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OF LANGUAGES, CULTURES AND COMMUNICATION

POSTGRADUATE STUDIES – SECOND CYCLE

THESIS:

"Determinants of Trust in the Electronic Payment Systems (EPSs) in Kosovo"

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DECLARATION

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.

Modest Morina Oct, 2017

DECLARATION

I, Visar Berisha, have proofread the thesis entitled “Determinants of Trust in the Electronic Payment Systems (EPSs) in Kosovo” and hereby certify that it conforms to generally acceptable standards for verbiage, spelling and format.

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Abstract

Purpose – The purpose of this research is to provide a theoretical and empirical view of the factors which impede or facilitate e-payments in the e-commerce environment, and this way increase e-trust and intention to transact. The link between these factors towards e-trust and intention will benefit the stakeholders in e-payment environment. E-commerce in Kosovo can be further developed having in mind the customers' view of the determinants used in this study.

Design/methodology/approach – A theoretical background is formed that links the factors of this study to the trust in e-payments and intention. To make the empirical tests, interview data is gathered and surveys are made in collaboration with Kosovo's bank employees. The model is analyzed using exploratory factor analysis and multiple regression analysis.

Finding – Results provided a positive relation between perceived privacy, security, usefulness and information quality towards the e-trust. In turn, e-trust has also been found to positively affect the intention to transact.

Research limitations/implications – The research focuses only on the bank employees of Kosovo's market. Future studies can generalize the findings across other markets and samples of population. Also, there are other factors which can be added and that were not on the scope of this study, therefore future research can address the disposition to trust and experience with e-payments more specifically.

Practical implications – The results provided us a model that stresses the importance of certain factors that can lead to higher trust in e-payments and this way increase the number of transactions and benefit all the entities that take part in e-commerce. Removing cash payments is also one of the newest initiatives of the Central Bank of Kosovo.

Originality/value – This model emphasizes the empirical relationship between the factors that are reasoned to be the most significant for increasing e-trust in Kosovo, this way providing a basis for other academic studies.

Keywords - E-trust, Banks, E-commerce, Intention

Paper Type – Master Thesis

Parathënie

Qëllimi - Ky hulumtim është bërë për të ofruar një vështrim teorik dhe empirik të faktorëve që pengojnë ose ndihmojnë pagesat elektronike në mjedisin e e-tregtisë, dhe kështu rrisin e-besimin dhe qëllimin për të paguar. Lidhja midis këtyre faktorëve drejt besimit në shërbimet elektronike dhe qëllimit do t'i sjell përfitime pjesëmarrësve në mjedisin e e-tregtisë. E-tregtia në Kosovë mund të zhvillohet edhe më tutje duke pas parasysh edhe opinionin e klientëve ndaj faktorëve që janë përdorur në këtë studim.

Planifikimi/metodologjija/qasja – Është përdorur një hulumtim teorik që lidhë faktorët e këti studimi me besimin në pagesat eletronike dhe qëllimin. Për të bërë testet empirike, janë grumbulluar të dhënat nga intervistat dhe pyetësoret në bashkëpunim me punëtoret e bankave në Kosovë. Modeli është analizuar duke përdore analizën e kërkimit (eksplorimit) të faktorëve dhe regres te shumëfishtë.

Të **gjeturat –** Rezultatet ofruan lidhje positive në mes të përceptimit të privatësisë, sigurisë, dobishmërisë dhe kualitetit të informative drejt e-besimit. Si rrjedhojë, e-besimi poashtu ka treguar që ka lidhje positive me qëllimin për të bërë pagesa.

Kufizimet e kë**ti hulumtimi –** Ky hulumtim përqendrohet vetëm në punëtoret e bankave të tregut të Kosovës. Hulumtimet e ardhshme mund të vijnë në konkluzione duke përfshire tregje dhe popullsi të tjera. Poashtu ka faktorë te tjerë që mund të shtohen e që nuk kanë qenë të perfshirë ne këtë studim, prandaj hulumtimet e së ardhmes mund të i drejtohen "hulumtimit të gatishmërise për të besuar" dhe "eksperiences me pagesat elektronike" në më shumë veçanti.

Ndë**rlidhjet praktike –** Rezultatet e këti studimi na kanë ofruar një model që thekson rëndësinë e disa faktorëve që mund të ngrisin besimin në e-pagesat dhe në këtë mënyre të rrisin numrin e transaksioneve dhe të sjellin përfitime tek të gjithe pjesëmarresit në e-tregtine. Zvogëlimi i pagesave me para në dorë është poashtu një nga iniciativat më të reja të Bankes Qendrore në Kosove.

Origjinaliteti/vlefta – Ky model thekson ndërlidhjen empirike ndërmjet faktorëve qe janë vlerësuar si më të rëndesishmit për të rritur e-besimin në Kosovë, në këtë mënyrë duke ofruar bazë per studimit tjera akademike.

Fjalet kyce – E-besimi, Bankat, E-tregtia, Qellimi

Lloji i dokumentit – Temë e masterit

Апстракт

Цел - Целта на ова истражување е да се обезбеди теоретски и емпириски поглед на факторите кои ги попречуваат или олеснуваат електронските плаќања во е-трговија, и на тој начин ја зголемуваат е-довербата и намерата да извршат трансакција. Врската помеѓу овие две фактори кон е-доверба ќе им користи на засегнатите страни во е-плаќање. Е-трговија во Косово може понатаму да се развива, имајќи го предвид гледиштето на купувачите за детерминантите користени во оваа студија.

Дизајн / методологија / пристап - Теоретска позадина е формирана да ги поврзува факторите на оваа студија со довербата и намерата во е-плаќањата. За емпириските тестови на ова истражување, податоците за интервјуто се собирани и вршени во соработка со вработените во банката во Косово. Моделот е анализиран со помош на истражувачка факторска анализа и регресивна анализа.

Наоѓање - Резултатите обезбедија позитивна врска меѓу перцепираната приватност, безбедноста, корисноста и квалитетот на информациите кон е-довербата. За возврат, е- довербата, исто така, се најде позитивно да влијае на намерата за трансакции.

Истражувачки ограничувања / импликации - Истражувањето е фокусирано само со вработените во банката на косовскиот пазар. Идните студии можат да ги генерализираат наодите на други пазари и примероци од населението. Исто така, постојат и други фактори кои можат да се додадат и кои не беа во опфатот на оваа студија, затоа идните истражувања може поконкретно да ги опфатат расположението за доверба и искуство со е-плаќања.

Практични импликации - Резултатите ни дадоа модел кој ја нагласува важноста на одредени фактори кои можат да доведат до поголема доверба во е-плаќањата и на тој начин ќе го зголемат бројот на трансакции и ќе имаат корист сите субјекти кои учествуваат во електронската трговија. Отстранувањето на готовинските плаќања е исто така една од најновите иницијативи на Централната банка на Косово.

Оригиналност / вредност - Овој модел ја нагласува емпириската врска меѓу факторите кои се сметаат за најзначајни за зголемување на е-довербата во Косово, на тој начин обезбедувајќи основа за други академски студии.

Клучни зборови - Е-доверба, банки, е-трговија, намера

Тип на трудот - Магистерски труд

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1. Introduction

Trust in the Electronic payment systems (EPSs) is a topic widely researched in the recent years for the purpose that it constitutes an important step in the business of Electronic Commerce and other payment solutions over the Internet. We intend to research the determinants of e-trust in the context of Kosovo, and what are the main constituents that may have effect on the e-payments.

Trust in the e-commerce is essential for the business relations of the e-commerce, and that is mostly because of the factors such as risk, uncertainty, technology use and others, that are present in many situations during these so-called distant relationships (McKnigh and Chervany, 2002).

There are many definitions of trust because it is used in many disciplines. In one context trust is defined as the customer's relationship with the bank and its assurance on the reliability of products and services, while in the electronic transactions it is even more important to build trust with the customers, than in the traditional in-store payments, since there is more perceived uncertainty and risk (Hwang, 2007; Liao, 2011). It is very hard to regulate the business relations, since customers need to trust the other party not to take advantage (Gefen, 2002).

In the e-business environment, trust is important since it is practically impossible to fully regulate the business agreement and consequently it is necessary to rely on the other party not to take unfair advantage and not to engage in opportunistic behavior (Deutsch, 1958; Fukuyama, 1995; Williamson, 1985) and as such, trust is a crucial aspect of many long-term business interactions (Dasgupta, 1988; Fukuyama, 1995; Gambetta, 1988; Ganesan, 1994; Gulati, 1995; Kumar et al., 1995b; Moorman et al., 1992; Williamson, 1985, cited in Gefen, 2002).

Therefore, trust plays an important role because of two possible mechanisms: (1) it is a social complexity reduction method (Gefen, 2000), and (2) it reduces the perceived risk of doing business with the vendor (Jarvenpaa and Tractinsky, 1999). The trust of the customers, while conducting payments using cards and electronic commerce, is an important factor in having a growing business and a safe payment environment (Hwang, 2007).

Related to trust is also customer loyalty, which is the aim of all the businesses, including the banks, since it will lead to more profitable business. To have the loyalty of the customers, one must offer quality services and products and have the trust of the customers. Therefore, a determinant of the customer loyalty is also trust, and for this reason the customers who trust the bank for its products and services will recommend them to other customers (Kim, 2008).

This study will aim to link the factors of the Internet payments, i.e. the 10 constructs that I will use in this research to the main construct -trust- and try to link this to the behavior and intention of the customers to make e-payments. Existing theories and research assume that the constructs of privacy,

security, usefulness, ease of use, user interface, and information quality might facilitate the customers' payments over the Internet. The potential contribution of my research will be to measure which factors contribute more to the trust and intention to make e-payments in the context of e-commerce in Kosovo.

The 10 constituents of my research fall into the category of cognition, observation based factors and affect-based ones (Kim, 2008), while the personality oriented factors will not be part of this study.

- Cognition (observation)-based: perceived privacy, perceived security, information quality, user interface quality, ease of use, usefulness, etc.
- Affect-based: awareness
- Personality-oriented: disposition to trust, etc.

1.1 Aims of the research

The aim of the research is to investigate and identify the main determinants of customer trust in the e-payments in the context of Kosovo, in both the empirical and the theoretical sense and the relation between them. The key antecedents of trust and their relationships will be studied and compared.
Understanding how these factors are related to the trust in payments made through Internet will provide to the financial institutions in Kosovo greater opportunity and better information to improve their acceptance of electronic payments and offer better services.

This study takes into consideration bank employees as consumers. They work in bank but in the same time they are consumers of the bank services. Their perspective is unique because of their dual role: a) working for bank that provides services, and b) using the same services as external consumers.

Therefore, this paper will aim to provide solutions to the following research questions from the perspective of bank employees as consumers:

- How do the perceived security/privacy influence consumer trust in EPSs?
- How do the perceived ease of use/usefulness/user interface and information quality influence consumer trust in EPSs?
- How does the awareness of communication of fraud prevention, of the services and its benefits and legal (judicial) influence the consumer trust in EPSs?
- And finally, their willingness to transact (behavioral intention).

The study will empirically assess how the bank employees as customers view the electronic payments made through the websites for shopping or services. The surveys will be able to show which are the main constituents and how the right and on time communication with the customers, and proactive and preventive steps can help to improve the relations with the customers, which will reflect into better and more beneficial business for the financial institutions and companies offering online shopping and services. By making use of the literature review I will state the hypotheses and with the use and the study

of the results of the surveys, i.e. the questionnaires I will assess the situation in Kosovo and either accept or reject the hypotheses stated.

The research results can help companies who process electronic payments or are stakeholders in this process, to find out how much their business is being impacted by the stated factors, and how they can benefit by improving or changing the methods they use for enticing the customers in using e-commerce. Since services, such as payment cards and other electronic products play a very important role for retaining customers and gaining the customer trust and loyalty, this research and its results are expected to provide a very valuable awareness within the financial institutions and businesses operating online.

This research is supposed to also improve the relationship between customer and the financial institution, and the current actions that banks can take to protect their customers and enhance the bond and connection with them. By using proper operationalization of the factors and using both methods of research, i.e. mixed method, I hope my model will provide a better understanding of the role of trust in the e-payments.

At this moment, I have not been able to find any similar study made in Kosovo, and therefore I consider this study can help others to continue their research with different factors and population samples.

1.2 Importance of the thesis

I hope this unique study for the Kosovo can be used by the internet retailers and the financial institutions and other stakeholders in this industry to have a clearer picture of how the e-payment channel can be shaped and utilized more, by providing more reassurance to the customer and increasing their trust, this way also increasing the online business.

Any future investments for the purpose of growing the number of e-commerce or e-banking transactions can be made with having in mind the factors of this study and how they relate to trust in this ecosystem. We will also understand how the customers perceive these factors and how this affects the use of the electronic products and the choices they made when choosing to pay by card instead of cash.

The retail banking managers and people leading businesses in electronic payments will be able to better understand how the short and the long-term relationship with their customers are affected by the mentioned factors, and why the current number of e-payments in Kosovo is low compared to other markets.

2. Literature Review

This research was aimed at finding the factors that influence the users to make e-commerce payments by increasing trust, and as such it used several theories, such as technology acceptance model (TAM) and theory of reasoned action (TRA). This being a rather widely researched topic has been addressed in a particular way for Kosovo, i.e. using several theories and a mixed method approach.

It is predicted in the literature that although TAM is good at predicting the use of a software, it is not suitable to be used in the nature of user approach towards the EPSs. (Plouffe et al. 2001, p. 209) had concerns that the TAM model cannot predict the use context as regards to the information system acceptance. For this reason, this research has also employed and used the theory of reasoned action (TRA) which derived from social physiology. In our study, both of these theories proved valid and provided very valuable outcome. This way we have confirmed that TAM is trustworthy and empirically valid for this analysis. Additionally, there are several studies that have used TAM successfully to evaluate users' adoption of e-commerce (Gefen, Karahanna, and Straub, 2003, cited in Al-Smadi, 2012). The interest in this topic of the research is also considered very crucial now that all the businesses and the financial institutions are trying to push towards payments using electronic channels.

For the reasons above, I have decided to thoroughly analyze the available literature and analyze other studies that are related or similar to mine and compare them. This way relating my study to the larger pool of the literature about similar topics, filling it with any new information and extending studies made prior to mine. In addition, as our main objective was to find the relation of the factors to trust, below we will be first examining the antecedents of trust and they relation to our study.

2.1 Antecedents of Trust

Since this study has E-trust as the dependent variable we will need to take a view of what the literature says about different kinds of trust and how they relate to our study. We have managed to find several theoretical identifications of trust antecedents: institution based trust, knowledge based trust, calculative-based trust, personality based trust, and cognition based trust (Gefen et al. 2003). In our research personality based trust and institution based trust were not in the focus, therefore we will discuss the other three briefly as they relate to our study more.

The cognition based trust is more relevant when consumers had prior experience with the particular vendor, in our case e-commerce payments according to (Gefen et al. 2003). According to (Brewer and Silver 1978 and Meyerson et al. 1996, cited in Gefen et al. 2003), the cognition based trust is created through the categorization of illusions of control. Illusions of control describes how, in the absence of significant first-hand information, trusting beliefs can be over-inflated. In an effort to gain

some sense of personal control in an uncertain situation, individuals will assess a person's trustworthiness by observing and attending to cues that might confirm this person's trustworthiness (Langer 1975, McKnightet al. 1998 cited in Gefen et al. 2003).

Knowledge based trust refers to having familiarity of what is happening at the moment according to (Gefen et al. 2003). Familiarity reduces social uncertainty through increased understanding of what is happening in the present (Luhmann 1979 cited in Gefen et al. 2003). This kind of trust is known to develop over time and with experience, since familiarity lessens the confusion about the website procedures, and in doing so minimizes the likelihood that the customer might perceive that they are being taken unfair advantage of (Gefen 2000, Holmes 1991; Lewicki and Bunker 1995 cited in Gefen et al. 2003).
This claim has been supported by empirical work on e-commerce which shows that familiarity with how to use a Web site as well as with the e-vendor increases trust in the e-vendor (Gefen 2000).

Calculative-Based Trust is built with the involvement of a calculative process (Hosmer 1995). It is known to be shaped by the rational assessment of the costs and benefits of another party cheating or cooperating in the relationship (Buckley and Casson 1988; Coleman 1990; Dasgupta 1988; Lewicki and Bunker 1995; Shapiro et al. 1992; Williamson 1993 cited in Gefen et al. 2003). This kind of trust seems to be derived from the economic analysis, that it is not worthy for the other party to engage in an opportunistic behavior (Doney et al. 1998; Williamson 1985 cited in Gefen et al. 2003). For this reason, it can be considered that if the other party has nothing to benefit from not being trustworthy, this will in turn build trust (Gefen et al. 2003). In our setting of e-payments, it implies that the customers will engage in e-commerce payments if they perceive that they will not lose anything, for the reason that the e-vendor has nothing to gain, or that he will lose more than he will gain.

After gaining an insight of the different kinds of trust that effect e-payments, next I will be showing the model of my study in Figure 1 which is going to be tested, and the 11 hypotheses.

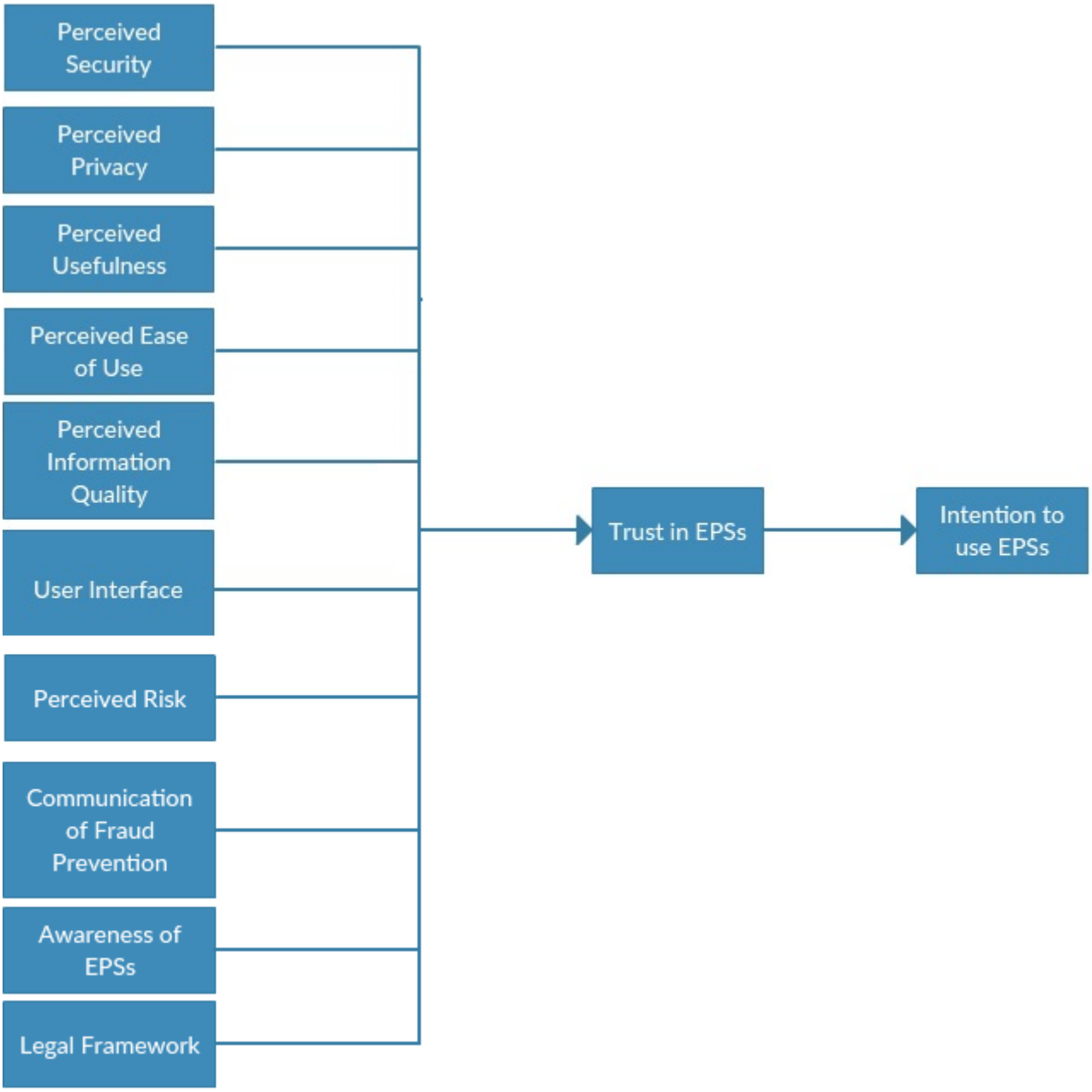


Figure 1. Proposed research model

2.2 Theoretical background of the hypotheses

The model presented above, has been designed especially for the context in Kosovo, and it is based on the literature and on the interviews that have been made with the people who have a large pool of experience in the topic and have potential to add value to the model construction. Further below I will be describing in more detail the mentioned factors and the stated hypothesis.

One of the factors is related to the privacy concerns, which will be measured by several variables, one being the customers' perceived information regarding its private data use and its rights, and their willingness to provide these data to other parties. Privacy also shows the interest of people to protect

their identity and personal information. During electronic payments using bank cards the database will save the information and leave a trace of who has bought what, for what amount and what was purchased, for this reason e-commerce payments are not anonymous (Abrazhevich 2004). Comparing this with cash payments, the trace of cash payments is much harder to trace and know who paid what (Abrazhevich 2004).

It is known that the service providers and sellers in the online environment try to increase their privacy protection measures, for the purpose of being perceived as trustworthy and to encourage the customers to make e-payments. The consumers most often perceive that their private information should not be shared with other parties. If consumers see that there is risk to their private information they may be less inclined to pay online (Kim 2008). This is also the reason that countries have privacy laws that protect the user rights and limit the usage of such information. In theory there is support that privacy is antecedent of e-trust (Chou et al. 2015). Therefore, we have proposed the following hypothesis.

H1. There is positive relationship between perceived privacy and trust in e-payments.

According to Friedman et al., (2000) perceived security can be defined as consumers' perception on how well the online vendor fulfill the basis security requirement such as integrity, authentication, encryption and non-repudiation in order to protect their personal information from threats, hackers or third parties. While according to Kolsaker and Payne (2002 cited in Flavián et al. 2006) they maintain that security reflects perceptions regarding the reliability of the payment methods used and the mechanisms of data transmission and storage. One of the reasons for such a statement is because of the possibility that financial data might be intercepted and put to fraudulent use (Jones et al., 2000 cited in Flavián et al. 2006).

Therefore, my next factor being security of the e-payments, refers to the consumer's perception that the service provider will fulfill the necessary requirements such as authentication, integrity, encryption and non-repudiation (Kim, 2008). This is mainly for the reasons that internet is an infrastructure on a network and is open to attacks. Since this infrastructure supports the electronic payments systems it has to be protected and safeguarded from any intrusion (Abrazhevich 2004). This sensitive information is being transmitted online from the customer's computer to the merchant's computer over a network. This information also goes through the banks and processing centers which enable and provide the infrastructure. So, customers must feel that their confidentiality is being protected during this transit of information (Boyd, 2010).

The factors mention above will be tested in my research as well as the general feeling of security of the consumer while making an e-payment. Definitions of these aspects of security are provided by Flavián et al. (2006), with the integrity of an information system referring to the impossibility of the transmitted

or stored data being modified by third parties without permission, while confidentiality involving the data being seen by authorized individuals. Next the authentication is defined as a certain operation allowed to be carried out only after identification, or if there are guarantees of the identity of the party one is dealing with (e.g. a web site). Finally, non-repudiation referring to the procedures that prevent an individual or organization from denying that they had carried out a certain operation (e.g. a purchasing order).

When referring to a report by ThreatMetrix (Cybercrime Report 2015 Q4), a leading company in security technology, it is stressed out that security and fraud risks continue to grow, and the anonymity of online transactions is helping fraudsters exploit this field. Therefore, the business, i.e. websites and their intermediaries need to work seriously to protect their customers. It was also found in the above mention report that there was a large increase in account creation and account takeover fraud driven by the increased availability of stolen identities in the wild, harvested from massive breaches. The overall attacks increased by over 100% compared to the previous year, according to the same report, or more precisely "80% increase in attacks over Q4 2014; and 250% increase in attacks on retailers during the peak shopping days" ThreatMetrix (Cybercrime Report 2015 Q4).

From above we can see that to attract and retain e-payment users, it is vital to enhance consumers' perceptions of security and maintain customers' trust during e-payment transactions (Kim et al, 2010). Direct effect of security to e-trust is proved in the theory (Chou et al. 2015; Ponte et al. 2015). Therefore we state the following hypothesis:

H2. There is positive relationship between perceived security and trust in e-payments.

The ease of use and the perceived usefulness of online websites, in my case e-payments, have showed significant effect on consumer intention to shop online (Shadkam et al., 2013, Lallmahamood 2007). Perceived ease of use is provided as the degree of how consumers believe that websites can help them to search more information with less effort (Chui et al., 2005, cited in Liat, 2014). Perceived ease of use is also "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p.56), and therefore, it is predicted that when processes of making e-payments are enjoyable, the trust in these payments will increase and as a result also the number of users will increase (Akhlaq and Ahmed, 2013, cited in Salimon, 2016). According to (Guttmann, 2003, p.89 cited in Abrazhevich 2004) paying online should be done easy, and must not be a complex task, we could refer to this as ease of system use (Lynch & Lundquist, 1996). Ease of use is thought to provide a payment process which would not require large efforts, because any complicated issues can affect customer interest in these payments and turn them away (Abrazhevich 2004)

We can see nowadays many efforts from many companies to make the process a user-friendly one. Considering the customer has to enter his personal information every time he pays, that is: name,

address, card number with 16 digits etc., the process seems rather a lengthy one (Abrazhevich 2004). For the reasons above many online companies are making efforts and are introducing new payment methods which facilitate the process and make it more effortless for the customer. Their check-out methods are changing and are being improved to support '1 click' payment process and complete the check-out much faster (Abrazhevich 2004). Therefore, I propose the following hypotheses.

H3. There is positive relationship between ease of use and trust in e-payments.

Perceived usefulness could be considered, as customers perceive it, a system that can help them to achieve their daily objectives (Cabanillas et al., 2013). It is also considered generally by other authors that perceived usefulness of a system has a greater influence on satisfaction, trust, and motivation of users to adoption (Pagani, 2004). While in the context nearer to my research of e-payments, it has been said that trust is a factor that is achieved when customers perceive services that are provided as useful (Yousafzai, Pallister and Foxall, 2009). Although e-trust is associated as antecedents of usefulness in a few research assignments (Lee et al., 2015), we accept the opposite direction of association (Yousefi & Nasiripour 2015).

For the following reasons, I expect to find positive relationship between this factor and trust in making e-payments, and I will research the following:

H4. There is positive relationship between usefulness and trust in e-payments.

According to the research findings below, the websites that facilitate e-payments must be able to provide user-friendly interface, which is easy to navigate, responds quickly to users' interactions, and is accessed reliably. It is also assumed that the quality of the service should last from the first interaction with the website until the end of the transaction (Chuang and Fan, 2011).

It has been suggested that elements of human computer interface design have a significant influence on customer attitudes and perceptions of the trustworthiness of a supplier (Kim and Moon, 1998; Cheskin Research, 2000; Nielsen & Norman, 2000; Egger, 2000, cited in Aubert et.al. 2001).

A study had been performed where the manipulation of different interface design factors could induce customer confidence. The study was focused on visual characteristics of the interface (Kim and Moon, 1998, cited in Aubert et.al. 2001). More recent studies (Cheskin Research, 2000; Cheskin Research and Studio Archetype, 1999; Rhodes, 1998, cited in Aubert et.al. 2001) suggested that the ease of navigation and feedback mechanisms are important factors, while Nielsen and Norman (2000) also emphasize the importance of "usability" in web sites. Also Egger (2000 cited in Aubert et.al. 2001) proposed a model and proved that interface issues such as usability, attractiveness and perception appear as important determinants of trust in this model.

In my study, I have focused on the appearance, site structure, and help and cancel buttons, as these are relevant factors of e-payments, and therefore I have stated the following hypothesis.

H5. There is positive relationship between user interface quality and trust in e-payments.

Information quality refers to how the service provider, i.e. website's accuracy of information as regards to products / services and transactions are perceived by customers (Kim, 2008). The information is supposed to help the customer make the right decisions. If the consumers perceive that the vendor is providing reliable information they will perceive it as more trustworthy (Kim, 2008).

In my research, the information that the websites provide for facilitating the payment process and the information that they provide for their services in a timely, reliable and high quality manner is seen as a factor in the decision the customers make towards making payments through Internet. The high-quality information can provide what is necessary to make the transaction in a well-ordered way, and therefore help the process of e-payments by reducing uncertainty (Kim, 2008).

H6. Trust in e-payments is positively affected from the consumer's perceived information quality (IQ).

The perceived risk is considered as a barrier for consumers who wish to make e-payments. In this research, I have used three kinds of risk to measure the consumer's belief about the outcomes of the online payments, i.e. general risk, time risk and financial risk. Because of these risks it can be reasonable for the customers to be afraid of making e-payments compared to the traditional cash payments for products and services (Kim, 2008). Since these risks can affect the customer decision whether to use e-payments or not, I propose the following hypothesis:

H7. Trust in E-payments is negatively affected from the consumer's perceived risk.

The other factor being researched in my study is the communication, which can be defined as ``the formal as well as informal sharing of meaningful and timely information'' (Anderson and Narus, 1990, cited in Mukherjee and Nath, 2013). The communication as the means of improving the customer relationship quality and the loyalty, is an important factor also in fraud handling, and that is in the proactive manner and also after an incident has happened. Effective communication allows a bank to evoke a shared understanding of values between itself and its customers according to (Asif and Sargeant, 2000, cited in Hoffmann, 2012). It is also thought that communication is a factor which can make a change and affect the customer satisfaction, trust and loyalty (Hwang, 2007).

From the literature, we have managed to find these definitions in relation e-payment fraud. One is the retail banking fraud, which is said to involve any attempt of criminals to "achieve financial gain at the expense of legitimate customers or financial institutions through any transaction channel, such as credit cards, debit cards, ATMs, online banking, or checks" (Sudjianto et al., 2010, p. 5), while the payments

fraud refers to “any activity that uses information from any type of payments transaction for unlawful gain” (Gates and Jacob, 2009, p. 7 cited in Hoffmann 2012).

The loyalty of the customers towards the bank, when the e-payments are concerned, has a different attitude to the one where the customer meets face to face with the service provider in a brick and mortar shop, since with the e-payments the human service provider is absent.

Customer satisfaction is defined as a good experience of the customers with the products and the services of the bank (Westin, 1967). The ongoing communication and fraud prevention actions that the banks take, will help retain and increase the customer satisfaction level (Hwang, 2007). The following works relate prediction of the relation between communication and trust, such as the timely communication fosters trust by assisting in resolving disputes and ambiguities (Moorman et al.1993 cited in Mukherjee and Nath, 2013), and aligning perceptions and expectations (Etgar, 1979, cited in Mukherjee and Nath, 2013). Further to this in e-payment environment there is certainly more uncertainties and disputes than into face to face transactions. So, the communication can play a big role towards this aim, for this reason the following hypothesis is the next one to help us confirm that these two are related (Kim, 2008).

I hypothesize that for e-payments, the communication between the business and the customer is positively related to trust. Therefore, I am stating the following hypothesis:

H8. There is positive relationship between communication of fraud prevention and trust in e-payments.

Another factor which I will link to trust in e-payments is the awareness of product and services and their benefits. Awareness in this context refers to the amount of information that users receive for making e-payments and knowing their benefits. It can also refer to the process of making customers aware of the special features of such products and the how they are different from competition (Aghdaie et al., 2011). It has also been found that low awareness about the benefits has caused low adoption of this channel of payments (Juwaheer et al. 2012, cited in Aghdaie et al., 2011).

Based on this information I propose the following hypothesis:

H9. Awareness of services and benefits has positive influence on the trust towards e-payments.

Continuing with the other factor in my research, the laws and regulations refer to the legal framework, which is established in Kosovo to protect e-payments. It is believed that legal framework can improve customer’s trust in e-payments (Peha and Khamitov, 2004, cited in Kim et al, 2010). The security of e-payment transactions depends on a number of factors, including legal factors, i.e., a legal framework for electronic transactions. This could also be for the reason that any disputes that client might have can be legally enforced in the court.

According to (Lewicki and Bunker 1996, cited in Hunter, 2006), trust is context specific. They also state that in the faceless environment of e-payments the legal framework and binding obligations of other parties are two factors which may affect the customer trust in this channel. It is also stressed out that governments need to ensure that the users are protected and they are aware and understand the laws that take care of the e-payments.

Therefore, knowing if our legal framework in Kosovo is able to offer confidence to the consumers and also provide the necessary environment for the businesses to operate is of great importance and will be part of the research in my paper.

Appropriate laws can facilitate and contribute to establishing trust in the e-payment ecosystem. To further understand the consumer perception, I propose the following hypothesis:

H10. There is positive relationship between awareness of laws and regulations and the trust in e-payments.

Our next hypothesis is the relation of trust to the intention to transact. Trust could refer to the customer's degree of assurance that their privacy, security and interests are safe, i.e. their personal information and money are safe (Abrazhevich 2004), and that also trust will lead to the intention to transact. According to de Ruyter et al. (2001 cited in Sirkemaa 2014), trust is a make or break element as in Internet the perceived trust dictates whether potential consumer shall make purchases or not. This is why we have decided to test also the relation of trust to intention. It is also known that intention refers to the extent of conscious effort that an individual will follow to approve his/her behavior; and that intention is also regarded as one of the motivational components of behavior (Ajzen, 1991, cited in Liat, 2014). In our context, the intention to purchase online can be defined similar to the situation when a person desires to buy a particular product or service through the website (Chen, Hsu & Lin, 2010; Fygenson & Pavlou, 2006 cited in Liat, 2014). In other words, consumers would tend to engage in online purchase behavior if they perceive the online merchant is trustworthy and confident towards the process of online transaction (Liat 2004).

Reichheld and Schefter (2000) recognized that a vital key to retaining the customers, is maintaining their trust in the e-vendor. It was also found that trust is at the heart of relationships of all kinds by (Mishra and Morrissey 1990; Morgan and Hunt 1994 cited in Gefen et al. 2003). In case of e-commerce were the web interface cannot help in judging the trustworthiness of a website this is even more crucial (Reichhelda nd Schefter 2000). One of the beliefs of trust is that the other party will behave in a dependable ethical and socially appropriate manner (Kumare t al. 1995a, Hosmer 1995, Zucker 1986 cited in Gefen et al. 2003). Trust is also said to be the expectation that others, one chooses to trust, will not behave opportunistically by taking advantage of the situation (Gefen et al. 2003). For this reason trust is

also a critical aspect of e-commerce, since in e-commerce there is an absence of proven guarantees that the e-vendor will not engage in harmful opportunistic behaviors (Gefen 2000; Kollock 1999; Reichheld and Schefter 2000 cited in Gefen et al. 2003). Some of these behaviors are what our study aims to clarify, such as, providing inaccurate information, violations of privacy, security and the corresponding events that these violations can cause. Some researchers have suggested that online customers generally stay away from e-vendors whom they do not trust (Jarvenpaa and Tractinsky 1999; Reichheld and Schefter 2000 cited in Gefen et al. 2003).

E-trust is associated with loyalty (Moriuchi & Takahashi 2016; Zhu et al. 2016, Othman et al. 2016). Trust in e-commerce is also positively influencing intention to perform transactions (Lu et al. 2015; Ponte et al. 2015; Lee et al. 2015; Alalwan et al. 2015; Pappas 2016). There are few articles claiming that e-trust is not influencing intentions to do online transactions (Lien et al. 2015). Therefore we declare the following hypothesis and we try to confirm if trust significantly affects the consumers' intention to make e-payments.

H11. Online purchase intention is positively related to trust in e-payments.

3. Research Methodology

3.1 Introduction

In my research, there seemed to be a reasonable purpose of why a mixed method might provide the best approach to analyzing the topic. First one was that no previous similar study could be found to provide basis for my research, and second that Kosovo might defer from other regional markets in terms of the use of e-payments.

For this reason, I have deployed a mixed-method research, first by using the qualitative method for collecting the data by making use of the face-to-face interviews with the Kosovo retail-banking sector, i.e. with the managers and specialists of the particular sectors within the financial institutions who are responsible for electronic payments. A focus group with small number of participants, who are especially specialized to cover these topics, was part of my study, and their comments contributed to shaping the model of my research.

This helped in:

- General exploration of what factors to study and afterwards explore these variables with a larger sample;
- Identifying the top or most known factors to influence consumer trust in e-payments;
- Their perception of the issues that are facilitating or hindering the e-payments in Kosovo market.

The quantitative method has been used to gather the statistical data by making use of questionnaires. They were designed in English language and consisted of two sections. First part, section A, contained general questions about respondents' background and their shopping habits. Section B covered the survey questions for the factors that influence consumer trust in the electronic payments, i.e. the hypotheses that have been identified in the literature and shaped according to our interview results.

3.2 Population and sample

Population was employees in the banking sector in Kosovo. Convenience sample from the banks that are mostly accessible had been used. We expected that due to the sensitive nature of the information required, there will be an issue of obtaining information from all the banks, therefore we focused on convenience sample. Majority of the research takes into consideration external clients, but our approach is not extensively deployed. Bank employees, especially those in IT departments, are fully aware of the technology that supports and provides electronic services. We want to check their perception and opinion because of their knowledge about the level of internal services related to security, privacy, web sites etc., and implemented controls that mitigate the risks of doing Internet payments.

The sample targeted people who would most likely use the electronic payments through E-commerce, and they were mostly from medium and high levels of management at the banks. This means that the convenience sampling was used for the research, for the reason that the selected participants were both easily reachable and a valid target for this research type, and they were furthermore ready to support me.

One hundred and four questionnaires were received, and all of them were valid because the electronic version through Google Forms had mandatory fields and could not be sent without filling all of the survey questions, while the ones on the hard copy form were also complete, even though the people had to be contacted to fill items which were left unanswered. The survey was sent to 7 banks which operate in Kosovo, however as the purpose of the study was not to make a comparison between financial institutions, the identity of the respondent was not gathered and will not be used for any purpose in this research.

3.3 Qualitative and Quantitative Data Collection

As mentioned before for the purpose of identifying the factors which influence electronic payments, the qualitative method was first used and adopted, this enabled the comparison of the constructs and factors which are already defined in the existing literature with those of the focus groups. Therefore, I first conducted the interviews and then followed up with the surveys.

As in my case the qualitative data supersedes the quantitative one, it means that the first data that I have gathered were from the notes taken during the interviews. However previous to the focus group I had already developed a strong knowledge in the topic from the literature review, and I had already developed my hypotheses. The Figure 2 below was drawn to show our approach to the data gathering technique.

Afterwards the notes were used to modify some of the already identified questions in the survey. Questions were based on the articles (journals and papers) which were rated the highest according to the citations they had in the internet libraries, and the authors of which were well known and trusted for their research.

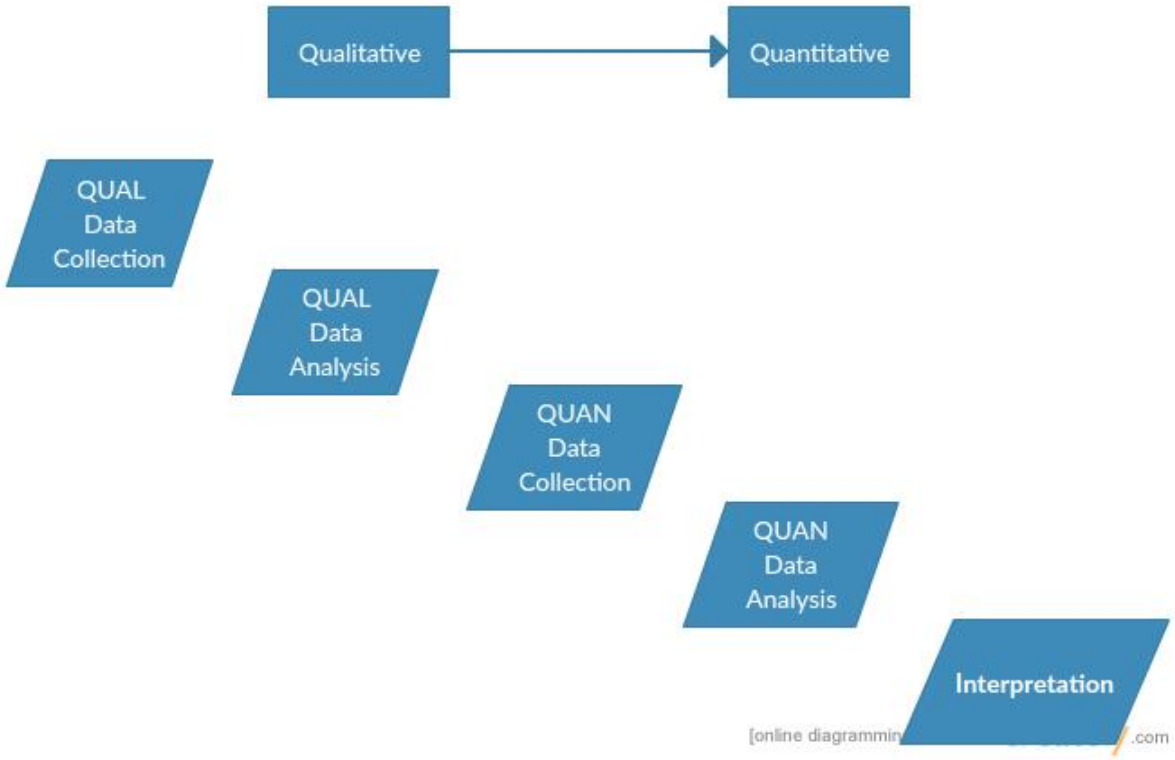


Figure 2. Data Collection Approach

3.4 Organization of Interviews

A research with the use of the focus groups is described as a means to collecting qualitative data with a small number of people in an informal discussion, with focus on a particular topic (Wilkinson, 2004, p. 177).

The interviews were held in two sessions and with small groups of 2 to 3 people. The first group consisted of 2 persons, whose experience was within the banking industry, while the second group had 3 participants, having 2 persons from the banking industry and 1 from the banking association in Kosovo. Krueger (1994) had approved the use of such groups and they are referred to as “mini-focus groups”, and these participants are expected to have specialized knowledge and experience, which was valid in my case.

First the idea of the study was laid out and then the participants were asked to provide their opinions, i.e. to state any factors which they think facilitates the electronic payments, or impede them in our country.

The interviews were conducted on face-to-face environment, which was a huge benefit for the discussion to take place in a relaxed setting and with enough time (1 to 2 hours) for the participants to think and express themselves. The participants had known each other for long time and they had friendly relationships, so this was helpful to create an environment for exchanging thoughts and opinions, since

focus groups are usually thought to be less intimidating to the research participants (Krueger & Casey, 2000).

The participants in the focus group were all people with over 10 years' experience either within a financial institution or some other stakeholder in the industry which facilitates the electronic payments, and their positions ranged from managerial to specialists in the field. For this reason, their opinions were highly valuable and provided a great way of confirming my hypothesis, so that I can continue with my research, i.e. the survey and the quantitative method.

During the exchange of the information, notes were taken for each point and opinion, while recording was not used as a method, as the participants themselves did not prefer it. The notes were then analyzed and confirmed once more at the end of the meeting.

Afterwards they were shown my model of the research and my hypotheses, and they were again asked to provide opinions and contribute through their expertise in the field. They did approve of my research model and confirmed that only small changes that were noted before, during the initial setting of the idea, were to be included and added to the already existing model.

As a result, several factors were identified, some that were already known to me based on the findings from literature and some which were new and maybe particular for Kosovo's market.
Using focus groups further helped to gather qualitative data during the discussion, which led to improving the survey with the right questions and the right issues that should be treated for this research.

3.5 Operationalization of Variables

The factors that we decided to study have been used by several scholars in various articles related to trust in e-payments, for this reason we have gathered and operationalized our study based on their studies and findings. So, the sources of our items in the questionnaire are from authors who have made valid and extensive research in the area of E-payments and their relation to trust.

As we had several factors and our approach and model was to use several known methodologies, this meant that to get the information for all these variables we have to use many sources, therefore our variables were created from the use of literature from 14 different authors.

From these 14 different authors, we chose the items that were most likely to describe our variables, and which would gather the necessary data for us to analyze. This meant that each variable was approached from different angles, using multiple items which treat different matters. For example, with security having 4 items in this variable, we were able to approach it through 4 different angles i.e. sensitive information, unauthorized access, disclosure, and modification of data, ensuring that we cover several aspects of the same variable. Three items were developed on our own, as it was seen a reasonable

approach to cover the points and gather the data for analysis, when we were not able to find similar items in the literature. Table 1 below represents our approach to creating the survey.

Construct	Abr.	Measurement	Adapted From	Notation
Perceived Privacy	PP1	Information regarding privacy of e-transactions is clearly presented.	Yakov Bart (2005)	Private data use and its rights, and their willingness to provide these data to other parties
	PP2	The site explains clearly how my information will be shared with other companies.	Yakov Bart (2005)	
	PP3	I would be comfortable giving personal information when performing e-transaction.	Yakov Bart (2005)	
	PP4	I think the website respects the user rights when obtaining personal information	Chen and Barnes, 2007	
Perceived Security	PS1	I feel secure about the electronic payment systems.	Tran Minh - 2012	Requirement such as integrity, authentication, encryption and non-repudiation are part of this factor
	PS2	I was confident that unauthorized parties cannot access my information during its transit	Peikari (2010b)	
	PS3	I was confident that the website will be the only party receiving my information	Peikari (2010b)	
	PS4	I was confident that my information will not be altered or intercept both during and after a payment process	Kim et al. (2010)	
Ease of Use	EU1	This site is user friendly	Dina Ribbink et al. (2004)	Ease of use of the

Construct	Abr.	Measurement	Adapted From	Notation
	EU2	Navigation (through payment solutions/options) on this site is easy	Dina Ribbink et al. (2004)	system and payment process are part of this factor
	EU3	My interactions with the website which I transact with are clear and understandable	Dina Ribbink et al. (2004)	
	EU4	The website which I transact with would not require a lot of mental effort	DeLone and McLean (2003)	
Usefulness	PU1	The banks I do transactions with are functional for e-payments	Van der Heijden et al. (2003), Koufaris and Hampton-Sosa (2004)	How customers perceive services that are provided as useful for managing finances and sparing time.
	PU2	Using this website can be of benefit to me in managing my finances	Bhattacherjee and Premkumar (2004)	
	PU3	Using E-payments is very useful to spare time	Our Definition	
	PU4	E-banking helps me to monitor my financial transactions & other online activities	Juwaheer, et al., 2013; Pikkarainen et al ,2004	
User Interface Quality	UIQ1	The Web site is visually appealing.	Mustafa I Eid (2011)	Navigation and manipulation of different interface design factors is part of this factor
	UIQ2	I always know where I am relatively to the site structure.	Mustafa (2011)	
	UIQ3	I always know where I can go	Mustafa (2011)	
	UIQ4	It always provides CANCEL option.	Mustafa (2011)	
	UIQ5	HELP is always provided.	Mustafa (2011)	
Information Quality	IQ1	The information on the Web site facilitates the e-transaction process	Mustafa I Eid (2011)	The attributes of the information that the websites

Construct	Abr.	Measurement	Adapted From	Notation
	IQ2	The Web site provides the relevant services information	Mustafa I Eid (2011)	provide are part of this factor
	IQ3	This Website provides timely information on the item.	Mustafa I Eid (2011)	
	IQ4	This Website provides reliable information.	Mustafa I Eid (2011)	
	IQ5	Overall, the information this Website provides is of high quality.	Mustafa I Eid (2011)	
Perceived risk	PR1	I believe that the risk of doing e-payments is not very high:	Tran Minh - 2012	General Risk / Financial Risk and Time Risk are part of this factor
	PR2	How would you rate your overall perception of risk for e-payments?	Moore and Benbasat [106]	
	PR3	E-payment system may not perform well and process payments incorrectly:	Featherman and Pavlou (2003	
	PR4	When transaction errors occur, I worry that I cannot get compensation from banks:	Featherman and Pavlou (2003	
	PR5	I would have to waste a lot of time fixing payments errors	Featherman and Pavlou (2003	
Awareness	A1	The bank is providing me sufficient information for fraud prevention	Hofmann 2012	Awareness of Fraud Prevention / Awareness of Laws (Legal) and Awareness of use were part of this factor
	A2	The bank is providing me sufficient information about the fraud prevention initiatives of the bank	Hofmann 2012	
	A3	I receive enough information about E-	Al-Somali, Gholami, & Clegg, 2009	

Construct	Abr.	Measurement	Adapted From	Notation
		payments		
	A4	I receive enough information of using E-payments	Al-Somali, Gholami, & Clegg, 2009	
	A5	I am aware of the existing laws and regulations that protect e-payments	Own Definition	
E-trust	ET1	I trust the site im doing transactions to give private information	Dina Ribbink et al. (2004)	Several characteristics of e-trust were part of this factor
	ET2	I trust the site im doing transactions to give my credit card number	Dina Ribbink et al. (2004)	
	ET3	The sites that I use for e-transactions in trustwurthy	Moore and Benbasat [106]	
	ET4	I think the sites I use for e-transactions keep promises and commitments.	Moore and Benbasat [106]	
	ET5	I believe that this Website vendor has my best interests in mind.	Moore and Benbasat [106]	
	ET6	The infrastructure of this website is dependable (reliable)	Moore and Benbasat [106]	
Intent to purchase	EP1	I intent to provide financial and personal information to the websites I use for e-payments.	Own Definition	Several questions were put to measure the e-trust relation to the willingness to transact in the future
	EP2	I would use electronic banking services for my banking needs.	Dr. Mohammad O. Al-Smadi - 2012	
	EP3	It is likely that I will transact with this web retailer in the near future.	Zwass (1998), Gefen (2000), Shim et al. (2001), Pavlou (2003), Gefen and Straub	

Construct	Abr.	Measurement	Adapted From	Notation
			(2004)	
	EP4	The website will be a good decision for me to make transaction	Kim et al., 2008	
	EP5	I would like to increase my frequency of purchase online compared to physical store	Kim et al., 2008	

Table 1. Variable names – Stating the items used in the survey and they source

3.6 Instrument Development

For developing the instruments for the measurement of the construct, we have used scale measurement with multi-items. The items used in the questionnaire were derived from known articles which have studied the relation of our 10 variables (PP, PS, EoU, PU, IQ, PR, UIQ and 3 Awareness factors) to the trust in e-payments and afterwards the relation of trust to intention, and they were revised in order to suit our context. All items of the questionnaire are reported on table 1, including the source of the items used in the measurement, i.e. where they were adapted from and the authors of those articles / journals.

The respondents were to agree to each statement by using Likert scale measurement from (1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree). At the beginning of the questionnaire information was sought about the demographics, online purchase and payment method used.

3.7 Ensuring Validity

With the aim of having a questionnaire, which fulfills the needs of the research and is both valid and practical for the respondents, the development of the questionnaire items was carried out in two phases.

First, a thorough literature review had been made to identify similar studies and identify the most suitable and most reliable questions for a survey of this kind. The constructs of this research and the items in the survey are derived by the known and trusted sources, which have made extensive research in the models similar to mine, the items are also based on theoretical concepts of previous similar studies. Afterwards the survey underwent face validity, asking for opinions for the content and if the survey was measuring what is thought to.

Second, a pilot test had been made to verify the questions of the initial version of the survey, and some questions from this pilot test that were not understood clearly by the participants were modified

(paraphrased), in order to improve both the quality and the content of the questionnaire. A panel of experts (one professor and two master candidates) who are members of the university were also asked to review the questions in order to improve the validity of the construct, and afterwards the required modifications were made to improve the clarity of the questionnaire, i.e. modifying the content of some questions to suit the study and removing any non-valid ones from the form. After this phase, some of the respondents from the sample were asked to read and answer the questionnaire. In this way, we have insured that this research will be appropriately relevant, demonstrative and understandable. After these phases the final questionnaire had been developed.

3.8 Administration of the survey

The sample that we have chosen proved to be practical, for the reason that it was easier to administer and design, and since I had access to the respondents who might not understand some item or would leave some empty in the survey.

The survey had been administered both on site, i.e. in the banks and via Google Forms in English language. Since I had access to the people to which I distributed the survey on hard copy, the positive rate and quality of the responses was at high level 100%, while for those distributed by email, the ratio was 63%, this way having a total of 104 responses, during 1 month period that I had left the survey open, which was predicted to be enough for the further analysis of the data.

There were two types of questionnaires distributed, one made through Google Forms and distributed through email with a link to the survey and the other one was paper based, the survey was then distributed in the printed format and left on the desk of the people I could reach, this was for the reason of the preference people might have and also for reaching more respondents, and those that were not reachable physically. The survey with 37 items, questions / statements was then conducted on a large scale with the participants of the banks.

4. Research results and findings

This research aimed to find the factors that mostly affect the electronic payments through E-commerce and influence customer e-trust in these payments, and possibly the relationships with the banks. The results of the analysis were derived by using SPSS tool and they will be presented and interpreted below, first beginning with the demographics of the participants and their attitude towards the electronic payments, then following with the exploratory factor analysis (dimension/factor reduction or EFA), descriptive analysis, reliability analysis and multiple regression analysis.

4.1 Demographics

According to Burns and Bush (2003), descriptive analysis is used to define the sample characteristics of the typical respondent and disclosing the general pattern of response. Table 2 below represents the gender and age characteristics, following with more information as to their interest in paying electronically vs with cash and their frequency of payments. You will see that according to this information the sample are active users of the E-commerce. Data collected from this research shows that the respondents are users of the electronic payments for the reason that most of them or 94.2% prefer paying online, rather than using traditional methods. Table 2 shows that 81.7 % of the respondents have payed online from 2-5 times during last month, which implies that they are active users of the electronic payments, 17.3 showing that they made at least one purchase, and 18.3 showing that they have paid more than 10 times through online channels. This research had 104 total respondents, from them 64 male and 40 females, 51.9 % were of the age group of 26-35, 27.9 % of the age 36-50, 19.2 % of the age 18-25, and only one respondent over 51. Most of them are working for financial institutions for more than 5 years, and have gained more in depth knowledge of what are the challenges of electronic payments during this time. Their positions ranged from IT, Operations and Business staff.

Gender	**Frequency**	**Percentage**
Male	64	61.54 %
Female	40	38.46 %
Age group	**Frequency**	**Percentage**
18-25	20	19.2 %
26-35	54	51.9 %
36-50	29	27.9 %
> 51	1	1.00 %
Educational Degree	**Frequency**	**Percentage**

Bachelor Degree	67	64.42 %
Master Degree	37	35.58 %
Phd	0	0.00 %
E-payment experience	**Frequency**	**Percentage**
Yes	103	99.04 %
No	1	0.96 %
Payment Preference	**Frequency**	**Percentage**
Online	98	99.40 %
Traditional	6	0.96 %
Frecuency of E-payments	**Frequency**	**Percentage**
1	18	17.30 %
2-5	67	64.40 %
More then 10	19	18.30 %

Table 2. Participants characteristics, Demographics

4.2 Factor Analysis (Principal Component Analysis)

The SPSS (Statistical Package for the Social Sciences) application has been used for measuring the validity of the factors, i.e. to determine that our factors are separate and distinct. The principal component analysis was conducted, while using rotations to detect the significance of the factors. The Varimax rotation was used as an extraction method for confirming the factor analysis, after which we decided to remove some variables from further analysis, for the reason that they were not extracted well.

Because our study contained a rather big number of variables, it was reasonable to use the exploratory factor analysis, while using rotations to detect the significance of the factors, in this way we could see which variables measure which aspects of the same factor. Through this analysis, we will gain a clearer view of the data, and have the possibility to use this output for subsequent analysis, i.e. multiple regression analysis in our case (Field 2000; Rietveld & Van Hout 1993).

The initial results did not give valuable results, therefore we did rotations to get meaningful results. After the obtained results it was decided that some of the variables such as, PP4, EoU3, PU1, UIQ[15], ET[34], and Intention1 were to be removed as explained and interpreted further below.

Continuing with the interpretation, Table 3 below, the rotated component matrix, shows how the variables are weighted for each component, and the correlation between the variables and the component, for these correlations the values can range from -1 to +1. Usually the correlations that are less than .3 are not reported, while according to (Stevens 2002, cited in Field 2000) it is recommended

that for a sample size of 100 the loading should be greater than 0.512. That is why we have used a loading cut-off of .5 in this study, since suppressing small coefficients helps with the interpretation. This makes the results easier to read, since the low correlations that might not be meaningful are removed. The results show that our factor loadings are appropriate.

The rotated component matrix below is a measurement model in order to find the items that share a high degree of residual variance with other items. This way we dropped the items one by one depending on the degree of the shared non-specified variance among the measurement model. After dropping some of the items, the PCA showed a reasonable model.

The PCA being used as a form of construct validity was set to load each factor loading more than 0.5. this way avoiding loss of information, and establishing validity for each scale (Hair et al., 2010).

This way PCA served to simplify the data, reduce the number of the variables, by rotating the factors after extraction, ensuring that the factors are orthogonal, and that the correlation coefficient between two factors is zero, eliminating the issues with multicollinearity in regression analysis.

From this figure, we can try to name the factors/components, according to the items that load highly on it. With an orthogonal rotation, such as the Varimax shown above, the factors are not permitted to be correlated (they are orthogonal to one another).

From Table 3 we can see that 6 factors were extracted. We removed the variables that have cross-loadings on two or more factors.

Rotated Component Matrix[a]

	Component					
	1	2	3	4	5	6
PP1 - Percieved Privacy Information					0.802	
PP2 - Percieved Privacy Information Share					0.715	
PP3 - Percieved Privacy Providing Information					0.626	
PS1 - Percieved Security - Feel Secure			0.616			
PS2 - Percieved Security - Access During Transit			0.84			
PS3 - Percieved Security - Party Receiving Info.			0.788			
PS4 - Percieved Security - Information Altered			0.863			
EOU1 - Percieved Ease of Use - User Friendly						0.766
EOU2 - Percieved Ease of Use - Navigating Easy						0.715
EOU4 - Percieved Ease of Use - Mental Effort						0.76
PU2 - Percieved Usefulness - Benefit Finances	0.586					
PU3 - Percieved Usefulness - Spare Time	0.614					
PU4 - Percieved Usefulness - Help Monitor	0.705					
UIQ2 - User Interface Quality - Site Structure		0.63				
UIQ3 - User Interface Quality - Know where to go		0.716				
UIQ4 - User Interface Quality - Cancel Option		0.601				

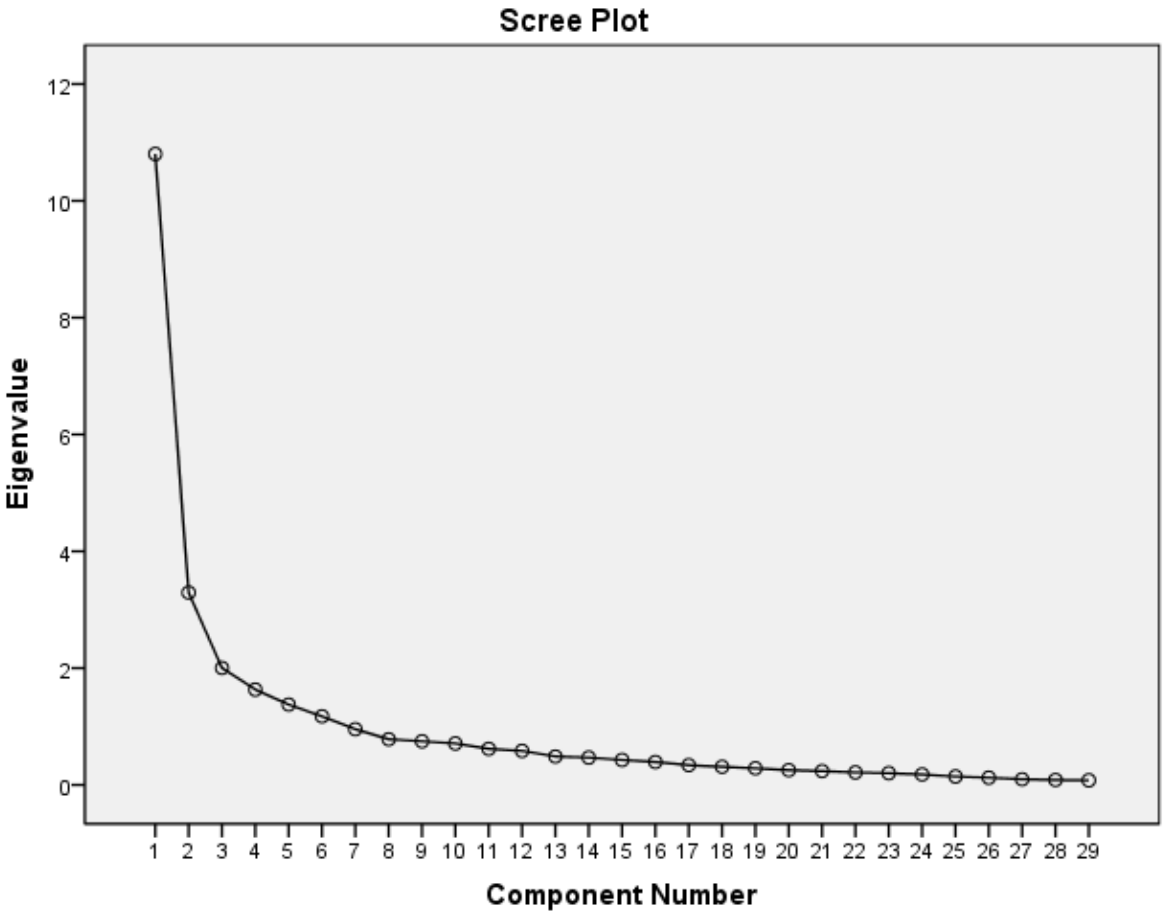
Rotated Component Matrix[a]

	Component					
	1	2	3	4	5	6
IQ1 - Information Quality - Facilitate Payments		0.604				
IQ2 - Information Quality - Important Information		0.803				
IQ3 - Information Quality - Relevant and Accurate		0.746				
IQ4 - Information Quality - Reliable Information		0.616				
IQ5 - Information Quality - High Quality Information		0.575				
E-Trust 1 - To Give Private Info.				0.606		
E-Trust 2 - To Give Credit Card Number				0.582		
E-Trust 5 - Have best interest in mind				0.745		
E-Trust 6 - Infrastructure Reliable				0.569		
Intention to Transact 2 - Would use E-payments	0.738					
Intention to Transact 3 - Likely to make in the future	0.742					
Intention to Transact 4 - Good Decision	0.809					
Intention to Transact 5 - Increase Frequency	0.792					

Table 3. Rotated Component Matrix - using rotations to detect the significance of the factors

- Component – Factor used in the study
- Extraction Method: Principal Component Analysis.
- Rotation Method: Varimax with Kaiser Normalization.
- Rotation converged in 9 iterations.

Using the Scree plot further below presented in Figure 3 we can see that 6 factors were accepted for interpretation, since they were above the Eigen values of greater that one (Table 6). These factors accounted for 69.92% of the variance. The variables of UIQ and IQ were extracted as the same factor. Since the theory clearly discriminate between them, we consider these as two factors: UIQ[234] and IQ[12435]. We consider this as a limitation of the study. As a final outcome we obtained the following factors: first factor related to privacy with variables PP[123], second factor security with variables PS[1-4], third factor with variables EoU[124], fourth factors with variables PU[234], fifth factor with variables UIQ[234], sixth factor with variables IQ[1-5], factor related to e-trust with variables E-Trust [1256], and the last factor Intention to transact with variables [2345].



- Eigenvalue: used to condense the variance in a correlation matrix.
- Component Number: number of factors

Figure 3. Scree plot

Furthermore, we checked whether the sample is big enough through the Kaiser-Olkin measure of sampling adequacy (KMO-test) table 4. It is considered that the sample is adequate if the KMO value is greater than 0.5. Additionally, we also did the calculation of the anti-image matrix of covariance and correlations (Table 5). All elements on the diagonal of this matrix should be greater than 0.5 for the sample to be adequate (Field, 2000). This way we will further confirm that our model has a patterned relationship.

The measured KMO has a value of (.849), which is above the minimum of .5 and an associated significance level being of (0.000) which is particularly small.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.849
Bartlett's Test of Sphericity	Approx. Chi-Square	2081.986
	df	406
	Sig.	0

Table 4. KMO and Bartlett's Test

- Table describing the KMO - Kaiser-Meyer-Olkin Measure of Sampling Adequacy
- A chi square (X2) statistic is used to investigate whether distributions of categorical variables differ from one another.
- Bartlett's test (see Snedecor and Cochran, 1989) is used to test if k samples are from populations with equal variances.
- Df: degrees of freedom
- Sig: Significance

The individual diagonal elements ([a]) were > .74. i.e. in the anti -image matrix of correlation. All elements on the diagonal of this matrix should be greater than 0.5 if the sample is adequate (Field 2000). This way we verified that we could proceed to interpret further our principal component analysis, continuing next with the Total Variance Explained (Table 6).

Anti-image Matrices

		Privacy_123	Security_1234	EoU_124	Usefulness_234	UIQ_234	IQ_12345	ETrust_1256	Intent_2345
Anti-image Correlation	Privacy_123	**.775[a]**	-0.256	-0.038	-0.061	-0.088	-0.026	-0.246	0.221
	Security_1234	-0.256	**.741[a]**	0.013	-0.054	-0.061	0.215	-0.39	-0.03
	EoU_124	-0.038	0.013	**.934[a]**	-0.184	-0.143	-0.065	-0.006	-0.083
	Usefulness_234	-0.061	-0.054	-0.184	**.870[a]**	-0.025	-0.043	-0.22	-0.413
	UIQ_234	-0.088	-0.061	-0.143	-0.025	**.827[a]**	-0.452	0.116	-0.282
	IQ_12345	-0.026	0.215	-0.065	-0.043	-0.452	**.800[a]**	-0.42	-0.119
	ETrust_1256	-0.246	-0.39	-0.006	-0.22	0.116	-0.42	**.799[a]**	-0.11
	Intent_2345	0.221	-0.03	-0.083	-0.413	-0.282	-0.119	-0.11	**.835[a]**

Table 5. Anti-image Matrices / Anti-image Correlation

- Verifying the adequacy of the sample through the diagonal values with negative partial covariances and correlations.

Using Total Variance Explained presented in table 6, we have determined the number of the significant factors. Here we can see the arranged factors in the descending order, starting with the one who provides most of the explained variance. The initial eigenvalues – total, show that the first factor accounts for the most of the variance, therefore has the highest eigenvalue. The next factor accounts for as much of the left variance that is left and so do the others, and in this way each successive factor counting for less and less variance, the next column Initial Eigenvalues - % of Variance, is showing the percentage of the variance explained by each factor, and then the Cumulative showing the collective percentage of the variance for the current and all subsequent factors. In our study the first six factors together account for 69.929% of the total variance, with these factors aggregated, and if the percentage of variance is above 60%, that is considered very satisfactory.

In the Extraction Sums of Squared Loadings, we see only the factors that have eigenvalues more than 1, i.e. the factors that we want to retain. In these columns, we see the eigenvalues and the variance prior to rotation. The next column the Rotation Sums of Squared Loadings shows the eigenvalues and the variance after the rotation. We will be using the rotated eigenvalues and the scree plot below to determine the number of the factors with significance. Here we can see that the Varimax rotation tried to maximize the variance of each of the factors, and the total amount of the variance is reallocated over to the six extracted factors.

In our case, it is indicated that we have 6 factors which are important, this means that these 6 components do a very good job at explaining the relationships.

While in the scree plot, we have the X-axis, that is the number of the components and the Y-axis which is the eigenvalues. This graph is explaining the table 6 and tells us that we want to retain the components that are above the scree, i.e. components above 1. From the 6th factor and on, we can see that the line begins to flatten, that means that each successive factor is accounting for smaller amounts of the total variance explained.

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	10.802	37.249	37.249	10.802	37.249	37.249	5.106	17.607	17.607
2	3.292	11.352	48.602	3.292	11.352	48.602	4.391	15.143	32.749
3	2.002	6.903	55.505	2.002	6.903	55.505	3.194	11.013	43.762
4	1.632	5.628	61.133	1.632	5.628	61.133	2.844	9.807	53.569
5	1.376	4.746	65.878	1.376	4.746	65.878	2.407	8.301	61.87
6	1.175	4.051	69.929	1.175	4.051	69.929	2.337	8.06	69.929

Table 6. Total Variance Explained

- Values of the 6 factors and their contribution to the variance explained, given in % percentage of total variance and cumulative.
- Extraction Sums of Squared Loadings - The values in this panel of the table are calculated in the same way as the values in the left panel, except that here the values are based on the common variance.
- Rotation Sums of Squared Loadings – The values in this panel of the table represent the distribution of the variance after the varimax rotation.

In the subsequent analysis only variables obtained as an outcome from EFA analysis will be considered.

I proceed with the interpretation of the results of the Communalities (table 7), where it is showing the total amount of variance an original variable is sharing with all other variables included in this

research, so the proportion of each variable's variance that can be explained by the factors. In principal component analysis, all communalities are initially 1, so it is assumed that the total variance of the variables can be explained by means of its components, and that there is no variance error. This way we are indicated with the amount of variance that component is explaining.

As communalities are seen as a continuation of the factor loadings, they are important representation of the proportion of the variance in that particular variable, accordingly if the communality of the variable is higher, the factors extracted explain a big amount of the variance of that variable, and that the PCA analysis is reliable. On the other side if the communalities are not very high, the sample size has to compensate for that (Field, 2000).

Communalities

Variable Name	Initial	Extraction	Variable Name	Initial	Extraction
PP1 - Percieved Privacy Information	1.000	.749	UIQ4 - User Interface Quality - Cancel Option	1.000	.584
PP2 - Percieved Privacy Information Share	1.000	.600	IQ1 - Information Quality - Facilitate Payments	1.000	.611
PP3 - Percieved Privacy Providing Information	1.000	.702	IQ2 - Information Quality - Important Information	1.000	.804
PS1 - Percieved Security - Feel Secure	1.000	.725	IQ3 - Information Quality - Relevant and Accurate	1.000	.773
PS2 - Percieved Security - Access During Transit	1.000	.772	IQ4 - Information Quality - Reliable Information	1.000	.700
PS3 - Percieved Security - Party Receiving Info.	1.000	.701	IQ5 - Information Quality - High Quality Information	1.000	.653
PS4 - Percieved Security - Information Altered	1.000	.786	E-Trust 1 - To Give Private Info.	1.000	.787
EOU1 - Percieved Ease of Use - User Friendly	1.000	.672	E-Trust 2 - To Give Credit Card Number	1.000	.701
EOU2 - Percieved Ease of Use - Navigating Easy	1.000	.716	E-Trust 5 - Have best interest in mind	1.000	.682
EOU4 - Percieved Ease of Use - Mental Effort	1.000	.680	E-Trust 6 - Infrastructure Reliable	1.000	.678
PU2 - Percieved Usefulness - Benefit Finances	1.000	.557	Intention to Transact 2 - Would use E-payments	1.000	.733
PU3 - Percieved Usefulness - Spare Time	1.000	.679	Intention to Transact 3 - Likely to make in the future	1.000	.797
PU4 - Percieved Usefulness - Help Monitor	1.000	.623	Intention to Transact 4 - Good Decision	1.000	.749
UIQ2 - User Interface Quality - Site Structure	1.000	.643	Intention to Transact 5 - Increase Frequency	1.000	.721

Communalities

Variable Name	Initial	Extraction		Variable Name	Initial	Extraction
UIQ3 - User Interface Quality - Know where to go	1.000	.701				

Table 7. Communalities

- Variable name: Factor name
- Initial: initial values on the diagonal of the correlation matrix
- Extraction: The values in this column indicate the proportion of each variable's variance that can be explained by the retained factors.

Continuing our analysis further, we come to Table 8, where we test for the existence of the linear relations between our variables, i.e. their strength and direction using Pearson correlation. With Pearson correlation analysis, we measure the degree of linear association between two variables (Hair et al., 2010). We can see that the correlations of all variables except Intention and Privacy, and EoU with Security and Privacy, have a significance level of 95%, i.e. (Sig<0.05). The ranges in this analysis move from +1.0 to -1.0, which indicate perfect positive and negative correlation coefficient, while 0 would indicate no linear relationship.

The variables in our research seem to have a patterned relationship, and we do not have correlations that are above r = +/- .90, which may indicate that our data may have a problem of multicollinearity. It also demonstrates that the correlation scores support the discriminant validity for none of the scores are greater than 0.90 (Tabachnick and Fidell 1996).

The results below, confirm to us that all the variables are having positive correlation with trust, indicating positive direction of association among all the tested variables. The highest correlation is retained by the IQ variable with a coefficient of (.627). While the lowest correlation is between EoU and Trust with a coefficient of (.353). In general, all the variables are positively correlated with Trust, and the linear relations are also significant with trust at a level of (Sig<0.00), while none of the values exceed 0.75, showing there is no overlapping of the constructs.

Correlations

Component		Privacy_123	Security_1234	EoU_124	Usefulness_234	UIQ_234	IQ_12345	ETrust_1256	Intent_2345
Privacy_123	Pearson Correlation	1	.443**	0.177	.269**	.225*	.267**	.465**	0.108
	Sig. (2-tailed)		0	**0.073**	0.006	0.022	0.006	0	**0.277**
	N	104	104	104	104	104	104	104	104
Security_1234	Pearson Correlation	.443**	1	0.172	.338**	.217*	.208*	.535**	.243*

Correlations

	Sig. (2-tailed)	0		**0.081**	0	0.027	0.034	0	**0.013**
	N	104	104	104	104	104	104	104	104
EoU_124	Pearson Correlation	0.177	0.172	1	.459**	.436**	.418**	.353**	.434**
	Sig. (2-tailed)	0.073	0.081		0	0	0	0	**0**
	N	104	104	104	104	104	104	104	104
Usefulness_234	Pearson Correlation	.269**	.338**	.459**	1	.504**	.545**	.595**	.668**
	Sig. (2-tailed)	0.006	0	**0**		0	0	0	**0**
	N	104	104	104	104	104	104	104	104
UIQ_234	Pearson Correlation	.225*	.217*	.436**	.504**	1	.679**	.449**	.605**
	Sig. (2-tailed)	0.022	0.027	**0**	0		0	0	**0**
	N	104	104	104	104	104	104	104	104
IQ_12345	Pearson Correlation	.267**	.208*	.418**	.545**	.679**	1	.627**	.588**
	Sig. (2-tailed)	0.006	0.034	**0**	0	0		0	**0**
	N	104	104	104	104	104	104	104	104
ETrust_1256	Pearson Correlation	.465**	.535**	.353**	.595**	.449**	.627**	1	.512**
	Sig. (2-tailed)	0	0	**0**	0	0	0		**0**
	N	104	104	104	104	104	104	104	104
Intent_2345	Pearson Correlation	0.108	.243*	.434**	.668**	.605**	.588**	.512**	1
	Sig. (2-tailed)	0.277	0.013	**0**	0	0	0	0	
	N	104	104	104	104	104	104	104	104

Table 8. Correlations / Pearson Correlation

- Table measuring the strength of association between the variables and the correlation coefficient significance
- Sig: Significance, Sig<0.00
- N: number of respondents

The dimensionality of this matrix can be reduced by "looking for variables that correlate highly with a group of other variables, but correlate very badly with variables outside of that group" (Field 2000: 424).

After performing exploratory factor analysis and reducing the variables and factors, I proceed to present descriptive statistics of the factor scores. I have created factor scores for each factor by adding values of all variables that loaded on the corresponding factor.

4.3 Descriptive statistics

Proceeding to Table 9, we are presenting the descriptive statistics of our variables, i.e. mean measurement, standard deviation, variance, skewness and kurtosis. From the results, we can see that most of the variables have a mean value of less than 2, with the minimum being the Privacy variable with a mean of 14.5, and the maximum being e-trust with a value of 22.52. Standard deviations start with the lowest value of 2.42 for EoU and go to the greatest one of 3.66 for e-trust. Furthermore, we can see from the data that our variables are negatively skewed and the curve leans to the right in the histograms. While as regards to kurtosis which shows the peaked distributions compared to normal distributions, in our case we seem to have a positive kurtosis, since our data shows we have peaked distributions. From this analysis, we will take things further and test the Reliability of the model.

Descriptive Statistics

		Privacy_123	Security_1234	EoU_124	Usefulness_234	UIQ_234	IQ_12345	ETrust_1256	Intent_2345
N	Valid	104	104	104	104	104	104	104	104
	Missing	0	0	0	0	0	0	0	0
Mean		109.038	146.058	119.038	123.942	116.635	187.692	147.692	168.654
Std. Deviation		205.988	263.81	184.085	230.836	191.879	321.172	258.16	261.087
Variance		4.243	6.96	3.389	5.329	3.682	10.315	6.665	6.817
Skewness		-.514)	-.448)	-.989)	-1.311)	-.743)	-.714)	-.803)	-1.595)
Std. Error of Skewness		0.237	0.237	0.237	0.237	0.237	0.237	0.237	0.237
Kurtosis		0.47	0.235	1.67	2.796	1.343	2.115	1.348	5.507
Std. Error of Kurtosis		0.469	0.469	0.469	0.469	0.469	0.469	0.469	0.469

Table 9. Descriptive data of the sample

- Table describing Skewness as a measure of symmetry, and Kurtosis as a measure of whether the data are heavy-tailed or light-tailed relative to a normal distribution.

4.4 Reliability

The test for reliability has been made for the purpose of showing the internal consistency, i.e. the precision between the items being measured and used in the study, and it will also show the relationship among variables.

We have assessed the items in this research using Cronbach's Alpha Table 10, which measures the internal consistency of the mean of the items (reliability), and which is often used in the cases such as ours when there are Likert scale questions in the survey. In our case, we have done a measure of the

Cronbach's Alpha value before and after the EFA analysis and it shown to be .939 before and .948 after the EFA, which makes it a valid value for us to continue with our study of the data.

Reliability Statistics after EFA

Cronbach's Alpha		N of Items
Before EFA	0.939	37
After EFA	0.934	29

Table 10. Reliability – measuring internal consistency

- Before and after an Exploratory Factor Analysis
- Number of items before and after EFA

The value of .939 above, indicates that we have a good internal consistency of the items in the scale. In this formula, the size of the Cronbach's Alpha is set by the number of items in the scale and the mean correlation of the inter-items. It is mostly predicted that an alpha of .8 is a reasonable goal, while according to (Nunnally 1978), minimum value for alpha Cronbach is 0.70. Cronbach Alpha values are also dependent on the number of items in the scale.

While we can say that we have a high value for Cronbach's Alpha, with a value of .939, which is considered good indicator of internal consistency of the items in the scale, we will still need to proceed further with the factor analysis in order to determine the dimensionality of the scale, before doing the multiple regression analysis.

Further below Table 11 (Item-Total Statistics) contains the "Corrected Item-Total Correlation" for all the factors. This column shows the correlation between a given task value item and the sum score of the other factors. What the results mean here is that there is a positive correlation between the scores on the one item and the combined score of the other ones. In this manner one can assess how well one item's score is internally consistent with composite scores from all other items. If this correlation is anything less than .30, than it is considered as a weak correlation for item-analysis purposes. All items appear to be worthy of retention, the removal of any other item would decrease Cronbach's Alpha, therefore we know that they are important factors in this model. All items correlated with the total scale to a good degree, with the lowest correlation being item PS4 - Perceived Security - Information Altered (.334), which is above the minimum value for this field 0.3 (Pallant, 2007).

The next column called the "Cronbach's Alpha if item deleted "displays Cronbach's alpha that would result if a given item were deleted. This column serves for determining which items from the set contribute to the Cronbach's Alpha. In our case Cronbach's Alpha, would decrease if any of the items are

removed, so all of the items seem to be useful, since they contribute to the overall reliability. In this case, we may decide not to remove any items since there is no statistical reason to drop any of them.

Item-Total Statistics – After dropping some of the items (EFA)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PP1 - Percieved Privacy Information	108.09	173.051	0.446	0.933
PP2 - Percieved Privacy Information Share	108.47	174.698	0.289	0.936
PP3 - Percieved Privacy Providing Information	108.16	174.468	0.345	0.934
PS1 - Percieved Security - Feel Secure	108.06	169.647	0.586	0.931
PS2 - Percieved Security - Access During Transit	108.36	173.008	0.41	0.933
PS3 - Percieved Security - Party Receiving Info.	108.32	174.413	0.384	0.934
PS4 - Percieved Security - Information Altered	108.16	176.041	0.323	0.934
EOU1 - Percieved Ease of Use - User Friendly	107.92	173.703	0.459	0.933
EOU2 - Percieved Ease of Use - Navigating Easy	107.81	173.71	0.45	0.933
EOU4 - Percieved Ease of Use - Mental Effort	107.99	173.641	0.405	0.933
PU2 - Percieved Usefulness - Benefit Finances	107.9	167.622	0.63	0.931
PU3 - Percieved Usefulness - Spare Time	107.63	166.758	0.698	0.93
PU4 - Percieved Usefulness - Help Monitor	107.69	167.574	0.638	0.93
UIQ2 - User Interface Quality - Site Structure	108.08	171.742	0.591	0.931
UIQ3 - User Interface Quality - Know where to go	107.97	171.523	0.565	0.931
UIQ4 - User Interface Quality - Cancel Option	107.91	169.381	0.547	0.932
IQ1 - Information Quality - Facilitate Payments	108.12	170.957	0.584	0.931
IQ2 - Information Quality - Important Information	108.18	169.063	0.602	0.931
IQ3 - Information Quality - Relevant and Accurate	108.09	169.148	0.654	0.93
IQ4 - Information Quality - Reliable Information	108.05	169.444	0.707	0.93
IQ5 - Information Quality - High Quality Information	108.17	169.329	0.642	0.93
E-Trust 1 - To Give Private Info.	108.16	165.808	0.741	0.929
E-Trust 2 - To Give Credit Card Number	108.13	167.703	0.715	0.93
E-Trust 5 - Have best interest in mind	108.33	172.552	0.538	0.932
E-Trust 6 - Infrastructure Reliable	108.12	169.928	0.709	0.93
Intention to Transact 2 - Would use E-payments	107.69	171.283	0.626	0.931
Intention to Transact 3 - Likely to make in the future	107.64	170.484	0.612	0.931
Intention to Transact 4 - Good Decision	107.63	169.771	0.632	0.931
Intention to Transact 5 - Increase Frequency	107.67	168.979	0.633	0.931

Table 11. Item-Total Statistics

- Column: Corrected Item-Total Correlation for all the factors shows the correlation between a given task value item and the sum score of the other factors.
- Column: Cronbach's Alpha if item deleted displays Cronbach's alpha that would result if a given item were deleted.

4.5 Validity

We checked two types of validity: a) convergent validity with communalities and average variance extracted, and b) discriminant validity according to the Fornell-Larcker criterion.

4.5.1 Convergent validity

Convergent validity shows correlation of an indicator with other indicators that measure the same construct (Hair et al., 2010). Communality shows the percentage the corresponding construct explains indicators' variance, and it should be at least 50%. It means that at least 50% of variance of each indicator is explained by the construct (communalities are above 0.50). All communalities in this study are above 0.5 (Table 7).

The other approach to test the convergent validity is Average Value Extracted (AVE). What is communality for indicators, Average Value Extracted (AVE) is for the construct. AVE is the sum of squared loadings divided by the number of indicators (Hair et al., 2010) and it should be above 0.50. In a similar manner as for communalities, all AVEs are above 0.50 which means that construct explains more than 50% of the indicators' variance (Table 12).

Average Value Extracted

Construct	AVE	Construct	AVE
Percieved Privacy	0.684	User Interface Quality	0.643
Percieved Security	0.746	Information Quality	0.708
Percieved Ease of Use	0.689	E-Trust	0.712
Percieved Usefulness	0.620	Intention to transact	0.750
Age	0.771	Participant Education Degree	0.728
Participant Payment Experience	0.660		

Table 12. Average Value Extracted

4.5.2 Discriminant validity

Discriminant validity shows whether constructs are different among themselves and that they reflect different phenomena. We did two tests (Hair et al., 2010). First we checked cross loadings of the indicators. An outer loading of indicator should be the highest among loadings of that particular indicator on all other constructs. In our case (Table is not presented) this test successfully passed. The second test, named Fornell-Larcker, checks criterion whether square root of AVE value of each construct is higher than its correlations with other constructs. In our study this criterion is satisfied (Table 13).

Correlations and AVE square-root

Correlations	Privacy_123	Security_1234	EoU_124	Usefulness_234	UIQ_234	IQ_12345	ETrust_1256	Intent_2345	Part. Age	Part. Educ. Deg.	Parti. Pay. Exp.
Privacy_123	**0.858**										
Security_1234	0.443	**0.869**									
EoU_124	0.177	0.172	**0.813**								
Usefulness_234	0.269	0.338	0.459	**0.838**							
UIQ_234	0.225	0.217	0.436	0.504	**0.807**						
IQ_12345	0.267	0.208	0.418	0.545	0.679	**0.854**					
ETrust_1256	0.465	0.535	0.353	0.595	0.449	0.627	**0.849**				
Intent_2345	0.108	0.243	0.434	0.668	0.605	0.588	0.512	**0.871**			
Part. Age	-0.033	-0.050	-0.066	-0.008	-0.159	-0.057	-0.135	-0.102	**0.878**		
Part. Educ. Degree	0.200	0.133	-0.072	0.101	0.058	0.034	0.176	0.085	-0.202	**0.853**	
Parti. Pay. Experience	-0.140	-0.210	0.059	-0.060	-0.034	-0.024	-0.068	-0.071	-0.015	-0.133	**0.812**

Correlations between factors; Diagonal line contains AVE square-roots

Table 13. Discriminant Validity

Based on the previous discussion and presented results, I conclude that criteria for convergent and discriminant validity are satisfied.

4.6 Regression Analysis

4.6.1 First Regression Analysis - Multiple Linear Regression of all variables

We have used multiple linear regression analysis to test the relationship between the independent factors and the dependent variable. Trust was our dependent variable, while the six factors (perceived privacy, perceived security, perceived ease of use, perceived usefulness, user interface quality, and information quality) were the independent variables. Afterwards a second regression analysis was made to see the relationship of trust on the intention to use electronic payment.

We did Stepwise multiple regression analysis by which multiple variables are regressed and in the same time unimportant variables are removed.

Table 14 presents the Adjusted R^2 value in our model and it shows 60.8% of variance (the proportion of the total variability explained) which is associated with the trust in electronic payments for the factors of: perceived privacy, perceived security, information quality and usefulness Table 15. While the other two, i.e. the ease of use and user interface quality, were not supported; therefore hypotheses related to these two were not accepted.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.790	.624	.608	1.61555

Table 14. Regression Model Summary

- The R is the square root of R2
- R-squared is a statistical measure of how close the data are to the fitted regression line.
- Adjusted R-squared adjusts the statistic based on the number of independent variables in the model.
- The standard error of the estimate is a measure of the accuracy of predictions made with a regression line.

Variables Entered/Removed[a]

Model		Variables Entered	Method
	1	IQ_12345	Stepwise (Criteria: Probability-of-F-to-enter <= .050. Probability-of-F-to-remove >= .100).
	2	Security_1234	Stepwise (Criteria: Probability-of-F-to-enter <= .050. Probability-of-F-to-remove >= .100).
	3	Usefulness_234	Stepwise (Criteria: Probability-of-F-to-enter <= .050. Probability-of-F-to-remove >= .100).
	4	Privacy_123	Stepwise (Criteria: Probability-of-F-to-enter <= .050. Probability-of-F-to-remove >= .100).

Table 15. Variables Entered/Removed

a. Dependent Variable: ETrust_1256

If we would like to have a step by step approach to explaining the 4 supported factors, the following Table 16 (Model Summary step by step) presents them according to their importance reflected in the variance that they share with the dependent variable. Information Quality comes as the most important factor, being followed in order by, perceived security, perceived usefulness and perceived privacy, enhancing the model to reach the R^2 of .608. Table 17 shows the test of the significance, or the (p) value, which means that there is 0.000 possibility that this value was provided by some random chance.

Model Summary step by step

Model		R	R Square	Adjusted R Square	Std. Error of the Estimate
Factor	1	.627[a]	0.393	0.387	2.02096
	2	.751[b]	0.564	0.556	1.72045
	3	.777[c]	0.603	0.591	1.65068
	4	.790[d]	0.624	0.608	1.61555

Table 16. Model Summary step by step

a. Predictors: (Constant). IQ_12345

b. Predictors: (Constant). IQ_12345. Security_1234

c. Predictors: (Constant). IQ_12345. Security_1234. Usefulness_234

d. Predictors: (Constant). IQ_12345. Security_1234. Usefulness_234.

Privacy_123

ANOVA[e]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	269.863	1	269.863	66.073	.000[a]
	Residual	416.599	102	4.084		
	Total	686.462	103			
2	Regression	387.507	2	193.753	65.458	.000[b]
	Residual	298.955	101	2.96		
	Total	686.462	103			
3	Regression	413.986	3	137.995	50.645	.000[c]
	Residual	272.476	100	2.725		
	Total	686.462	103			
4	Regression	428.072	4	107.018	41.003	.000[d]
	Residual	258.39	99	2.61		
	Total	686.462	103			

Table 17. ANOVA–Step by step analysis

- Sum of squares: being the sum, over all observations, of the squared differences of each observation from the overall mean.
- Df: degrees of freedom
- Mean square: used to determine whether factors (treatments) are significant.
- F value: a value you get when you run an ANOVA test or a regression analysis to find out if the means between two populations are significantly different.
- Sig: Significance Value

a. Predictors: (Constant). IQ_12345

b. Predictors: (Constant). IQ_12345. Security_1234

c. Predictors: (Constant). IQ_12345. Security_1234. Usefulness_234

d. Predictors: (Constant). IQ_12345. Security_1234. Usefulness_234. Privacy_123

e. Dependent Variable: ETrust_1256

This relationship can also be seen in the values of the standardized Beta coefficients, where the weakest relationship belongs to the *perceived privacy* with a value of .163, while the strongest one is *information quality* with a value of .392. This means that *information quality* is the most important factor

in creating trust for customers in e-commerce environment. The Table 18 below (Coefficients) shows the summary of the six hypotheses and the results.

From the table, we can see that the (p = .000) for the *information quality*, which is less than the alpha value of 0.05, concludes that this factor is positively related to the customer trust in e-payments, therefore supporting the hypothesis no.7.

Next, we have a value of (p = .000) for the *perceived security*, which is also less than the alpha value of 0.05, and confirms that security is also positively related to the customer trust in e-payments, and hence the hypothesis no. 2, is also supported.

Usefulness is the next supported hypothesis, with a value of (p = .003), being less than the alpha value of 0.05, providing us proof that hypothesis no. 5 is also supported.

Coming next is the perceived privacy with a value of (p = .022), being within the threshold and showing us that hypothesis no.1 is also supported as positively affecting the trust of the customers in the e-payments.

Obtained F value is compared and should be higher than the critical value from the statistical tables available on Internet. To check the corresponding critical values from the tables we need degrees of freedom for the numerator and denominator. The degrees of freedom in the numerator corresponds to the number of independent variables. The degrees of freedom in the denominator can be found by the formula: n – (k + 1), where n is number of cases (responded surveys), and k is number of independent variables. There are already existing tables from which the F value of our table has to be compared. If our value is higher from the value of those tables then results are good.

The F value of the first model (predictor IQ_12345) is F(1,102)= 66.073and is higher than the critical value of 3.94 from the table (column 1 because the number of freedom in numerator is 1; raw 100 as the closest value to 102 because the degrees of freedom in denominator is 102).

The F value of the first model (predictors IQ_12345, Security_1234) is F(2,101)= 65.458 and is higher than the critical value of 3.09 from the table (column 2 because the number of freedom I n numerator is 2; raw 100 as the closest value to 101 because the degrees of freedom in denominator is 101).

The F value of the first model (predictors IQ_12345, Security_1234, Usefulness_234) is F(3,100)= 50.645 and is higher than the critical value of 2.70 from the table (column 3 because the number of freedom in numerator is 3; raw 100 because the degrees of freedom in denominator is 100).

The F value of the first model (predictors IQ_12345, Security_1234, Usefulness_234, Privacy_123) is F(4,99)= 50.645 and is higher than the critical value of 2.46 from the table (column 4 because the number of freedom in numerator is 4; raw 100 as the closest value to 99 because the degrees of freedom

in denominator is 99).

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.31	1.18		4.498	0
	IQ_12345	0.504	0.062	0.627	8.129	0
2	(Constant)	0.589	1.253		0.47	0.639
	IQ_12345	0.433	0.054	0.539	8.028	0
	Security_1234	0.414	0.066	0.423	6.304	0
3	(Constant)	-.145)	1.225		-.118)	0.906
	IQ_12345	0.336	0.06	0.418	5.558	0
	Security_1234	0.358	0.066	0.366	5.464	0
	Usefulness_234	0.272	0.087	0.244	3.117	0.002
4	(Constant)	-.956)	1.249		-.766)	0.446
	IQ_12345	0.315	0.06	0.392	5.272	0
	Security_1234	0.295	0.07	0.302	4.242	0
	Usefulness_234	0.263	0.086	0.235	3.074	0.003
	Privacy_123	0.205	0.088	0.163	2.323	0.022

Table 18. Coefficients – Measurement of unstandardized and standardized coefficients of the predictor variables:

- B: values for the regression equation for predicting the dependent variable from the independent variable.
- Std. Error –standard errors associated with the coefficients.
- a. Dependent Variable: ETrust_1256
- Beta –The standardized coefficients
- t and Sig. – These are the t-statistics and their associated 2-tailed p-values used in testing whether a given coefficient is significantly different from zero.

The final equation of this multiple regression analysis is:

$$ETrust_{1256} = -0.956 + 0.392 * IQ_{12345} + 0.302 * Security_{1234} + 0.235 * Usefulness_{234} + 0.163 * Privacy_{123} + Error$$

4.6.2 First Regression Analysis - Multiple Linear Regression of all variables with control variables

This study has also made use of the linear regression with controlled variables, to see the effect they might have on the e-trust in performing e-payments depending on the age of the participants, their

experience with e-payments and their education degree. In the first block we have entered the variable that we want to control, which in our case are age, participant payment experience, and participant education degree, while in the second block we have entered the independent variables.

This way 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.

From the table below, we can see that we have put control variables in the first block, and in the second step we have put our independent variables. By doing this we are controlling the effects of age, experience and education degree, and will see if our independent variables can still explain the variance of our dependent variable.

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Participant Payment Experience, Participant Age, Participant EducationDegree[a]	.	Enter
2	IQ_12345, Security_1234, EoU_124, Privacy_123, Usefulness_234, UIQ_234[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: ETrust_1256

Table 19. Regression analysis with control variables

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

The variables in the block one, the one we have controlled, accounts for .015 of the variability of the outcome in the (adjusted R Square). The block two of the independent variables, i.e. the model as a whole accounts for or explains .607 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 .598, so this means that our independent variables explain an additional 59.8% of variance in the outcome, even when the effects of control variables have been statistically controlled for. And in the Sig. F

Change we can see that the value is very significant.

So this way we have confirmed that the model is statistically significant predictor of the outcome at a level of .000.

Model Summary

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	,209[a]	,044	,015	2,56228	,044	1,520	3	100	,214
2	,801[b]	,641	,607	1,61855	,598	26,102	6	94	,000

a. Predictors: (Constant), Participant Payment Experience, Participant Age, Participant EducationDegree

b. Predictors: (Constant), Participant Payment Experience, Participant Age, Participant EducationDegree, IQ_12345, Security_1234, EoU_124, Privacy_123, Usefulness_234, UIQ_234

Table describing the R-square change and F-change with controlled variable

Table 20. Model Summary with control variables

The next step was evaluating each variable in the table (coefficients), and see their individual contribution in the final model. By interpreting the table below and the Sig value, we can see that in the row 2, we have 4 variables which make significant contribution to the model, while the control variable does not make significant contribution.

If we look at the Standardized Coefficients Beta column, we can see which of our independent variables makes the largest contribution, in our model it is shown that of the Privacy, Security, Usefulness and Information Quality, the IQ makes the largest contribution, while the other follow, but they all make unique contribution to the model, while age does not make any contribution in this case.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15,603	3,071		5,081	,000
	Participant Age	-,386)	,364	-,106)	-1,060)	,292
	Participant EducationDegree	,792	,541	,148	1,464	,146
	Participant Payment Experience	-1,312)	2,600	-,050)	-,505)	,615
2	(Constant)	-1,555)	2,521		-,617)	,539
	Participant Age	-,327)	,234	-,090)	-1,397)	,166
	Participant EducationDegree	,310	,352	,058	,878	,382
	Participant Payment Experience	1,214	1,684	,046	,721	,473
	Privacy_123	,196	,090	,156	2,184	,031
	Security_1234	,300	,071	,307	4,239	,000
	EoU_124	,017	,103	,012	,163	,871
	Usefulness_234	,279	,091	,249	3,054	,003

	UIQ_234	-,135)	,120	-,101)	-1,133)	,260
	IQ_12345	,356	,072	,443	4,920	,000

a. Dependent Variable: ETrust_1256

B: values for the regression equation for predicting the dependent variable from the independent variable.

Std. Error –standard errors associated with the coefficients.

Beta –The standardized coefficients

t and Sig. – These are the t-statistics and their associated 2-tailed p-values used in testing whether a given coefficient is significantly different from zero.

Table 21. Coefficients with control variables

4.6.3 Second regression analysis - Trust to Intention

To test the relation of trust to the Intention to purchase, a second regression analysis was used. Table 22 provides us with an R^2 of .263 and the Anova Table 23, shows that the possibility that his value was provided by some random chance is 0.000, test has significance of p = 0.000. This bivariate regression analysis resulted that trust actually is a strong predictor of the intention to purchase (p = .000) (Table 24), suggesting that when consumers have a greater level of trust in e-payments they are more likely to purchase though internet. The F value is F(1,102)= 36.326 and is higher than the critical value of 3.94 from the table (column 1 because the number of freedom in numerator is 1; raw 100 as the closest value to 102 because the degrees of freedom in denominator is 102).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.512	.263	.255	2.25296

Table 22. Model Summary - Second regression analysis

- The R is the square root of R2
- R-squared is a statistical measure of how close the data are to the fitted regression line.
- Adjusted R-squared adjusts the statistic based on the number of independent variables in the model.
- The standard error of the estimate is a measure of the accuracy of predictions made with a regression line.

ANOVA b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	184.383	1	184.383	36.326	0
	Residual	517.733	102	5.076		
	Total	702.115	103			

Table 23. ANOVA b - Second regression analysis

- Sum of squares: being the sum, over all observations, of the squared differences of each observation from the overall mean.
- Df: degrees of freedom
- Mean square: used to determine whether factors (treatments) are significant.
- F value: a value you get when you run an ANOVA test or a regression analysis to find out if the means between two populations are significantly different.
- Sig: Significance Value

Coefficients a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.211	1.289		7.145	0
	ETrust_1256	0.518	0.086	0.512	6.027	0

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.211	1.289		7.145	.000
	ETrust_1256	.518	.086	.512	6.027	.000

a. Dependent Variable: Intent_2345

Table 24. Coefficients a - Second regression analysis

The final equation of this multiple regression analysis is:

$$Intent_{2345} = 9.211 + 0.512 * ETrust_{1256} + Error$$

4.6.4 Linear Regression with separate variables

We have done further analysis, by doing linear regression with each variable separately, in order to find the individual relationships, i.e. the correlation coefficient. Table 25, Model Summary below provides the individual amount of variance in the dependent variable that can be explained by the independent variable for each variable separately.

All of the items are showing positive correlation, with IQ having the highest value of R (.627), indicating that as information quality increases the trust in the e-payments will also increase, the IQ is then followed by Usefulness (.595), security (.535), privacy (.465), UIQ (.449) and EoU (.353).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Privacy	0.465	0.216	0.209	2.2967
Security	0.535	0.287	0.28	2.19117
EoU	0.353	0.124	0.116	2.42742
Usefulness	0.595	0.355	0.348	2.08427
UIQ	0.449	0.201	0.193	2.31844
IQ	0.627	0.393	0.387	2.02096

Table 25. Model Summary - Linear Regression with separate variables

- The R is the square root of R2
- R-squared is a statistical measure of how close the data are to the fitted regression line.
- Adjusted R-squared adjusts the statistic based on the number of independent variables in the model.
- The standard error of the estimate is a measure of the accuracy of predictions made with a regression line.

Followed by the model summary is the Anova (Table 26), showing the significance of the regression for each variable individually. The results show us that value of being ($p < 0.05$) indicates that statistically each variable is significant.

ANOVA b

Model	Sum of Squares	df	Mean Square	F	Sig.
Privacy	148.427	1	148.427	28.139	0
Security	196.738	1	196.738	40.977	0
EoU	85.442	1	85.442	14.501	0
Usefulness	243.355	1	243.355	56.019	0
UIQ	138.193	1	138.193	25.709	0
IQ	269.863	1	269.863	66.073	0

Table 26. ANOVA b - Linear Regression with separate variables

- Sum of squares: being the sum, over all observations, of the squared differences of each observation from the overall mean.
- Df: degrees of freedom
- Mean square: used to determine whether factors (treatments) are significant.
- F value: a value you get when you run an ANOVA test or a regression analysis to find out if the means between two populations are significantly different.
- Sig: Significance Value

The coefficients in Table 27 provides us information about the intercept and for the slope of the regression line. The Standardized Beta Coefficient column indicates the contribution that each variable

individually is making to the model. Below we can see that privacy contributes for .465 to the trust in e-payments, the same value being indicated in our correlation matrix and Pearson's r value.

Whereas the t value for trust (t=6.904. p<0.00) confirms to us that the intercept is significantly different from zero, while the t value for privacy (t=5.305. p<0.00), shows that the regression is significant. These values are positive and significant for all our variables and support all of the variables in our model as presented in this table.

Coefficients a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	8.415	1.219		6.904	0
Privacy_123	0.583	0.11	0.465	5.305	0
(Constant)	7.118	1.214		5.86	0
Security_1234	0.524	0.082	0.535	6.401	0
(Constant)	8.88	1.565		5.674	0
EoU_124	0.495	0.13	0.353	3.808	0
(Constant)	6.516	1.121		5.81	0
Usefulness_234	0.666	0.089	0.595	7.485	0
(Constant)	7.728	1.407		5.492	0
UIQ_234	0.604	0.119	0.449	5.07	0
(Constant)	5.31	1.18		4.498	0
IQ_12345	0.504	0.062	0.627	8.129	0

Table 27. Coefficients a - Linear Regression with separate variables

- B: values for the regression equation for predicting the dependent variable from the independent variable.
- Std. Error –standard errors associated with the coefficients.
- Beta –The standardized coefficients
- t and Sig. – These are the t-statistics and their associated 2-tailed p-values used in testing whether a given coefficient is significantly different from zero.

4.6.5 2-stage least squares

2-stage least squares (2sls) uses three types of variables: dependent, explanatory and instrumental. Dependent and explanatory variables are endogenous, which means they are estimated within the model (SPSS, 2010). Instrumental variables are exogenous , which means they are estimated outside the model. In our study dependent variable is Intent_2345, explanatory variable that explains or predicts the dependent variable is ETrust_1256, while instrumental variables are all or any of other variables that explains our explanatory variable. 2-sls is used then the errors in the dependent variables,

which relate to factors or variables not included in the model, are correlated with the independent variables. In this case model estimates are not optimal and the researcher should do 2-sls.

2-sls consists of two stages (SPSS, 2010): 1) by using instrumental variables that are uncorrelated to error terms, estimate the unstandardized predicted value and save it as a separate variable; 2) estimate coefficients of the dependent variables by using the unstandardized predicted values saved as a variables from the first stage. Analysis of the results obtained from the 2sls is the same as for the standard linear regression.

In this study, following tables presents results that are obtained by doing 2-sls. As instrumental variables we included only the four significant factors.

Model Description

		Type of Variable
Equation 1	Intent_2345	dependent
	ETrust_1256	predictor
	Privacy_123	instrumental
	Security_1234	instrumental
	Usefulness_234	instrumental
	IQ_12345	instrumental

Table 28. Model Description

Model Summary

Equation 1	Multiple R	,560
	R Square	,314
	Adjusted R Square	,307
	Std. Error of the Estimate	2,350

Table 29. Model Summary

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Equation 1	Regression	258,092	1	258,092	46,718	,000
	Residual	563,502	102	5,525		
	Total	821,594	103			

Table 30. Anova

Coefficients

		Unstandardized Coefficients				
		B	Std. Error	Beta	t	Sig.
Equation 1	(Constant)	5,397	1,694		3,187	,002
	ETrust_1256	,776	,114	,768	6,835	,000

Table 31. Coefficients

The previous Table shows that predictor (ETrust_1256) has significant direct effect on dependent variable Intent_2345, which is in accordance with the results from the standard linear regression.

4.7 Summary of findings

The status of hypotheses, whether they are accepted or rejected is presented in Table 32.

The strongest and the most significant relationship in our results is between IQ and Trust, showing that what we had predicted in H6 is very much related to the trust in e-payments. Meaning trust is positively affected from the consumer's perceived information quality sig. (.000). The second most significant factor was security, supporting the H2 and the relation between security and increased trust in e-payments, and confirming that security is a very important element in this research sig. (.000). After security, it is usefulness which has the most significant effect on trust sig. (.003), and shows that our H4 is also supported, and that this factor plays an essential role. The forth supported hypothesis, was H1, showing that perceived privacy positively effects the trust in the e-payments (.022), as it was predicted in our research. However, two of our hypotheses were not supported. Ease of use (H3) and user interface quality (H5) did not show enough significance to be considered further, and were thus dropped, showing that users might not have valued these factors as important as some others.

So, the results supported 4 of our hypotheses, while 2 of them were not supported. While the results of our second regression analysis provided positive results and there was support for trust and intention to transact.

Additionally, our second regression analysis between trust and intention to transact provided a positive relationship, which is very significant and confirming that trust in e-payments leads to increased intention to transact. These results and their effects are further explained and interpreted in the section implications, were one can see their value in theory and also their contribution in practice.

It is important to state at this stage that 4 of our hypothesis, i.e. perceived risk (H7), communication of fraud prevention (H8), awareness of services and benefits (H9) and awareness of laws and regulations (H10) will not be part of further analysis, since during the EFA analysis they did not fit well in the model, i.e. even after the Varimax rotation which attempts to maximize the dispersion of loadings

within factors. We assume that this could be due to the variables, i.e. survey items, not being understood correctly by the participants, and thus certain valuables did not load into the certain factor. This way we had to remove the variables that do not relay to the construct that we plan to measure. The statistical analysis that provided evidence to reject these hypotheses in not presented in this document.

Hypothesis	**Status**
Hypothesis 1 Perceived Privacy	Accepted
Hypothesis 2 Perceived Security	Accepted
Hypothesis 3 Ease of Use	Not Supported
Hypothesis 4 Usefulness	Accepted
Hypothesis 5 User Interface Quality	Not Supported
Hypothesis 6 Information Quality	Accepted
Hypothesis 7 Perceived Risk	Not Supported
Hypothesis 8 Awareness of fraud prevention	Not Supported
Hypothesis 9 Awareness of services and benefits	Not Supported
Hypothesis 10 Awareness of laws and regulations	Not Supported
Hypothesis 11 Intention to Transact	Accepted

Table 32. Hypotheses status

5. Discussion

This research was started with the aim of discovering the factors which can influence the electronic payments in Kosovo and increase their use through the determinant of e-trust, foreseeing that this will be beneficial for the parties taking place in such eco-system. Therefore, as identified in other studies, we have explored empirically several factors coming from several theories, such us TAM and TRA with the objective of understanding e-commerce development through the lens of e-trust. We believe this work will have both theoretical and practical contribution towards influencing the e-payments, i.e. increase their usage.

Looking at the current situation in Kosovo, we can see a trend that shows that electronic payments using bank cards such as Visa and MC are on the rise. A report by the Kosovo's Banking Association (Kosovo Banker, July 2015) shows an increase in the number of electronic payments (all channels) for as much as 58.9 % from 2011 to 2015 in number, and 69.6 % in amount, in the first quarter of each year respectively. Since online channel is not distinguished in this report, we suppose that e-payments are part of the rising number in this report.

However, in the online channel, which was our target in this study, there were 469,390 payments with a value of 29,958,816.26 EUR in 2015, as reported by the Central Bank of the Republic of Kosovo (CBK) (July 2016). The value and the number of e-payments show that there is much interest to use e-payments and there is big potential for online companies to find their place in the market.

The same report of CBK shows that the biggest users are the age group of 26-35 years, followed by 36-45 years, both of these groups making as much as 70% of these payments. Why this value is related to our study even more is that our sample group had 80% of the respondents of the same age group (26-45), which shows that our research was comprised of these active participants in online shopping.

5.1 Discussion per factor

5.1.1 Information Quality and User Interface Quality

IQ being one of our most significant factors and supporting H6, has provided us support that the customer's general view of the quality, reliability, exact and on time website information is an important element to be considered. Contrary it can be said that if the quality of the information is poor, and it is not reliable and accurate, it can mislead the customers (KIM et al. 2008). Therefore, we believe that these IQ elements together will increase trust and sales volume this way engaging more people to make e-payments. The importance and effect of Information Quality on E-trust is proved by a few articles (Ponte et al. 2015; Steyn & Mawela 2016).

Customers might also be particularly focused on the IQ, since this information would help them to make good decisions when purchasing products or services (KIM et al. 2008) Therefore we have confirmed that when making e-payments, people want to be served with high quality information, this way they will perceive that the websites are providing accurate information and for this reason they would be more willing to fulfill their promises or obligations, this way resulting in a higher level of trust. According to Liao, Palvia, and Lin (2006), the content quality of an e-vendor's website (referring to the usefulness, accuracy, and completeness of the information offered) may increase customers' trust in online transactions. The researchers cite that since customers are not in the position to touch and feel the item in online shopping, they require detailed and clear information to decide on the purchase (Beldad et al. 2010).

Quality of the information of e-payments is mostly characterized of information about products and services and also the refund and cancellation policy but it is very much also part of the information about security and privacy, this way also relating to our other determinants in this research, which showed positive effect on trust. Websites should provide clear information of this type in their business transactions (Cheskin et al., 1999, Egger, 2001; Neilsen, 1999, cited in Sirkemaa 2014). We believe this information would also be available in real time chat for some websites, since there are many existing cases of such chat sessions available, this way helping the shoppers solve their problems and most probably engage in buying. Users of e-commerce are more likely to obtain satisfaction when using high quality information provided by the websites (Lee et al. 2000, cited in Hsu, L. 2010). The same research has proven the relation between information which is available in real-time, correct, and comprehensible, to the trust in e-payments (Lee et al. 2000, cited in Hsu, L. 2010).

Sparing time being one of the qualities of the PU determinant seems also related to the IQ. The valuable information is to reduce the time that the customers should spend in searching for the information according to Lin (2007).

However, our UIQ determinant did not show significant effect on trust in contrast to the findings presented in Park et al. (2017) that refers to quality of site design. We believe that by leaving the evaluation of user interface open and not pushing the respondents to some particular website, it seems that they might have not evaluated and considered this factor as of great importance, so it seems that the design of the websites is not a priority when considering making an e-payment.

5.1.2 Security and Privacy

Making transactions online vs in store, carries more uncertainties, therefore trust or e-trust as called in case of electronic transactions, is an important condition. Therefore the security and privacy both elements in such a setting have proved to be important factors in our study. Our research found a positive link between both, the perceived security (H1) and privacy (H2) of e-payments and trust, are seen as

important and significant factors for improving customers' view of trust in e-payments. These results are similar to other studies that were found, where it has been declared that when customers evaluate the trustworthiness of an organization online, privacy and security are taken as vital criteria in the assessment (Aiken & Bousch, 2006, cited in Beldad et al 2010). In our research both these factors are marked as important, however security had a bigger contribution than privacy. A reason for this could be that the security features are easier to understand and see, while privacy might be harder to interpret and its meaning is not understood the same by every person. This finding was reported also in a research by Belanger, Hiller, and Smith (2002, cited in Beldad et al. 2010). Other studies show that these two determinants are related when it comes to the intention to make e-payments. Customers will not perform payment transactions via Internet if they do not trust that their privacy and personal data will be kept private and that there are no security controls; the transaction must be performed only with appropriate authorization (Urban et al. 1999, p. 9. cited in Liao et al. 2011).

Furthermore these two constituents also relate to our IQ determinant as high quality information is considered when the data about privacy and security are clearly provided through the websites. The websites that provide this information have the highest score (Kim et al. 2006, Xia et al. 2008, and Carlson and O'Cass 2010, cited in Noorshella et al.).

There has been research where the awareness of security was a factor for the consumers to use websites for shopping. This information tells us that awareness about security is important information towards increasing customer trust (Zhong, et al. 2010). As regards to security, the e-commerce business should provide a security policy through some sort of communication. Websites that provide e-payments should show clearly the security measures employed and provide information as to why the system is secure for them to make payments (Abrazhevich 2004).

The attitude of the individuals towards the adoption of online payments is influenced by their perceived security (Jahangir & Begum, 2008; Yeh, Lin, Wang, & Hsu, 2010, cited in Shah et al. 2014). From this statement, we can relate how our study found out that this element is an important one, and as such it has a big role on the customers' approach in evaluating the e-payment security mechanisms. The perceived security is also believed to be influenced by the perceived technical protection, which has been referred to as the technical instruments which are put into use by websites to protect integrity, privacy and confidentiality aspects of customers' data, all these leading to a more secure e-payment transaction (Kim et al., 2010; Peikari, 2010). Even though in the literature there are two different perceptions about technical protection aspect, i.e. confidentiality assurances, such as security and privacy seals, and the technical protection mechanisms such as authentication and encryption, our study has been referring to the second one, i.e. technological solutions that provide protection of information during transit, and its

encryption, and we managed to prove that these technical elements are important for trust in e-payments and that they should be communicated to the customer, relating this to our IQ determinant above and its information quality aspect.

We also confirmed that the customer attitude towards the trust of e-payments is determined by the privacy determinant (H1). We can say that now we know better what are the customers' worries when making payments on the internet. If the customer does not understand clearly the explanations of how his personal data might be used, he can find it more complicated to make an e –payment and may not trust the website fearing that his personal data might be misused. So, it seems of rather great importance that e-commerce businesses follow some policies and procedures to inform users about privacy policy, how and why their data will be used and how long they are going to be retained and what type of personal information (Abrazhevich 2004).

5.1.3 Usefulness and ease of use (TAM)

TAM and its constituents have been chosen in this study since they are believed to contribute to the usefulness and ease of use of e-payments. Ease of use (H3) and perceived usefulness (H4) have been found to have a positive impact on information system usage and Internet usage (Igbaria et al. 1995; Lee & Turban, 2001; Lim et al. 2008, cited in Sirkemaa 2014). It is also known that when websites have useful content and provide an enjoyable user experience they are likely to be visited also in the future (Shang et al. 2005, cited in Sirkemaa 2014). In our context, the PU (H4) has a significant effect on trust, and as such it has been confirmed to have relations to the improved effectiveness through saving time and improving performance. This finding is in contrast to the Yousefi & Nasiripour (2015) who claim that usefulness is not significant factor towards increasing e-trust.

Our perceived ease of use determinant (H3) is not significant as usefulness in our study. This is in accordance with the findings of Chou et al. (2015) and Al-Sharafi el al. (2016), but is in contract with results presented by Yousefi & Nasiripour (2015). The reason could be partly that our sample had active and experiences users. In literature it is stated that online payments should be an easy task and user friendly (Guttmann, 2003, p.89, cited in (Abrazhevich 2004). It is also known in the literature that perceived ease of use has direct impact on perceived usefulness (Abrazhevich 2004). Therefore, we believe that familiarity with general usage of Internet adds to heightened ease of use perceptions, and as such we had lower significance for ease of use than for usefulness. Therefore, we believe that since our sample was more familiar with e-payments their ease of use perception was larger and in a greater level, and for this reason we had lower significance for ease of use H3, then for usefulness (H4).

5.1.4 Trust

Trust significantly influences online purchase intention (Isaac and Volle, 2008; Kim et al., 2008). The same result was also provided to us from the statistics, and it seems that trust (H8), is a very important element for e-payments. Therefore, the use of trust in our model as intermediary of e-payments has proven that trust in technology has an important role when making e-payments. And we also know which constituents increase trust, but it also seems there can be more constituents which can play a role and which are of psychological type. In some research trust is also regarded as an attitude, which is neither subjective nor objective, and does not simply involve mechanical influences from the environment since it has to be learned (Luhmann, 1979, p. 27, cited in Beldad et al 2010). Viewing trust as a psychological state implies that people vary in terms of when and how much they are willing to trust. Such willingness to trust, according to Tyler and Kramer (1996, p. 10, cited in Beldad et al 2010), is based on people's estimation of the probability that those trusted will reciprocate the trust (Beldad et al 2010). How this relates to our study is that for gaining trust of the customers, one must consider also the characteristics of people and their differences in payment experience, schooling, cultural background, personality meaning the disposition to trust could be different for each person (Mayer et al., 1995, cited in Beldad et al 2010).

Building trust in online environment has been the goal of this research, and the results show that there are a few factors which can help build and maintain trust. Trust in the online companies has been confirmed to be a necessary antecedent to online and repeated buying (Gefen and Straub, 2004; Reichheld and Schefter, 2000, cited in McCole et al.2010). Therefore, the online companies can make use of our results to influence the customers and change their behavior towards purchasing online.

In our study ease of use and user interface quality are not significant factors that influence e-trust. This is in disagreement with a finding that visual appeal (in our study user interface quality) and ease of use influence customer evaluation of trust (Pengnate & Sarathy (2017).

Next, we will see how trust is considered as directly affecting intentions (e.g. McKnight and Chervany 2002), or as influencing intentions through attitude (e.g. Jarvenpaa et al. 2000).

5.1.5 Intention

If we understand the factors that affect the customers' trust, then we also know that as trust increases it has a positive impact on the use of e-payments (Culnan and Armstrong, 1999, Miyazaki and Fernandez 2000, cited in Liat et al. 2014). This has shown to be true in our case also, where we had a positive relationship between trust and intention to transact (H11). In the context of E-Commerce, online purchase intention can be defined as a situation when a person desires to buy a particular product or service through the website (Chen, Hsu & Lin, 2010; Fygenson & Pavlou, 2006 cited in Liat et al. 2014). It has also

been found that trust plays a role as mediator between the disposition to trust and the intention to purchase (Gefen, 2000).

They are numerous studies that relate how consumer's intention to make online payments is a predictor of their actual involvement in e-payments (Pavlou 2006 cited in KIM et al. 2008). Intention and behavior relationship are based on the theory that human beings try to make rational decisions based on the information that they have (KIM et al. 2008). Thus a person's behavioral intention to make or not make a behavior is the immediate determinant of that person's real behavior (Ajzen 1980, cited in KIM et al. 2008), and for this reason we believed and confirmed that an increase in trust will significantly and positively affect the intention to purchase. Confirming our assumption that intention to purchase can also predict the actual behavior or the decision to purchase, the customers' would like to make an online purchase if they assume that the website can be trusted.

5.2 Theoretical contribution

The study's results have certain theoretical contribution.

The ease of use is one of the two constructs of the original TAM model (Davis, 1989). Ease of use, together with the usefulness, is antecedent of the several constructs as user acceptance of information technology (Davis, 1989), online trust (Awad and Ragowsky, 2008), e-satisfaction (Ribbink et al., 2004), attitude towards online shopping (Shadkam et al., 2013), etc. The TAM model experienced several improvements, but the two main constructs remain. Our study shows that the construct ease of use is not significant factor towards building e-trust. Ease of use is considered as a mandatory attribute of the web sites and their functionalities and questionable is whether this construct should be part of the TAM model. This study's contribution relates not only to the change in significance of one major factors in TAM and in general, but also, the necessity to have regular reevaluation of theoretical models in order to reflect the current technology and electronic state of affairs. Similar issues are raised in a few articles but only based on theoretical foundation (Straub and Burton-Jones, 2007; Benbasat and Barki, 2007).

5.3 Practical Implications

The use of the TAM and TRA proved that they are valid theories for testing e-payment use and their determinants in Kosovo, and that they can make significant contribution to later studies and researchers who may want to use similar or different approach, and maybe with different population samples. Knowing what factors are more effective than others in making e-payments more attractive, can help in determining what approach should be used in future studies, i.e. add new factors or modify the context of the existing ones. Furthermore, the topics that I have chosen and the literature that I have reviewed will

add important information to the pool of knowledge about electronic payments, especially in Kosovo where I have not managed to find any similar study. Therefore, I believe this study will add very beneficial information and will contribute to the literature in Kosovo and elsewhere.

In practice the results of this thesis can be used by the online companies by developing and increasing trust in the websites, i.e. ensuring the privacy and security of the users, and providing them information that will help increase their awareness of the ways to protect their information. Knowing that trust is vital to retaining the customers, and increasing the number of e-payments, e-vendors can make use of this study to help them to attract and probably retain the existing customers.

Our results showed that most of the cognition-based antecedents, in our case security, privacy, usefulness and IQ had a significant effect on the customer trust. While Ease of Use and User Interface Quality even though expected to be present and significant, they were not, partly to our sample being experienced e-shoppers and not valuing a pleasant and nice UIQ and the efforts to navigate through EoU as important as other determinants. It means that e-payment users do not build e-trust based on the nice interfaces and easiness of performing tasks, but they want qualitative information, usefulness, and they want security and privacy to be retained.

Paying online for goods and services was shown to have an increase in the latest times in Kosovo, and the trend being the one where there is widespread use of the internet for making e-payments, one should consider how to make e-payments even more attractive. We believe that the information of this research will benefit all stakeholders in the process, for the reason that facilitating e-payments will help the e-commerce sites, the banks, and the customers themselves.

We have seen that many researchers had identified trust as an important aspect when taking part in transactions over the internet, and that the customers are keener to make internet purchases when trust is high (KIM et al. 2008). In this research, we have used a combination of factors and theories to find the ones that are most important or have the greatest impact. The benefit of the results of this analysis will bring clearer picture to the companies (websites) and the banks, on how they can play a role on increasing the information quality, privacy, security and usefulness, and thus increase trust. Therefore, the practical contribution for the merchants who build their internet sites and the financial institutions is of great importance, as they can increase their business by increasing the trust of their customers and as a result their intention to engage in a transaction.

5.4 Managerial implications

We conclude that customer needs are combination of factors that should be satisfied to reach the goal and attract customers towards the use of EPSs. They will both need to feel secure in the term of technical security, but they also want to make payments which protect their privacy. At the same time, IQ being the

most important factor in our study, shows that detailed information on the website is a crucial element. And having all these elements in place the EPSs must also fulfill the criteria of being useful, as that has proved to be a very important element in our study. The results of this study also showed that for e-commerce one needs to be aware of different kinds of antecedents, both technological and trust issues, since EoU and PU are considered to be technological antecedents, while trust is a social one. These elements therefore must be on attention of managers who want to promote the e-payments and who design and work on the systems that provide support to EPSs, this way increasing the number of online payments and the revenues.

The personal information being gathered by the companies is of huge amount. They can be as forms which the customer can fill or through software or cookies. These data afterwards bring value to the companies, who can utilize them for creating advertising and identify the needs of their customers (Liu, Marchewka, & Ku, 2004b). Therefore, if the customers have concerns on how their data will be used, they might not be willing to provide this information online or use e-payments. The solution to such concerns can be to create privacy policies which offer explanation of how the data will be used (Wu et al. 2012). Concerns such as this are slowing the growth of the electronic commerce (Rubin & Lenard, 2001, cited in Wu et al. 2012).

The findings of this research are to support the decisions about design and implementation of websites for e-payments, and also the academics and researchers who are studying online trust. We think that knowing the determinants of the online trust can help professionals not only in the retail market where products and services are sold but also on the governmental level and central bank level, where they have been initiatives in Kosovo towards cashless payments, i.e. cashless society. The e-government and e-health services can also benefit to know what group of factors has the greatest impact on trust on e-payments.

The banks themselves, who as financial institutions provide the connection to e-commerce websites for payments, can benefit knowing that what their customers are looking forward to when engaging in such transactions, and the banks can make use of their marketing and business strategies to focus on these factors.

5.5 Implications to Intermediaries

When speaking about the interests and involvement of other parties in the e-payment process, we have to acknowledge that the e-trust is also a big part of the responsibility of the banks as financial institutions and the card companies, such as Visa, Master Card and other. These are the so-called intermediaries of trust, and for the customer they play an important role as the guarantor (Salam et al. 2003). It lies in the responsibility of these institutions to take care of the e-trust in a higher level and act as a party which

reduces risk and increases the confidence between the e-tailor and customer. These institutions thus play the most important role when coming to the situation were the e-vendors might fail or violate their terms and conditions or any security procedures such as PCI DSS, and make e-payments insecure.

The involvement of the intermediaries seems obvious when we know that the banks and card companies are those who have contracts with e-commerce merchants. Therefore, the users who would be engaging in e-payments, except the trustworthiness of the sellers, will also evaluate how the electronic commerce system in general is reliable and functional (Grabner-Kraeuter 2002, cited in Beldad et al 2010). According to this customers must also have trust in the organizations which foster and process these payments.

5.6 Cooperation between Intermediaries (Trust in banks)

Having achieved to identify the main factors that impact Trust in e-payments, we came to the part where we also want to identify what is the industry doing to tackle such issues and what is the cooperation between participants in this case. We believe that there is mutual interest in all the parties to protect the infrastructure and the customers and increase their use of the e-payments. In Kosovo, there has been an excellent cooperation between banks in order to tackle difficulties that arise as a result of security or privacy incidents in the form of joint forums fostered by the Kosovo's banking association (KBA). KBA is facilitating the cooperation between banks while offering a single platform for mutual lobbying and discussion of new initiatives. Further to the voluntary efforts that are made, there are a number of tools, policies and strategies that can be implemented in order to make e-payments more reliable and secure and increase customer trust as a result. These policies could come as mandatory from the payments entities or as best guidance. Support for why cooperation regarding security elements is seen as very important element was also found in the literature where it is stressed that security is a fundamental and increasingly important issue in today's banking industry (Kanniainen, 2010 cited in Hoffmann et al., 2012). Over the last few years, the number of fraudulent transactions committed by third parties has risen tremendously, consequently, fraud prevention has become a central concern to banks, customers, and public policy makers (Banks, 2005; Sullivan, 2010)

5.6.1 Mandatory requirements

The leading payment entities such as Visa, Master Card and others have jointly introduced security programs such as the PCI DSS in order that intermediaries who store, transmit or process cardholder data comply with requirements of this standard, thus securing the data and preventing any security breaches. This way wherever the data resides, it ensures that cardholder data is protected by the customers, merchant, banks and service providers by ensuring several standards, such as: building and maintaining a

secure network, encrypting data during transmission, regularly monitoring and testing the networks, maintaining an information security policy, using anti-malware and anti-virus software, and implementing strong access-control measures. This standard being an international and of mandatory nature, is mostly believed to be met by all the participants, as they must comply and prove their validation in order that they can go on with the business. However, they are a number of other tools and applications which can bring and create a more secure and reliable e-commerce space in order to foster the e-payments further, and they are discussed next.

5.6.2 Tools and tactics

From the literature, it has been found that if the banks demonstrate their fraud prevention knowledge and know-how, they can create a feeling of safety (Rauyruen and Miller, 2007), thereby enhancing relationship quality, which may ultimately improve customer loyalty (Morgan and Hunt, 1994). There are a number of tools and strategies which can help the issuers of payments cards to increase the security and customer experience during the e-payments. Banks in cooperation with the merchants can create a safe and useful experience during online shopping, thus facilitating and increasing the number of e-payments. The feeling of security may be an effective means to retain existing customers and attract new ones (Behram, 2005, cited in Hoffmann et al., 2012).

Possible solutions range from the: data tokenization, cross channel transaction monitoring, multi factor authentication, geolocation, device recognition, express checkout, etc. While most of these have in mind the secure authentication and authorization of e-payments, they are also built having in mind the customer experience and they impact on increased trust. Krummeck (2000) states that fraud may damage the bank-customer relationship because of shattered trust and confidence, while Varela-Neira et al. (2010, cited in Hoffmann et al., 2012) state that increased dissatisfaction comes also as a result of perceived service failure. Therefore, the solutions above are to provide additional security for the e-payments, and increasing trust for the cardholders when they pay online. According to Threatmetrix report (Cybercrime Report 2015 Q4) - Loyalty and trust is critical: 86% of transactions in the network come from returning users.

Being aware that customer trust leads to intention to transact, we have also confirmed the importance of a number of guidelines that are available from the governing card entities that provide useful information and materials that are designed to help the financial institutions to keep the cardholder trust following any security incidents. These are mostly in a form of customer service care and cardholder notification and his assurance of the steps being made to protect him against fraud.

5.7 Theoretical and practical contribution

This study has theoretical and practical contribution.

This study shows that in the second decade of 21st century the factors that relate to impression management, i.e. ease of use and user interface quality are not important when building trust towards electronic payment systems. Although at the outset of Internet payments, ease of use and user interface quality might have certain influence on building trust, this is not the case anymore. Internet consumers cannot be impressed by the easiness of performing transactions and with excellent look-and-feel interfaces. The probable cause of this is improving interfaces (e.g. Amazon) and it become the mandatory characteristic of each web site. Therefore, Internet consumers want information quality and useful sites, beside the factors of privacy and security which must be fulfilled and are prerequisite for building-trust. We consider the previous discussion as a theoretical contribution.

Although there is an extant knowledge about factors that have effect on e-trust, it is always interesting to check whether that knowledge is valid for some market or country. It is not sufficient to apply general knowledge. When starting business in new country or market, or if consumers from some particular country should be attracted, the service providers must take into consideration particularities of the market or country. Therefore, as practical contribution this study's results show the factors that are important and significant in the context of Kosovo and bank employees that perform electronic payments as ordinary consumers.

5.8 Economic significance

The study's results shows that four factors are statistically significant: information quality (standard coefficient =0.315), security (standard coefficient =0.295), usefulness (standard coefficient =0.263) and privacy (standard coefficient =0.205). If the perception of the information quality increases for one unit, then perception of e-trust will increase for 0.315 units. If the perception of the security increases for one unit, then perception of e-trust will increase for 0.295 units. If the perception of the usefulness increases for one unit, then perception of e-trust will increase for 0.263 units. If the perception of the privacy increases for one unit, then perception of e-trust will increase for 0.205 units. To increase perception of e-trust, banks should first increase information quality 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 information quality for one unit will provide the highest gain in e-trust. The difference between standard coefficients is not high, therefore, although results imply that some factors are more influential than the others, banks must implement strategies to improve and sustain high levels of consumers' perception on information quality, security, usefulness and privacy.

6. Limitations and Future Research

Our research has used several theories as an approach to this study, however it did not have in the scope to include other factors which might affect customers' intention to use the EPSs. There can be more specific and individual factors which play a role, and also social norms and non-technology issues, such as education which could be part of a similar study in the future. For example, our research did not take into consideration website characteristics such as the size and reputation, which can play a role in the initial trust that is created in the customers (Jarvenpaa and Tractinsky 1999), the social norms (Karahanna and Straub 1999; Venkatesh and Davis 2000) and personality of the person and his belief in humanity (McKnight et al. 1998; Rotter 1971, cited in Gefen et al. 2003) or other.

Secondly, our sample contained mostly experienced users of EPS, consequently some factors and especially those which are considered as pre-interaction were not studied in our research. Considering these limitations, our results provided an important foundation for future studies where it is sought to find factors that influence e-payments.

Also another direction for future research is to compare and contrast opinions of employees per bank. Due to the anonymous survey done for this research, we consider this as a limitation but in the same time potential for further analysis.

7. Conclusion

Our findings revealed that perceived privacy, perceived security, perceived usefulness and information quality are important attributes and have significant effect on customer's trust in e-payments. Further into the study the results also provided us with the information that trust in e-payments is also positively related to the customer's intention to purchase. We believe this is important information for people who manage the processes in this transaction environment and also those that use marketing as a tool to increase the volume of the transactions.

Our model has received strong empirical support for some of its factors, where we assumed that trust is a facilitator of e-payments. However our model supposed that these variables affect the purchase intention through trust rather than directly, however there is research (McKnight cited in KIM et al. 2008) where it is implied that these factors might affect the intention directly, and not through trust, which can be investigated by future researchers.

Having used more than one theory on our research and using two research methods, quantitative and qualitative, we came to an understanding that trust reflects on both technology used (TAM) and also other trust building instruments, such as the information quality, privacy and security, and awareness of

the customer in each of them. So, it seems that the combined mechanisms used together are an attribute of e-trust in EPSs.

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