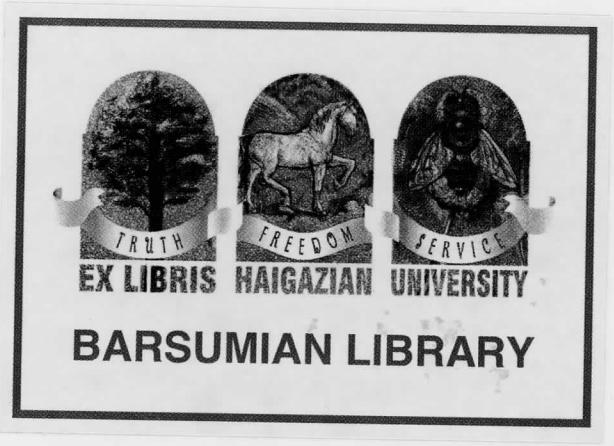

HAIGAZIAN UNIVERSITY

Factors That Influence Online Shopping Intentions of Lebanese Consumers from a Trust and Technology Perspective

By

Harout Atam Sahaguian

A thesis

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By

Harout Atam Sahaguian

Approved by:

Sona Jerejian

Dr. Sona Jerejian, Assistant Professor in Business Administration — First Reader

Faculty of Business & Economics

Dr. Akram Tannir, Lecturer in Business Administration — Second Reader

Faculty of Business & Economics

Date of Project presentation: June 6th 2012

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Acknowledgments

Thank you Jesus for doing all great things in my life.

To my mother who has always directed me to continue my higher education. It has been exactly four years since you've gone, but you are still guiding us from above.
May your soul rest in peace.

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"It is nice to be important, but it's more important to be nice"

An Abstract of the Thesis of

Harout Atam Sahaguian for Masters in Business Administration

Major: Business Administration

Title: Factors That Influence Online Shopping Intentions of Lebanese Consumers from a Trust and Technology Perspective

There are many factors that influence online shopping intentions of Lebanese consumers. The factors were tested from a trust and technology perspective. Perceived familiarity with the E-vendor, perceived trustworthiness and reputation of the E-vendor, perceived privacy and security protection were identified as trust factors that influence positively the intentions to shop online of Lebanese consumers. Perceived ease of use and perceived usefulness of the website were identified as technology factors that influence positively the intentions to shop online of Lebanese consumers. An empirical study was conducted in which the contributions of both perspectives were explored and reported. The survey was conducted with 240 Lebanese potential online shoppers. This study provided empirical evidence that the Lebanese consumers' trust in internet shopping is the result of specific factors. The 1st relates to the vendor's familiarity, the second to the vendor's reputation and trustworthiness and the third to the security and privacy provided by the website of the E-vendor. Also, the Lebanese consumers' acceptance of technology factors of online shopping is the result of the Ease of use of the website and its usefulness.

Table of Content

1. Introduction

Nowadays, consumers have more alternatives in choosing the suitable medium for shopping than ever (Rosemary P. Ramsey, 1999). Online stores are one of the important and sometimes highly visible mediums that represent the 'new economy' (Hoffman & Novak, 1996). E-commerce is defined by Reddy & Lyer (2002) as the purchasing and selling of goods or services on the internet. The phenomenal growth in the number of internet users and the enormous potential of E-commerce via the internet has attracted merchants to conduct their business online (Wang & Emurian, 2005)

The use of internet for purchasing goods and services is becoming an important transaction medium for consumers worldwide (Cheung & Lee, 2006). It is offering an interactive channel and enabling consumers to shop or do transactions online 24 hours a day, all year round, and from all locations (Cheung & Lee, 2006). As concluded in a study by Pew Internet (2007), online shopping was a feature of online life since the late 1990s, but now it has become a commonplace.

Some of the advantages of E-commerce identified by Ranganathan & Sanjeev (2007) and other researchers are: convenience and price , ease of information search/gathering, ability to compare prices, wider selection of products and services, time saving, original service and personal motivation among others.

However, although the internet offers a range of advantages that have been shown to be important enough to attract massive interest, recent surveys demonstrated that the penetration rate of internet shopping remains low (Cheung & Lee, 2006).

Some researchers (chen et Al. 2003) have identified that there are many risks that relate to online shopping compared to traditional shopping methods. These are: the inability to examine the physical goods, inability to socialize the way the traditional shopping allows (Chen et Al., 2003), risk of using new technology (Monsuwe et al, 2004), fear of fraud, lack of standard technologies for secure payments, privacy, lack of trust and security in e-commerce (Ranganathan and Sanjeev, 2007; lee and Turban,2001; Nargez Delafrooz et al., 2011; Dolatabadi & Ebrahimi, 2010),and inability to control personal information (Lee et al.2007).

Therefore, only when consumers can be convinced that online shopping is safe and reliable, then online shopping can have a big potential. (Nargez Delafrooz et al., 2011)

Trust has been recognized by Reichheld and Schefter (2000) as an important key to maintaining and retaining customers and that it's at the heart of relationships of all kinds. Also, recent studies as identified by Cheng & Lee (2006), have demonstrated with empirical evidence the importance of trust in internet shopping.

However, it should be taken into consideration that the vendor-client relationship is not like the traditional one because the primary interface with an e-vendor is an information technology, a website. Having said this, technology also plays a role in online shopping (Gefen et al., 2003)

Research results by Gefen et al. (2003) have shown that consumer trust antecedents are as important to online commerce as Davis's Technology Acceptance Model antecedents, mainly perceived usefulness and perceived ease of use.

Online purchase intention is the strength of a consumer's intention to perform a specified purchasing behavior via the internet (Delafrooz et Al., 2011)

The Usage of internet has grown rapidly in Lebanon over the past years and has become a means for delivering and trading information, services, and goods. With an internet population of 1,367,220 users, which is around 33% of the total population (http://www.internetworldstats.com/middle.htm), it is becoming an attractive market for businesses to market and sell their goods online.

Despite this growth in internet, and in a study conducted by Ecomleb in 2002, 75 businesses in B2C e-commerce were surveyed; only 56 of those responded to the survey regarding the stoppers of e-commerce in Lebanon. The factors have been identified to have a negative impact: the high cost of Internet and the telecommunications infrastructure, the unavailability of fast internet connections (broadband), the lack of confidence of the consumer in Internet transactions, the lack of a regulatory framework, and the high cost of shipping packages.

We take the case of Lebanese consumers and see whether they are ready to embrace e-commerce.

Aim of this study:

This study aims to investigate and explore the factors that influence online shopping intentions of Lebanese consumers using 2 different perspectives: technology and trust.

It poses 3 big questions,

1. What are the trust factors that will affect the intention to shop online for the Lebanese consumer?

2. Does the perception that an E-vendor website is easy to use affect the intention to shop online for the Lebanese consumer?

3. Does the perception of the website's usefulness affect the intention to shop online for the Lebanese consumer?

Technology and trust are highly relevant issues in online consumer behavior, yet their inclusion in an integrated framework is limited.

This study will also investigate ways through which marketers can develop ways to increase online consumer shopping motivation and the efforts that must be carried out in order to increase the effectiveness of online shopping.

This study is divided into 2 sections. The 1st section is the literature review and the theoretical background that explores the factors that influence online buying behavior, focusing attention on technology and trust-oriented perspectives of online consumer behavior.

The second part is the description of a survey and collection of data and measuring of the validly of the factors identified in and adopted from the literature review in explaining the variance in the shopping intention of consumers in my sample.

2. Literature Review

2.1 Brief Definition of E-commerce

E-commerce as defined in the Oxford online Dictionary is the commercial transactions conducted electronically on the internet or it refers to a trade that takes place over the internet where a buyer visits a seller's website, orders and makes the payment of the product over the internet, and finally, goods are delivered physically to the consumers (Yulihsdri et Al., 2011)

Yu and Abdulai (2000) mentioned that the most significant result of the rapid innovations in information and communication is electronic commerce.

2.2 Intention to Shop and Intention to Shop Online

Purchase intention, defined by Engel et al, is the willingness or a plan for buying a product in the future (1995). Also, it is defined by zeithaml (1988) as the possibility of consumers purchasing a product. Greater purchase intention creates a higher probability of purchase and has been widely applied to predicting actual purchasing behaviors.

Therefore, the intention to purchase online is the strength of a consumer's intention to perform a specific purchase behavior via the internet (Delafrooz et al., 2011)

The Online consumer's behavior can be studied using the framework from offline consumer behavior, but developing trust in online transaction is substantially more difficult than that of traditional business (Dolatabadi & Ebrahimi, 2010).

Indulging at the difference between online and offline consumer behavior, there are mainly two differences that can be indentified (Van Der Heijden et al., 2003)

Firstly, the physical shopping environment is replaced by an electronic shopping environment which will give rise to the technological aspect of the online shopping. (Van Der Heijden et al., 2003)

Secondly, as the shopping is done through virtual shops, a greater degree of trust is required by the online consumer which will give rise to the trust aspect of online shopping. (Van Der Heijden et al., 2003)

A website is both an IT and a channel through which consumers interact with an E-vendor. Technology based and trust based antecedents will work together to influence the shopping intentions of consumers (Gefen et Al, 2003)

2.3 Infrastructure and Information Technology

The most creative technology that has a big impact on us is the internet innovation (Yulihsdri et Al., 2011).A website is in essence an Information Technology, and as such, online shopping intentions should be explained in part by the Technology Acceptance Model. (Gefen et al., 2003)

Researchers developed many models and conducted numerous experiments and tests to identify the factors that influence online shopping.
Some theories related the adoption of this technology to demographic and social factors, while other theories connected the adoption to technical factors of Information Systems.

A common tool that was used in these studies is a behavioral model, the Theory of Reasoned Action (TRA). The Theory of Reasoned Action claims that individual behavior is driven by behavioral intentions which are a function of an individual's attitude toward the behavior. The Theory of Reasoned Action defines attitude toward the behavior as the individual's positive or negative feelings about performing this behavior. It is determined through an evaluation of one's beliefs regarding the consequences arising from a behavior and an assessment of the desirability of these consequences.

The technology perspective focuses on the consumers' assessment of the technology required to conduct transactions online (Van Der Heijden et Al, 2003). This paper will refer technology to the website that an online vendor uses to market and sell its products.

Technology has the potential to decrease the cost of searching and evaluating alternatives, and increase the quality of the decisions. (Haubl & Trifts, 2000).

2.4 Technology Acceptance Model

In the field of Information Technology, this behavioral model was used in defining the Technology Acceptance Model (TAM). TAM is an adaptation of the Theory of Reasoned Action. TAM claims that information systems that are installed but not adopted by the end users do not bring full benefits to the organization. TAM was designed to study information system acceptance, through its two vital elements, perceived usefulness and perceived ease of use, which eventually affect consumer attitude, intention, and behavior.

Many researchers like Gefen et al., (2003), Yulihasri et al, (2011), have identified Technology Acceptance Model (TAM) developed by Davis, 1989 and Davis et al., 1989, as a preeminent theory of technology acceptance in information systems research.

Gefen et al (2003) explains that TAM is a predominant and robust model of technology acceptance behavior in a wide variety of IT across both levels of expertise and across countries. Even though considerable TAM research has examined IT acceptance in the context of organizational work-related activity, the theory is applicable and has been successfully applied to diverse non organizational settings including E-commerce.

Van Der Heijden (2003) has indicated that TAM adopts a causal chain of beliefs, attitudes, intention, and overt behavior that social psychologists Fishbein and Ajzen (Ajzen, 1991) have put forward, and that has become known as the Theory of Reasoned Action (TRA). Based on certain beliefs, a person forms an attitude about a certain object, on the basis of which he/she forms an intention to behave with respect to that object. The intention to behave is the prime determinant of the actual behavior.

2.5 The Antecedents of Technology

Researchers have empirically validated the original TAM in a variety of settings. Of particular interest here are recent studies on technology acceptance in internet usage and website usage. These studies confirm the relevance and appropriateness of ease-of-use and usefulness in an online context (Teo et al., 1999; Moon & Kim, 2001).

TAM explains and highlights the importance of website usefulness and the usability of the website. As indicated in pervious TAM studies, the underlying logic is that IT users

react rationally when they elect to use and IT. The more useful and easy to use is the website in enabling the users to accomplish their tasks, the more it will be used.

In summary, the intention to voluntarily accept, that is to use, a new IT is determined, according to TAM, by two salient beliefs dealing with perceived usefulness of using IT and perceived ease of use of the new IT.

In order to better understand these vital concepts of perceived usefulness and perceived ease of use, we should discuss them further.

Perceived Usefulness

Perceived Usefulness (PU) is defined by Davis (1989) as 'the degree to which a person believes that using a particular system would enhance his or her job performance'. It is a measure of the individual's subjective assessment of the utility offered by the new IT in a specific task based context.

Also, the antecedents of attitude towards website include consumers' beliefs in the availability, design attractiveness, and structure of information on those websites (Luna, Peracchio, & Juan, 2002).

Researchers have found that PU influences intentions to use internet shopping (Koufaris, 2002). Moon and Kim (2001) also reported that PU had a significantly positive influence on trust, attitude, and behavioral intentions.

Perceived Ease of Use

As to Perceived Ease of Use (PEOU), it is defined by Davis (1989) as the degree to which a person believes using a particular system will cost little in terms of effort.

PEOU influences consumer online shopping intentions. If there are barriers that reduce perceptions of ease of use of internet shopping, internet users may develop a negative attitude towards internet shopping.

Marketers should ensure that online shopping through their websites should be easy, simple, and convenient as possible.

Also, the website design should be in a way that is not too confusing for potentially new buyers, mainly with users that may not be familiar with this form of shopping.

Perceived ease of use is an indicator of the cognitive effort needed to learn and to utilize the new IT.

Again, let us acknowledge that Gefen et al, (2003), has proven empirically the validity of the two antecedents of TAM, PU & PEOU, in explaining the variance in intended behavior.

2.6 Relation between Technology and Trust

However, and while a secure technical infrastructure is necessary, it is not sufficient for creating the trust necessary to generate spontaneous electronic transactions on the internet. Reliable encryption and authentication methods, digital certificates, secure

transactions methods using encryption and other methods are common technical approaches and steps in the right direction. Yet the perceived risk of internet transactions is still significant. (Salam et al., 2005)

2.7 Trust

Trust, as defined in the Oxford English Dictionary is confidence in or reliance on some quality or attribute of a person or thing, or the truth of a statement. Despite this definition, trust is often conceptualized by researchers according to the features of a particular context (Wang & Emurian, 2005).

Trust is a complex and multidimensional issue which can be studied in different viewpoints and disciplines (Dolatabadi & Ebrahimi, 2010, Wang & Emurian, 2005). These viewpoints come from social psychology, sociology, economics or marketing as defined by Donney & Cannon, 1997.

Thus, trust has been studied in many disciplines, but each has its own understanding of the concept and different ways to operationalize it (Wang & Emurian, 2005).

In this study, we will adopt the definition of trust in the article *'Understanding Consumer Trust in Internet Shopping: A Multidisciplinary Approach', Cheung & Lee, 2006* as the willingness of a consumer to be vulnerable to the actions of an online store based on the expectations that the online store will perform a particular action important to the consumer, irrespective of the ability to monitor or control the online store.

Aiken et Al, 2007 have mentioned in their study that trust has been labeled as the most precious of all business assets, as well as the very foundation upon which relationship marketing is built. Other research as indicated by Wang & Emurian (2005) have agreed that trust, rather than power, helped manufacturers or retailers receive more tangible benefits and realize their full potential, thus enhancing long term relations.

Little research was done regarding the trust in the context of business to consumer electronic commerce (Van der Heijden et Al, 2003). Amongst other researchers, Cheung & Lee (2000) have developed instruments to measure trust in internet shopping, and these measures are beginning to be used in the testing of empirical frameworks.

2.8 Role of Trust in the Intention to Shop Online

In the marketing area, trust has been highly focused on relationship marketing which includes marketing activities for creating and maintaining successful relational exchange (Dolatabadi & Ebrahimi, 2010). Moreover, research on trust has been conducted within the context of distribution channels and buyer-seller relationships (Wang & Emurian, 2005). Trust does not exist in vacuum; it needs the context of a relationship to develop. Alternatively, it is difficult to imagine an exchange relationship that could be developed and nurtured without trust (A.F. Salem et al., 2005).

Online exchange environment requires trust as an important component because of the uncertainty, anonymity, lack of control and potential opportunities existing in online environment as discussed by Dolatabadi and Ebrahimi, 2010.

Wang & Emurian (2005) have indicated that online trust shares similar characteristics to those of offline trust, but there are some important distinctions that are unique in the online environment. These distinctions are defined by the authors as follows:

1. Trustor and Trustee: In the offline world, the trustor and trustee can be comprised of persons, organizations, and/or products. In the online world, the trustor is typically a consumer who is browsing an e-commerce website, and the trustee is the e-commerce website, or specifically the merchant that the website represents.
2. Vulnerability: Trust involves vulnerability, and because of the high complexity and anonymity associated with e-commerce, merchants can behave in an unpredictable manner on the internet. The online consumers are often uncertain about the risks present and their full consequences when purchasing online.
3. Produced actions: Consumers' trust in online merchants generate two specific forms or actions from the consumer: a. making a purchase online from the merchant and presumably providing credit card and personal information in the transaction and b. window-shopping at the merchants' website. To engage in such activities, consumers must be confident that they have more to gain than to lose.
4. Subjective matter: like offline trust, online trust is associated with individual differences and situational factors. People also have different attitude towards machines and technology.

2.9 All the Antecedents of Trust in the literature review

Creating trust in consumers is one of the challenges faced by internet merchants because consumers are scattered around the world, and the sources of trust are not available to exploit. (Dolatabadi and Ebrahimi, 2010)

Many researchers have confirmed that there is little doubt that trust plays an important role in the customer's online buying decision as indicated by Dolatabadi and Ebrahimi, *(2010)*.Consumers wishing to shop or to purchase over the internet not only need to trust the E-vendor, but they need to trust the internet itself as a mode of communication, distribution, and commerce in general (Aiken et al, 2007). Also, it has been reviewed by Connolly & Bannister (2007) that trusting beliefs positively influence online consumers' purchase intentions

Connolly & Bannister (2007) have included in their literature that many researchers have shown an increasing awareness of how trust contributes towards the success of many types of online environments and that trust is considered to have a critical importance for the success of online consumer purchase.

Some of the key variables identified by Aiken et al (2007) in internet trust development are: issues related to risk, reliability, privacy, security, and control of information.

Other factors identified by many researchers and included in Dolatabadi and Ebrahimi, 2010 literature review include, perceived reputation, perceived size, multichannel integration, system assurance, store trustworthiness, web site quality, perceived risk, perceived privacy and security protection, perceived benefits/usefulness, familiarity with

the website, consumers propensity to trust, consumers' attitude towards using virtual store, consumers' experience and knowledge, and web shopping risk attitudes.

Some other variables that can influence trust are identified in the literature review of Van der Haijden (2003) are the perceived size of the company, and the reputation of the company which is also directly related to the familiarity with the store-an antecedent of trust identified by many researchers. The larger the perceived size and the reputation of the company, the greater the trust in the company (Van der Haijden , 2003).

Yet, another set of variables identified by Connolly & Bannister, and that have influence on consumers trust in online shopping include: the characteristics of the online vendor, situational factors, third party certifications, the individuals propensity to trust, and the influence of consumers' perceived risk.

Continuing the discussions on the antecedents of trust, we should focus here on the perceived familiarity on the E-vendor website and perceived reputation and trustworthiness.

2.10 Antecedents of Trust used in this Study

Perceived Familiarity with the E-vendor

Familiarity is the experience with the what, who, how and when of what is happening. While trust reduces social complexity relating to future activities of the other party, familiarity reduces social uncertainty through increased understanding of what is happening (Luhmann, 1979).

In e-commerce, consumer familiarity corresponds to how well a consumer comprehends the web site procedures, including when and how to enter credit card information (Gefen, 2000).

Perceived Reputation and Trustworthiness

Reputation of a company is also crucial in online business, as after analyzing reputation a client can predict how the company could behave (Dolatabadi & Ebrahimi, 2010). A company's reputation is often expressed by publishing stories and customer testimonials on a website. Jarvenpaa & Tractinsky (1999) defined reputation as the extent to which shoppers believe that the selling company is honest and concerned about its customers.

As previous studies have indicated, perceived reputation affects trust in an internet store (Jarvenpaa et al., 2000; Van Der Heijden et al., 2003)

The more the seller has a good reputation, the more the seller has presumably committed resources to build that reputation, the higher the penalty for violating the consumer's trust and hence more trustworthy the seller is perceived to be (Jarvenpaa & Tractinsky, 1999)

Trust can only exist if the consumer believes that the seller has both the ability and the motivation to deliver the goods and services of the quality expected by the consumer. (Jarvenpaa & Tractinsky, 1999). The attributes that constitute the main elements of trustworthiness are: ability, benevolence and integrity (lee & Turban, 2001).

Ability comprises the skills and competences enabling a party to have influence within some specific domain. In our context, it relates to the competence of a company in the

internet shopping business. (Dolatabadi & Ebrahimi, 2010). It includes perception of characteristics such as honesty, credibility, reliability, dependability, and discretion (Salam et al., 2005)

Benevolence is the extent to which the trusting party believes that the trusted party wants to do good things rather than just to maximize profit (Dolatabadi & Ebrahimi, 2010). It includes perceptions of characteristics demonstrated by the vendor such as goodwill, caring, responsiveness and concern (Salam et al., 2005)

Integrity is the trusting party's perception that the trusted party will honor and adhere to an acceptable set of principles. (Dolatabadi & Ebrahimi, 2010). It also captures concerns related to privacy and subsequent use of consumer information by vendor. A vendor's compliance with consumers' beliefs about integrity implies explicit and careful management policies to protect financially and legally sensitive information. (Salam et al., 2005)

The three attributes of trustworthiness include the concept of reputation (Lee & Turban, 2001)

Cheung and Lee, 2006, have proved empirically that the trustworthiness of the internet merchant is a key determinant of consumer trust in online shopping.

Finally, we should include in our discussions the concept of perceived privacy and security protection and the concept of perceived risk.

Perceived Privacy and Security Protection

The security and privacy problems have existed on the internet since the beginning, but have gotten much worse in recent years due to the growth of the internet.

Many online security problems exist because users are not given the best tools to understand risk. Yet another aspect of the security problems is that the users have different mental models of how computers operate (Hardee et al., 2006).

Despite the threats to users and the fact that many claim to value security, users are often willing to give up security in exchange for other benefits. According to Bierhoff and Vornefeld (2004), "although the internet is a technical system with strict, built-in security measures, it is managed, maintained and used by humans and therefore will never be able as a system to guarantee perfect security".

There is a close relationship between security and privacy. While privacy is related to what a company purposely decides to do with the consumer data, security is concerned with any accidental compromise of consumer data to a third party (Yulihasri et al, 2011).

Privacy is often cited as a top concern among internet users (Ackerman et al., 1999). Most of the consumers are concerned about companies collecting their personal information because of the risk that companies might share their personal information inappropriately (Brustoloni &Villamarin, 2007) as was the case of amazon.com sharing its database of customer activity (Rosencrance 2000a,2000b).

2.11 A Note on Perceived Risk

Consumers have several concerns which keep them from engaging in financial transactions online. Previous research has pointed out a relationship between the perceived risk of a new shopping channel and the choice of purchasing using that channel (Bhatnagar et al., 2000).

Perceived risk as defined by Ko et al., 2004 is the potential loss in pursuing a desired outcome when engaged in online shopping.

The consumers' perception of risk is associated with the nature and amount of uncertainty perceived by consumers in considering a particular purchase decision (Cox & Rich., 1964).

Although perceived risk is an important factor in the intentions to shop online, we will not focus on it in this study.

Very little research is done on E-commerce in Lebanon and below is some of the articles that talked about E-commerce in Lebanon.

2.12 Focal Point Lebanon and E-commerce

E-commerce in Lebanon has been discussed positively and negatively at the same time in different articles. Recently, Brooke Anderson wrote an article in the Daily Star, dated 28/9/2011, stating that despite the country's slow and insecure internet, businesses in Lebanon have begun to tap the demand for online shopping. This demand is backed up by

the social media networking and a newfound confidence in the safety of credit card purchasing.

Mr. El-khoja, co-founder of Mizalla.com advertized his website as the region's first online mall. Also, Darine Sabbagh, marketing manager at Integrated Digital Systems, quotes that she believes E-commerce has a lot more potential in the country, beyond the possibility for retailers who sell physical goods to go online and open online outlets, there is a huge need for service retailers online—from delivery services to shopping services, beauty services, online consultancy, video-on-demand and many others.

In a recent survey done by GoNabit.com, ninety-three percent of the respondents said that they had a positive view of E-commerce despite the perceived security problems. Also, sixty-six percent said that if it is cheaper to buy online, they would do so more often.

On the contrary, and in an article published on September 7, 2011, by Youmna Zod, she discusses the case of an E-commerce failure in 2009, though the payment method that they had adopted was "payment upon delivery". The main reason that she mentioned, was that Lebanese liked to be guided in their purchases. Also, they like to have a second opinion and the salesperson seems to be a must. (www.marketinginlebanon.com)

Nevertheless, E-commerce, although a new concept in the Middle East, is proving to be a cost-effective and viable business, and is becoming a normal way to do business.

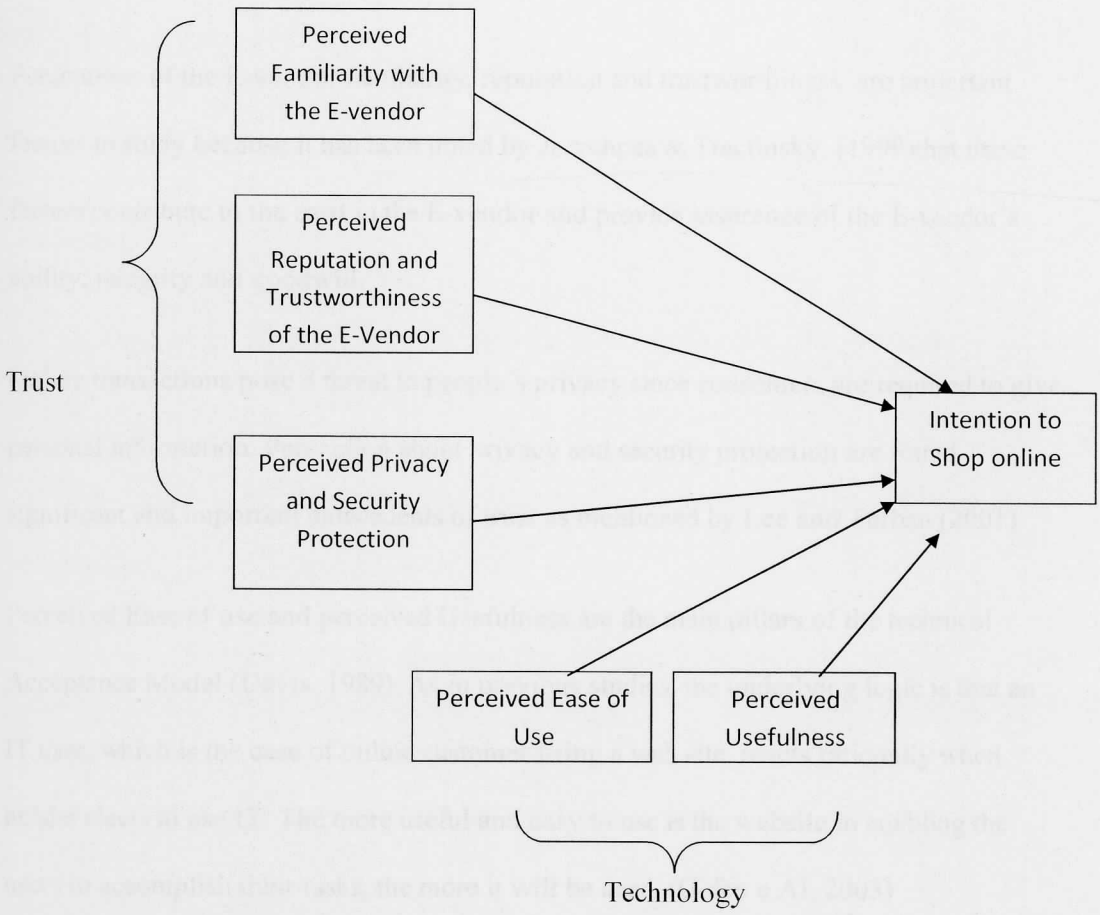
Below is a table of some of the E-commerce websites in Lebanon

Name	Website	Type	Products
Exotica	www.exotica.com	click-and-mortar	Flowers
Hallab	www.hallab.com.lb	click-and-mortar	Sweets
M2	www.m2.com	click-and-mortar	Electronics
MarkaVIP	http://markavip.com/	Pure play	Fashion;
Lebanesemall	www.lebanesemall.com	Pure play	All kinds of products
Mazilla	www.mizalla.com	Pure play	
Lebanon Mart	http://www.lebanonmart.com/	Pure play	All kinds of products
Buy Lebanese	http://www.buylebanese.com/	Pure play	All kinds of products
PC & Parts	http://www.pcandparts.com	Pure play	Electronics
Soukourjouwan	http://www.soukorjuwan.com	Pure play	Discounted products
GoNabit	www.GoNabit.com	Pure play	Discounted products
Dia Boutique	www.Dia-boutique.com	Pure play	Discounted products
Cobone	www.cobone.com	Pure play	Discounted products
Lebonline	www.lebonline.com	click-and-mortar	Electronics

2.13 Summary of the Literature Review

The literature review gave me the opportunity to develop a model for studying the Lebanese consumers' intention towards online shopping. This model is a combination of the two models developed by Gefen et al, 2003 and Chung and Lee 2000.

Factors that influence online shopping intentions



As more businesses are converging to E-commerce in Lebanon, the factors that affect online shopping intentions and thus actual online shopping behavior are important to study.

Taking into consideration that shopping online requires the consumer to use the website, this "new" channel of distribution the technology ability to manage the website and the trust of the consumer. For these reasons, it is important to take the technology and trust based factors.

Perceptions of the E-vendor familiarity, reputation and trustworthiness are important factors to study because it has been noted by Jarvenpaa & Tractinsky, (1999)that these factors contribute to the trust in the E-vendor and provide assurance of the E-vendor's ability, integrity and goodwill.

Online transactions pose a threat to people's privacy since consumers are required to give personal information. Perception about privacy and security protection are found significant and important antecedents of trust as mentioned by Lee and Turban (2001).

Perceived Ease of use and perceived Usefulness are the main pillars of the technical Acceptance Model (Davis, 1989). As in previous studies, the underlying logic is that an IT user, which is the case of online customer using a web site, reacts rationally when he/she elects to use IT. The more useful and easy to use is the website in enabling the users to accomplish their tasks, the more it will be used. (Gefen e Al, 2003)

Research Questions:

1. What are the trust factors that will affect the intention to shop online for the Lebanese consumer?

2. Does the perception that an E-vendor website is easy to use affect the intention to shop online for the Lebanese consumer?

3. Does the perception of the website's usefulness affect the intention to shop online for the Lebanese consumer?

Hypotheses:

H1: Perceived Familiarity with the E-vendor will positively affect the intentions to shop online

H2: Perceived Reputation and Trustworthiness will positively affect the intentions to shop online

H3: Perceived Privacy and Security Protection will positively affect the intentions to shop online

H4: Perceived Ease of use will positively affect intentions to shop online

H5: perceived usefulness will positively affect intentions to shop online

3. Research Methods

3.1 Methodology

There are at least three ways in which the data could be collected for this type of study. A popular approach is field surveys in which researchers have participants imagine a website that they recently patronized and answer the survey questions (Chiu et al., 2005). However, this data collection approach could be potentially biased by vendor effects. In addition, researchers may not be aware of what extraneous factors the survey participants are dealing with because there are too many contingencies. The second approach is a laboratory experiment, which allows a high degree of manipulability and control of extraneous factors (Li et al. 2003). The laboratory experiment typically involves a non-real (i.e. researcher-developed) business website in an isolated environment, but consumers' actual perception in the real world might be very different from that in the controlled environment (kim, 1996).

This thesis is based on field survey and seeks general perceptions about online shopping rather than vendor-specific perceptions, and requires a minimum level of outside interference. Also, the measured perception of consumers should reflect on the actual electronic business-to-consumer environment (kim, 1996).

3.2 Measurements

The first section of the survey consists of five questions, these questions are general questions related to the usage of the internet, action of purchasing online and the willingness of the users to purchase online.

The second section of the survey consisted of 20 questions which investigated online shopping intentions from a trust and technology perspective.

This section asked about the factors that affect the intentions to shop online using a five-point likert scale.

The third section consisted of five demographic questions. The questions involved such demographics as gender, age, educational level, income range and major. All five questions were located on one page.

All the measurement items were adapted from the literature and previous research questionnaires which were empirically proven to be reliable and valid. The questionnaire was adapted to fit the Lebanese culture and environment.

Data was entered into the Statistical Package for Social Sciences (SPSS 17.0) and the required statistics was conducted.

3.3 Pretest

Ten students were asked to test the survey. The students were timed to determine how long it would take them to respond to the questions and upon completion, the students were asked for their feedback.

The feedback from the students who participated in pre-testing the survey confirmed that the amount of time to take the survey was not too long to lose the student's interest. A number of revisions and modifications were implemented based on their feedback and some questions were removed.

Upon completion of the revisions and additions, the survey was ready for printing.

3.4 Sample

The sample was chosen according to Quota sampling method, the non probability version of stratified sampling.

The population was first segmented into mutually exclusive sub-groups, than convenience was used to select the subjects or units from each segment based on a specified proportion.

The subjects selected were student consumers and non-student consumers from the public.

Quota sampling was used because of the limited time. Subsets were chosen and then people were conveniently chosen from each subset. The sample size was 240 Lebanese consumers, 60% of which were students and 40% were non-students from the public. This sample size is judged to be acceptable based on similar studies that were reviewed in the literature review.

The criterion was that participants should have experience in shopping online and/or using the internet. These factors were used to filter out participants that do not serve the objectives of this research.

Therefore, we have limited our focus on the majority of consumers, and those rare cases do not constitute the target of this study. Participants with no experience using the Internet were identified through an upfront questionnaire and were eliminated from the study.

To investigate the online shopping intentions of Lebanese consumers, a survey questionnaire was prepared and survey was conducted with 144 university students on the

2nd of May 2012 in the 5 well know universities in Lebanon namely American University of Beirut(AUB), Haigazian University (HU), Lebanese American University (LAU), Notre Dame University (NDU), Universite Saint-Esprit De Kaslik (USEK).

Also, 96 consumers were chosen from the public were asked to fill up the survey questionnaire; these consumers were selected from some gatherings and from several Lebanese companies.

3.5 Reliability Analysis

Reliability refers to the extent to which a scale produced consistent results if repeated measurements are made. It is assessed by determining the proportion of systematic variation in the scale. To achieve high reliability, a vast array of literatures were reviewed, articles, textbooks, journals, etc. Then the exploratory findings were systemized and the information was linked together with the facts extracted through the survey.

Reliability analysis was conducted for all the factors. With a cronbach's alpha of 0.846, it can be deduced that the items are in compliance with the elements of reliability.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.843	.846	20

Reliability analysis was conducted for the Trust and Technology factors.

Trust factors consisted of 12 items.

With a cronbach's alpha of 0.805, it can be deduced that the items are in compliance with the elements of reliability.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.801	.805	12

Technology factors consisted of 8 items.

With a cronbach's alpha of 0.771, it can be deduced that the items are in compliance with the elements of reliability.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.767	.771	8

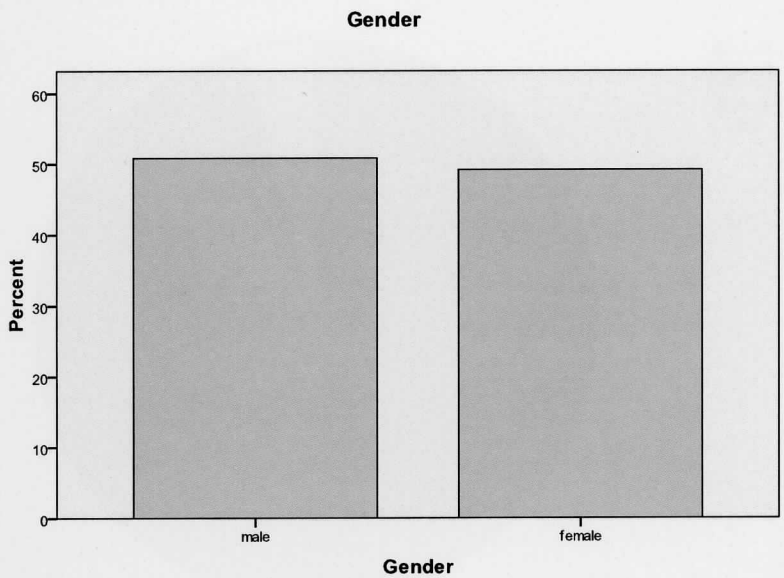
4. Empirical Findings and Analysis

4.1 Descriptive Statistics and Cross-Tabulations

Gender: The total number of respondents was 240, of these 50.8% were males and 49.2 % were females.

Gender

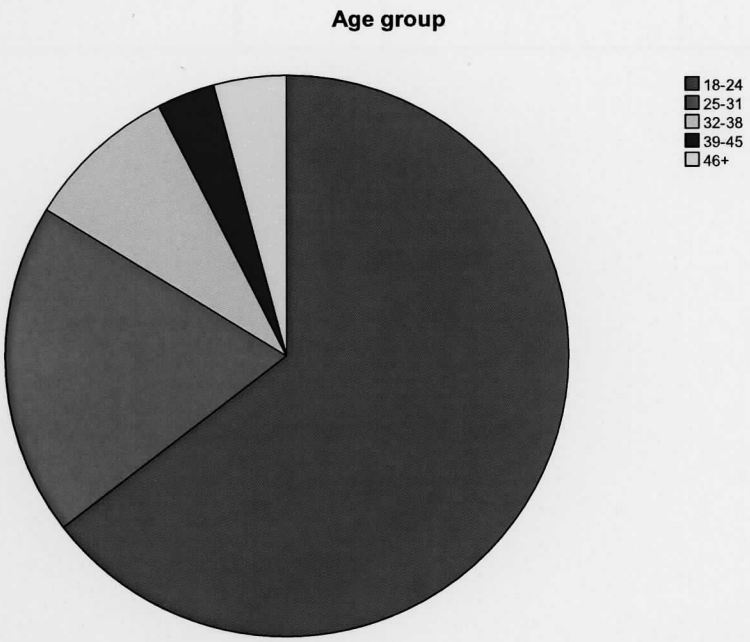
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	122	50.8	50.8	50.8
	female	118	49.2	49.2	100.0
	Total	240	100.0	100.0	



Age Group: 64.6% of the respondents were between age 18-24, and 19.2% of the respondents were between 25-31 of age. The remaining respondents were between 32-38, 39-45 and 46+.

Age group

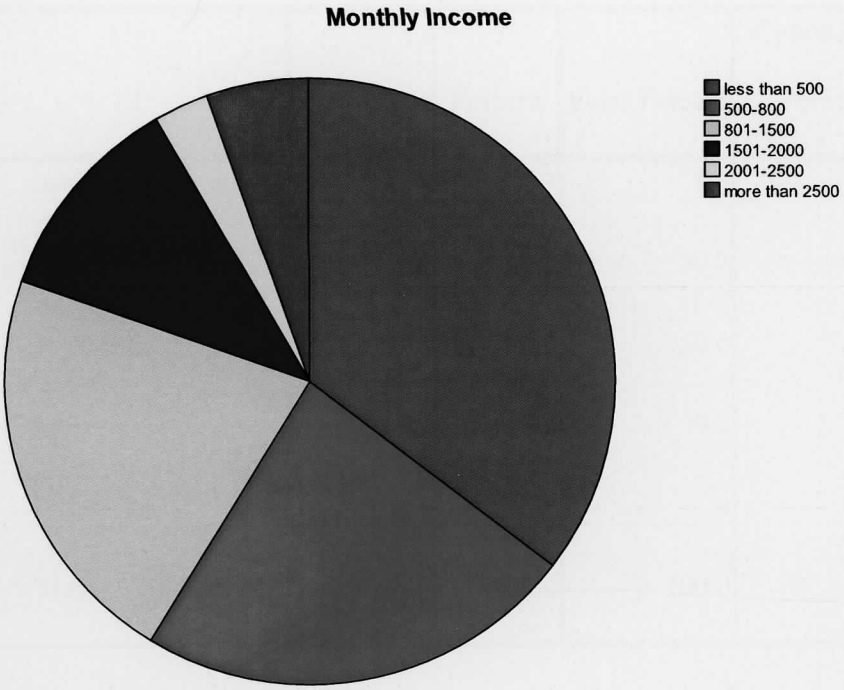
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	155	64.6	64.6	64.6
	25-31	46	19.2	19.2	83.8
	32-38	21	8.8	8.8	92.5
	39-45	8	3.3	3.3	95.8
	46+	10	4.2	4.2	100.0
	Total	240	100.0	100.0	



Income Group: Mostly, the respondents had low and mid level monthly income. 35.4 % less than 500 USD, 23.3% between 500-800 USD and 21.7% between 800-1500 USD. The remaining sample account for 19.6% which has an income above 1500 USD.

Monthly Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 500	85	35.4	35.4	35.4
	500-800	56	23.3	23.3	58.8
	801-1500	52	21.7	21.7	80.4
	1501-2000	27	11.3	11.3	91.7
	2001-2500	7	2.9	2.9	94.6
	more than 2500	13	5.4	5.4	100.0
	Total	240	100.0	100.0	

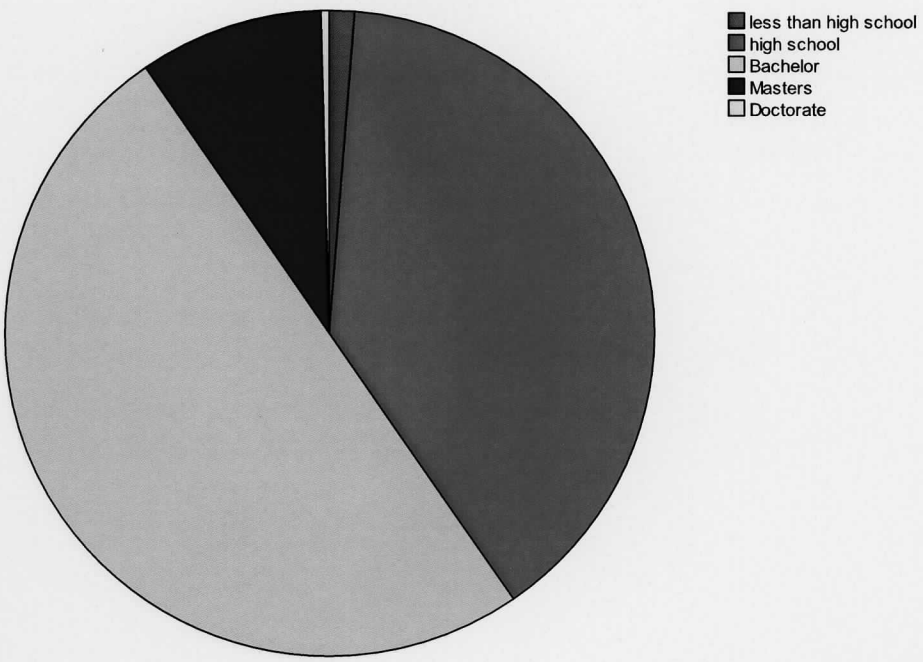


Educational level: the sample consists mainly from bachelor degree holder which account for the 50% of the sample, and high school degree holder account for 39.2% of the sample. The remaining 10.8% account for the less than high school, master's and doctorate degree holders.

Educational level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than high school	3	1.3	1.3	1.3
	high school	94	39.2	39.2	40.4
	Bachelor	120	50.0	50.0	90.4
	Masters	22	9.2	9.2	99.6
	Doctorate	1	.4	.4	100.0
	Total	240	100.0	100.0	

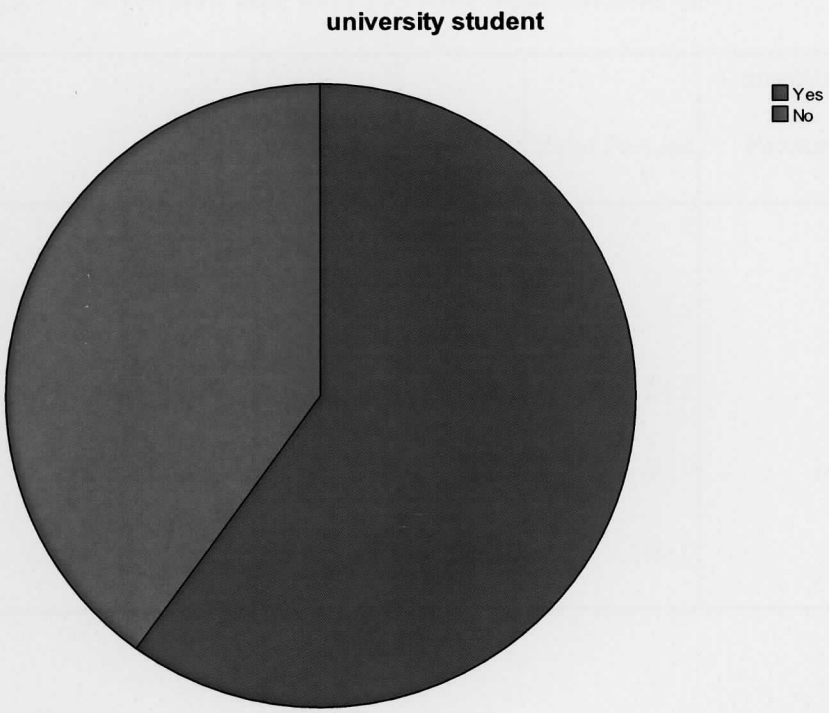
Educational level



Student status: As for being currently enrolled as a university student, university students account 60% of the sample and the remaining 40% represents the non-student sample.

university student

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	144	60.0	60.0	60.0
	No	96	40.0	40.0	100.0
	Total	240	100.0	100.0	



Internet user: The whole sample is internet users (10 respondents were not internet users and were discarded from the sample)

Do you use the internet?

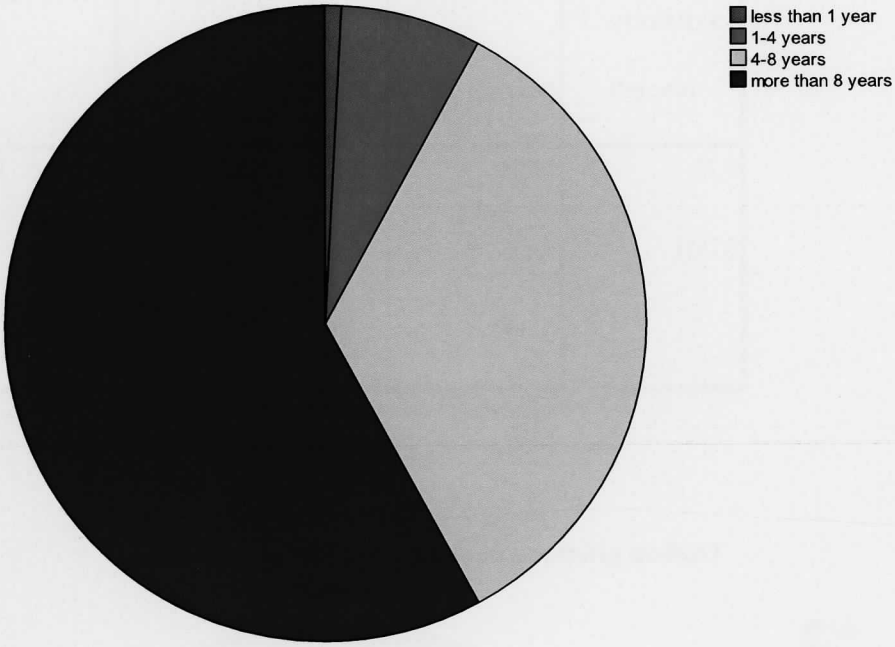
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	240	100.0	100.0	100.0

Internet Experience: The sample had good experience using the internet, having 57% experience of more than 8 years and 34.2% from 4-8 years.

if yes, how long have you been using the internet?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1 year	2	.8	.8	.8
	1-4 years	17	7.1	7.1	7.9
	4-8 years	82	34.2	34.2	42.1
	more than 8 years	139	57.9	57.9	100.0
	Total	240	100.0	100.0	

If yes, how long have you been using the internet?

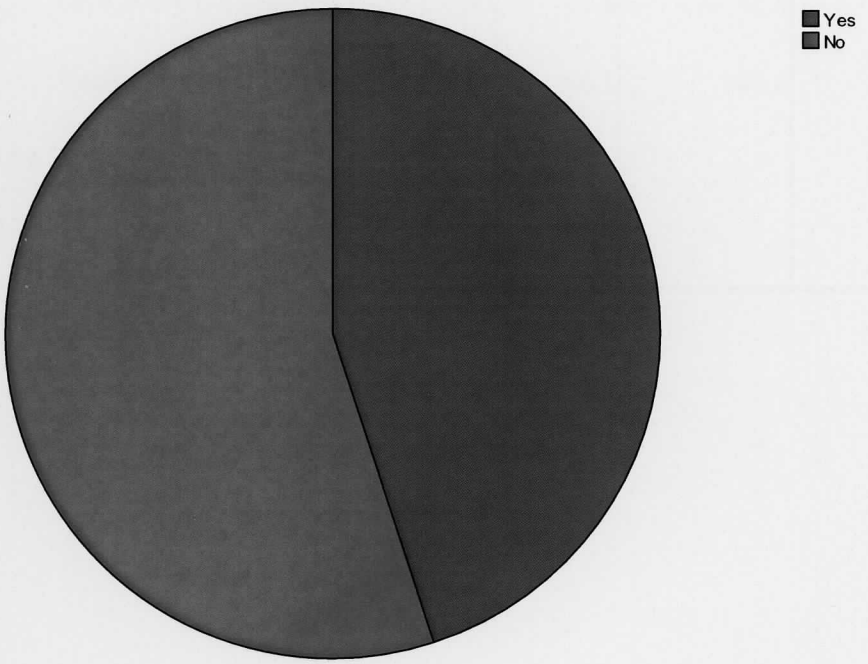


Shopped online: From the total sample only 45% have shopped online previously.

Have you ever shopped anything online?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	108	45.0	45.0	45.0
	No	132	55.0	55.0	100.0
	Total	240	100.0	100.0	

Have you ever purchased anything online?



Frequency of shopping online: 51.4 % of the sample who shopped online shop online once every 6-12 months. Frequent online shoppers account for 12.6% of the sampl..

how often do you shop online?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	once a week or more often	11	4.6	9.9	9.9
	once a month	14	5.8	12.6	22.5
	once every 4-6 months	29	12.1	26.1	48.6
	once every 6-12 months	57	23.8	51.4	100.0
	Total	111	46.3	100.0	
Missing	System	129	53.8		
Total		240	100.0		

Shopped online V/S Gender: Of those who purchased online, 62% were males and 38% were females.

Have you ever purchased anything online? * Gender Crosstabulation

			Gender		
			male	female	Total
Have you ever purchased anything online?	Yes	Count	67	41	108
		% within Have you ever purchased anything online?	62.0%	38.0%	100.0%
		% within Gender	54.9%	34.7%	45.0%
		% of Total	27.9%	17.1%	45.0%
	No	Count	55	77	132
		% within Have you ever purchased anything online?	41.7%	58.3%	100.0%
		% within Gender	45.1%	65.3%	55.0%
		% of Total	22.9%	32.1%	55.0%
Total		Count	122	118	240
		% within Have you ever purchased anything online?	50.8%	49.2%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	50.8%	49.2%	100.0%

Shopped online V/S Educational level: 23.8% of those who have a bachelor degree have shopped online.

Educational level * Have you ever purchased anything online? Crosstabulation

			Have you ever purchased anything online?		
			Yes	No	Total
Educational level	less than high school	Count	1	2	3
		% within Educational level	33.3%	66.7%	100.0%
		% within Have you ever purchased anything online?	.9%	1.5%	1.3%
		% of Total	.4%	.8%	1.3%
	high school	Count	35	59	94
		% within Educational level	37.2%	62.8%	100.0%
		% within Have you ever purchased anything online?	32.4%	44.7%	39.2%
		% of Total	14.6%	24.6%	39.2%
	Bachelor	Count	57	63	120
		% within Educational level	47.5%	52.5%	100.0%
		% within Have you ever purchased anything online?	52.8%	47.7%	50.0%

		% of Total	23.8%	26.3%	50.0%
	Masters	Count	15	7	22
		% within Educational level	68.2%	31.8%	100.0%
		% within Have you ever purchased anything online?	13.9%	5.3%	9.2%
		% of Total	6.3%	2.9%	9.2%
	Doctorate	Count	0	1	1
		% within Educational level	.0%	100.0%	100.0%
		% within Have you ever purchased anything online?	.0%	.8%	.4%
		% of Total	.0%	.4%	.4%
Total		Count	108	132	240
		% within Educational level	45.0%	55.0%	100.0%
		% within Have you ever purchased anything online?	100.0%	100.0%	100.0%
		% of Total	45.0%	55.0%	100.0%

4.2 Regression Analysis

We have used the regression analysis to test the significance of the variables related to trust and technology on the willingness to shop online.

We will use regression analysis on the whole model against the dependant variable in the first stage and following that we will use regression analysis on the technology and trust variables against the willingness to shop online.

In the last section we will use regression analysis on each hypothesis variable with the dependant variable and we will use the stepwise method and check for the significance of every hypothesis.

Regression analysis of all the variables against the dependant variable:

Model Summary[e]

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	.345[a]	.119	.115	1.047	.119	31.498	1	233	.000
2	.425[b]	.181	.174	1.012	.062	17.518	1	232	.000
3	.460[c]	.211	.201	.995	.031	8.947	1	231	.003
4	.476[d]	.227	.213	.987	.015	4.577	1	230	.033

d. Predictors: (Constant), (H5) because it makes shopping more convenient that traditional shopping, (H3) if the website of the E-vendor is using secured protocol to protect my information from hackers, (H5) because the online system provides me with sufficient information about the products, (H2) if the reviews and ratings of the E-vendor were positive

e. Dependent Variable: level of willingness to shop online

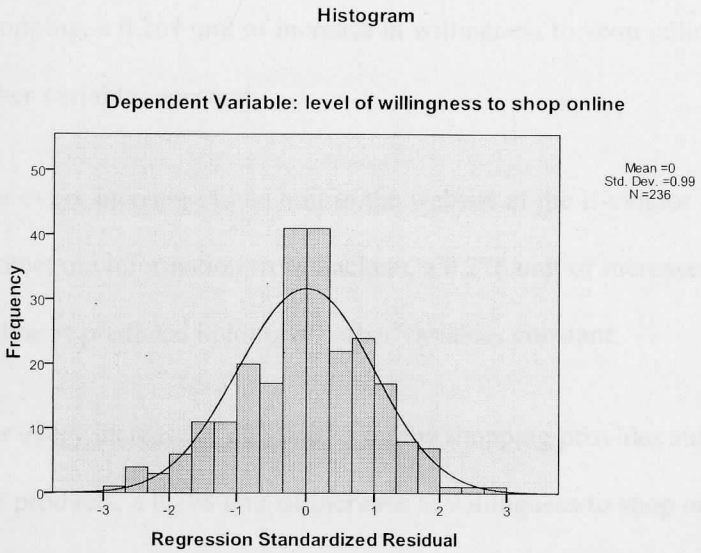
ANOVA[e]

Model		Sum of Squares	df	Mean Square	F	Sig.
4	Regression	65.785	4	16.446	16.872	.000[d]
	Residual	224.198	230	.975		
	Total	289.983	234			

d. Predictors: (Constant), (H5) because it makes shopping more convenient that traditional shopping, (H3) if the website of the E-vendor is using secured protocol to protect my information from hackers, (H5) because the online system provides me with sufficient information about the products, (H2) if the reviews and ratings of the E-vendor were positive

e. Dependent Variable: level of willingness to shop online

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
4	(Constant)	-.335	.429		-.780	.436	-1.180	.511			
	it makes shopping more convenient that traditional shopping	.264	.070	.233	3.754	.000	.126	.403	.345	.240	.218
	the website of the E-vendor is using secured protocol to protect my information from hackers	.276	.077	.217	3.572	.000	.124	.428	.304	.229	.207
	the online system provides me with sufficient information about the products	.198	.079	.157	2.522	.012	.043	.353	.278	.164	.146
	the reviews and ratings of the E-vendor were positive	.173	.081	.133	2.139	.033	.014	.333	.276	.140	.124



The model is significant and the R^2 is 22.7% which means that 22.7% of the variations in the willingness to shop online are explained by the following variables: online shopping is more convenient that traditional shopping, the website of the E-vendor is using secured protocol to protect me information from hackers, online shopping provides sufficient information about the products and the reviews and ratings of the E-vendor were positive.

To the best of our knowledge, and to the best of our efforts, this is the regression line we found.

Expected willingness to shop online: -0.335+ 0.264(online shopping is more convenient that traditional shopping) + 0.276 (the website of the E-vendor is using secured protocol to protect me information from hackers) + 0.198 (online shopping provides sufficient information about the products) +0.173 (reviews and ratings of the E-vendor were positive)

For every increase of one unit in online shopping is more convenient that traditional shopping, a 0.264 unit of increase in willingness to shop online is predicted holding all other variables constant.

For every increase of one unit in the website of the E-vendor is using secured protocol to protect me information from hackers, a 0.276 unit of increase in willingness to shop online is predicted holding all other variables constant.

For every increase of one unit in online shopping provides sufficient information about the products, a 0.198 unit of increase in willingness to shop online is predicted holding all other variables constant.

For every increase of one unit in the reviews and ratings of the E-vendor were positive, a 0.173 unit of increase in willingness to shop online is predicted holding all other variables constant.

Regression analysis of the trust variables against the dependant variable:

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.304[a]	.093	.089	1.060	.093	23.882	1	234	.000
2	.364[b]	.133	.125	1.039	.040	10.766	1	233	.001

a. Predictors: (Constant), (H3) if the website of the E-vendor is using secured protocol to protect my information from hackers

b. Predictors: (Constant), (H3) if the website of the E-vendor is using secured protocol to protect my information from hackers, (H2) if the reviews and ratings of the E-vendor were positive

c. Dependent Variable: level of willingness to shop online

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	38.477	2	19.238	17.823	.000[b]
	Residual	251.506	233	1.079		
	Total	289.983	235			

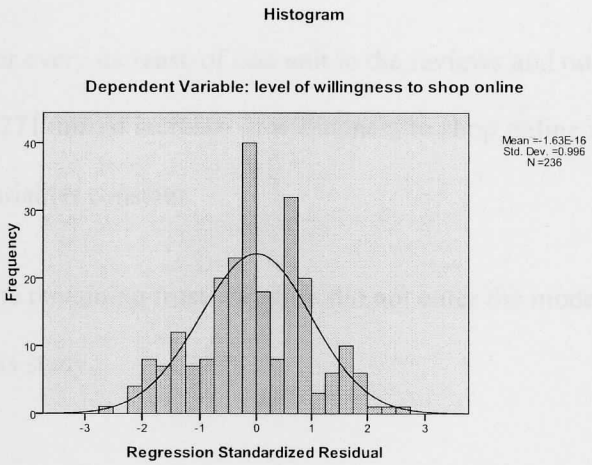
b. Predictors: (Constant), (H3) if the website of the E-vendor is using secured protocol to protect my information from hackers, (H2) if the reviews and ratings of the E-vendor were positive

c. Dependent Variable: level of willingness to shop online

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
2	(Constant)	.670	.395		1.696	.091	-.108	1.447			
	the website of the E-vendor is using secured protocol to protect my information from hackers	.315	.081	.248	3.912	.000	.156	.474	.304	.248	.239
	the reviews and ratings of the E-vendor were positive	.271	.082	.208	3.281	.001	.108	.433	.275	.210	.200

a. Dependent Variable: level of willingness to shop online



The model is significant and the R^2 is 13.3% which means that 13.3 % of the variations in the willingness to shop online are explained by the following variables: the website of the E-vendor is using secured protocol to protect my information from hackers and the reviews and ratings of the E-vendor were positive.

To the best of our knowledge, and to the best of our efforts, this is the regression line we found.

Expected Willingness to shop online: 0.670+ 0.315 (the website of the E-vendor is using secured protocol to protect my information from hackers) + 0.271(the reviews and ratings of the E-vendor were positive)

Setting all the independent variables to zero, it can be deduced that the average willingness to shop online is 0.670.

For every increase of one unit in the website of the E-vendor is using secured protocol to protect my information from hackers, a 0.315 unit of increase in willingness to shop online is predicted holding all other variables constant.

For every increase of one unit in the reviews and ratings of the E-vendor were positive, a 0.271 unit of increase in willingness to shop online is predicted holding all other variables constant.

The remaining trust variables did not enter the model because they were not significant in this study.

Regression analysis of the technology variables against the dependant variable:

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.345[a]	.119	.115	1.047	.119	31.498	1	233	.000
2	.389[b]	.151	.144	1.030	.032	8.805	1	232	.003

a. Predictors: (Constant), (H5) because it makes shopping more convenient that traditional shopping

b. Predictors: (Constant), (H5) because it makes shopping more convenient that traditional shopping, (H5) because the online system provides me with sufficient information about the products

c. Dependent Variable: level of willingness to shop online

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	43.873	2	21.937	20.679	.000[b]
	Residual	246.110	232	1.061		
	Total	289.983	234			

a. Predictors: (Constant), (H5) because it makes shopping more convenient that traditional shopping

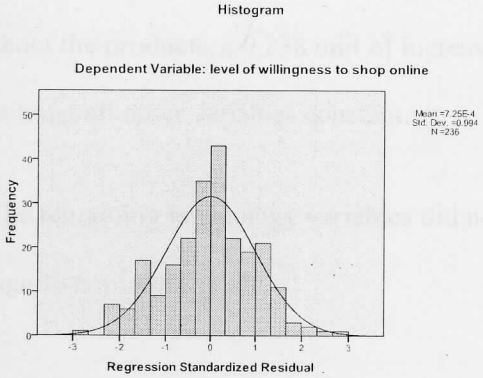
b. Predictors: (Constant), (H5) because it makes shopping more convenient that traditional shopping, (H5) because the online system provides me with sufficient information about the products

c. Dependent Variable: level of willingness to shop online

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
2	(Constant)	1.137	.309		3.677	.000	.528	1.746			
	it makes shopping more convenient that traditional shopping	.324	.072	.286	4.494	.000	.182	.467	.345	.283	.272
	the online system provides me with sufficient information about the products	.238	.080	.189	2.967	.003	.080	.396	.278	.191	.179

a. Dependent Variable: level of willingness to shop online



The model is significant and the R^2 is 15.1% which means that 15.1 % of the variations in the willingness to shop online are explained by the following variables: it makes shopping more convenient that traditional shopping and the online system provides me with sufficient information about the products.

To the best of our knowledge, and to the best of our efforts, this is the regression line we found.

Expected Willingness to shop online: 1.137 + 0.324 (it makes shopping more convenient that traditional shopping) + 0.238 (the online system provides me with sufficient information about the products)

Setting all the independent variables to zero, it can be deduced that the average willingness to shop online is 1.137.

For every increase of one unit in (it makes shopping more convenient that traditional shopping, a 0.324 unit of increase in willingness to shop online is predicted holding all other variables constant.

For every increase of one unit the online system provides me with sufficient information about the products, a 0.238 unit of increase in willingness to shop online is predicted holding all other variables constant.

The remaining technology variables did not enter the model because they were not significant in this study.

Regression analysis of the H1variables against the dependant variable:

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.190[a]	.036	.032	1.093	.036	8.720	1	234	.003
2	.268[b]	.072	.064	1.075	.036	8.962	1	233	.003

a. Predictors: (Constant), (H1) if I have visited the website of the E-vendor repeatedly

b. Predictors: (Constant), (H1) if I have visited the website of the E-vendor repeatedly, (H1) if I knew the E-vendor personally

c. Dependent Variable: level of willingness to shop online

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	20.772	2	10.386	8.989	.000[b]
	Residual	269.211	233	1.155		
	Total	289.983	235			

a. Predictors: (Constant), (H1) if I have visited the website of the E-vendor repeatedly

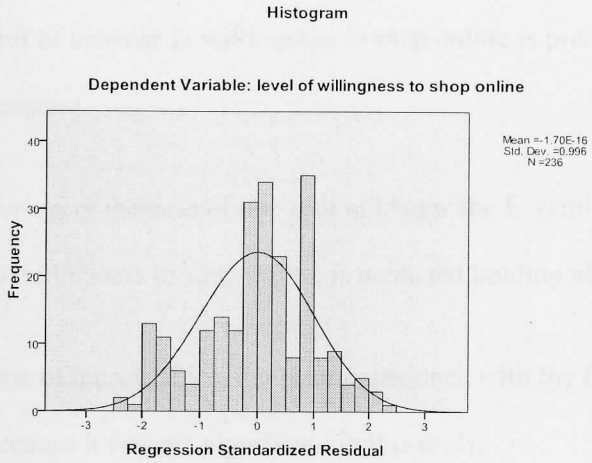
b. Predictors: (Constant), (H1) if I have visited the website of the E-vendor repeatedly, (H1) if I knew the E-vendor personally

c. Dependent Variable: level of willingness to shop online

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
2	(Constant)	1.332	.398		3.342	.001	.547	2.117			
	visited the website of the E-vendor repeatedly	.234	.076	.195	3.089	.002	.085	.383	.190	.198	.195
	I knew the E-vendor personally	.232	.077	.189	2.994	.003	.079	.384	.183	.192	.189

a. Dependent Variable: level of willingness to shop online



H1: Perceived Familiarity with the E-vendor will positively affect the intentions to shop online

The model is significant and the R^2 is 7.2% which means that 7.2 % of the variations in the willingness to shop online are explained by the following variables: visited the website of the E-vendor repeatedly and I knew the E-vendor personally.

To the best of our knowledge, and to the best of our efforts, this is the regression line we found.

Expected Willingness to shop online: 1.332 + 0.234(visited the website of the E-vendor repeatedly) + 0.232 (I knew the E-vendor personally)

Setting all the independent variables to zero, it can be deduced that the average willingness to shop online is 1.332.

For every increase of one unit in knowing the website of the E-vendor repeatedly, a 0.234 unit of increase in willingness to shop online is predicted holding all other variables constant.

For every increase of one unit in I knew the E-vendor personally, a 0.232 unit of increase in willingness to shop online is predicted holding all other variables constant.

One of the variables, the prior experience with the E-vendor did not enter the model because it was not significant in this study.

Therefore, we reject the null hypothesis and conclude that Perceived Familiarity with the E-vendor will positively affect the intentions to shop online

.

Regression analysis of the H2 variables against the dependant variable:

Model Summary[b]

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	.275[a]	.076	.072	1.070	.076	19.171	1	234	.000

a. Predictors: (Constant), (H2) if the reviews and ratings of the E-vendor were positive

b. Dependent Variable: level of willingness to shop online

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.959	1	21.959	19.171	.000[a]
	Residual	268.024	234	1.145		
	Total	289.983	235			

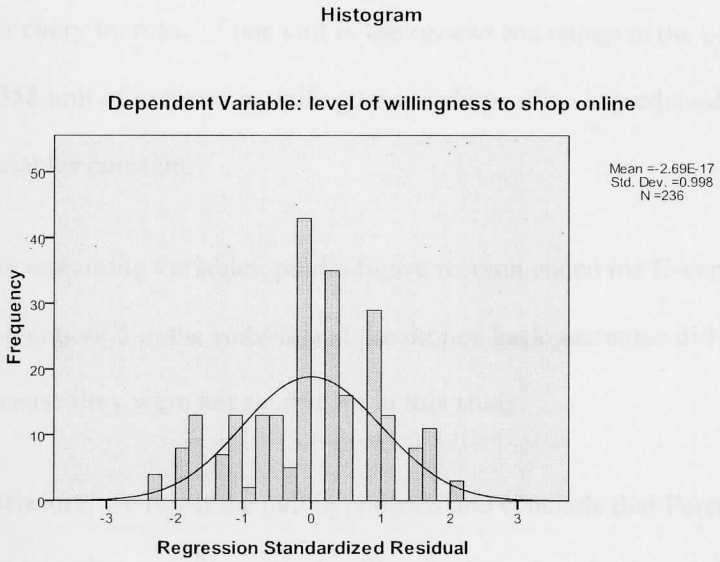
a. Predictors: (Constant), (H2) if the reviews and ratings of the E-vendor were positive

b. Dependent Variable: level of willingness to shop online

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	1.682	.307		5.476	.000	1.077	2.287			
	the reviews and ratings of the E-vendor were positive	.358	.082	.275	4.379	.000	.197	.519	.275	.275	.275

a. Dependent Variable: level of willingness to shop online



H2: Perceived Reputation and Trustworthiness will positively affect the intentions to shop online

The model is significant and the R^2 is 7.6% which means that 7.6 % of the variations in the willingness to shop online are explained by the following variable: the reviews and ratings of the E-vendor were positive.

To the best of our knowledge, and to the best of our efforts, this is the regression line we found.

Expected Willingness to shop online: 1.682 + 0.358(the reviews and ratings of the E-vendor were positive)

Setting all the independent variables to zero, it can be deduced that the average willingness to shop online is 1.682.

For every increase of one unit in the reviews and ratings of the E-vendor were positive, a 0.358 unit of increase in willingness to shop online is predicted holding all other variables constant.

The remaining variables, public figure recommended the E-vendor, delivery of the goods as mentioned in the website and the money back guarantee did not enter the model because they were not significant in this study.

Therefore, we reject the null hypothesis and conclude that Perceived Reputation and Trustworthiness will positively affect the intentions to shop online.

Regression analysis of the H3 variables against the dependant variable:

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.304[a]	.093	.089	1.060	.093	23.882	1	234	.000
2	.339[b]	.115	.107	1.050	.022	5.826	1	233	.017

a. Predictors: (Constant), (H3) if the website of the E-vendor is using secured protocol to protect my information from hackers

b. Predictors: (Constant), (H3) if the website of the E-vendor is using secured protocol to protect my information from hackers, (H3) if the website has identification certificate and shows green address bar (Internet Explorer 9) i.e certified by a recognized third Party

c. Dependent Variable: level of willingness to shop online

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	33.274	2	16.637	15.100	.000[b]
	Residual	256.709	233	1.102		
	Total	289.983	235			

a. Predictors: (Constant), (H3) if the website of the E-vendor is using secured protocol to protect my information from hackers

b. Predictors: (Constant), (H3) if the website of the E-vendor is using secured protocol to protect my information from hackers, (H3) if the website has identification certificate and shows green address bar (Internet Explorer 9) i.e certified by a recognized third Party

c. Dependent Variable: level of willingness to shop online

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
2	(Constant)	.847	.399		2.124	.035	.061	1.632			

the website of the E-vendor is using secured protocol to protect my information from hackers	.328	.082	.258	3.994	.000	.166	.489	.304	.253	.246
the website has identification certificate and shows green address bar (Internet Explorer 9) i.e certified by a recognized third Party	.200	.083	.156	2.414	.017	.037	.363	.233	.156	.149

a. Dependent Variable: level of willingness to shop online

H3: Perceived Privacy and Security Protection will positively affect the intentions to shop online

The model is significant and the R^2 is 11.5 % which means that 11.5 % of the variations in the willingness to shop online are explained by the following variables: the website of the E-vendor is using secured protocol to protect my information from hackers and the

website has identification certificate and shows green address bar (Internet Explorer 9) i.e certified by a recognized third Party.

To the best of our knowledge, and to the best of our efforts, this is the regression line we found.

Expected Willingness to shop online: 0.847+ 0.328 (the website of the E-vendor is using secured protocol to protect my information from hackers)+0.200 (the website has identification certificate and shows green address bar (Internet Explorer 9) i.e certified by a recognized third Party)

Setting all the independent variables to zero, it can be deduced that the average willingness to shop online is 0.847.

For every increase of one unit in the website of the E-vendor is using secured protocol to protect my information from hackers, a 0.328 unit of increase in willingness to shop online is predicted holding all other variables constant.

For every increase of one unit in the website has identification certificate and shows green address bar (Internet Explorer 9) i.e certified by a recognized third Party, a 0.200 unit of increase in willingness to shop online is predicted holding all other variables constant.

The remaining variables, cash upon delivery system, explicit indication that they will not use the information and legal evidence that they will not share the information did not enter the model because they were not significant in this study.

Therefore, we reject the null hypothesis and conclude that Perceived Privacy and Security Protection will positively affect the intentions to shop online

.

Regression analysis of the H4 variables against the dependant variable:

Model Summary[b]

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	.261[a]	.068	.064	1.075	.068	17.138	1	234	.000

a. Predictors: (Constant), (H4) because the online system makes it easy to find the information required

b. Dependent Variable: level of willingness to shop online

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.789	1	19.789	17.138	.000[a]
	Residual	270.194	234	1.155		
	Total	289.983	235			

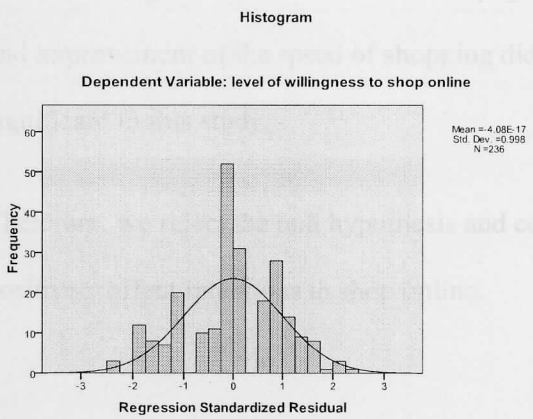
a. Predictors: (Constant), (H4) because the online system makes it easy to find the information required

b. Dependent Variable: level of willingness to shop online

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	1.761	.305		5.764	.000	1.159	2.362			
	the online system makes it easy to find the information required	.340	.082	.261	4.140	.000	.178	.501	.261	.261	.261

a. Dependent Variable: level of willingness to shop online



H4: Perceived Ease of use will positively affect intentions to shop online

The model is significant and the R^2 is 6.8% which means that 6.8 % of the variations in the willingness to shop online are explained by the following variables: the online system makes it easy to find the information required.

To the best of our knowledge, and to the best of our efforts, this is the regression line we found.

Willingness to shop online: 1.761+ 0.340 (the online system makes it easy to find the information required)

Setting all the independent variables to zero, it can be deduced that the average willingness to shop online is 1.761.

For every increase of one unit in the online system makes it easy to find information requested , a 0.340 unit of increase in willingness to shop online is predicted holding all other variables constant.

The remaining variables, if there are less pages to be filled, one step check out process and improvement of the speed of shopping did not enter the model because they were not significant in this study.

Therefore, we reject the null hypothesis and conclude that Perceived Ease of use will positively affect intentions to shop online.

Regression analysis of the H5 variables against the dependant variable:

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.345[a]	.119	.115	1.047	.119	31.498	1	233	.000
2	.389[b]	.151	.144	1.030	.032	8.805	1	232	.003

a. Predictors: (Constant), (H5) because it makes shopping more convenient that traditional shopping

b. Predictors: (Constant), (H5) because it makes shopping more convenient that traditional shopping, (H5) because the online system provides me with sufficient information about the products

c. Dependent Variable: level of willingness to shop online

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.533	1	34.533	31.498	.000[a]
	Residual	255.450	233	1.096		
	Total	289.983	234			
2	Regression	43.873	2	21.937	20.679	.000[b]
	Residual	246.110	232	1.061		
	Total	289.983	234			

a. Predictors: (Constant), (H5) because it makes shopping more convenient that traditional shopping

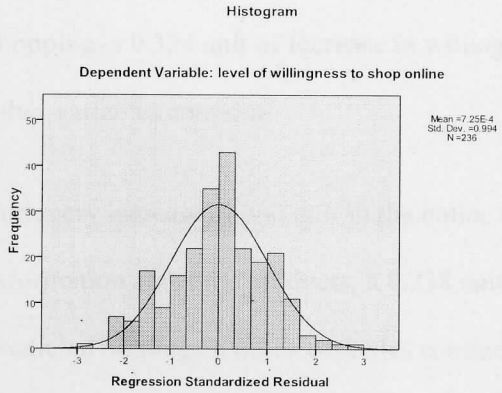
b. Predictors: (Constant), (H5) because it makes shopping more convenient that traditional shopping, (H5) because the online system provides me with sufficient information about the products

c. Dependent Variable: level of willingness to shop online

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
2	(Constant)	1.137	.309		3.677	.000	.528	1.746			
	it makes shopping more convenient that traditional shopping	.324	.072	.286	4.494	.000	.182	.467	.345	.283	.272
	the online system provides me with sufficient information about the products	.238	.080	.189	2.967	.003	.080	.396	.278	.191	.179

a. Dependent Variable: level of willingness to shop online



H5: perceived usefulness will positively affect intentions to shop online

The model is significant and the R^2 is 15.1% which means that 15.1 % of the variations in the willingness to shop online are explained by the following variables: it makes shopping more convenient that traditional shopping and the online system provides me with sufficient information about the products.

To the best of our knowledge, and to the best of our efforts, this is the regression line we found.

Expected Willingness to shop online: 1.137+ 0.324 (it makes shopping more convenient that traditional shopping) + 0.238(the online system provides me with sufficient information about the products)

Setting all the independent variables to zero, it can be deduced that the average willingness to shop online is 1.137.

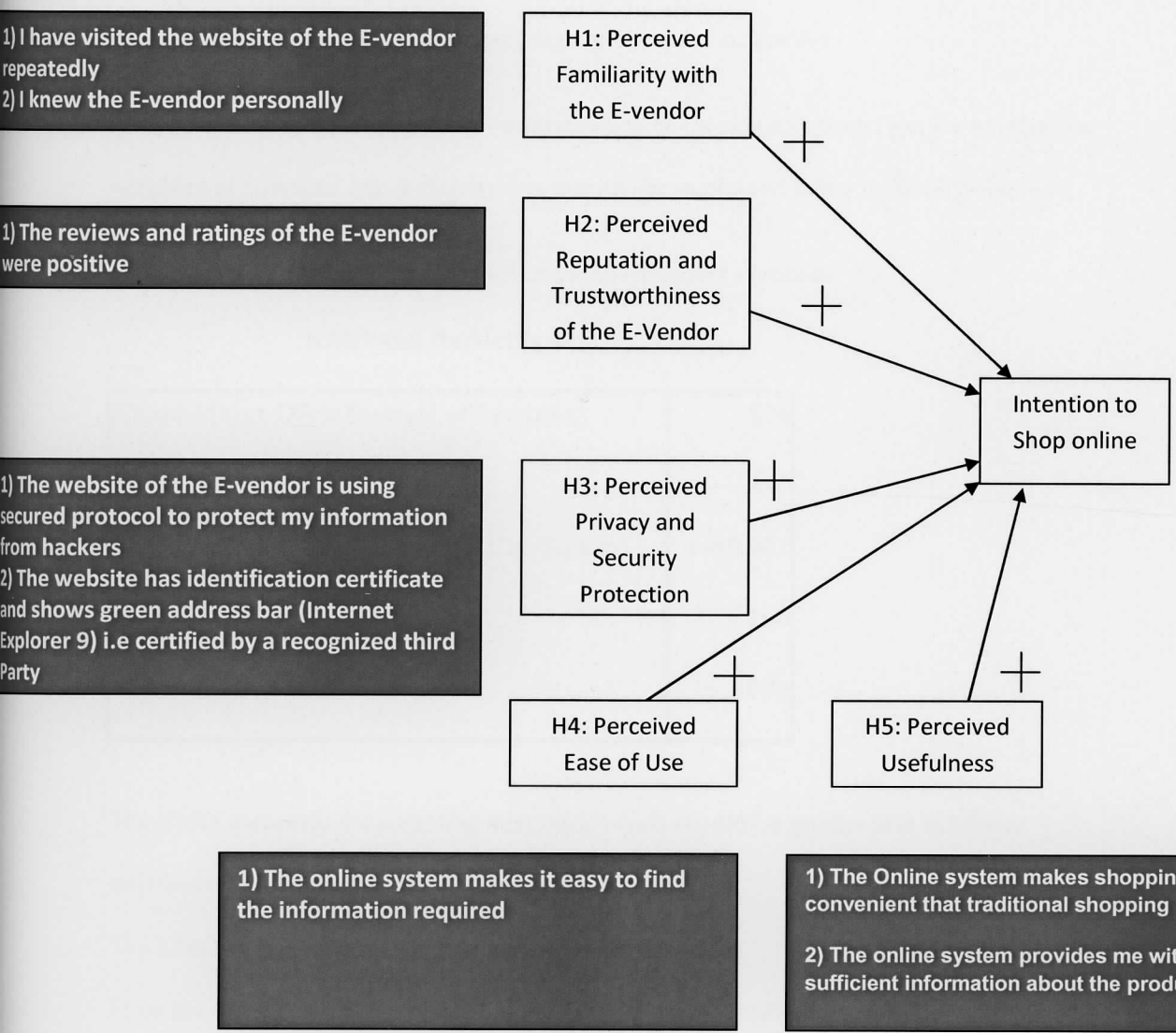
For every increase of one unit in the it makes shopping more convenient than traditional shopping, a 0.324 unit of increase in willingness to shop online is predicted holding all other variables constant.

For every increase of one unit in the online system provides me with sufficient information about the products, a 0.238 unit of increase in willingness to shop online is predicted holding all other variables constant.

The remaining variables, providing sufficient information and shopping for multiple products did not enter the model because they were not significant in this study.

Therefore, we reject the null hypothesis and conclude that perceived usefulness will positively affect intentions to shop online

Factors that influence online shopping intentions



4.3 Factor Analysis

Factor analysis was conducted to better understand the structure of my variables and their dimensions for Trust and Technology separately and combined.

The factor analysis reinforced my understanding of the constructs and has shown that the variables are divided into 6 dimensions that can be explained in the following manner.

Factor analysis was performed on all of the independent variables.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.826
Bartlett's Test of Sphericity	Approx. Chi-Square	1480.907
	df	190
	Sig.	.000

The KMO measures the sampling adequacy which should be greater than 0.5 for a satisfactory factor analysis to proceed with.

The KMO in this case is 0.826 which is greater than 0.5.

From the same table, we can see that the Bartlett's test of sphericity is 0.000, which is less than 0.05, so it is significant.

From the above satisfactory test results, we can pass on to performing the factor analysis.

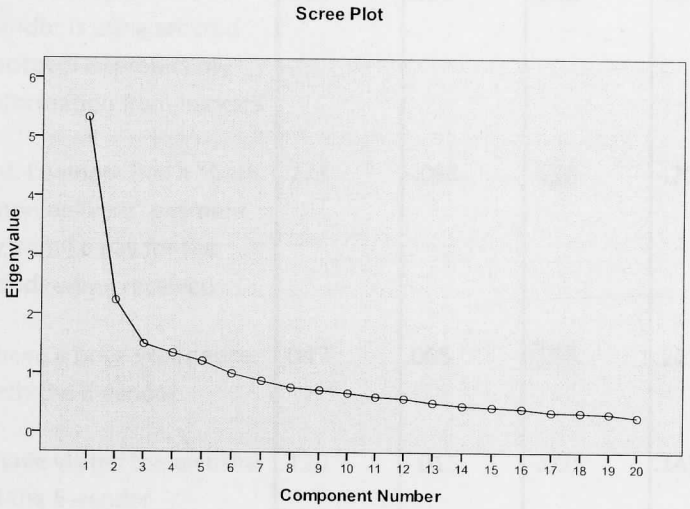
We can see on the table all the factors extractable from the analysis; in this case 6 factors were extracted, cumulatively accounting for 63.17 % of the total variance.

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	5.333	26.666	26.666	5.333	26.666	26.666	3.062	15.311	15.311
2	2.237	11.185	37.851	2.237	11.185	37.851	2.749	13.747	29.059
3	1.501	7.506	45.356	1.501	7.506	45.356	1.887	9.436	38.495
4	1.348	6.740	52.097	1.348	6.740	52.097	1.744	8.720	47.215
5	1.212	6.062	58.158	1.212	6.062	58.158	1.679	8.394	55.609
6	1.002	5.010	63.169	1.002	5.010	63.169	1.512	7.560	63.169
7	.878	4.390	67.558						
8	.766	3.832	71.390						
9	.725	3.624	75.014						
10	.675	3.373	78.387						
11	.614	3.068	81.455						
12	.583	2.916	84.371						
13	.512	2.559	86.931						
14	.462	2.309	89.240						
15	.436	2.178	91.419						
16	.413	2.064	93.482						
17	.355	1.775	95.257						
18	.347	1.737	96.995						

19	.329	1.645	98.640						
20	.272	1.360	100.000						

Extraction Method: Principal Component Analysis.



Rotated Component Matrix[a]

	Component					
	1	2	3	4	5	6
I knew the E-vendor personally	-.004	.125	.805	.074	.024	.112
the website of the E-vendor is using secured protocol to protect my information from hackers	.503	.135	.555	.128	.093	.051
the E-vendor had a "Cash upon delivery" payment system i.e pay for the goods when received	.271	-.083	.638	-.205	-.122	.002
I have a prior experience with the E-vendor	.047	.005	.586	.223	.492	-.082
I have visited the website of the E-vendor repeatedly	.120	-.015	-.025	.143	.813	-.058
the website has identification certificate and shows green address bar (Internet Explorer 9) i.e certified by a recognized third Party	.483	.344	.042	-.051	.269	.116
the reviews and ratings of the E-vendor were positive	.381	.312	-.002	.048	.478	.001
the E-vendor indicated in the privacy policy explicitly that he will not share my personal information	.705	.134	-.135	.085	.236	.117

a public figure has recommended that E-vendor	.171	.167	.085	-.148	.573	.315
I'm sure that the store would deliver the goods as they are mentioned in the website	.668	.144	.200	.035	.011	.128
I knew that the E-vendor will provide me with money back guarantee when the product doesn't serve the intended need	.788	-.089	.229	.095	.044	.094
the E-vendor provides legal evidence that he will not share my personal information	.750	.122	.104	.194	.138	.202
it makes shopping more convenient that traditional shopping	.034	.628	.064	.322	.080	.064
the online system provides useful information related to my shopping	.152	.799	.116	.093	.143	-.049
the online system makes it easy to find the information required	.123	.813	.055	.194	-.026	.049
the online system provides me with sufficient information about the products	.073	.773	-.072	.024	.052	.122
there are less pages requested to be filled	.160	.043	-.019	-.005	.088	.831

the website uses one step checkout process	.273	.100	.134	.214	-.035	.755
online shopping will improve the speed with which I could do shopping	.129	.199	-.013	.839	.050	.080
it allows me to shop for multiple products at the same time	.156	.250	.069	.792	.058	.071

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

The factor analysis has shown that the variables are divided into 6 dimensions that can be explained in the following manner.

Confidence in the E-vendor	**Usability of the online shopping system**
the website has identification certificate and shows green address bar (Internet Explorer 9) i.e certified by a recognized third Party	it makes shopping more convenient that traditional shopping
the E-vendor indicated in the privacy policy explicitly that he will not share my personal information	the online system provides useful information related to my shopping
I'm sure that the store would deliver the goods as they are mentioned in the website	the online system makes it easy to find the information required
I knew that the E-vendor will provide me with money back guarantee when the	the online system provides me with sufficient information about the products

product doesn't serve the intended need	
the E-vendor provides legal evidence that he will not share my personal information	

Experience with the E-vendor	**Convenience of the transaction medium**
I knew the E-vendor personally	online shopping will improve the speed with which I could do shopping
the website of the E-vendor is using secured protocol to protect my information from hackers	it allows me to shop for multiple products at the same time
the E-vendor had a "Cash upon delivery" payment system i.e pay for the goods when received	
I have a prior experience with the E-vendor	

Reputation of the E-vendor	**Ease of use of the website**
I have visited the website of the E-vendor repeatedly	there are less pages requested to be filled
the reviews and ratings of the E-vendor were positive	the website uses one step checkout process
a public figure has recommended that E-vendor	

For trust factors:

The KMO in this case is 0.833 which is greater than 0.5.

From the same table, we can see that the Bartlett's test of sphericity is 0.000, which is less than 0.05, so it is significant.

From the above satisfactory test results, we can pass on to performing the factor analysis. We can see on the table all the trust factors extractable from the analysis; in this case 3 factors were extracted, cumulatively accounting for 55.79 % of the total variance.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.833
Bartlett's Test of Sphericity	Approx. Chi-Square	736.979
	df	66
	Sig.	.000

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	3.982	33.181	33.181	3.982	33.181	33.181	2.960	24.671	24.671
2	1.511	12.590	45.771	1.511	12.590	45.771	1.905	15.876	40.547
3	1.202	10.017	55.788	1.202	10.017	55.788	1.829	15.241	55.788

4	.876	7.296	63.085							
5	.777	6.472	69.557							
6	.693	5.772	75.329							
7	.641	5.345	80.674							
8	.621	5.173	85.847							
9	.492	4.098	89.945							
10	.436	3.630	93.575							
11	.412	3.430	97.005							
12	.359	2.995	100.000							

Extraction Method: Principal Component Analysis.

Rotated Component Matrix[a]

	Component		
	1	2	3
I knew the E-vendor personally	.025	.794	.084
I have a prior experience with the E-vendor	-.024	.602	.534
I have visited the website of the E-vendor repeatedly	.051	-.008	.796
the website of the E-vendor is using secured protocol to protect my information from hackers	.498	.572	.146

the E-vendor had a "Cash upon delivery" payment system i.e pay for the goods when received	.228	.655	-.205
the website has identification certificate and shows green address bar (Internet Explorer 9) i.e certified by a recognized third Party	.512	.054	.365
the reviews and ratings of the E-vendor were positive	.384	-.006	.563
the E-vendor indicated in the privacy policy explicitly that he will not share my personal information	.729	-.119	.268
a public figure has recommended that E-vendor	.260	.058	.522
I'm sure that the store would deliver the goods as they are mentioned in the website	.675	.220	.067
I knew that the E-vendor will provide me with money back guarantee when the product doesn't serve the intended need	.754	.268	.046
the E-vendor provides legal evidence that he will not share my personal information	.789	.129	.197

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Security and Privacy of the website	**Confidence with the E-vendor**
the website has identification certificate and shows green address bar (Internet Explorer 9) i.e certified by a recognized third Party	I knew the E-vendor personally
the E-vendor indicated in the privacy policy explicitly that he will not share my personal information	I have a prior experience with the E-vendor
I'm sure that the store would deliver the goods as they are mentioned in the website	the website of the E-vendor is using secured protocol to protect my information from hackers
I knew that the E-vendor will provide me with money back guarantee when the product doesn't serve the intended need	the E-vendor had a "Cash upon delivery" payment system i.e pay for the goods when received
the E-vendor provides legal evidence that he will not share my personal information	

Trustworthiness of the E-vendor
I have visited the website of the E-vendor repeatedly
the reviews and ratings of the E-vendor were positive
a public figure has recommended that E-vendor

For technology factors:

The KMO in this case is 0.742 which is greater than 0.5.

From the same table, we can see that the Bartlett's test of sphericity is 0.000, which is less than 0.05, so it is significant.

From the above satisfactory test results, we can pass on to performing the factor analysis. We can see on the table all the technology factors extractable from the analysis; in this case 3 factors were extracted, cumulatively accounting for 70.53 % of the total variance.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.742
Bartlett's Test of Sphericity	Approx. Chi-Square	559.014
	df	28
	Sig.	.000

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	3.192	39.899	39.899	3.192	39.899	39.899	2.472	30.903	30.903
2	1.347	16.838	56.738	1.347	16.838	56.738	1.702	21.280	52.183
3	1.103	13.791	70.528	1.103	13.791	70.528	1.468	18.345	70.528
4	.690	8.621	79.149						
5	.552	6.903	86.052						
6	.401	5.011	91.063						
7	.380	4.748	95.811						
8	.335	4.189	100.000						

Extraction Method: Principal Component Analysis.

Rotated Component Matrix[a]

	Component		
	1	2	3
it makes shopping more convenient that traditional shopping	.646	.321	.061
the online system provides useful information related to my shopping	.832	.125	.012

the online system makes it easy to find the information required	.820	.190	.092
the online system provides me with sufficient information about the products	.773	.055	.109
there are less pages requested to be filled	.066	-.045	.883
the website uses one step checkout process	.101	.239	.804
online shopping will improve the speed with which I could do shopping	.179	.856	.111
it allows me to shop for multiple products at the same time	.216	.868	.068

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

Usefulness of the Website	**Multi-tasking**
because it makes shopping more convenient that traditional shopping	because online shopping will improve the speed with which I could do shopping
because the online system provides useful information related to my shopping	because it allows me to shop for multiple products at the same time
because the online system makes it easy to find the information required	

because the online system provides me with sufficient information about the products	

Ease of Use of the Website
there are less pages requested to be filled
the website uses one step checkout process

4.4 Independent sample T-test

An independent sample T-test was performed to check if the level of willingness to shop online is different between students and non-students.

The significance for test of equal variances is 0.595 >0.05, therefore we assume "Equal Variances".

The significance for the test of equal means is 0.418>0.05, there we assume "Equal means"

There is no significant difference in the means of willingness to shop online between students and non students.

Group Statistics

	university student	N	Mean	Std. Deviation	Std. Error Mean
level of willingness to shop online	Yes	140	2.94	1.117	.094
	No	96	3.06	1.103	.113

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
level of willingness to shop online	Equal variances assumed	.283	.595	-.812	234	.418	-.120	.147	-.410	.171
	Equal variances not assumed			-.814	205.993	.417	-.120	.147	-.409	.170

An independent sample T-test was performed to check if the level of willingness to shop online is different between males and females.

The significance for test of equal variances is 0.315>0.05, therefore we assume "Equal Variances".

The significance for the test of equal means is 0.005<0.05, there we reject "Equal means"

There is a significant difference in the means of willingness to shop online between males and females.

Males have a higher mean of 3.19 than females 2.79.

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
level of willingness to shop online	male	118	3.19	1.064	.098
	female	118	2.79	1.124	.103

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
level of willingness to shop online	Equal variances assumed	1.015	.315	2.855	234	.005	.407	.142	.126	.687
	Equal variances not assumed			2.855	233.315	.005	.407	.142	.126	.687

An independent sample T-test was performed to check if the level of willingness to shop online is different between those who had purchased online and those who haven't.

The significance for test of equal variances is 0.410>0.05, therefore we assume "Equal Variances".

The significance for the test of equal means is 0.000<0.05, there we reject "Equal means"

There is a significant difference in the means of willingness to shop online between males and females.

Those who have purchased online have a higher mean of 3.35 than those who haven't 2.70.

Group Statistics

Have you ever purchased anything online?		N	Mean	Std. Deviation	Std. Error Mean
level of willingness to shop online	Yes	107	3.35	1.047	.101
	No	129	2.70	1.080	.095

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
level of willingness to shop online	Equal variances assumed	.682	.410	4.654	234	.000	.648	.139	.374	.922
	Equal variances not assumed			4.667	228.341	.000	.648	.139	.375	.922

4.5 One-Way ANOVA Tests

One-way ANOVA test was conducted to see if there is a difference in willingness to shop online, between different income groups.

Descriptive

level of willingness to shop online

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
less than 500	83	2.73	.925	.102	2.53	2.94	1	5
500-800	55	2.98	1.269	.171	2.64	3.32	1	5
801-1500	51	3.24	1.050	.147	2.94	3.53	1	5
1501-2000	27	3.04	1.255	.242	2.54	3.53	1	5
2001-2500	7	3.29	1.254	.474	2.13	4.45	2	5
more than 2500	13	3.46	1.127	.312	2.78	4.14	1	5
Total	236	2.99	1.111	.072	2.85	3.13	1	5

Test of Homogeneity of Variances

level of willingness to shop online

Levene Statistic	df1	df2	Sig.
1.211	5	230	.305

The variance is >0.05, which indicates that there is no difference in the variance between difference income groups.

ANOVA

level of willingness to shop online

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.034	5	2.407	1.992	.081
Within Groups	277.949	230	1.208		
Total	289.983	235			

As for the means, the significance is 0.081>0.05, which also indicates that there is no difference in the means between different income groups

One-way ANOVA test was conducted to see if there is a difference in willingness to shop online, between different age groups.

Descriptive

level of willingness to shop online

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
18-24	152	2.84	1.088	.088	2.66	3.01	1	5
25-31	45	3.33	.977	.146	3.04	3.63	1	5
32-38	21	3.71	1.056	.230	3.23	4.19	1	5

39-45	8	2.13	1.356	.479	.99	3.26	1	4
46+	10	3.00	.943	.298	2.33	3.67	1	4
Total	236	2.99	1.111	.072	2.85	3.13	1	5

Test of Homogeneity of Variances

level of willingness to shop online

Levene Statistic	df1	df2	Sig.
.777	4	231	.541

The variance is >0.05, which indicates that there is no difference in the variance between difference age groups.

ANOVA

level of willingness to shop online

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	25.934	4	6.484	5.672	.000
Within Groups	264.049	231	1.143		
Total	289.983	235			

As for the means, the significance is 0.000<0.05, which indicates that there is significant difference in the means between different age groups and especially people aged 32-38 have the highest willingness to shop online.

One-way ANOVA test was conducted to see if there is a difference in willingness to shop online, between different age groups.

Descriptive

level of willingness to shop online

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
less than high school	3	4.00	.000	.000	4.00	4.00	4	4
high school	91	2.79	1.111	.116	2.56	3.02	1	5
Bachelor	120	3.03	1.092	.100	2.84	3.23	1	5
Masters	21	3.48	1.123	.245	2.96	3.99	1	5
Doctorate	1	3.00	.	.	.	.	3	3
Total	236	2.99	1.111	.072	2.85	3.13	1	5

ANOVA

level of willingness to shop online

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.845	4	2.961	2.459	.046
Within Groups	278.138	231	1.204		
Total	289.983	235			

As for the means, the significance is $0.046<0.05$, which indicates that there is significant difference in the means between different educational level. Removing the extremes, we can say that those who have masters have the highest willingness to shop online followed by bachelor holder and high school graduates.

5. Discussions, Recommendations and conclusions

This study shows that the willingness to shop online is related to some characteristics of trust and some characteristics of technology. Developing some of these aspects is well within the control of the E-vendor.

Among all variables, convenience of online shopping was the most significant. Security of the website was also an important factor in forecasting the willingness to shop online. Sufficient information about the product and the reviews and ratings of the E-vendor will also help in determining the willingness to shop online.

As for the familiarity with the E-vendor, visiting the website of the E-vendor and knowing the E-vendor personally positively affect the willingness to shop online. Therefore, online vendors should work on creating consumers' trust by encouraging customers to visit their website frequently. This can be done through TV advertising, creating public events, posting articles in magazines and making linkage with popular websites and web portals. Also, Familiarity can be developed through personal relationship with the consumers.

As for the trustworthiness and reputation of the E-vendors, the reviews and ratings of the E-vendor have been found to be significant in affecting positively the willingness to shop online. Marketers must work on maintaining positive reviews and ratings of their companies as they must keep a closer look over what is being said about their company in blogs and social media. There are out of the box software that monitor reviews and ratings over the net, (eg. Radian6, trackur, Google alerts, etc). Also, they should achieve

trustworthiness through publishing statements of guarantees, providing contact telephone numbers, providing governmental seals and doing increased publicity of legal actions taken by the authorities for untrustworthy vendors.

Security and privacy factors were also significant factors as is the case in other researches, but for the Lebanese consumers, security issues were more prevailing than privacy issues. They were more willing to shop online if the website used a secured protocol to protect their credit card information from hackers and if the website had a digital certificate identifying the integrity of the website. Therefore, security and privacy policies must be explained by E-vendors so that the consumers know and differentiate between secured and non-secured websites. Also, privacy policies must be explained to the consumers so that they know that their information is protected.

As for the ease of use of the website, Lebanese consumers identified that the online system will make it easy to find information and this was the main reason they were willing to shop online. E-vendors should engage in additional research to identify the typical website properties and the website design that must be adopted in order to provide easy to use websites.

Also, the usefulness factor was important for the Lebanese consumers because online shopping was more convenient than traditional shopping and the online system provided sufficient information about the products. This means that E-vendors should emphasize the usefulness of online shopping by providing significant information about the products.

This study provides evidence that the Lebanese consumers' trust in internet shopping is the result of specific factors. The 1st relates to the vendor's familiarity, the second to the vendor's reputation and trustworthiness and the third to the security and privacy provided by the website of the E-vendor.

Also, the technology factors of internet shopping are the results of the Ease of use of the website and the usefulness of the website.

The findings that familiarity with the E-vendor, the reputation and trustworthiness, and security and privacy issues have positive influence on the willingness to shop online is consistent with the view of researchers who consider these factors as antecedents to trust in traditional environments (Butler, 1991, Buttler & Canteral, 1984)

Moreover, by providing evidence that the factors influencing the willingness to shop online are both trust and technology related, this study goes hand in hand with studies conducted by Gefen et al, 2003 and Gefen and straub, 2003.

Some additional findings in this study can be of some use to E-vendors and provide researchers to do further research such as:

In this study we saw that males are more willing to shop online than females. This finding is not surprising because males don't like to spend much time in doing their shopping and rather prefer to get the products they want in the easiest and quickest way possible. On the contrary, women like the act of shopping more than the shopping itself.

Also, consumers who have purchased online are more willing to shop online than those who haven't shopped online.

In addition, people who belong to different age groups, and who have different educational levels show different patterns in their online shopping intentions.

Limitations of the study and additional recommendations

A larger sample size could have given us more confidence in our findings.

In addition, approaching the topic from other perspectives such as the study of online shopping experience or online shopping for different product groups could be of interest to E-vendors and researchers.

6. Appendices

6.1 Questionnaire

SURVEY QUESTIONNAIRE

The purpose of this Questionnaire is to describe Lebanese consumer's online shopping intentions from a technology and trust perspective. Data will be collected and analyzed for the purpose of defending a thesis for an MBA degree.

This Questionnaire in its three-parts contains items specifically related to the topic under study, and will not require on average more than 15 minutes of your time. There is no right or wrong response. Your candid responses to these items will be important, highly appreciated by the researcher, and held in strict confidence. You are not required to identify yourself.

Thank you for your assistance and spirit of social responsibility.

Part A:

Circle the letter of correct response

1. **Do you use the internet?**
   a. Yes b. No

   If No, please stop filling the questionnaire and return it back to the surveyor.

2. **If yes, how long have you been using the internet?**
   a. less than 1 year b.1-4 years c.4-8 years d. more than 8 years

3. **Have you ever purchased anything online?**
   a. Yes b. No

4. **If you answered yes on question 3, how often do you shop online?**
   a. once a week or more often
   b. once a month
   c. once every 4-6 months
   d. once every 6-12 months

5. **Choose your level of willingness to shop online by circling the scale between 1 and 5 as 1 showing high unwillingness to shop online and 5 showing high willingness to shop online.**

Highly unwilling to shop online — Highly willing to shop online

1 2 3 4 5

Part B:

Directions: read each item carefully, think about how you perceive online shopping and express your sincere opinion according to the following scale:
1: Strongly Disagree; 2: Disagree; 3: Neutral; 4: Agree; 5: Strongly Agree

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I would be more willing to shop online, if I knew the E-vendor personally	1	2	3	4	5
2. I would be more willing to shop online, if the website of the E-vendor is using secured protocol to protect my information from hackers	1	2	3	4	5
3. I would be more willing to shop online, if the E-vendor had a "Cash upon delivery" payment system i.e pay for the goods when received	1	2	3	4	5
4. I would be more willing to shop online, if I have a prior experience with the E-vendor	1	2	3	4	5
5. I would be more willing to shop online, if I have visited the website of the E-vendor repeatedly	1	2	3	4	5
6. I would be more willing to shop online, if the website has identification certificate and shows green address bar (Internet Explorer 9) i.e	1	2	3	4	5

certified by a recognized third Party					
7. I would be more willing to shop online, if the reviews and ratings of the E-vendor were positive	1	2	3	4	5
8. I would be willing to shop online, if the E-vendor indicated in the privacy policy explicitly that he will not share my personal information	1	2	3	4	5
9. I would be more willing to shop online, if a public figure has recommended that E-vendor	1	2	3	4	5
10. I would be more willing to shop online, if I'm sure that the store would deliver the goods as they are mentioned in the website	1	2	3	4	5
11. I would be more willing to shop online, if I knew that the E-vendor will provide me with money back guarantee when the product doesn't serve the intended need	1	2	3	4	5
12. I would be more willing to shop online, if the E-vendor provides legal evidence that he will not share my personal information	1	2	3	4	5
13. I'm willing to shop online, because it makes shopping more convenient that traditional shopping	1	2	3	4	5
14. I'm willing to shop online, because the online system provides useful information related to my shopping	1	2	3	4	5
15. I'm willing to shop online, because the online system makes it easy to find the information required	1	2	3	4	5
16. I'm willing to shop online, because the online system provides me with sufficient information about the products	1	2	3	4	5
17. I would be less willing to shop online, if there	1	2	3	4	5

are many pages requested to be filled					
18. I would be more willing to shop online, if the website uses one step checkout process (i.e you choose the product and click checkout directly go to the payment section, without the need to submit 2-3 pages of filled forms)	1	2	3	4	5
19. I'm willing to shop online, because online shopping will improve the speed with which I could do shopping	1	2	3	4	5
20. I'm willing to shop online, because it allows me to shop for multiple products at the same time	1	2	3	4	5

Part C:

Circle the letter of correct response

1. Your Gender:

a. Male b. Female

2. Age Category:

a. 18-24 b. 25-31 c. 32-38 d. 39-45 e. 46+

3. What is your average monthly Income?

a. Less than 500 USD
b. 501USD-800USD
c. 801USD-1500USD
d. 1501USD- 2000USD
e. 2001USD-2500USD
f. More than 2500USD

4. What is your highest educational level achieved?

a. less than High School
b. High School
c. Bachelor
d. Masters
e. Doctorate

5. Kindly indicate if you are currently enrolled at a university as a student?

a. Yes b. No

Thank You

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