of 32.7% of the respondents were students, 60.4% of respondents were employed and 6.9% were unemployed. Therefore, academic degree of respondents was 15.1% with High school diploma, 5.7% with College diploma, 55.3% with Bachelor's degree, 23.3% with Master's degree and 0.6% with PhD or higher degree. The age of the respondents was 32.1% from 18-24 years, 59.7% from 25-43 years and 8.2% from 35-44 years. Gender of respondents was 59.1% male and 41.5% female.

The research methodology that I did for this study was described in the previous section. After the phase of data collection, I did statistical analysis by using statistical package SPSS (version 18). The procedures and findings are explained in the next section.

4 RESULTS

4.1 Introduction

The description of the statistical results will be based on the Hinton et al. (2004) and we will not repeat the citation throughout this section.

In this chapter we will present the results and statistics collected or derived from the survey. Initially we present the explanatory factor analysis (EFA) which performs dimension reduction to know if we should proceed with other analysis, followed by descriptive statistics, then reliability before and after the EFA, and finally regression analysis.

Data were collected from respondents in Kosovo that have been of different type of professions and fields, where all respondents had to have access to the Internet through their mobile phones. This survey contained total of 159 respondents, wherein all responses were filled-in because online answering the questions was made mandatory.

The responses gathered from survey created in Google Forms, are exported to Microsoft Excel file and then imported to the Statistical Package for the Social Sciences (SPSS) software for the analysis.

4.2 Dimension reduction (exploratory factor analysis)

In EFA analysis the goal is to identify the relationship between variables. We first checked Kaiser–Meyer–Olkin (KMO), then Bartlett's Test of Sphericity. Then we performed Total Variance Explained which contains all the components. After that we present the factors in scree plot, following with Rotated Component Matrix with seven factors and ending with Communalities.

Kaiser–Meyer–Olkin (KMO) is showing whether the data are appropriate for data analysis. KMO returns values between 0 and 1, and the rule of KMO is that result should be above 0.5 or higher. If the value is lower than 0.5 it means that there are wide extension of correlations which are a large problem for factor analysis.

Bartlett's Test of Sphericity is showing us if there is a relationship between the variables. If the relationship between them is not found, then there is no reason to continue with the factor analysis. The p value (Sig.) lower than 0.05 proves that we can continue with the factor analysis.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,879
Bartlett's Test of Sphericity	Approx. Chi-Square	2980,148
	df	465
	Sig.	,000

Table 2. KMO and Bartlett's Test

In our research the KMO value is .879, which is higher than the required value .5 (Table 2). It means that we should proceed with our analysis. Therefore the Bartlett's Test of Sphericity in our results is found to be p<0.001 which means that we can conclude there are relationships between the variables, in other words the Bartlett's Test is significant and factor analysis is suitable.

Total Variance Explained shows us the number of calculated factors, starting from eigenvalues which are presented for each factor, and also it is calculated for all the factors the percentage of total variance and cumulative percentage (Table 3).

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9,610	31,001	31,001	9,610	31,001	31,001	5,355	17,273	17,273
2	5,360	17,291	48,292	5,360	17,291	48,292	4,065	13,113	30,385
3	1,967	6,345	54,637	1,967	6,345	54,637	3,886	12,535	42,920
4	1,429	4,608	59,246	1,429	4,608	59,246	2,622	8,459	51,379
5	1,146	3,695	62,941	1,146	3,695	62,941	2,485	8,015	59,394
6	1,120	3,612	66,553	1,120	3,612	66,553	2,219	7,159	66,553
7	,931	3,003	69,556						

Extraction Method: Principal Component Analysis.

Table 3. Total Variance Explained

Actually in the table of Total variance Explained were presented all 31 components, but we will explain only the important ones where their eigenvalues are greater than 1. In our case we have six factors that have eigenvalues greater than 1.

In our results before rotation (Initial Eigenvalues) we can see that factor 1 has an eigenvalue 9.610, which has 31.001% of total variance and cumulative percentage. The second factor has an eigenvalue of 5.360, which has 17.291% of total variance. The third factor has an eigenvalue of 1.967 and has 6.345% of total variance. The fourth factor has an eigenvalue of 1.429, which has 4.608% of total variance. The fifth factor has an eigenvalue of 1.146, which has 3.695% of total variance. Wherefore the last factor which has eigenvalue greater than 1 is the sixth one has an eigenvalue of 1.120, which has 3.612% of total variance where the total cumulative percentage is 66.553.

We can see also section of Extraction Sums of Squared Loadings, where the results are same as in section Initial Eigenvalues. The last section is Rotation Sums of Squared Loadings that is presented after the rotation, where we can see that factor one value is 17,273% of variance, the second factor value is 13,113% of variance, the third factor value is 12,535% of variance, the fourth factor value is 8,459% of variance, the fifth factor value is 8,015% of variance and the sixth factor value is 7,159% of variance. It means that 66.553% of the variance is presented by the six extracted factors.

Next section is the Scree plot (Figure 4), which is one other form for presenting the variance of the factors presented graphically. In the vertical direction we have Eigenvalues and in the horizontal we have Component numbers, where the factor with the highest eigenvalue is the first component and then comes other factors, until to the sixth factor which have values greater than 1. Thus, scree plot describes the amount of variance explained by each factor.
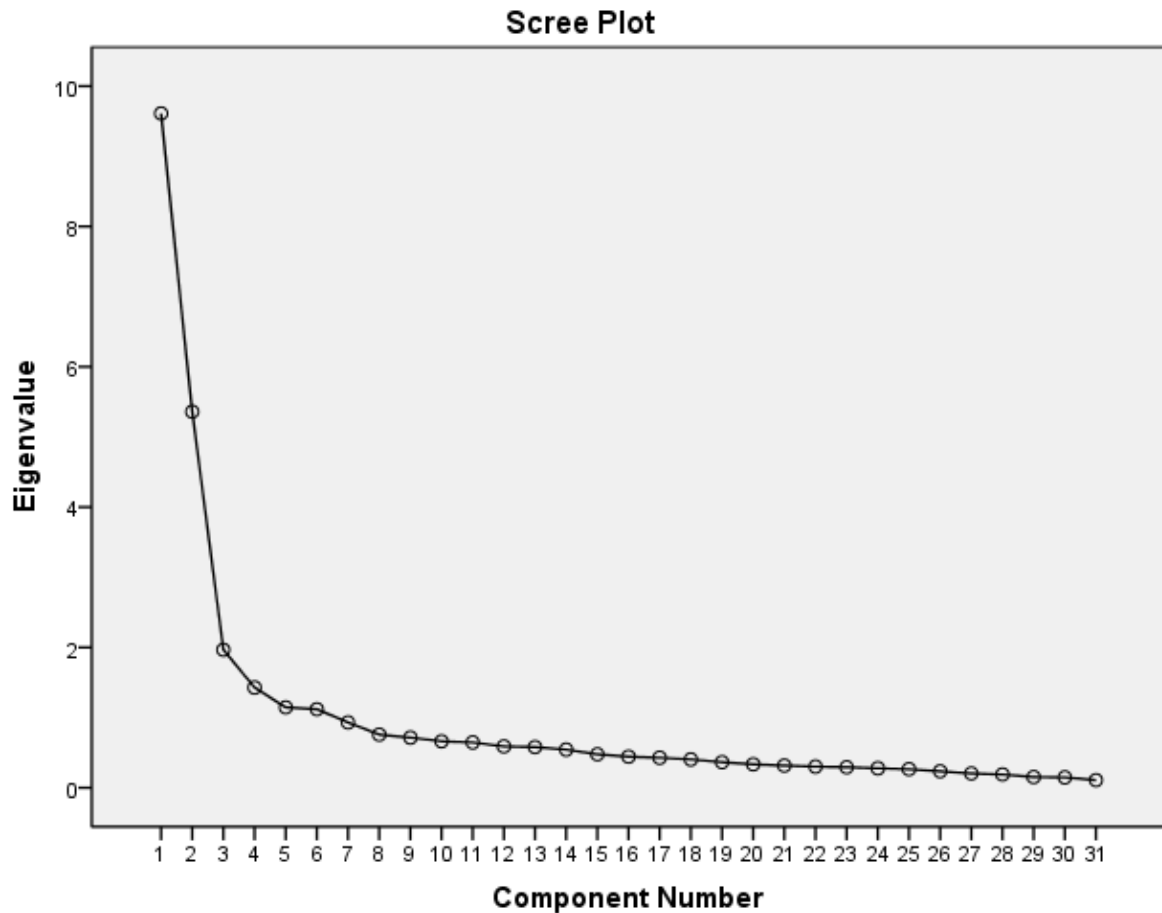
Figure 4. Scree Plot

The next section is presenting the results of Rotated Component Matrix (Table 4). As an extraction we have used the method of Principal components and as a rotation method Varimax with Kaiser Normalization. The Rotation converged in 6 iterations. Before the rotation process, it was found that 6 items are causing problems or overlapping the other factors. They were removed from the process of rotation and 1 item was suppressed because the coefficients was lower than 0.4. Therefore, after the extraction 6 factors were found and were extracted. Before the rotation the total number of the items was 38, then removing 7 of them remained 31 items after the rotation.

Rotated Component Matrix^a

	Component					
	1	2	3	4	5	6
BI1			,798			
BI2			,791			
BI3			,797			
BI5			,650			
BI6			,721			
U2					,517	
U4					,762	
U5					,725	
U6					,708	
E3				,648		
E4				,737		
E5				,732		
E6				,635		
T1		,637				
T2		,840				
T3		,722				
T4		,638				
T5		,689				
T7		,722				
P1	,730					
P2	,831					
P3	,798					
P4	,818					
P5	,749					
S1	,606					
S2	,773					
S3	,826					
S4	,677					
C1						,765
C2						,770
C3						,581

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Table 4. Rotated Component Matrix

Results from factor analysis shows us that six factors were found, starting from Behavior Intention (BI), Usefulness (U), Ease of Use (E), Trust (T), Privacy concerns (P), Security concerns (S) and Compatibility (C).

The section of communalities shows us the variance for all the factors computed for each of the items (Table 5). It was used the method of Principal Component Analysis. Before the extraction each of the items have communalities values of 1, but after the extraction we can see that all of the items have different values lower than 1. For example based on the results we can see that the variance of BI1 is initially given a communality value of 1.000, but after the extracting the factors we find it has a communality of 0.746, which means that 74 percent of the variability is explainable by the variable BI1.

It is better if communalities' values are higher, therefore almost all of the items were above 0.5, which means that results are good. Based on the results, the question of trust (T2) has the highest communality value of 0.769, which means that 76.9% of the variance associated with question T2 is communal. Therefore, the question of security concerns (S1) has the lowest communality value of 0.503, or 50.3% of the variance, which is above the minimum of the range that is acceptable.

Communalities

	Initial	Extraction
BI1	1,000	,746
BI2	1,000	,724
BI3	1,000	,743
BI5	1,000	,626
BI6	1,000	,633
U2	1,000	,566
U4	1,000	,682
U5	1,000	,723
U6	1,000	,704
E3	1,000	,679
E4	1,000	,746
E5	1,000	,662
E6	1,000	,587
T1	1,000	,591
T2	1,000	,769
T3	1,000	,712
T4	1,000	,593
T5	1,000	,650
T7	1,000	,609
P1	1,000	,555
P2	1,000	,715
P3	1,000	,717
P4	1,000	,743
P5	1,000	,610
S1	1,000	,503
S2	1,000	,674
S3	1,000	,738
S4	1,000	,518
C1	1,000	,755
C2	1,000	,744
C3	1,000	,613

Extraction Method: Principal Component Analysis.

Table 5. Communalities

4.3 Factor scores

Based on the EFA results, I have created summed factor scores. For example, EFA showed that variables BI[1,2,3,4,5,6] measure the same phenomenon of behavioral intentions. Therefore we summed all values of the variables 1,2,3,5 and 6 and we created variable BI_12356 (DiStefano et al., 2009). Similar logic was applied to the other factors.

4.4 Descriptive Statistics

In the Descriptive statistics table we want to describe the data before proceeding with other analysis. Therefore, these statistics shows us that our results are understandable and usable, wherefore in this section we can measure the mean and calculate the frequency.

In Table 6 the column N shows us the number of respondents which in this research is 159. Mean values measure the average in group of data. In our case mean values is found by adding all the values and dividing by the number of scores. Standard deviation quantifies the data dispersion. Skewness is a measure of symmetry. In our case this means that skewness measure

if our group of data is symmetric. Skewness tells us about the direction of variation of the group of data. The Skewness shows us that values are below 2, where the highest value is 1.151 on the question S4, and the lowest values is in the question BI6 with the value -1.232. Kurtosis is a guideline that expresses the outline of a variable probability distribution. This means that kurtosis measure if the data are closely or wide related to a distribution. The Kurtosis section shows us that values are below 2, where the highest value is 2.274 on the question BI4, and the lowest values is in the question P5 with the value -0.674. Although some values are above the cut-off value of 2, they are acceptable. We consider this issue as a limitation of the study.

The table 6 contains descriptive statistics for each variable separately, while the next table shows factor scores after summing all variables relevant for the corresponding factors.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
BI1	159	1	5	3,92	,857	-,821)	,192	1,216	,383
BI2	159	1	5	4,01	,823	-,633)	,192	,732	,383
BI3	159	1	5	3,93	,865	-,816)	,192	1,131	,383
BI4	159	1	5	4,11	,842	-1,185)	,192	2,274	,383
BI5	159	1	5	3,93	,908	-,941)	,192	1,246	,383
BI6	159	1	5	4,18	,868	-1,232)	,192	1,784	,383
U1	159	1	5	4,09	,913	-,998)	,192	1,062	,383
U2	159	1	5	3,74	,982	-,638)	,192	,277	,383
U3	159	1	5	3,72	,915	-,612)	,192	,298	,383
U4	159	1	5	3,52	1,018	-,352)	,192	-,187)	,383
U5	159	1	5	3,60	,928	-,669)	,192	,709	,383
U6	159	1	5	3,74	,807	-,580)	,192	,785	,383
E1	159	1	5	4,00	,819	-,910)	,192	1,470	,383
E2	159	1	5	3,96	,983	-,964)	,192	,871	,383
E3	159	1	5	3,95	,877	-1,041)	,192	1,760	,383
E4	159	1	5	3,98	,924	-1,083)	,192	1,635	,383
E5	159	1	5	3,83	,989	-,647)	,192	-,044)	,383
E6	159	1	5	3,99	,879	-,769)	,192	,624	,383
T1	159	1	5	3,64	,984	-,344)	,192	-,369)	,383
T2	159	1	5	3,66	,940	-,474)	,192	,171	,383
T3	159	1	5	3,65	,982	-,462)	,192	,058	,383
T4	159	1	5	3,73	,862	-,587)	,192	,674	,383
T5	159	1	5	3,82	,927	-,787)	,192	1,170	,383
T6	159	1	5	3,82	,967	-,987)	,192	1,078	,383
T7	159	1	5	3,36	1,098	-,345)	,192	-,583)	,383
P1	159	1	5	3,50	,940	-,176)	,192	-,473)	,383
P2	159	1	5	3,55	1,059	-,320)	,192	-,653)	,383
P3	159	1	5	3,55	1,089	-,437)	,192	-,534)	,383
P4	159	1	5	3,47	1,005	-,338)	,192	-,333)	,383
P5	159	1	5	3,52	1,055	-,239)	,192	-,674)	,383
S1	159	1	5	3,47	1,005	-,207)	,192	-,478)	,383
S2	159	1	5	3,49	,999	-,301)	,192	-,425)	,383
S3	159	1	5	3,47	,960	-,158)	,192	-,583)	,383
S4	159	1	5	3,33	1,151	-,177)	,192	-,819)	,383
C1	159	1	5	3,77	,828	-,489)	,192	,532	,383
C2	159	1	5	3,82	,810	-,377)	,192	,136	,383

C3	159	1	5	3,89	,904	-,567)	,192	-,126)	,383
C4	159	1	5	3,94	,876	-,677)	,192	,477	,383
Valid N (listwise)	159								

Table 6. Descriptive statistics- variables

Table 7 shows us the descriptive statistics of the factor scores: Behavior Intention, Usefulness, Security concerns, Ease of use, Trust, Compatibility and Privacy concerns.

Statistics

	BI_12356	U_2456	S_1234	E_3456	T_123457	C_123	P_12345
N Valid	159	159	159	159	159	159	159
Missing	0	0	0	0	0	0	0
Mean	19,9623	14,6038	13,7610	15,7484	21,8491	11,4780	17,5912
Std. Deviation	3,58599	3,00004	3,21480	2,94242	4,60075	2,15194	4,25636
Variance	12,859	9,000	10,335	8,658	21,167	4,631	18,117
Skewness	-1,209)	-,784)	-,165)	-,951)	-,522)	-,475)	-,206)
Std. Error of Skewness	,192	,192	,192	,192	,192	,192	,192
Kurtosis	2,622	1,418	,146	1,792	,148	,111	-,361)
Std. Error of Kurtosis	,383	,383	,383	,383	,383	,383	,383

Table 7. Descriptive statistics – factor scores

4.5 Reliability (before and after EFA)

Reliability is investigating the items reliability in a test, in our case in questions from the questionnaire, which is done by examining relationships between each item and scores of the test. Reliability shows us the consistency and stability while measuring the variables.

Cronbach's alpha is the most popular method for testing reliability. In the tables below it is shown number of items and Cronbach's alpha. The value that we need for Cronbach's Alpha to be reliable is higher than 0.7.

Reliability Statistics are presented before EFA which was 0.935, and after EFA was 0.914 (Table 8). This values are acceptable and value is required to be higher than 0.7.

Before the EFA number of items was 38, and after the dimension reduction number of items reduces in 31. Cronbach's Alpha slightly decreased.

<table>
<tr><td colspan="2" align="center">Before EFA</td><td colspan="2" align="center">After EFA</td></tr>
<tr><td colspan="2" align="center">**Reliability Statistics**</td><td colspan="2" align="center">**Reliability Statistics**</td></tr>
<tr><td>Cronbach's Alpha</td><td>N of Items</td><td>Cronbach's Alpha</td><td>N of Items</td></tr>
<tr><td align="right">,935</td><td align="right">38</td><td align="right">,914</td><td align="right">31</td></tr>
</table>

Table 8. Reliability Statistics

4.6 Assumptions of regression

I checked the following items to analyze whether assumptions of regression are satisfied: sample size, data normality, multicollinearity, autocorrelation, homoscedasticity and outliers.

For sample size there is a rule of thumb that requires to have 20 observations for each variable. In this case, number of variables is 7, while number of observations is 159. The ratio is 22.7, therefore the rule of thumb is satisfied.

For Normality I have tested Skewness and Kurtosis of each variable separately and for the factor scores (Tables 6 and 7). Kurtosis and Skewness should be closer to 0. In this case, the separate variables satisfies this criterion with neglecting exceptions (kurtosis of BI_4 > 2, but it is removed from the factor score). The Skewness of the factor scores are all below 1.0, except BI_12356). Kurtosis is in acceptable ranges, except BI_12356 which is slightly above 2. I conclude that normality is not ideal, but it is in an acceptable range for this type of study.

Multicollinearity is when there is high correlation between predictor variables. I did two tests. In correlation matrix no correlation is >0.8, which would indicate existence of multicollinearity (Table 9). Then, I checked Variance Inflation Factor (VIF) by doing regression analysis among all factors, taking all combinations of factors as a dependent variable regressing on all other factors (Tables 10, 11, 12, 13, 14, 15, 16). VIF values above 10 indicate multicollinearity. In my case, all VIFs are <3, which means that there is no correlation between predictor variables.

Correlations

		BI_12356	U_2456	E_3456	T_123457	P_12345	S_1234	C_123
BI_12356	Pearson Correlation	1	,542**	,573**	,557**	,052	,004	,499**
	Sig. (2-tailed)		,000	,000	,000	,518	,959	,000
	N	159	159	159	159	159	159	159
U_2456	Pearson Correlation	,542**	1	,577**	,612**	,144	,146	,527**
	Sig. (2-tailed)	,000		,000	,000	,069	,067	,000
	N	159	159	159	159	159	159	159
E_3456	Pearson Correlation	,573**	,577**	1	,504**	,192*	,086	,487**
	Sig. (2-tailed)	,000	,000		,000	,015	,281	,000
	N	159	159	159	159	159	159	159
T_123457	Pearson Correlation	,557**	,612**	,504**	1	-,087)	,068	,569**
	Sig. (2-tailed)	,000	,000	,000		,278	,396	,000
	N	159	159	159	159	159	159	159
P_12345	Pearson Correlation	,052	,144	,192*	-,087)	1	,779**	,190*
	Sig. (2-tailed)	,518	,069	,015	,278		,000	,016
	N	159	159	159	159	159	159	159
S_1234	Pearson Correlation	,004	,146	,086	,068	,779**	1	,298**
	Sig. (2-tailed)	,959	,067	,281	,396	,000		,000
	N	159	159	159	159	159	159	159
C_123	Pearson Correlation	,499**	,527**	,487**	,569**	,190*	,298**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,016	,000	
	N	159	159	159	159	159	159	159

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 9. Correlations

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	U_2456	,501	1,997
	E_3456	,546	1,832
	T_123457	,455	2,198
	P_12345	,318	3,142
	S_1234	,332	3,015
	C_123	,546	1,832

a. Dependent Variable: BI_12356

Table 10. Collinearity Statistics for Behavior Intention

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	E_3456	,542	1,845
	T_123457	,486	2,058
	P_12345	,318	3,146
	S_1234	,322	3,106
	C_123	,536	1,867
	BI_12356	,540	1,852

a. Dependent Variable: U_2456

Table 11. Collinearity Statistics for usefulness

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	T_123457	,443	2,259
	P_12345	,340	2,944
	S_1234	,338	2,958
	C_123	,539	1,856
	BI_12356	,565	1,769
	U_2456	,520	1,922

a. Dependent Variable: E_3456

Table 12. Collinearity Statistics for ease of use

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	P_12345	,363	2,754
	S_1234	,341	2,935
	C_123	,561	1,781
	BI_12356	,559	1,790
	U_2456	,553	1,808
	E_3456	,525	1,905

a. Dependent Variable: T_123457

Table 13. Collinearity Statistics for trust

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	S_1234	,872	1,147
	C_123	,529	1,889
	BI_12356	,535	1,869
	U_2456	,496	2,018
	E_3456	,552	1,813
	T_123457	,497	2,011

a. Dependent Variable: P_12345

Table 14. Collinearity Statistics for privacy

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	C_123	,561	1,782
	BI_12356	,545	1,834
	U_2456	,491	2,037
	E_3456	,537	1,863
	T_123457	,456	2,191
	P_12345	,853	1,172

a. Dependent Variable: S_1234

Table 15. Collinearity Statistics for security

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	BI_12356	,548	1,824
	U_2456	,499	2,005
	E_3456	,523	1,913
	T_123457	,459	2,177
	P_12345	,316	3,163
	S_1234	,343	2,917

a. Dependent Variable: C_123

Table 16. Collinearity Statistics for compatibility

Autocorrelation occurs when the residuals are not independent from each other. I checked Durbin-Watson test and it should be between 1,5 and 2,5, which means there is no autocorrelation. In our case it is 1,973, therefore the residuals are independent (Table 17).

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,686^a	,471	,450	2,65853	,471	22,578	6	152	,000	1,973

a. Predictors: (Constant), C_123, P_12345, E_3456, U_2456, T_123457, S_1234

b. Dependent Variable: BI_12356

Table 17. Autocorrelation

Homoscedasticity is variance of the residuals and should be equal for all predicted values. I am presenting a scatterplot plotting the: 1) the values of the standardized residuals (y-axis), 2) standardized prediction value (x-axis). Residual is a difference between the observed (from the survey) and predicted value (from the regression analysis). This plot is presented in Figure 5, which shows that residuals are randomly positioned above and below zero. There are several outliers in the lower part of the plot, but most of the residuals are located between +/-2. This is the visual indication of the homoscedasticity. In this case it is not ideally equal, but in general sense the equality is satisfied.
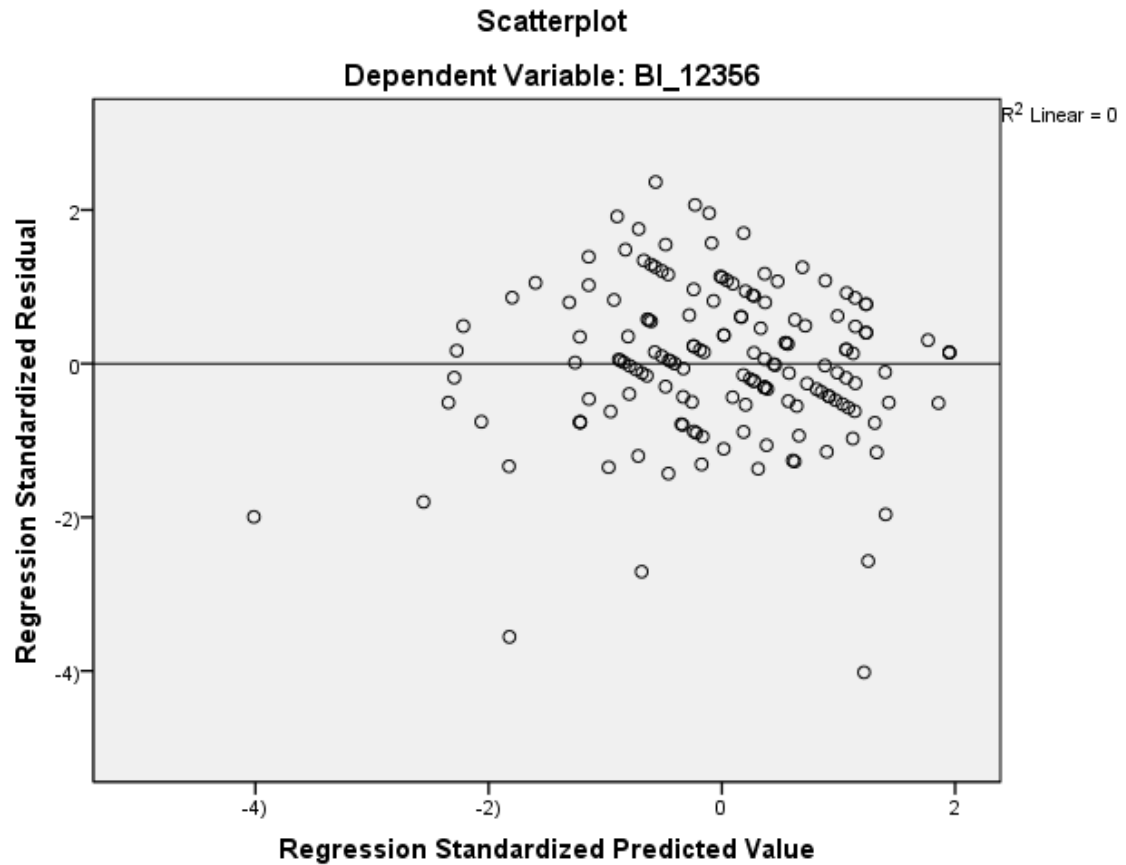
Figure 5. Scatterplot

We can conclude that assumptions are satisfied with certain deviations related to the normality, but for this type of study we consider them acceptable.

We are presenting that we have used a method by SPSS for the purposes of detecting an outlier. Therefore, SPSS utility helped us to identify the outliers on our variables. In the menu Explore we have inserted all the variables and SPSS produced an analysis to detect outliers. The procedure is based on an examination of a boxplot.

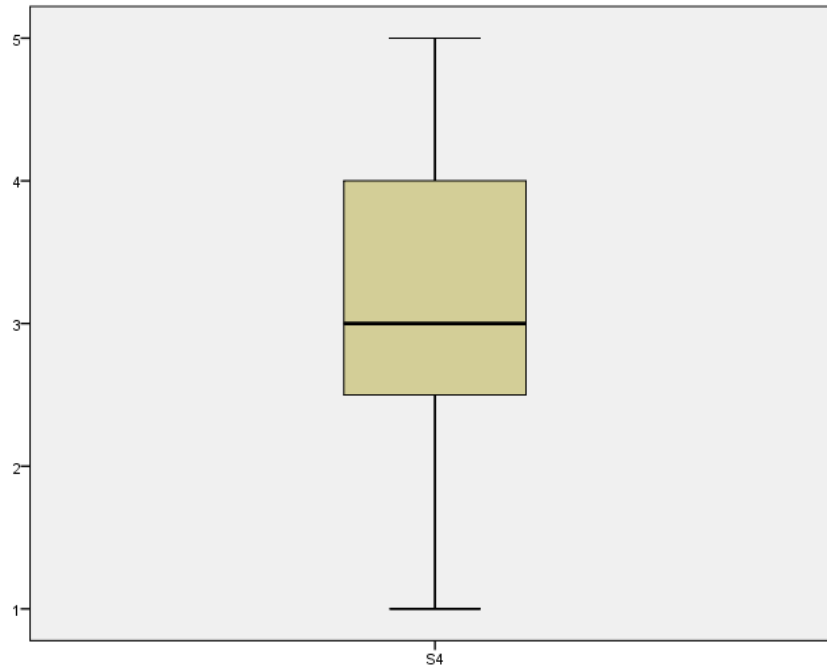In the figure below is shown a Boxplot of a security variable.

Figure 6. Boxplot of S4 variable.

The highest observation is the highest line shown at number 5, and the lowest observation is the lowest line shown at number 1.

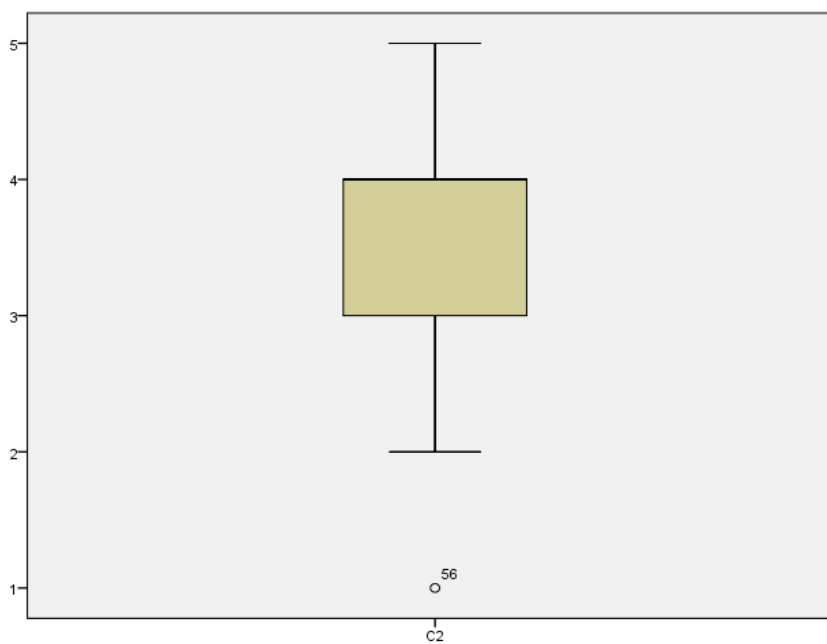In the figure below is shown a Boxplot of a compatibility variable.

Figure 7. Boxplot of C2 variable.

In this case we have the lowest value of the case 56, and this implies that SPSS has not identified this as an outlier. The circle below 2 is also not an outlier. Lines on 2 and 5 are the extreme points lower and high.

The circle - In some of the variables some circles were identified and shown there with a number which corresponds to the case number which has high or low value. Based on (Hoaglin & Iglewicz, 1987) a potential outliers are values that are shown with the star values, not the values noted with a circle values. This research describes that approximately 50% of the time we will identify an outlier when actually it is not.

The star - If in one of the variables in histogram is shown with a star, it means that it is noted as an extreme outlier and informs as with the case number.

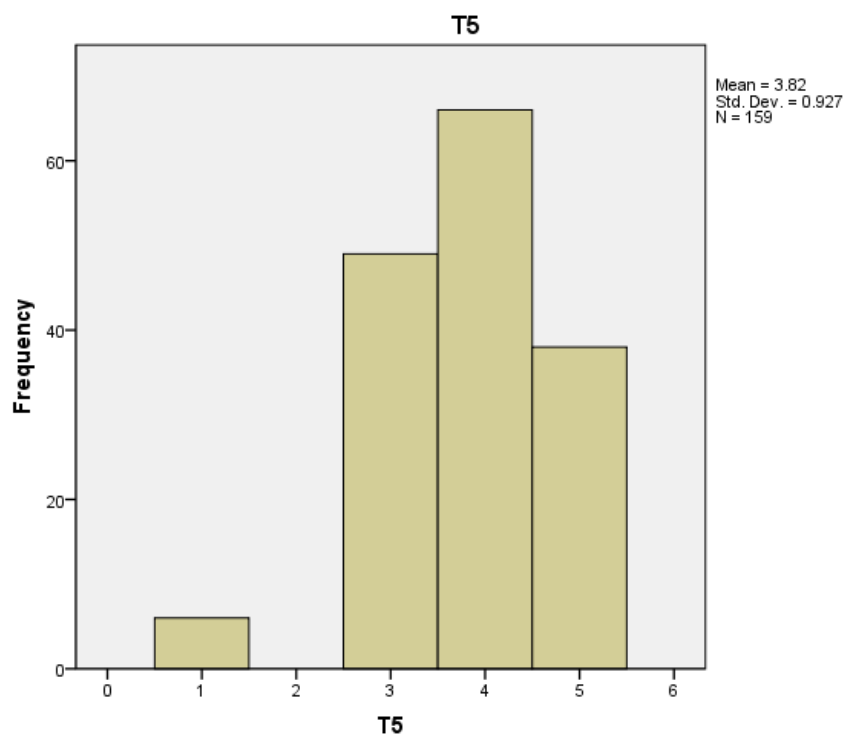In the figure below is shown the Histogram of T5.

Figure 8. Histogram of T5

Therefore, with this we understand that all variables are good, or an extreme outlier is not present and we do not have any outliers, based on (Hoaglin & Iglewicz, 1987). We retain outliers because they also convey message to the analysis.

4.7 Regression Analysis

Regression is the forecast of scores on one variable by their scores on a second variable. In this research we have used multiple regression analysis which is extension of linear regression. Multiple regression analysis describes where the values of one variable are forecasted from the values on a number of forecasted variables. Therefore, the larger the correlation between the variables, prediction will be more precise.

Initially we are going to forecast the intention of users about mobile commerce technology since it is the dependent variable on this research, with six factors that influence mobile commerce: Usefulness, Ease of Use, Trust, Privacy concerns, Security concerns and Compatibility which are independent variables.

The method that is used for estimating the regression is Stepwise, which adds predictor variables to the regression that best correlate with the dependent variable, and subtracts predictor variables that are less related or do not have significance.

Based on the table below we can see that Ease of Use, Trust and Usefulness are significant factors while predicting the dependent variable Behavior Intention. The criterion of stepwise probability is less than 0.05.

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	E_3456	.	Stepwise (Criteria: Probability-of-F-to-enter <= ,050, Probability-of-F-to-remove >= ,100).
2	T_123457	.	Stepwise (Criteria: Probability-of-F-to-enter <= ,050, Probability-of-F-to-remove >= ,100).
3	U_2456	.	Stepwise (Criteria: Probability-of-F-to-enter <= ,050, Probability-of-F-to-remove >= ,100).

a. Dependent Variable: BI_12356

Table 18. Variables Entered/Removed

As we can see on the table Model Summary using method stepwise, there are 3 models presented, the model 1 contain the factor of ease of use, model 2 contain ease of use and trust factor, and the model 3 contain factors of ease of use, trust and usefulness.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,573[a]	,328	,324	2,94943
2	,652[b]	,425	,417	2,73760
3	,665[c]	,442	,431	2,70510

a. Predictors: (Constant), E_3456

b. Predictors: (Constant), E_3456, T_123457

c. Predictors: (Constant), E_3456, T_123457, U_2456

Table 19. Model Summary

In the table of Model Summary we can see the R squared column which shows us the amount of variance in the dependent variable that can be explained by the independent variables. In the model 1 the independent variable Ease of use accounts for 32.8 percent of the variance, model 2 the independent variables Ease of use and Trust together account for 42.5 percent of the variance, and the last model number 3 with three independent variables Ease of use, Trust and Usefulness accounts for 44.2 percent. Therefore, the last column is the Std. Error of the Estimate, which is a measure of the variability of the multiple correlation analysis. SPSS reports statistical error of estimate, which is square root of the sum of squared differences between obtained and predicted values, divided by sample.

In the next table ANOVA it was used Stepwise method for analyzing the variance. ANOVA tests the significance of each regression model to see if the regression predicted by the independent variables explains a significant amount of the variance in the dependent variable. In the ANOVA essential items that should be necessary are F value, df, and probability value.

ANOVA[d]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	666,004	1	666,004	76,560	,000[a]
	Residual	1365,769	157	8,699		
	Total	2031,774	158			
2	Regression	862,635	2	431,318	57,551	,000[b]
	Residual	1169,138	156	7,494		
	Total	2031,774	158			
3	Regression	897,547	3	299,182	40,885	,000[c]
	Residual	1134,226	155	7,318		
	Total	2031,774	158			

a. Predictors: (Constant), E_3456

b. Predictors: (Constant), E_3456, T_123457

c. Predictors: (Constant), E_3456, T_123457, U_2456

d. Dependent Variable: BI_12356

Table 20. Analysis of variance

As we can see on the ANOVA Table 20, Sig values of model 1 the ease of use and behavior intention values are significant which means that $p < 0.005$. In the model 2 ease of use, trust and behavior intention values are significant which means that $p < 0.005$. In the model 3 ease of use, trust, usefulness and behavior intention values are also significant which means that $p < 0.005$. Thus, based on the ANOVA table we can say that these factors presented on the table, are statistically significant.

The next table is the Coefficients, where it was used the Stepwise method for giving us the regression equation, which means only the selected variables are presented for the final model. The Standardized Beta Coefficient column shows us the values of each variable that are presented on the model, where we can see that which one is the most powerful factor.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8,974	1,277		7,025	,000
	E_3456	,698	,080	,573	8,750	,000
2	(Constant)	6,321	1,294		4,886	,000
	E_3456	,477	,086	,391	5,566	,000
	T_123457	,281	,055	,360	5,122	,000
3	(Constant)	5,744	1,306		4,400	,000
	E_3456	,398	,092	,326	4,317	,000
	T_123457	,220	,061	,282	3,617	,000
	U_2456	,216	,099	,180	2,184	,030

a. Dependent Variable: BI_12356

Table 21. Coefficients

The next table is Excluded Variables. When variables are excluded from the model their beta values, t values and significance vales are shown in the Excluded table.

Excluded Variables[d]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	U_2456	,317[a]	4,150	,000	,315	,667
	P_12345	-,060)[a]	-,906)	,366	-,072)	,963
	S_1234	-,045)[a]	-,690)	,491	-,055)	,993
	T_123457	,360[a]	5,122	,000	,379	,746
	C_123	,288[a]	4,028	,000	,307	,763
2	U_2456	,180[b]	2,184	,030	,173	,528
	P_12345	,008[b]	,133	,895	,011	,918
	S_1234	-,054)[b]	-,890)	,375	-,071)	,992
	C_123	,166[b]	2,178	,031	,172	,622
3	P_12345	-,014)[c]	-,220)	,826	-,018)	,894
	S_1234	-,071)[c]	-1,169)	,244	-,094)	,978
	C_123	,140[c]	1,819	,071	,145	,601

a. Predictors in the Model: (Constant), E_3456

b. Predictors in the Model: (Constant), E_3456, T_123457

c. Predictors in the Model: (Constant), E_3456, T_123457, U_2456

d. Dependent Variable: BI_12356

Table 22. Excluded Variables

The Beta ln values gives an estimate of the beta weight if it was included in the model at this time. The results of t test for each factor are shown with their probability values. The partial Correlation value shows the contribution that the excluded predictor would make if we decided to include it in our model. Collinearity Statistics Tolerance value check for any collinearity in our results. A criterion is that tolerance value should be above 0.1.

Based on previous analysis, usefulness, ease of use and trust have positive and significant effect on intentions to adopt mobile commerce. The coefficients of security and privacy have negative values, which means, the higher privacy and security concerns the lower intentions to adopt mobile commerce, but their direct effect on intentions is non-significant.

4.8 Regression Analysis with control variable

I did multiple regression with a controlled variable. The control variables in our case is age. We will see the outcome of the second set of the variables, while controlling the effect of control variables, and if our predictor variables will still predict a significant amount of variance.

I did regression analysis in two steps: in the first step only with control variable – age, while in the second step all other variables.

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Age[a]	.	Enter
2	P_12345, T_123457, E_3456, C_123, U_2456, S_1234[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: BI_12356

Table 23. Variables entered/removed

In the table below (model summary), we will evaluate the model and interpret the outcome.

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,159ª	,025	,019	3,55188	,025	4,049	1	157	,046
2	,695ᵇ	,483	,460	2,63637	,458	22,329	6	151	,000

a. Predictors: (Constant), Age

b. Predictors: (Constant), Age, P_12345, T_123457, E_3456, C_123, U_2456, S_1234

c. Dependent Variable: BI_12356

Table 24. Multiple regression with control variables - model summary

The variables in the block one, the one we have controlled, accounts for .019 of the variability of the outcome in the (adjusted R Square). Adjusted R square of 19% shows the variability in the dependent variable that accounts to the variable age. Variability increases to 46% when other independent variables are added and therefore these variables predict significantly more the dependent variable than the control variables. The block two of the independent variables, i.e. the model as a whole accounts for or explains .46 of the variability. This block contains all of the variables, and we can see what effect the variables have together after the control of the first block of variables.

To find out how much this overall variance is explained by our independent variables, after the effect of control variables had been removed, we look in the column R Square Change. In our case it is .458, so this means that our independent variables explain an additional 45.8% of variance in the outcome, even when the effects of control variables have been statistically controlled for.

Therefore, Age has certain explanatory and predicting contribution towards intention to adopt mobile commerce and should be considered in studies or in strategies how to increase adoption level.

4.8.1 Regression Analysis with control variable Age

Based on the table below we can see that Ease of Use, Trust and Usefulness and added control variable Age are significant factors while predicting the dependent variable Behavior Intention.

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	E_3456	.	Stepwise (Criteria: Probability-of-F-to-enter <= ,050, Probability-of-F-to-remove >= ,100).
2	T_123457	.	Stepwise (Criteria: Probability-of-F-to-enter <= ,050, Probability-of-F-to-remove >= ,100).
3	U_2456	.	Stepwise (Criteria: Probability-of-F-to-enter <= ,050, Probability-of-F-to-remove >= ,100).
4	Age	.	Stepwise (Criteria: Probability-of-F-to-enter <= ,050, Probability-of-F-to-remove >= ,100).

a. Dependent Variable: BI_12356

Table 25. Variables Entered/Removed with control variables

In the table Model Summary there are 4 models presented, the model 1 contain the factor of ease of use, model 2 contain ease of use and trust factor, the model 3 contain factors of ease of use, trust and usefulness, and the model 4 contain factors ease of use, trust, usefulness and control variable Age.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,573[a]	,328	,324	2,94943
2	,652[b]	,425	,417	2,73760
3	,665[c]	,442	,431	2,70510
4	,675[d]	,456	,442	2,67865

a. Predictors: (Constant), E_3456

b. Predictors: (Constant), E_3456, T_123457

c. Predictors: (Constant), E_3456, T_123457, U_2456

d. Predictors: (Constant), E_3456, T_123457, U_2456, Age

Table 26. Multiple regression with control variable (Age)

In the table of Model Summary we can see the R squared column. In the model 1 the independent variable Ease of use accounts for 32.8 percent of the variance, model 2 the independent variables Ease of use and Trust together account for 42.5 percent of the variance, and the next model number 3 with three independent variables Ease of use, Trust and Usefulness accounts for 44.2 percent. The last model number 4 with four variables ease of use, trust, usefulness and control variable Age accounts for 45.6 percent.

In the next table is shown ANOVA, the essential items that are necessary are F value, df, and probability value.

ANOVA[e]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	666,004	1	666,004	76,560	,000[a]
	Residual	1365,769	157	8,699		
	Total	2031,774	158			
2	Regression	862,635	2	431,318	57,551	,000[b]
	Residual	1169,138	156	7,494		
	Total	2031,774	158			
3	Regression	897,547	3	299,182	40,885	,000[c]
	Residual	1134,226	155	7,318		
	Total	2031,774	158			
4	Regression	926,796	4	231,699	32,292	,000[d]
	Residual	1104,978	154	7,175		
	Total	2031,774	158			

a. Predictors: (Constant), E_3456

b. Predictors: (Constant), E_3456, T_123457

c. Predictors: (Constant), E_3456, T_123457, U_2456

d. Predictors: (Constant), E_3456, T_123457, U_2456, Age

e. Dependent Variable: BI_12356

Table 27. Analysis of variance with control variable

As we can see on the ANOVA Table 27, Sig values of model 1 the ease of use and behavior intention values are significant which means that $p < 0.005$. In the model 2 ease of use, trust and behavior intention values are significant which means that $p < 0.005$. In the model 3 ease of use, trust, usefulness and behavior intention values are significant which means that $p < 0.005$. In the model 4 ease of use, trust, usefulness, control variable Age and behavior intention values are also significant which means that $p < 0.005$.

Based on the ANOVA table we can say that these factors presented on the table, are statistically significant.

The next table is the Coefficients. The Standardized Beta Coefficient column shows us the values of each variable that are presented on the model.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8,974	1,277		7,025	,000
	E_3456	,698	,080	,573	8,750	,000
2	(Constant)	6,321	1,294		4,886	,000
	E_3456	,477	,086	,391	5,566	,000
	T_123457	,281	,055	,360	5,122	,000
3	(Constant)	5,744	1,306		4,400	,000
	E_3456	,398	,092	,326	4,317	,000
	T_123457	,220	,061	,282	3,617	,000
	U_2456	,216	,099	,180	2,184	,030
4	(Constant)	3,878	1,589		2,440	,016
	E_3456	,380	,092	,312	4,153	,000
	T_123457	,225	,060	,288	3,727	,000
	U_2456	,216	,098	,180	2,207	,029
	Age	,740	,367	,121	2,019	,045

a. Dependent Variable: BI_12356

Table 28. Coefficients with control variable

The next table is Excluded Variables. When variables are excluded from the model their beta values, t values and significance vales are shown in the Excluded table.

Excluded Variables[e]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	U_2456	,317[a]	4,150	,000	,315	,667
	T_123457	,360[a]	5,122	,000	,379	,746
	P_12345	-,060)[a]	-,906)	,366	-,072)	,963
	S_1234	-,045)[a]	-,690)	,491	-,055)	,993
	C_123	,288[a]	4,028	,000	,307	,763
	Age	,107[a]	1,635	,104	,130	,992
2	U_2456	,180[b]	2,184	,030	,173	,528
	P_12345	,008[b]	,133	,895	,011	,918
	S_1234	-,054)[b]	-,890)	,375	-,071)	,992
	C_123	,166[b]	2,178	,031	,172	,622
	Age	,121[b]	1,993	,048	,158	,990
3	P_12345	-,014)[c]	-,220)	,826	-,018)	,894
	S_1234	-,071)[c]	-1,169)	,244	-,094)	,978
	C_123	,140[c]	1,819	,071	,145	,601
	Age	,121[c]	2,019	,045	,161	,990
4	P_12345	-,011)[d]	-,175)	,861	-,014)	,894
	S_1234	-,071)[d]	-1,177)	,241	-,095)	,978
	C_123	,127[d]	1,662	,099	,133	,596

a. Predictors in the Model: (Constant), E_3456

b. Predictors in the Model: (Constant), E_3456, T_123457

c. Predictors in the Model: (Constant), E_3456, T_123457, U_2456

d. Predictors in the Model: (Constant), E_3456, T_123457, U_2456, Age

e. Dependent Variable: BI_12356

Table 29. Excluded Variables

Although expectation is that younger population will adopt more easily mobile payments due to their knowledge, these results show that coefficient for age is significant, but positive. Although younger Internet users are adopters of mobile technology, when it comes to payment closely related to security/privacy, the previous is not true.

4.9 Economic significance

The study's results shows that three factors are statistically significant: ease of use (standard coefficient =0.326), trust (standard coefficient =0.282) and usefulness (standard coefficient =0.180) as shown in Table 21.

If the perception of the ease of use increases for one unit, then perception of users' intention to use mobile commerce will increase for 0.326 units. If the perception of the trust increases for one unit, then perception of users' intention to use mobile commerce will increase for 0.282 units. If the perception of the usefulness increases for one unit, then perception of users' intention to use mobile commerce will increase for 0.180 units.

To increase perception of users' intention to use mobile commerce, service providers and companies that offer mobile commerce services should first increase ease of use because it is the most influential factor. Of course, improving one factor it does not mean that the other factors should be neglected. All factors must be on a satisfactory level, but improving ease of use for one unit will provide the highest gain in users' intention to use mobile commerce.

The difference between standard coefficients is not high, therefore, although results imply that some factors are more influential than the others, service providers and companies that offer mobile commerce services must implement strategies to improve and sustain high levels of consumers' perception on ease of use, trust and usefulness.

4.10 Hypotheses status

Based on the previous analysis, the status of the hypotheses whether they are supported or not is presented in the table below. Usefulness, ease of use and trust have a direct and positive effect on intentions to adopt mobile commerce.

Research Hypotheses	Supported
H1: Usefulness has a positive impact on user's intention to use mobile commerce	√
H2: Ease of use has a positive impact on user's intention to use mobile commerce	√
H3: Trust has a positive impact on user's intention to use mobile commerce	√
H4: Privacy concerns has negative impact on user's intention to use mobile commerce	x
H5: Security concerns has negative impact on user's intention to use mobile commerce	x
H6: Compatibility has positive effect on user's intention to use mobile commerce	x

Table 30. Summary of the Results

5 DISCUSSION

This part of the study presents the discussion of the hypotheses, to describe whether they are achieving the objectives of the study or they are not. The statistics and respectively results obtained from this research helped us to find how users understand and accept Mobile commerce technology. Based on results we have found that three factors Ease of use, Trust and Usefulness have a significant correlation with the behavior intention to use mobile commerce technology.

Different from researches of early e-commerce and m-commerce adoption, the influence of these three factors in adoption of m-commerce shows to be much more important, according to numerous studies: Grandon & Pearson (2004), Wu & Wang (2004), Luarn & Lin (2005). Except these three factors, the other factors, security, privacy and compatibility, were found not to be significant. Thus, during the analysis ease of use is found to be the factor which has the highest direct effect on behavior intention compared to other factors. Importance of ease of use is confirmed by various studies of mobile commerce adoption: Im, Kin & Han (2007), Fang & Chen & Brzezinski & Xu (2005). This study and results present the understanding of users' acceptance in mobile commerce in Kosovo's context.

Usefulness

Usefulness was found to have a positive impact on the adoption of mobile commerce. Based on the survey, specifically on the responses, we can say that if we offer a system which is useful or beneficial to the users and increases their potential, chances are favorable to accept and use it. Based on the results we have found a relation between usefulness and intention to use mobile commerce, which is proved by acceptance of the first hypothesis in this study. Usefulness is one of the two basic factors in TAM linked with user's acceptance of technology, in our case mobile commerce.

Therefore, our results are in accordance with Chau & Hu (2001), where user can accept a new system to make transactions via mobile commerce technology if the system will be useful for them. The finding is in accordance with Pavlou (2001) where usefulness affects the user's

intention to make a transaction on the Internet and in accordance with Wu & Wang (2004) were usefulness has influence on behavior intention.

Our results are in accordance with Grandon & Pearson (2004), where usefulness shown to be the most important factor that influence adoption of e-commerce.

But, our finding is different from the findings presented in Wei et al. (2009) where it is found that usefulness is the most significant factor to predict user's intention to use mobile commerce and in our study usefulness it is not the most significant factor. Our results show that usefulness is determined as a valuable factor for users in behavior intention to use mobile commerce. Our results show that Usefulness was factor with less influence than Ease of use in acceptance of mobile technology.

The purpose of usefulness was to collect information from respondents related to knowledge whether using mobile commerce technology will accomplish consumers shopping tasks faster, which was proved by respondents. The users of mobile commerce will save their time, since time nowadays is very valuable. Therefore, mobile commerce users do not need to go through different type of payments from different places, but offering the possibility of purchasing through the mobile commerce, customers also will have better purchasing decisions.

However, based on the results we observed that for consumers it is important to use a system or a technology that saves consumers money, in this case using mobile commerce technology will improve the performance of consumers' purchasing. Therefore, in other words results related to factor usefulness describe that users may find it more useful to make transactions using mobile commerce.

From results we have noticed that by being useful, the system will increase consumer's quality of shopping tasks. Therefore, by improving the quality of shopping tasks, the number of consumers will increase. Our results show that being useful as a system can increase productivity in the shopping tasks of the consumers, which means the consumers will make various and more payments if they perceive it as useful for them.

Ease of use

Ease of use has been a powerful factor that affects the consumers Intention to use mobile commerce. Therefore, our results are in accordance to several studies which have recommended that ease of use is an important factor in technology adoption as Davis (1989). In this study ease of use is suggested as a factor which is basic or essential in usage of mobile commerce.

If a system is considered to be easy for use, then it is expected to be used and accepted by the consumers more often and on a higher level. In other words it means that if the system will be provided with an easy to use process, it can increase the rationale for its usage and gives motivation to even increase the usage of mobile commerce.

Based on Grandon & Pearson (2004), ease of use turned out to be the factor which has the most influence on adoption of e-commerce. Developers of mobile commerce applications should consider that offering a system which is easy to use and flexible, is one of the most important factors that affect the users. Therefore, in order to be accepted by customers it should provide easiness of use.

Ease of use is a factor which mostly has affected behavior Intention in this study. It is important for users if they would find it easy to learn how to shop online using their mobile phones. Therefore, offering a system or an application or payment method which is easy to use, means that users do not need to be accompanied by anyone, do not need the professional assistance or help of an expert to use it.

Respondents from this survey were chosen those that have smart phones and have Internet connectivity within their mobile phones, therefore we have found that a large proportion of the respondents think they would be skillful using mobile commerce technology, which was proved by this study's results. This means that respondents or consumers do not think they should have a great mental effort to shop using mobile commerce technology.

If the system is easy to be used, it will be easy for consumers to find their products or services they wish to purchase. From the results we have observed that respondents prefer to buy through electronic commerce, in comparison with off-line commerce where sometimes they have to wait in line to make payments or to go in different places to perform the payments.

Hence, this means that this technology which offers to make online payments through mobile phones should be appropriate, flexible and provide easy usage to consumers when buying online via mobile commerce.

Trust

The results also show a positive relation between trust and Intention to use mobile commerce, proved by the third hypotheses that trust has a positive impact on user's Intention to use mobile commerce, which means that trust is important construct in mobile commerce adoption.

Service providers should implement higher trust standards to get more users, offering different type of services for applications that deal with various transactions. Considering the previous, the consumers will have more trust and confidence in mobile technology usage. From the statistics, I conclude that trust is statistically significant in user's intention to use mobile commerce. The results are in accordance with Luarn & Lin (2005) and a few others where trust was found to be a factor that is important for adoption of mobile commerce and technology acceptance. As well, the research presented by Wei et al (2009) shows that trust has a high positive association with users' intention to use mobile commerce.

Trust is also one of the most important factors in this study. From the results we have seen that consumers trust that their personal information will be kept confidential while using mobile commerce technology.

Based on the results we have seen that a majority of respondents think that processing transactions using mobile commerce will be safe. We have seen that they also believe in the benefits of decisions in mobile commerce sites and they do not hesitate to use their credit cards to the Internet to buy products or services.

This means that they do not hesitate to give their information in relation to their habits to mobile commerce sites. Therefore, in general, trust is being developed as a phenomenon during online purchase on the Internet and few of the respondents do not believe in it.

Privacy concerns

Privacy concerns in this study were not found to be statistically significant. The results are in accordance with Rajabion (2015) who was performed a survey about mobile commerce

adoption and its factors in Iran, and the results show that privacy does not have influence on mobile commerce adoption.

Therefore, the industry of Information Technology should take in consideration to develop applications that are more user friendly to manage privacy threats.

Our results are in contrast with the literature and previous studies such as Dinev & Hart (2006) that deals with factors of mobile commerce adoption, where it is described that Privacy concerns negatively affect the users' intention to adopt mobile commerce.

Thus, we can say that privacy is on a top of the concerns for users. Based on the article by Boateng & Osei (2013, page 151), I have found that "markets with high software piracy rates also have the tendency to experience high rates of malware infections". On this study privacy concerns refers to a user when is asked to give their personal information on the Internet.

It is known that privacy concerns are one of the factors that mostly affects negatively technology users, because information or their personal data are valuable for them. This means that personal data or their information do not need to be published or even sold by companies or different organizations. It is not that software applications developed by companies or large corporations in the world and who offer various services are very valuable or are worth millions, but information of users, are those that have the real value. This implication that users' personal data and their content are those that have greater value than its application. In other words, this means that the information that we give every day or signup through the applications or we use them are broad sensitive because these data contain all our personal information, and sometimes those can be misused or abused by organizations or individuals for irresponsible or illegal purposes.

Some of the factors that influence user privacy concerns are starting from collecting too much information of the users, which means that users' personal data includes their names, surnames, age, gender, place of birth, up to addresses and contact number, to the social and family relations. Therefore, it is easy nowadays to find a way to contact or to find the address of users, because we use smart phones and applications that make it possible to show users information or even location.

Based on the results, it is shown that users have a deep concern when submitting their personal information's in the internet because those could be misused. Also an important part of privacy concerns is financial section, where many of the users are concerned when giving credit card information's on the internet because it could be stolen during its transfer on the Internet.

Other concerns about privacy relate to the purpose of collecting users' information. This means that users are concerned to submit their personal data on the internet because what others might do with them and those can be used in a way that users can not foresee.

Therefore, although this study shows that privacy is not significant, the users consider as a mandatory part of the service offering. The direct effect is not significant, but this does not mean that is has indirect effect via some other factor.

Security concerns

Security concerns in this study were not found to be statistically significant, which can be explained as respondents are familiar with online payments and are informed that security features are implemented. Thus, some of the users know that when buying online, security is implemented from service providers and mobile commerce websites which contains different type of techniques like firewall, antiviruses and encryption.

Security concerns are found to be disturbance in adoption of mobile commerce. Therefore, security concerns is a basic factor in future development of mobile commerce, which means that in the future this field needs a big commitment.

Security concerns exist at all times although in most cases service providers and mobile commerce sites have implemented the systems that protect consumers which saves users confidentiality, integrity and are available all the time. Users' confidentiality means that only authorized users should access the data and for integrity it is expected that data's should be received as they are sent, this means that nobody could change or modify them.

The results are in contrast with Fang, Chan, Brzezinski & Xu (2005), where security is positively related with users intention to transact on handheld devices. Results show that respondents have expressed their concerns about the safety of mobile commerce in general, but also in the security of payments details during transactions. Other concerns have been when

releasing the credit card information's through mobile commerce services, and service providers can misuse personal information for other purposes without the authorization.

In this study direct effect of Privacy and Security as separate factors as theoretically conceptualized and as one factor as obtained from the statistical analysis (EFA), leads to the convergent result. For exploratory purposes I did regression analysis to check whether combined factor of Privacy and Security has direct effect on intention, but I do not present results because it is data-driven approach, and the research goal is to be theory-driven. The non-significance of the Privacy and Security concerns is confirmed by the Oliveira et al. (2014). In their study Privacy and Security concerns are considered as one factor. The potential answer is advancement of technology that mitigates risks of inherent Internet threat. Mobile commerce users think that all issues related to Security and Privacy are resolved. Also, hot topic is a privacy issue to be framed in the directive, not only in Kosovo, but also in European Union. The other potential answer is that mobile commerce users are aware of security and privacy, although probability is low due to the general knowledge and high penetration of Internet technology in business and personal life. Therefore, I consider that our result that privacy and security do not have direct effect on intention to adopt mobile commerce, either as separate factors or as one factor, is relevant due to newest trends in technology and legislative.

Compatibility

Compatibility was shown not to have influence on intention to use mobile commerce. From this study it is implicated that users seek for compatibility to be not in the right level with their payment activities and being compatible with user's lifestyle. The sixth hypothesis was not proved, which means that compatibility is not statistically significant.

Therefore, our results are in accordance with the results of the study performed in Hong Kong and presented in article of Fong & Wong (2015) where compatibility was not statistically significant. However, our results are in contrast with the studies performed in Taiwan by Wu & Wang (2004), where compatibility is frequently associated with adoption of technology innovations. Therefore, in this article it is found that compatibility has direct effect on behavioral intention. In the article of Grandon & Pearson (2004) compatibility was found to be statistically

significant in adoption of electronic commerce, which means that compatibility in that study was relevant to users intention to use mobile commerce, but in contrast with our results.

Early studies have found that compatibility is considered as an important factor for technology adoption, but over time it appears that compatibility is not an important and significant factor that influences the behavior Intention of mobile commerce. Most probably this is based on the accumulated experience of the internet users when performing any type of transaction, not necessarily related to commerce.

Although I should note that in different type of companies that use electronic commerce, compatibility was found to be influential factor, but not the most important factor, therefore in this study compatibility is an independent variable which do not influence users' intention to use mobile commerce.

Results shows us that compatibility is not an important factor in mobile commerce and do not have influence on the way that users make payments or how users shop or seek for product information's.

5.1 Implications

Since users disclose their profiles or shopping preferences for service providers and service providers are the ones who make the transfer of information's to users, their focus should be on improving the factors that affect mobile commerce users, ranging from the most important factors to those with less importance, with the idea to increase the number of users.

Based on results from this study Ease of use was the most important factor followed by Trust and Usefulness. Therefore, service providers need to improve the ease of use factor since it affects mostly the users. This means that mobile commerce technology should be offered to users as easy to use where the number of users will increase.

It is known that sometimes different technologies or systems are difficult or complicated to use, or at least proceedings to make a purchase or sale through the Internet are lengthy or complex. Therefore, offering systems or technologies in order to be as easy to use, implies that there will be used more by different people because of the suitability or adaptation with the users requests. We all know that older generations are finding it hard to adapt or develop their

activity in the use of the latest technology, therefore service providers should consider all factors that affect the adoption of mobile commerce and offer always better services.

Other factors that influence mobile commerce adoption are usefulness and trust, where trust in mobile commerce has an important role as a factor that influence users, but also if a system of mobile commerce will be useful, users will use it. This means that if a system or a technology of mobile commerce is offered as useful and users will have trust in that, then expectations and usage will be larger.

But anyway it is not preferable to skip other factors that affect adoption of mobile commerce such as: privacy concerns, security concerns, compatibility and other factors.

5.2 Limitations

Most of the studies that are related with mobile commerce have limitations, also this means that our study has its own limitations. Since the study was done in Kosovo this means that this is a limitation, therefore this research has studied only the factors that have influence on Kosovo's context.

Another limitation can be studying not only individual users or non-users of mobile commerce in Kosovo, but to include also different type of businesses and industries.

The convenience sampling is also a limitation of this study.

Small sample size is a limitation in this study. With the small number of respondents, it is difficult to define thoughts and opinions of everyone related to mobile commerce technology in Kosovo. In fact, it was difficult to reach a much larger number of respondents.

This study shows no clear distinction between security and privacy. Therefore, two potential causes are: issue with data, or the mobile payment users are not able to discriminate between privacy and security. It is interesting to research whether this issue is valid as well for other industries in Kosovo, e.g. e-commerce.

5.3 Future Research

Most of the current similar research as in this study is being done in developing countries, while research in Kosovo and similar neighboring countries should receive adequate research attention in the future. Therefore, as a future research I propose to perform similar studies in neighboring countries and to compare results with the results from the context of Kosovo. Studying the mobile commerce factors in neighboring countries and collecting the most important factors will be a great additional contribution in terms of adopting mobile commerce for us, for European countries and for all interested stakeholders.

Also one avenue for future research could be the study of mobile commerce from the business perspective of mobile commerce services providers.

Yet another limitation that is basis for future research, is studying only the presented factors in this research. Therefore, extending and studying other factors in this research could give us different results, wherein mobile commerce in general or buying and selling online via Internet is affected by many different factors. Despite from choosing the most important factors in this study, there is a possibility that this research can be expanded with inclusion of other factors that influence adoption of mobile commerce.

6 CONCLUSION

Mobile commerce is an important technology development nowadays, knowing that electronic commerce at this time is mainly being used by mobile phones and it is increasing day by day even more. This means that mobile commerce that I am seeing these days would not be same in the next years. Mobile commerce has helped companies in many different ways and also helped customers to shop online around the world. This thesis makes possible to define the factors that have influence on mobile commerce adoption decision in Kosovo. From the six hypotheses that I have expand and described on this study, I have found how many of them are statistically significant. Since all the tests are performed and I got the final results, this study is able to present the factors that influence adoption of mobile commerce for service providers, organizations or companies and different type of industries in Kosovo. This study can be used by different developing countries such as Kosovo for factors regarding mobile commerce adoption. Therefore, these tests and results derived from this study will contribute respectively to all organizations or companies that intent to implement mobile commerce in Kosovo to explore the factors and to accommodate their business needs, strategies, models and their paths before implementing mobile commerce services.

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APPENDIX A

Factors	Code	Adopted Source	Questions from the articles
Behavior Intention	BI 1	Cheong & Park, 2005	I intend to use Mobile commerce
	BI 2	Bomil Suh & Ingoo Han, 2002	I intend to continue using this Mobile commerce site in the future
	BI 3	Pin Luarn & Hsin-Hui Lin, 2004	I intend to increase my use of mobile services in the future
	BI 4	Toh Tsu Wei, Govindan Marthandan, Alain Yee-Loong Chong, Keng-Boon Ooi, Seetharam Arumugam, 2008	I intend to use Mobile commerce if the cost of services is reasonable for me
	BI 5	Bomil Suh & Ingoo Han, 2002	I will strongly recommend others to use mobile commerce sites
	BI 6	Eunju Ko & Eun Young Kim, 2009	I intend to learn how to use Mobile commerce services in the future
Attitude	A 1	Cheong and Park, 2005	I think that using Mobile commerce is good idea
	A 2	Jiajun Chen, 2007	In general, I have positive opinion about Mobile commerce services
	A 3	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	I think that using Mobile commerce is valuable
	A 4	Bomil Suh & Ingoo Han, 2002	I think that using Mobile commerce is a wise idea
	A 5	Lei-da Chen, Mark Gillenson, Daniel Sherrel, 2001	I think that using Mobile commerce is convenient

	A 6	Bomil Suh & Ingoo Han, 2002	Using mobile commerce is a pleasant idea
	A 7	Bomil Suh & Ingoo Han, 2002	Using mobile commerce is an interesting idea
Usefulness	U 1	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	Using Mobile commerce would enable me to accomplish shopping tasks faster
	U 2	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	Using Mobile commerce can help me to make better purchasing decisions
	U 3	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	Using Mobile commerce will improve the performance of my purchases
	U 4	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	Using Mobile commerce will help me to save money
	U 5	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	Using Mobile commerce improves the quality of my shopping tasks
	U 6	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	Using Mobile commerce increases the productivity of my shopping tasks
Ease of Use	E 1	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	I think that I would find it easy to learn how to shop using a mobile phone
	E 2	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	I think that I am able to shop using a mobile phone without the help of an expert

	E 3	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	I think that my mobile phone is flexible to interact with when shopping
	E 4	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	I think that I could become skillful at Mobile commerce
	E 5	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	I think that Mobile shopping online does not requires great mental effort
	E 6	Joaquı Aldas-Manzano, Carla Ruiz-Mafe, Silvia Sanz-Blas, 2008	I think that it is easy to use a mobile phone to find services that I would buy
Trust	T 1	Toh Tsu Wei, Govindan Marthandan, Alain Yee-Loong Chong, Keng-Boon Ooi, Seetharam Arumugam, 2008	I believe my personal information will be kept confidential while using Mobile commerce technology
	T 2	Toh Tsu Wei, Govindan Marthandan, Alain Yee-Loong Chong, Keng-Boon Ooi, Seetharam Arumugam, 2008	I believe transaction conducted through Mobile commerce will be secure
	T 3	Toh Tsu Wei, Govindan Marthandan, Alain Yee-Loong Chong, Keng-Boon Ooi, Seetharam Arumugam, 2008	I believe payments made through Mobile commerce channel will be processed securely

	T 4	Bomil Suh, Ingoo Han, 2002	I trust in the benefits of the decisions in Mobile commerce sites
	T 5	Bomil Suh, Ingoo Han, 2002	I trust the Mobile commerce sites
	T 6	David Gefen & Detmar Straub, 2002	I would use my credit card to purchase from internet
	T 7	David Gefen & Detmar Straub, 2002	I would not hesitate to provide information about my habits to sites
Privacy Concerns	PC 1	Jiajun Chen, 2007	I am concerned that the mobile payments service is collecting too much information from me
	PC 2	Dinev & Hart, 2006	I am concerned that the information I submit on the Internet could be misused
	PC 3	Dinev & Hart, 2006	When I shop on-line, I am concerned that the credit card information can be stolen while being transferred on the Internet
	PC 4	Dinev & Hart, 2006	I am concerned about submitting information on the Internet because of what others might do with it
	PC 5	Dinev & Hart, 2006	I am concerned about submitting information on the Internet because it could be used in a way I did not foresee
Security Concerns	SC 1	Muniruddeen Lallmahamood, 2007	I am concerned that using mobile commerce is financially secure

			I am concerned about the security of my payment details during payments transmission
	SC 2	Jiajun Chen, 2007	
	SC 3	Muniruddeen Lallmahamood, 2007	I am concerned when I release credit card information through mobile commerce
	SC 4	Jiajun Chen, 2007	I am concerned that the service provider will misuse my personal information for other purposes without my authorization
Compatibility	C 1	Jiajun Chen, 2007	I think that using mobile commerce services fits in well with the way I like to make payments
	C 2	Jiajun Chen, 2007	Using the mobile commerce services is compatible with all aspects of my payment activities
	C 3	Jiajun Chen, 2007	Using the mobile commerce services is compatible with my life style
	C 4	Lei-da Chen, Mark Gillenson, Daniel Sherrel, 2001	Using Mobile commerce fits well in the way I like to shop or to seek product information