DEVELOPMENT AND VALIDATION OF B2C E-COMMERCE ADOPTION MODEL: AN EMPIRICAL INVESTIGATION USING STRUCTURAL EQUATION MODELING AND INTERPRETATIVE PHENOMENOLOGICAL ANALYSES

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ABSTRACT

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Incentive for this research stems from the fact that Business-to-Consumer electronic commerce sector is going to oligopoly and the new actors have relatively less chance to accomplish in the current market if they follow the same ways that the old companies have already paved. Considering this challenge, the aim is to understand the adoption process of customers by analyzing the contemporary perceptions of individuals against e-shopping. Initially, business-to-consumer electronic commerce adoption model is developed. Proposed model and hypotheses are tested with Partial Least Squares as a Structural Equation Modeling technique using data collected from 1115 respondents via an online survey. Then, semi-structured open-ended interviews are conducted in order to grasp the perceptions of customers. The results are interpreted following a systematic mixed methodology involving Interpretative Phenomenological Analysis to elucidate the antecedents and causal relations of constructs in an inductive and exploratory way to illuminate a socio-technical phenomenon as complementary to deductive and confirmatory quantitative

perspective. Findings and implications are asserted to be utilized as a roadmap especially for start-up companies that challenge to survive and succeed in current market conditions. Trust is found to be the predominant factor in e-shopping adoption. It is proved that, after almost two decades shopping via Internet had been invented, contemporarily, definitions for the dimensions of Enjoyment, Perceived Usefulness, Store Familiarity, Perceived Ease of Use and Subjective Norm have evolved into new semantics and customers perceive each factor according to their actual cognition contexts.

Keywords: Business to Consumer Electronic Commerce, Technology Adoption, Structural Equation Modeling, Interpretative Phenomenological Analysis.

ÖZ

İŞLETMEDEN MÜŞTERİYE ELEKTRONİK TİCARET BENİMSEME MODELİNİN GELİŞTİRİLMESİ VE GEÇERLENMESİ: YAPISAL EŞİTLİK MODELLEMESİ VE YORUMLAYICI OLGUSAL ANALİZLER KULLANILARAK UYGULAMALI BİR ARAŞTIRMA

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Bu araştırma için temel güdü, işletmeden müşteriye elektonik ticaret sektörünün oligopole benzer bir piyasaya doğru gitmesi ve yeni aktörlerin şu andaki mevcut piyasada bulunan şirketlerin uyguladıkları yolları takip etmeleri durumunda göreli olarak başarı için daha az ihtimalin olduğu gerçeği üzerine dayanmaktadır. Bu problemi göz önünde bulundurarak; amaç, müşterilerin elektronik alışverişe karşı güncel algılamalarının analiziyle benimseme sürecini anlamaktır. Öncelikle, müşteriden işletmeye elektronik ticaret benimseme modeli oluşturulmuştur.Önerilen model ve hipotezler çevrimiçi ankete katılan 1115 kişiden toplanan veriler kullanılarak Yapısal Eşitlik Modellemesi tekniklerinden Kısmi En küçük Kareler yöntemi ile test edilmiştir. Daha sonra, müşterilerin algılamalarını elde etmek üzere yarı yapılandırılmış açık uçlu mülakatlar yapılmıştır. Sonuçlar, sosyoteknik bir olguyu aydınlatmak üzere tümdengelimci ve doğrulayıcı nicel sonuçların bir tamamlayıcısı olarak tümevarımcı ve açınsamalı yaklaşımla boyutlar arasındaki nedensellik ilişkilerini ve bunların öncüllerini ortaya koyabilmek için Yorumlayıcı

Olgusal Analizi içerecek şekilde sistematik karma metodoloji izlenerek yorumlanmıştır. Bulgular ve dolaylı sonuçlar özellikle piyasa şartlarında hayatta kalmaya ve başarıya ulaşmaya çalışan yeni girişimci şirketler için bir yol haritası olarak kullanılmak üzere ileri sürülmüştür. Güven, elektronik ticaretin benimsenmesinde en önemli faktör olarak bulunmuştur. İnternet üzerinden alışverişin icat edilmesinden yaklaşık 20 yıl sonra, günümüzde, Hoşlanma, Algılanan Yararlılık, Mağaza Bilinirliği, Algılanan Kullanım Kolaylığı ve Yakınların Etkisi faktörlerinin yeni anlamlara evrildiği ve müşterilerin her bir boyutu güncel bilişsel bağlamlarına göre algıladıkları ortaya konulmuştur.

Anahtar Kelimeler: İşletmeden Müşteriye Elektronik Ticaret, Teknoloji Benimsemesi, Yapısal Eşitlik Modellemesi, Yorumlayıcı Olgusal Analiz.

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LIST OF ABBREVIATIONS AND ACRONYMS

ATT: Attitude

AVE : Average Variance Extracted

B2C : Business to Consumer

ECM: Expectation-Confirmation Model

ENJ : Enjoyment

FAM: Familiarity

INT: Intention

IPA : Interpretative Phenomenological Analysis

IT : Information Technology

PEOU: Perceived Ease of Use

PLS: Partial Least Squares

PU : Perceived Usefulness

SEM: Structural Equation Modeling

SN : Subjective Norm

TAM: Technology Acceptance Model

TPB: Theory of Planned Behavior

TRA: Theory of Reasoned Action

CHAPTER 1

INTRODUCTION

Commerce activities are as old as the civilized human history. "Karums" founded by Asurian Colonies have been accepted as being the first organized early settlers and initial business-to-consumer commerce centers in Anatolia.

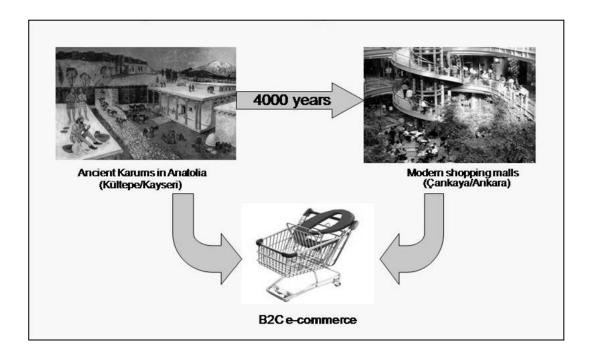


Figure 1: Evolution of Commerce

In the modern era, by the two main factors being computers and global conditions, retailing has evolved (Figure 1) into electronic shopping and a new approach to understand this old phenomenon became imperative by considering time based attributes.

The focus of this study is "Business to Consumer (B2C) e-commerce" which is defined as the buying and selling of goods and services over the Internet between a merchant and a consumer (Figure 2). As being different from brick-and-mortar shops, the main point of contact for online retailers is virtual world. Because the medium of online shopping is an information technology (IT) application, relationship with the B2C e-commerce sites requires the interaction with IT and consumers have to adopt the online activities to purchase an item from an electronic shop.

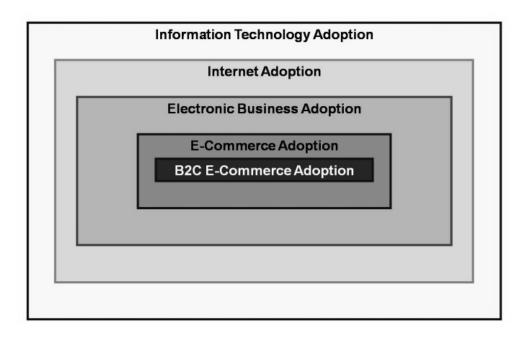


Figure 2: Focus of the Research

By this research, we attempt to evaluate one of the most aged human activities which have evolved from usage of stone tablets to state-of-the-art integrated circuit based interactions namely business-to-consumer electronic commerce in an exploratory way. Considering the challenges in B2C e-commerce sector, we have two research objectives: The primary intent of the proposed study is to develop and assert a perception based conceptual model to understand a contemporary socio-technical phenomenon. Second intent is to put forward implications for practitioners, especially for start-up companies by analyzing the up-to-date factors regarding B2C

e-commerce adoption. Since, researches in this area enable to investigate the contact of users with highly complex IT (Pavlou and Fygenson, 2006); additionally, this study will allow us to investigate IT-Human interaction in a systematic way within the context of the most recent and on-the-edge technology in practice.

1.1 Problem Statement

E-commerce is directly related with Internet usage and penetration. Fusilier et al. (2008) assert that Internet penetration rate and facilitating conditions should be investigated in order to comprehend the real usage. Internet penetration rate can be accepted as being in a moderate situation in Turkey (41.6% of households have Internet access according to Turkish Statistical Institute Report No: 148, August 2010). The most challenging area in Turkey for B2C e-commerce is the position of some big companies in the market. According to a recent research (Gökdere, 2012), with 23,4 millions of unique numbers of Internet users, Turkey is the sixth largest Internet population in the Europe and Turkish people pay four billion dollars for ecommerce in the total 200 billion \$ retailing sector. Turkey accomplished 57% revenue increase in e-retailing sector in 2011 whereas it was 16 in USA and 8.1 in Germany. Growth in the sector is expected to become 75% in 2012. Although these numbers may be interpreted that entrepreneurs have advantages to make profits in Turkey; it is also fact that 90% of the revenue in the sector is shared by only 32 online companies. It should be emphasized that, not all 32 companies share the profit fairly and there are some main actors in this number who get the bigger shares.

Taking the aforementioned challenge into consideration, a guide to follow for new market entrants is vital because the situation resembles to an oligopoly to some extent in which start-up companies will not be able to compete with old actors in a highly competitive harsh market conditions.

There are numerous B2C e-commerce success researches in the literature; on the other hand, they follow deductive and confirmatory methodology in which fitness

between a generic model and collected data is assessed but they do not give us clues about the success in an exploratory way. It is apparent that there is a need for concrete guideline for new market entrants in the B2C e-commerce sector. This research is expected to contribute to B2C e-commerce body of knowledge by exploring the evolving definitions of the affecting factors in the area by implementing a mixed methodology.

1.2 Research Phases

Research was performed in five phases (Figure 3) mainly:

In the first phase of the research, problem area was clarified and need for research was justified. In this phase, theoretical basis for the technology acceptance was constructed by reviewing current literature.

In the second phase of the study, initial interviews were held with customers. Then, a systematic review of B2C e-commerce was performed in order to determine the research factors.

In the third phase of the study, research model was proposed and hypotheses were formulated. An initial survey for data collection phase was constructed for the dimensions placed in the model. In addition to that, a pilot study was conducted with 50 respondents and the survey was updated considering the statistical analysis as well as the feedbacks by the respondents.

In the fourth phase of the study, main data was collected via an online survey tool. Total numbers of respondents were recorded as 1154. After conducting survey, collected data was analyzed and outliers were deleted. In this phase, quantitative analysis was performed by using a Structural Equation Modeling (SEM) technique namely Partial Least Squares (PLS) and variances of relations between dimensions were put forward and hypotheses were tested.

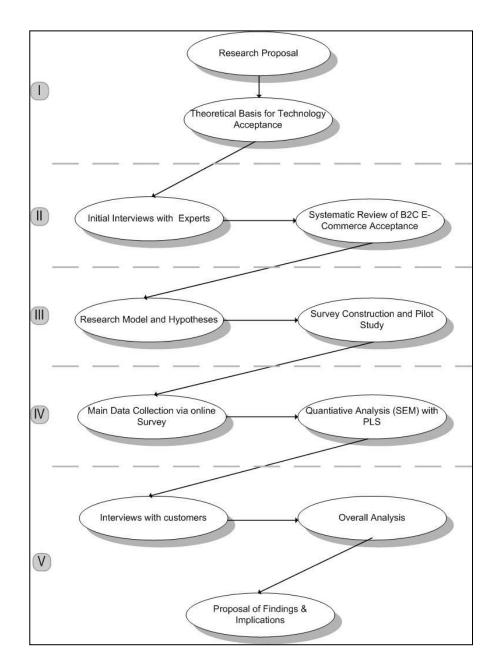


Figure 3: Research Phases

In the fifth phase of the study, interviews were held with 16 people. An overall qualitative analysis was performed by utilizing quantitative and qualitative results together. Research implications and findings were proposed.

1.3 Research Methodology

Although, the research was conducted in a straight step-by-step manner from the phase perspective, the methodology was rather recursive and interpretative following mixed approach consisting of both qualitative and quantitative techniques (Figure 4).

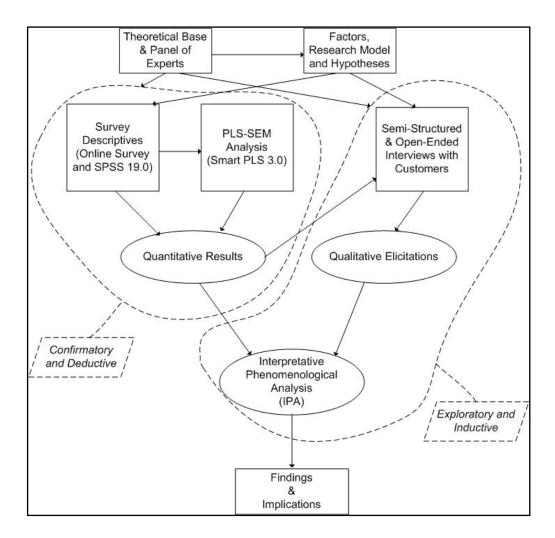


Figure 4: Research Methodology

Dimensions in the model were determined mainly by the systematic review of current literature. Research model and hypotheses were tested by a strict quantitative methodology employing PLS-SEM utilizing data collected via a survey. Quantitative phase was confirmatory and deductive in a sense that we confirmed proposed model by testing the hypotheses.

After the quantitative phase, we had the numerical impact values between the dimensions; but we needed to have causative perspectives between those dimensions. Therefore, within the scope of the proposed model, semi-structured and open-ended interviews were held in order to explore the subject. We implemented Interpretative Phenomenological Analysis (IPA) by acknowledging that our research topic is a real phenomenon for the customers and they may perceive some differences from statistical results. This approach was exploratory and inductive, because we had the opportunity to understand the role of X dimension in causing other Y dimension in detail. We reached to answers for "how" and "why" questions through the interviewees' perspectives. It should be emphasized that IPA was performed as complementary to PLS analysis. In other words, IPA does not reject PLS findings but it explores the relations between dimensions analyzed in the quantitative phase.

1.4 Thesis Outline

The remainder of the thesis is organized as follows:

Chapter 2 presents an extensive survey of prior research. In the first section, B2C e-commerce researches and problems in general are outlined, in the second section technology acceptance theories within the context of Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB) and Technology Acceptance Model (TAM) are given. This chapter provides a theoretical background for the research.

In Chapter 3, determination of the research model dimensions via a systematic review methodology is performed. In this chapter, empirical researches about the acceptance and the adoption of B2C e-commerce are classified, all of the factors in those studies are grouped; then frequencies and relations with each other are analyzed.

In Chapter 4, research model is developed and hypotheses are formulated. In this chapter, for each of the factor/dimension in the model, current literature is revisited and operational definitions are given. At the end of this chapter, survey construction

phase and pilot study conducted for reliability and validity of the instrument is explained.

In chapter 5, main data collection via an online survey and quantitative analysis phase is presented. In this chapter, research model and hypotheses test results are proposed.

In Chapter 6, need for qualitative phase is justified and interview elicitations are asserted. In this phase, Interpretative Phenomenological Analysis is carried out by merging quantitative and qualitative results. At the end of the chapter, findings and implications are proposed.

In Chapter 7, findings and implications of the research are discussed within the context of current literature.

Chapter 8 is a summary and conclusion of the study. The research is summarized with emphasis upon the results obtained and the contributions made by this thesis. The limitations and suggestions for future research are stated.

CHAPTER 2

LITERATURE REVIEW

Customers have to adopt Internet shopping in order to enable companies to make profit at the end. B2C e-commerce application medium is Internet and it is highly related with IT. Considering the mentioned fact, in this chapter, different researchers' views and comments about the technology acceptance theories in general and B2C e-commerce within the context of technology acceptance and adoption in specific is discussed.

2.1 Business-to-Consumer Electronic Commerce

Although the Internet has spread vastly, it is not possible to say that the potential for business is realized (Lim et al, 2006). As Hsu and Chiu (2004) pointed out, in the earlier periods, online shops did not evolve as it was anticipated, so many of them experienced the bankruptcy or they were taken by other large companies. Vijayasarathy (2004) states that online shopping could not reach to its potential yet and it is apparent that online commerce will not replace the traditional shopping in the short run. Despite to this negative view, due to the developing web technologies, online shopping mall profits increased rapidly (Ahn et al., 2004). Therefore, companies are eager to be in touch with online shoppers. Even small businesses are using Internet to attract more customers, building relationships with suppliers, and cutting many conventional costs. Internet and e-commerce has great potential to drive world economy for further decades (Park et al., 2004). There are many

advantages of electronic commerce. Electronic retailing is time and geography independent, can reach more customers. In addition to that, customers may get better information about the products order and get goods faster. In addition, B2C e-commerce enables consumers to save time, provide greater product selection, convenience, better pricing and better access to information (Lin, 2007; Tsai and Huang, 2007). Chen et al. (2007) claim that e-business revolution changed the customer relationship management practices totally. The Internet's efficiency in accessing, organizing and communicating information enables new way for relationships between customers and firms by innovative ways of economic means and new business models (Crespo and Bosque, 2008).

Besides the advantages of e-commerce, there are some barriers to overcome. People visit online shops frequently but they do not make decisions to purchase from an online shop easily and they leave the shopping cart in the payment phase (Negra and Mzoughi, 2012). Ahn et al. (2004) claim that, Internet shopping malls have to compete with other Internet shopping malls and brick-and-mortar companies. In addition, for the Internet shopping, customer satisfaction is more important than traditional ones because customers are more demanding and they want their needs to be met immediately. As Park et al. (2004) claimed, in e-commerce, customers cannot touch the products physically; therefore it constitutes a great barrier creating uncertainty. Product or services may not meet the customers' expectations. In addition, there are problems, like payment methods, protecting customer information, attracting keeping customer (Vijayasarathy, 2004). Customers need to feel confidence in the e-commerce process itself. Jarvelainen (2007) claims that, although business to consumer electronic commerce is becoming more common; he adds that click and mortar companies are experiencing problems because the real benefit of online channel for the traditional channel cannot be evaluated correctly. Potential customers are accessing online sites just to gather information about the product and they are using traditional shops to buy. A major challenge for online companies is to convert reluctant Internet users into online purchasers and online sellers would like to know who will buy its products or services (Wang et al., 2005).

Considering the current literature, actual situation concerning the B2C e-commerce can be summarized as followings:

- B2C e-commerce is growing as the Internet evolves, so online customer rate in proportion to classical ones and profit gained by the online companies are increasing year by year.
- B2C e-commerce has many advantages over traditional shopping as:
 - o Independence from geographic location,
 - o Broader selection,
 - o Competitive pricing,
 - o Advantage of comparison,
 - o Time advantage to receive to product,
 - o Home comfort while shopping,
 - o Kind of leisure activity and enjoyment.
- B2C e-commerce potential has not been realized as expected.
- B2C e-commerce is mainly a matter of IT-Human interaction and intention of potential customers' attitudes are far different from traditional ones.
- Dynamics of the Internet shopping carries self-specific attributes.
- Intention against online shopping is accepted as the main determinant of actual purchase behavior. Therefore, it is necessary to understand how the intention forms to purchase in online environment.

2.2 Technology Acceptance

The medium of online shopping is an IT application namely a web site; therefore as

Pavlou and Fygenson (2006) stated, relationship with the B2C e-commerce sites requires the interaction with IT and consumers have to adopt online activities to use it.

Technology acceptance is one of the most significant research areas in IS domain. The general belief is that if a technology/product is not used then it is not possible to gain predicted or expected outcome from that system. In other words, in the most basic form, if a system is effective it means it is being operated. Liao et al. (2009) go further and claim that the adoption affects successful use of information systems directly. On this ground, researchers have developed numerous models or frameworks to understand the determinants of individual's technology acceptance behavior (Aggelidis and Chatzoglou, 2009; Crespo and Bosque, 2008).

Table 1 below represents main theoretical intention-behavior models and their summaries.

Table 1 Summary of the Technology Acceptance Models

Model	Relations
Theory of Reasoned Action (Ajzen and Fishbein, 1980)	Behavior Intention, Attitudes, Personal Influence/Subjective Norm
Theory of Planned Behaviour (Schifter and Ajzen, 1985; Ajzen, 1991)	Behavior Intention, Attitudes, Personal Influence/Subjective Norm, Perceived Behavioral Control
Technology Acceptance Model (Davis, 1989; Davis et al., 1989)	Behavior Intention, Attitudes, Perceived Usefulness, Perceived Ease of use

Since the information systems science discipline needs tangible definitions, which have to be practical and applicable, a structured and robust theoretical ground is essential in IS researches. Accordingly, in this research Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB) and Technology Acceptance Model (TAM) were utilized mainly. In the IS/IT acceptance studies, numerous models have

been constructed, but they generally stem from TRA, TPB and TAM as extensions or modifications and their power comes from the validation by many empirical researches. In addition to these three intention based seminal theories, Some validated and significant studies emphasizing on various antecedents and moderating effects of initial acceptance of a particular IS will be in the scope of this research (Kang et al., 2009).

2.2.1 Theory of Reasoned Action (TRA)

TRA is a general model of human behavior (Figure 5). It was developed by Martin Fishbein and Icek Ajzen (1980).

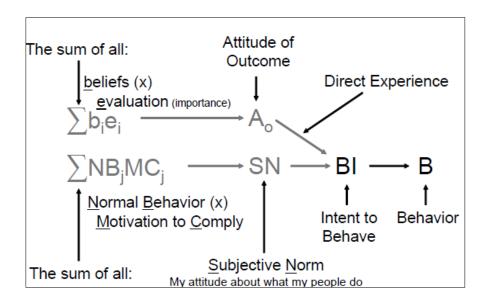


Figure 5: Theory of Reasoned Action

According to TRA, behavior is a direct function of human intent. Behavioral intent measures the strength of the intent. If one's intent is potent enough, it is highly probable that he/she will perform that activity. Attitude and subjective norms affect the intent. Attitudes may reflect the positive or negative feelings. These feelings are function of evaluations and beliefs about the consequences of a human behavior. Subjective norms are individuals' perceptions about other important referents' acknowledgement of the habit (Thatcher and George, 2004). TRA indicates that social behaviors are shaped by individual attitudes and it is used to predict actual

usage of information systems (Lin, 2007).

TRA serves as a robust theoretical base for understanding web consumers' perceptions toward e-business. It should be noted that as Thatcher and George (2009) claim TRA does not specify which beliefs influence on attitudes or subjective norms for a behavior, researchers must develop theory to link significant beliefs to target behavior.

2.2.2 Theory of Planned Behavior (TPB)

TPB is an extension of TRA. It was extended (Schifter and Ajzen, 1985; Ajzen, 1991) by adding perceived behavioral control (Figure 6). TBP explains the relation between belief, attitude, intention and behavior. Although TBP has some limitations, with the help of new IT alterations, it seems well fitted as a theoretical base. Since it is a parsimonious model, despite its simplicity it has an explanatory power. It explains behavior better than other models.

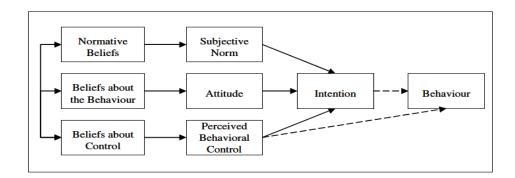


Figure 6: Theory of Planned Behavior

TPB is an extension of the TRA. According to TRA, behavior is determined by behavioral intention and behavioral intention is determined by attitude and subjective norm. Attitude is a person's overall evaluation of performing the behavior. Subjective norm is the person's perceptions of the expectations of other important people (Pavlou and Fygenson, 2006). In Theory of Planned Behavior; attitude is

resulted from individual beliefs regarding behavior and consequences. Subjective norm reflects how the person is affected by the perception of some significant referents, like relatives, friends and colleagues. Normative beliefs and motivation are two basic underlying factors shaping subjective norm. Perceived behavioral control represents individual perception/availability or lack of the necessary resources and opportunities to develop a behavior. Behavioral intention is motivational factors and willingness to try to perform that behavior. Behavioral intention is the most influential predictor of the behavior (Crespo and Bosque, 2008).

TPB is a model that can be utilized to predict behavior for many contexts. Therefore, TPB can be used for online shopping activities. TPB has been used in Internet research to analyze behavior. In the context of online shopping attitude refers to general consumer feeling against shopping online. Subjective norm refers the idea of online shopping by referent groups. Behavioral control refers the perceptions of the availability of knowledge, resources, and opportunities for online shopping.

2.2.3 Technology Acceptance Model (TAM)

TAM (Davis, 1989; Davis et al., 1989) was asserted to explain and predict computer usage behavior (Figure 7) and it has been widely used for the studies of the technology acceptance (Kim et al., 2007).

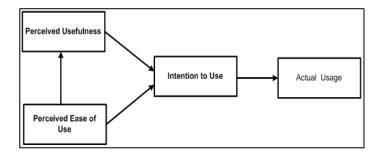


Figure 7: Technology Acceptance Model (Davis, 1989)

TAM is one of the dominant theoretical frameworks explaining user acceptance and continuance of IT (Premkumar, 2008). It is dominant because TAM is among the

mostly used theories to evaluate technology acceptance (Hausman and Siekpe, 2009) and many studies give empirical support to theory by validating in many contexts to evaluate the users' acceptance of IT (Park et al., 2004).

It has theoretical grounds on TRA which states that beliefs influence attitudes, which lead to intentions and finally to behaviors and TPB which incorporates the "perceived behavioral control" construct. Davis (1989) determines TAM's major determinants as perceived ease of use and perceived usefulness. Davis (1989) defines perceived usefulness (PU) as "the degree to which a person believes that using a particular system would enhance his or her job performance" and perceived ease of use (PEOU) as "the degree to which a person believes that using a particular system would enhance his or her job performance". Gefen et al. (2003) states that PU is the subjective evaluation of the utility by IT for task related issues and PEOU is the cognitive effort needed to learn to utilize the new system. TAM, like TPB, claims intention as the strongest and the immediate predictor of individual behavior.

According to TAM, system use is determined by behavioral intention and it is influenced by users' attitude. Attitude is shaped by beliefs stemmed from perceived ease of use and perceived usefulness (Palvia, 2009). TAM gives the explanation of belief-attitude-intention-behavior causal relationship for potential IT users. PEOU and PU are two main determinants of actual usage and the PEOU explains the variance in PU (Ha and Stoel, 2009). In many self-reported system usage researches, PU is accepted to have larger effect on intention than PEOU as in common TAM researches (Jarvelainen, 2007). It means that PU was found as a significant determiner, but in many of them as Davis claims PEOU operates through PU. Because a new IT is adopted by its instrumental in achieving task as extrinsic motivation. On the other hand, PEOU is the assessment of intrinsic motivation (Gefen et al., 2003).

In recent studies, TAM was utilized as the model to study acceptance of Internet related technologies. Consequently, TAM's robust and parsimonious foundation is

very suitable for theoretical base for Web applications, because Internet is based on computers (O'Cass and Fenech, 2003). So, it can be claimed that TAM is also suitable for theoretical foundations for Internet shopping (Ahn, 2004). TAM may be useful in obligatory environments but in e-commerce it is necessary to add some extra variables (Vijayasarathy, 2004).

According to TAM, intention is the main determinant of a human's actual behavior. This justification stems from the cognitive dissonance theory which claims that differences between behavior and intention creates a tension and people adjust their intentions to be consistent with their behaviors (Bhattacherjee, 2001). The relationship between intention and behavior accepts that human beings make rational decisions based on the information they have (Kim et al., 2003). Correlation between intention and behaviors was validated by Davis' (1989) research.

TAM originally explains individual acceptance of information technology. Although, TAM was introduced by Davis (1989) in a work place initially, different researchers validated TAM on user behavior analysis for the Internet (Park et al., 2004). So, TAM is likely to be suitable as a theoretical foundation for the user acceptance of Internet shopping (Ahn et al., 2004) and recently it has been utilized for electronic commerce (Jarvelainen, 2007). Because B2C e-commerce can be viewed as an innovative information system and Internet service to some extent (Bhattacherjee, 2001). Hernandez et al. (2009) claim that TAM has a great explanatory power in technological behavior in e-commerce. Liu and Wei(2003) define TAM considering the B2C e-commerce and they give the definition for PU as the extent to which a person believes that making purchases over the Internet creates value for him or her. Within the context of B2C e-commerce three key issues are addressed as "facilitating comparison-shopping, providing access to useful information, and reducing shopping time" (Lin et al., 2009). It should be added that, as Hernandez et al. (2009) stated for e-commerce, there are two main acts like adoption (by potential customers) and acceptance (re-purchase) to consider.

Although TAM is accepted as a robust intention based model to predict the actual usage, there are also some criticisms that there may be some inconsistencies between intention and actual usage and this is called as intention-behavior gap (Bhattacherjee and Sanford, 2009). Kim et al. (2009) emphasize that, although TAM was validated for many information systems there may be inconsistencies between beliefs and behavioral intention and actual usage. In other words, TAM itself does not consider the attitude-strength and as an attitude based generic model. TAM without modification does not take the researcher to the point aimed. It can be asserted that, especially in self reported studies this discrepancy may appear, therefore other actual facts like spent money, actual usage, information technology competitiveness, should be taken into consideration to evaluate real potential usage. Another criticism is that, TAM was developed in order to envisage the adoption of new IT, but it should be pointed out that, as Chiu et al. (2009) asserted the success lies on the continuance of usage by the users.

Fusilier et al. (2008) allege that a new comprehensive approach integrating and refining previous studies should be performed in order to get the correct findings. Some researchers argue that some additional factors should be incorporated into TAM in order to enhance its explanatory strength (Tsai and Huang, 2007). Because, as Hernandez et al. (2009) state, TAM is a very generic model and a general structure designed to explain almost all human behavior and is based on the importance of an individual's beliefs for the prediction of his/her behavior. In fact, it can be claimed that TAM's assertion is equal to saying "world is spherical in shape" universally true statement but not enlighten anything. Therefore, system specific modification and extension is necessary according to different contexts (Khalifa and Shen, 2009). For example, Zhu and Chen (2012), focus on "Service Fairness" and take "Perceived value" and "Trust" as mediators in online Banking area. Zhou (2011) in the context of "Mobile Banking" explores the "Initial Trust" mainly. In other area, "Buy-it-now auctions," Xu et al. (2010) take the "Perceived Risk" as the determiner for purchase behavior. Considering the mentioned points, in our research a systematic methodology was implemented to determine the research model dimensions

according to context of B2C E-commerce.

TAM has been validated and modified for many conventional information systems, on the other hand, B2C e-commerce systems need a different view. For example, there has to be a mutual trust between parties namely consumer and seller in online commerce. Although the modern age is said to be challenging in some values like trustworthiness, as a paradox, the information technology capture people in more virtual environments in which trust is desired more than ever. In the current literature there are numerous studies asserting "trust" as one of the most important factors impacting success. Main problem of those studies is their limited and constrained definition of the trust. As in seen in the "trust" dimension example, an epistemological approach to understand and to define meaning of all terms and definitions in the information age about new phenomenon is essential.

Especially in B2C e-commerce online/virtual environments, there is no mandatory policy or obligation to use any online shopping site, consumers instinctively go to one and purchase. The aspect that is to say full volunteer user from the perspective of IS domain is the critical point. In addition to that, as Shen and Chiou (2010) stated, despite the advantages of e-commerce against traditional one, like speed and information search; there are still some problems in online shopping like discerning another party's identity and are unable to touch and real products to purchase.

2.3 Previous Studies on B2C E-Commerce Adoption

In the previous sections, B2C e-commerce and technology acceptance were investigated separately. In this section, in order to see the actual situation, current literature about "B2C E-Commerce Adoption" was reviewed. Survey for previous studies was performed in two phases. In the first phase, Electronic Databases served by METU library was searched with determined keywords. The keywords were online shopping, e-commerce, B2C, online retailing, online grocery, technology adoption and technology acceptance.

In the second phase, 21 major journals related to Information Systems, electronic Commerce, retailing and business were searched manually. First, Web of Social Science Citation Index was used to determine those journals and other journals in those "21" were selected by classifying journals' references determined by the keyword searching. Since B2C e-Commerce requires a multidisciplinary approach journals from various branches were attempted to be involved in the manual search like "retailing", "business", "Information systems" as well as electronic commerce journals.

In manual search, two criteria were taken:

- All essays include empirical research,
- All essays were about adoption, acceptance, intention and attitude for business-to-consumer electronic commerce in online retailers.

Manually searched journals are given below:

- Communications of the ACM,
- Computers In Human Behavior,
- Decision Support Systems,
- E-Commerce Research,
- Electronic Commerce Research and Applications,
- European Journal of Marketing,
- Information and Management,
- Information Systems and E-Business Management,
- International Journal of E-Business Research,

- International Journal of Electronic Commerce,
- International Journal of Information Management,
- Journal of Business Research,
- Journal of the Association for Information Systems,
- Journal of Electronic Commerce in organizations,
- Journal of Electronic Commerce Research,
- Journal of Global Information Technology Management,
- Journal of Management Information Systems,
- Journal of organizational Computing and Electronic Commerce,
- Journal of Retailing and Consumer Services,
- Journal of Theoretical and Applied Electronic Commerce Research,
- MIS Quarterly.

Total number of papers searched manually was well over 3000. Every paper was scanned considering the criteria given above. At the end, 30 papers were selected and studied in depth. A matrix was developed to classify the researches containing the columns:

- Author,
- Year,
- Journal,
- Purpose of the Model,

- Model,
- Findings,
- Research sample identification,
- Research sample numbers,
- Methodology,
- Variables studied,
- Research limitations.

Summary of the matrix is given in Appendix A. This review indicates that:

- Almost all researches are limited to the students,
- Researches have limited constructs/variables,
- Researches are all done with self-reported instruments,
- Studies are country-specific.
- Studies are system-specific,
- Studies are Content-specific,

Considering the issues highlighted above, our research aimed to have:

- An integrative model in which the dimensions should be determined to involve the essential perspectives to explore adoption process of a customer in a realistic manner,
- Research sample from different layers of the society,
- Other instruments besides the self-reported surveys,

 Overall perspective for B2C e-commerce rather than system specific 	
exploration.	

CHAPTER 3

DETERMINATION OF THE MODEL DIMENSIONS

In the previous chapter, literature review on B2C e-commerce adoption was given. In this chapter, a systematic methodology to determine the model dimensions will be justified. In the first section, need for a systematic methodology is discussed, in the following section, systematic literature review is summarized and justification for model dimensions is given.

3.1 Rationale for Methodology to Determine the Model Dimensions

The primary intent of this study is to construct and assert a perception based conceptual model to understand a contemporary socio-technical phenomenon. Our further intent, at the end of this study, is to put technological implications for practitioners by analyzing the up-to-date factors regarding B2C E-Commerce adoption and acceptance. Up to now, many studies have been conducted trying to understand the B2C E-Commerce by integrating the different and fragmented pieces (Pavlou and Fygenson, 2006), but we need a systematic approach to perceive this phenomenon.

Bhattacherjee (2001) claims that according to attitude theories, people can continue to use a B2C e-commerce channel according to their subjective perception although

these perceptions are not objective. Therefore, intended adoption model will be perception based. The model will be generic rather than focusing on a specific web site. In research tool, namely survey, it is intended to grasp the perceptions against B2C e-commerce. So, results and technological implications can be utilized by any company having a retailing web site as a road map or checklist in order to reach to expected success.

Even though parsimony of many models limits them and it is inevitable to make modifications and extensions, it would not be sensible to involve all of the possible factors regarding the B2C e-commerce adoption. Considering this issue, asserted model should be simplified enough to understand the basic dimensions in detail. It should be added that, limited numbers of dimensions enable the model to be applicable, rational and pragmatic.

Up to this point, numerous essays about technology acceptance related with the e-commerce and technology acceptance were investigated in depth. It was seen that in one stream of essays, authors choose the constructs by performing meta-analysis of the previous researches. They classify the previous researches and after a basic descriptive statistical analysis, they locate the most noted factors as the constructs. It is accepted that many of these meta-analysis based studies enable novice researcher to understand the problem area in the first run, but in the further stages, it hinders to make scientific contribution to the body of knowledge producing self-repeating results. Therefore, in this study, formulation of constructs is not only based on the result of the previous studies' integration.

Some other researchers select and determine the factors or constructs by interviewing with panel of experts like Delphi method. At the first glance, this method may seem realistic and effective, but it should be accepted that determining constructs just by meeting with experts may represent only a limited view. Especially, it is a fact that there are many actors in B2C e-commerce phenomenon and only asking to limited number of experts would be an obstacle to reach to target accurately. Considering

those issues, in this research, the method of interviewing only with the experts to choose constructs was not applied.

As stated above, there are many ways to choose dimensions for conceptual model assertion in the literature but there is an ambiguity and lack of justification for the selection process. Considering this pitfall we devised an hybrid methodology. To develop our model, a specific approach was applied (Figure 8):

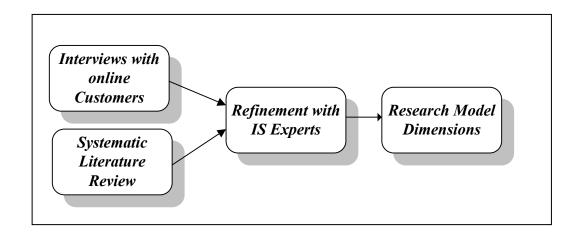


Figure 8: Construct Determination Method

In our method, interviews with online customers were held, and then a systematic review of previous literature was performed. Consequently, results of the interviews and systematic review were merged and refined with IS experts to have model constructs.

Initially, open-ended semi structured interviews were conducted with eleven people, known as online-shoppers, from university and work environment. In initial interviews two open-ended questions were asked. First question was inquired to comprehend the intent and reasoning of people by performing electronic shopping and the second question was asked to elicit the perceived relative importance of factors for making a purchase decision from an Internet shop by customers. As the interview texts were analyzed, reasons of e-shopping were appeared as the cheaper prices compared to brick-and-mortar stores, ability to access goods without geographic constraint, ability to compare products, enjoyment of surfing in electronic

shopping sites and effect of people near around. For the second part, familiarity with the e-vendor, product variety, price, trust on site, agile and safe product delivery were found to be the main impacting factors for purchase decision. Analyzed interview texts and main findings are summarized in the Table 2 below:

Table 2 Initial Interview Results

Interview Questions	Summary of the Answers	
Why do you shop online?	 Cheaper products compared to brick-and-mortar stores, Ability to access goods without geographic constraint, Ability to compare products, Effect of the people near around, Enjoy surfing in electronic-shopping sites. 	
Which factors are important in your buying	• Trust in electronic-shopping site,	
decision from an Internet shop?	Familiarity with the e-vendor,	
	Product variety,	
	• Price,	
	Agile and safe product delivery	

Interview analysis indicated that main dimensions that shape's customers' purchase intention are: Trust, Enjoyment, Store Familiarity and Usefulness. These candidates will be taken into consideration with systematic literature review results and the model factors will be put forward at the end of chapter.

3.2 Systematic Review of the B2C Electronic Commerce Studies

In the systematic review, empirical researches about the acceptance and the adoption

of B2C electronic commerce were analyzed and descriptive statistics about studies were given. In addition to that, all of the dimensions studied were determined, grouped and frequencies and relations with each other were analyzed. Main objectives for performing systematic review are:

- To assert a systematic summary of researches about the B2C E-commerce adoption and acceptance,
- To provide a scientific framework for the PhD research utilizing the fundamental prior research,
- To determine the deficiencies in former researches in order not to repeat in the prospected study,
- To compare the results studies performed in other countries with ours in a rational and realistic manner,
- To assert the model dimensions for our research.

3.2.1 Systematic Review Method

In the second phase of the study, Systematic review has been executed following Kitchenham's (2004) systematic review methodology. Sequence of activities are depicted in Figure 9 and explained in the following sections.



Figure 9: Systematic Review Method

In the systematic review, empirical researches about the acceptance and the adoption of B2C e-commerce were scanned, all of the factors studied were grouped and frequencies and relations with each other were analyzed.

- **Database Search:** For the research following databases were scanned:
- Ebsco Host (Academic Search Complete): Science, Technology, Human Sciences, Management, Social Sciences,
- Ebsco Host (Computers and Applied Sciences Complete): Engineering disciplines, Computer Theory and Systems, Computer systems within the Context of Social and Work Environment,
- Ebsco Host (Business Source Complete): Management, Administration, Economics, Finance, Accounting, International Management,
- ACM (Association for Computing Machinery) Digital Library: Computer Science,
- Science Direct: Multi-disciplinary database. As related with our research: Business administration, management, Computer Sciences, Decision Science, Economics, Social Sciences,
- Jstor: Multi-disciplinary database,
- Springer Link: Multi-disciplinary database. As related with our research: Computer Sciences, Economics, Engineering,
- Scopus: Multi-disciplinary database. As related with our research: Engineering, Social Sciences, Psychology, Economics, Applied Sciences,
- ABI/INFORM Proquest: Multi-disciplinary database. As related with our research: Business Administration, International Economics, Information Systems, marketing,

- Emerald Management Xtra: Business Administration, management, computer sciences, engineering and library Sciences,
- Web of Science ISI: Science Citation Index and Social Science Citation Index.
- At the end of the key word search in databases, approximately 600 essays were determined.
- Search of Reference Lists: After the first round of database search, taking the most cited references' into consideration, 15 journals were manually searched between the dates 2000 and 2010. In addition to database search performed by determined terms, manually searched journals are given below:
- Communications of the ACM,
- Computers In Human Behavior,
- Electronic Commerce Research and Applications,
- Information and Management,
- International Journal of Electronic Commerce,
- International Journal of Information Management,
- Journal of Business Research,
- Journal of the Association for Information Systems,
- Journal of Global Information Technology Management,
- Journal of Management Information Systems,
- Journal of organizational Computing and Electronic Commerce,

- MIS quarterly,
- Interacting with Computers,
- Industrial Marketing Management,
- Technovation.

At the end of the manual journal search, approximately 200 essays were found being related with the subject.

- Citation Lists Search: All of the findings were filtered to make sure to be in SSCI (Social Sciences Citation Index) and SCI (Science Citation Index) lists.
- Management of Search Results: Studies determined by the systematic review were recorded into a database. In the database as authors, name of the journal, title of the essay, publish date, method, tool, analysis technique, sample size, sample age, data collection method, country, factors and relations of factors were recorded.
- **Study/research Determination:** Studies found after database search and manual journal search were elected considering some criteria. At the end of the selection 20 papers were found to be within the constraints.
- Initial Selection: Compatibility with our research in both database and manual journal search was enabled with search terms and abstracts initially. In addition to this, studies not empirical and conference papers were dismissed.
- Citation Indexes: Journals were selected from the ones in SSCI (Social Science Citation Index) and SCI (Science Citation Index).
- Date of Studies: Since electronic commerce is a contemporary subject and especially technological innovations and developments affect this area

directly, studies published after 2000 were taken into evaluation.

- **Sample Type:** Since, customers in electronic commerce can be from every layer of the society, no constraint was imposed in the sample type.
- Theories used In Studies: Technology Acceptance Model and its extensions were taken as a reference in this review. In addition to that, Theory of Reasoned Action and Theory of Planned Behavior, these theories were not excluded from the review as the TAM stems from these theories.

3.2.2 Review and Analysis

In the analysis phase, in the first hand, descriptive statistics were depicted. Later on, factors in these researches and their frequency were studied and relations between them were analyzed.

Descriptive Statistic Results: Within the context of descriptive statistics, publish year, country, sample number and type, research method, sample age interval, response rate, analysis technique and analysis software were analyzed.

To enable up-to-datedness of the review, a nalyzed studies were selected from 2000 up to now. Distribution of essays is given in Figure 10. Twelve of them are published in last five years.

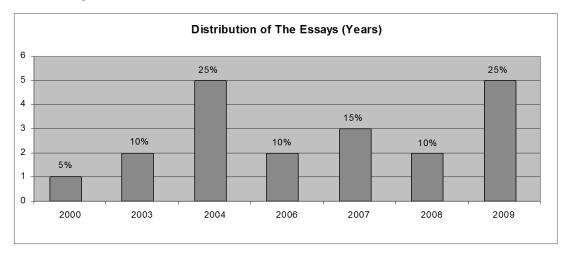


Figure 10: Distribution of Essays (Years)

In searching and election process, although there were not any criteria relating the country, at the end of the review, it was seen that 50% of the studies were performed in USA and the others belong to other six countries (Figure 11).

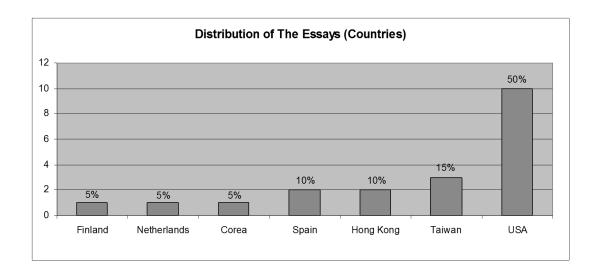


Figure 11: Distribution of Essays (Countries)

Distribution of essays according to sample type for selected papers is given in Figure 12.

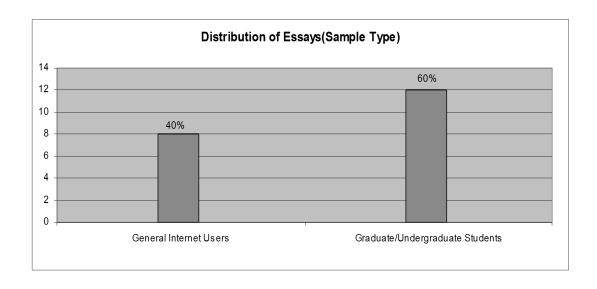


Figure 12: Distribution of Essays (Sample Type)

Distribution of the essays classified according to the theories used is given in Figure 13.

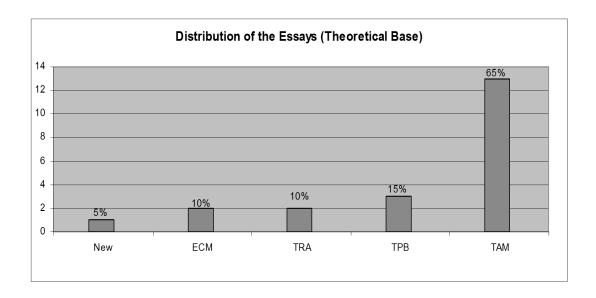


Figure 13: Distribution of Essays (Theoretical Base)

In all the studies, questionnaires are the main data collection tools. For the 85% of the studies, survey items are given. In some studies, qualitative methods like interviews are used. In each study, number of sample is given neatly. Average sample size is 500. Response rate is given in 40% of the essays. In the researches that response rate could not be given, surveys are applied to a group or the surveys are performed via Internet.

Average male and female rates in samples are almost equal and only in three of the studies gender ratio is not given. For all the essays analyzed, lower age limit is 11 and upper is 75, but average age is between 18 and 40.

As depicted in Figure 14, in the 80% of the studies, SEM (Structural Equation Modeling) is used as analysis method.

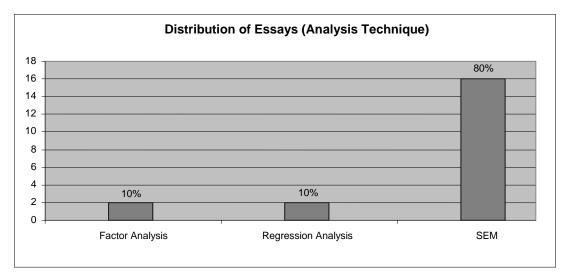


Figure 14: Distribution of Essays (Analysis Technique)

From the perspective of analysis tools, there is no apparent cumulating in any software as in shown in Figure 15.

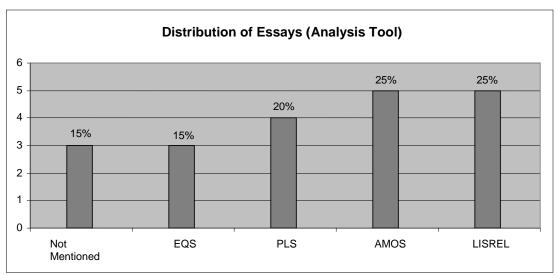


Figure 15: Distribution of Essays (Analysis Tools)

3.2.3 Factor Analysis

In order to analyze the variables in essays objectively, initially 155 different factors were determined. Then these factors were classified into semantically different 61 factors. Factors studied in each study is presented in Appendix-B. Subsequently, these factors were classified according to their frequencies. In Appendix-C,

frequency analysis is given. In Appendix-D, relations that have appeared in more than three studies are given within the context of their significance and frequency.

Factors found in the studies are mainly classified as social, individual and system attributes in order to draw a logical frame.

Social Factors: Factors determined as social ones are the environmental ones that affect the adoption of B2C e-commerce. These factors are; Subjective Norm, Trust, Demographical Variables, External Influence, Value and Social Involvement. Subjective Norm and Trust are prominent constructs that are analyzed frequently as given in Appendix-C.

Individual factors: Factors that affect the individuals personally are asserted in this context. These factors are Attitude toward Purchasing, Intention to purchase, Actual Purchase, Perceived Behavioral Control, Self Efficacy, Innovativeness in General, Innovativeness against new Technologies, Enjoyment, Human Factors, Regret, Flow, Previous Online Shopping Experience, Conversation Preference, Self Image Congruity, Confirmation, Satisfaction, Continuance Intention, Willingness to Buy, Belief in Integrity, Belief in Competence, Positive Affect, Customization, Privacy, Belief in benevolence, Situational Normality. Intention to Purchase, Attitude, Enjoyment, Satisfaction and Continuance Intention are the factors that researched most frequently in these studies as given in Appendix-C.

System factors: Factors or attributes that an electronic store should have are classified in this group. These factors are System Quality, Information Quality, Service Quality, Product Quality, Delivery Service, Perceived Ease of Use, Perceived Usefulness, Perceived Security, Perceived Risk, Compatibility, Informativeness, E-Shopping Quality, Store Style, Store Familiarity, Store Settlement Performance, Task Ambiguity, Product Complexity, Facilitating Conditions, Commitment, Price, Convenience, Product variety, Artificial Costs, Learning Costs, Transaction Costs, Comparison of Vendors, Aesthetics, Switching Barrier. Perceived usefulness and Perceived Ease of Use are the most frequently

analyzed ones. In addition to those constructs, Store Familiarity is also an important factor as presented in Appendix-C.

3.2.4 Discussion of the Systematic Review

In this section, analysis is performed in two phases. In the first part, descriptive statistics based comments and in the second part, studied factors and their relations are given.

General Attributes of Studies: Researches were chosen from the ones published from year 2000 to now in or to enable the review to be contemporary. 60% of the studies are performed in the last five years. This situation reflects that as the B2C electronic commerce develops, the scientific studies increase in parallel. From other point of view, it also reflects that there is still a need to explain the B2C e-commerce acceptance theoretically.

Researches are performed in Finland, Netherlands, Spain, Taiwan, Korea, Hong Kong and United States of America. There are some other countries that B2C e-commerce Acceptance studies but these studies are not published in the journals which are SSCI and SCI. Considering these, it may not be true to assert that e-commerce is performed only in some countries. But on the other hand it is significant that 50% of the studies are from the United Sates. This is an indicator that E-commerce is performed frequently and diffused in the United States of America.

Samples are mainly from the graduate and undergraduate students (60%). This may depend on the preference of data collection from students by academicians because of applicability with little effort. An objection may come that students may not represent the whole society. On the other hand, 40% of sample comes from other professions and ages. This may increase the representative power of the studies. From another point of view, as observed, people in the ages between 18 and 35 are the general online customers. Therefore, graduate and undergraduate students may enhance the validity of the studies to some extent.

During the searching phase of the study in order to capture the wide range of view, keywords as adoption, acceptance, TAM, TRA, TPB were used solitarily or in combinations. In the subsequent phase of the study, in order to enable semantic integrity, abstracts and whole essays were also analyzed and the irrelevant ones were dismissed. It was seen that, in all the essays taken into review; TAM, TRA, TBP and its extensions or dimensions are tested. It should be accepted that for the IT acceptance studies mentioned theories are the main starting points as theoretical bases.

In all the essays, surveys are conducted as main data collection method. In some studies, surveys are performed in labs or classes. Also in some studies, studies are performed by giving some tasks for a specific web site. In addition to surveys in some studies, interviews are used to enhance the validity of researches.

Constructs and Relations: Initially, 155 factors were found in the studies. In the second phase, these factors were combined into semantically the same 61 constructs and a frequency analysis was performed (Appendix C). To comprehend the factors in a self-explaining context, constructs were grouped into three main titles as social, individual and system qualities factors. These grouping made clear that in order to be a B2C e-Commerce site to be successful, there are three main factors to consider as environment (Social factors), Customers Perceptions(Individual factors), attributes of electronic store (System qualities).

After grouping the factors, as seen in Appendix-C a frequency analysis was performed and the factors which have the most frequencies were determined. Factors used in more than two studies are given below with frequencies in parentheses.

- Perceived Usefulness (15),
- Intention to Purchase (14),
- Perceived Ease of Use (12),

- Attitude (12),
- Subjective Norm (7),
- Trust (6),
- Enjoyment (5),
- Store Familiarity (5),
- Satisfaction (5),
- Continuance Intention (5),
- Purchase (4),
- Perceived behavioral Control (4),
- Perceived Security (3),
- Perceived Risk (3),
- Compatibility (3),

Perceived Ease of Use and Perceived Usefulness are the main dimensions of TAM, so it is expected to have the most frequency. Also, attitude and intention to purchase are the main factors mentioned in the studies, so it is an expected situation. However, here it is necessary to analyze the factors affecting the purchase intention. In that context, Subjective Norm, Trust, Enjoyment, Store Familiarity can be assumed as the most important factors considering the frequency. In addition, Trust, Perceived Security and Risk can be analyzed together; because Security and Risk Mitigation enhances the Trust against someone or something.

After performing the frequency analysis, factors which have more than 3 frequencies were analyzed considering the relations with each other. Significance of the relations

will enable us to compare the results of our study with others. In addition, summaries of the studies are given in Appendix-E.

3.2.5 Systematic Review Conclusion

In this systematic review, studies about the electronic retailing published later than 2000 was searched and filtered using some criteria. At the end of the selection process 20 of the scanned essays complying with the criteria were analyzed using the systematic review technique. Initially, characteristics like publish year, country, sample type, research techniques were taken into consideration for descriptive statistics analysis. Later on, studied factors, their frequencies and relations with each other were analyzed. Factors were grouped into social, individual and system factors.

Although it may be asserted that frequently analyzed factors do not reflect the importance of them, it should be noticed that in all of the studies those factors are determined by observations, interview and pilot studies. Within the context of electronic retailing, most frequently studied factors those affect the intention to purchase are Perceived Usefulness, Perceived Ease of Use, Subjective Norm, Store Familiarity, Intention, Trust and Enjoyment.

3.3 Dimensions for Research Model

At the end of this phase, it became apparent that interview analyses with online customers and systematic review results are overlapping. In the last stage of the construct determination phase, candidate dimensions were discussed and refined with IS panel of experts in METU Informatics Institute. Combining all views following those three stages with a robust underlying theory, research factors were determined. These dimensions are Perceived Ease of Use, Perceived Usefulness, Trust, Store Familiarity, Subjective Norms, Enjoyment and Intention.

CHAPTER 4

RESEARCH MODEL DEVELOPMENT, HYPOTHESES FORMULATION AND SURVEY INSTRUMENT CONSTRUCTION

In the previous chapter, determination of the model dimensions for the research was justified. In this chapter, the research model is developed and hypotheses are formulated. Then, construction of survey instrument and testing it by a pilot study are presented.

4.1 Research Model Development and Hypotheses Formulation

Current literature on adoption of electronic commerce has been generally performed by giving a specific shopping site and researchers require respondents to evaluate the perceived success to reach a global perception based model. However, in our research, rather than directly searching for clues of a specified successful shopping site, the main intent is determining the factors which convert a classical shopper into an electronic shopper. Since this research mainly attempts to understand the perceptions, we try to understand the factors having impacts on the people's adoption of electronic commerce. Our research model (Figure 16) asserts that, anyone who has accepted and adopted Internet shopping channel would possibly assert his perceptions as:

- I perceive electronic shopping sites as easy to use,
- I perceive electronic shopping as useful,
- I perceive electronic shopping sites as trustworthy,
- I am familiar with electronic shopping sites,
- In my near environment, people have positive attitude against electronic shopping,
- I enjoy navigating and purchasing in electronic shopping sites.

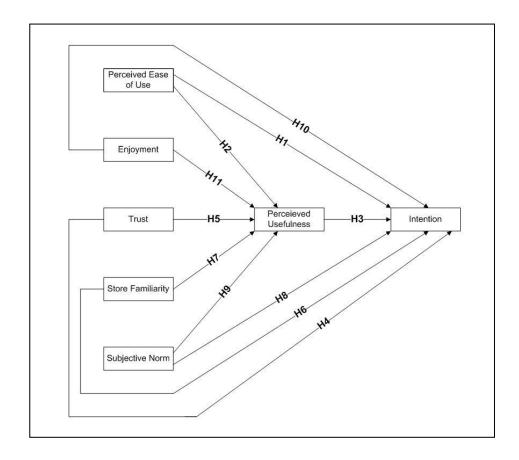


Figure 16: Proposed Research Model

4.1.1 Perceived Ease of Use

Davis (1989) defines perceived ease of use (PEOU) as "the degree to which a person

believes that using a particular system would enhance his or her job performance". Gefen et al. (2003) state that PEOU is the cognitive effort needed to learn to utilize the new system. Although there are many studies arguing that perceived ease of use is very important factor, Davis (1989), TAM's developer, did not find a direct linkage between PEOU and IT adoption, he proves that it operates through perceived usefulness. Gefen and Straub (2000) also claim that PEOU does not have impact on intended use when to purchase an item from an online store. In the log-based work of Henderson and Divett (2003), perceived ease of use was found to have impact through perceived usefulness. In addition, Hausman and Siekpe (2009) state that, as users are more accustomed to system, the effect of PEOU decreases. On the other

hand, Sun et al. (2010) assert that PEOU determines technology acceptance.

Research hypotheses about PEOU are:

H1: PEOU positively affects online shopping intention.

H2: PEOU positively affects PU in online shopping.

4.1.2 Perceived Usefulness

Davis (1989) defines Perceived Usefulness (PU) as "the degree to which a person believes that using a particular system would enhance his or her job performance". Gefen et al. (2003) state that PU is the subjective evaluation of the utility by IT for task related issues. PU is accepted to have larger effect on intention than PEOU as in common TAM researches (Jarvelainen, 2007).

PU is the perception of the user against a system whether it enhances the job productivity/effectiveness or not. As Gefen and Straub (2000) state, PU is related with the extrinsic motivation of the shopping act, like task efficiency and effectiveness. Considering the online shopping environment, PU can be defined by the aspects like product variety, information richness and pricing. Within the context of this era, information is rich if that knowledge clears the ambiguity of the potential customer about a product or service (Chen and Tan, 2005).

There are many advantages of electronic commerce. Electronic retailing is time and geography independent, can reach more customers. In addition to that, customers may get better information about the products order and get goods faster. Also, B2C e-commerce enables consumers to save time, provide greater product selection, convenience, better pricing and better access to information (Lin, 2007; Tsai and Huang, 2007). Product variety is the key issue for online customer (Chen and Tan, 2005). Many people use B2C e-commerce channel in order to find the items that cannot buy from the brick-and-mortar stores.

Research hypothesis about Perceived Usefulness is:

H3: PU positively affects online shopping intention.

4.1.3 Trust

Trust is accepted one of the most important factors in e-shopping (Lee et al., 2011). There has to be a mutual trust between parties namely consumer and seller in online commerce. Although the modern age is said to be challenging in some values like trustworthiness, as a paradox, the information technology capture people in more virtual environments in which trust is desired more than ever.

Especially in B2C online/virtual environments, there is no mandatory policy or obligation to use any online shopping site, consumers instinctively go to one and purchase. The aspect that is to say full volunteer user from the perspective of IS domain is the critical point. Also as Shen and Chiou (2010) summarized, despite the advantages of e-commerce against traditional one like speed and information search; there are still some problems in online shopping like discerning another party's identity and are unable to touch and real products to purchase.

In online commerce, even physical goods and products are intangible, customers cannot touch to products and they cannot feel, smell or taste them. Compared to the traditional brick-and-mortar way of shopping to e-retailing is differentiated mainly by the uncertainty (Chiu et al., 2009). Lin (2007) gives a term as "stickiness" to

define loyalty to a web site. He says that Trust is the main factor for stickiness to web site. Reason why many people do not shop online is the lack of trust against online activities (Chen and Tan, 2005; Ha and Stoel, 2009; Palvia, 2009). Ou and Sia (2009) go further and argue that distrust is the major obstacle for online shopping. The consumers shop from an electronic store if they perceive that site is trustworthy (Crespo and Bosque, 2010). In other words, trust is very vital to keep the customers of an online shopping site (Gefen et al., 2003). Trust is the main factor affecting B2C e-commerce (Corritore et al., 2003).

Personal privacy and the data security are coming first in the trust issues. According to Chen and Tan (2005) 42% of the online shop visitors leave the site when to ask to provide personal data. Eastlick et al. (2006) say that loss and abuse of private information is another hindrance to use Internet means. Risk is an important dimension of trust in online shopping (Corritore et al., 2003). Gefen et al. (2003), define the behaviors which are not trustworthy within the context of business to consumer electronic commerce as "inappropriate pricing, giving inaccurate information, privacy violation, usage of credit card information without authorization, saving and tracking the shopping transactions illegally".

Up to Holsapple and Sasidharan (2005) for 80% of the Internet users the first and the most important necessity to interact with an e-commerce web site is trust. Need for trust has been explored by many researches and many measures were taken in order to enhance trust against commercial web sites like Secure Socket Layering protecting personal information, secure transactions, third party guarantees, and secure payment systems.

Besides the advantages of e-commerce, there are some barriers that should be overcome. As Park et al. (2004) claimed, in e-commerce customers cannot touch the product physically therefore, it constitutes a great barrier creating uncertainty. Product or services may not meet the customers' expectations. Also there are problems, like payment methods, protecting customer information, attracting keeping

customer (Vijayasarathy, 2004). Customers need to feel confidence in the e-commerce process itself.

Research hypotheses about Trust are:

H4: Perception of Trust positively affects online shopping intention.

H5: Perception of Trust positively affects perception of Usefulness in online shopping.

4.1.4 Store Familiarity

Rowley (2009) asserts that store familiarity has considerable impact on using electronic shopping channel. Yeh etal. (2012) support the idea and state that the reluctance of online shopper is mainly caused by the unfamiliarity with the vendor. In some researches like Heijden and Verhagen's (2004), online store image is taken as a composition of trustworthiness, settlement, performance, usefulness and enjoyment as direct factors and familiarity, perceived ease of use and style as indirect factors. Nevertheless, in our study, store familiarity is considered as standalone and comprehensive construct and the store familiarity is taken as a unique perception rather than overall collection or cumulating of others.

Firm reputation lowers the perceived risk of potential customer and if reputation of a firm is outstanding than the customers' trust will increase (Eastlick et al., 2006). Since there is an information asymmetry, vendors should apply information policies including advertisement, chat rooms, public relations, messaging boards to in order to close the gap (Chiu et al., 2009).

Reputation can be an advantage for well-known companies (Pennington et al., 2003). Lu and Lin(2002) in their studies, conclude that consumers perceive the value of the products within the context of brand name. It is advised to companies develop marketing strategies to enhance customer positive feelings against e-commerce in general to gain overall benefit to involve all people in the society rather than aiming

a limited potential customers (Crespo and Bosque, 2008). In our study, we will try to understand if the potential customers are familiar with electronic stores in general and effect of familiarity on shopping intention.

Our hypotheses about Store Familiarity are:

H6: Familiarity with the Internet shopping sites positively affects online shopping intention

H7: Familiarity with the Internet shopping sites positively affects Perception of Usefulness.

4.1.5 Subjective Norm

Subjective norm is accepted as one of the main factors affecting the purchase makers' decision (Crespo and Bosque, 2010). Subjective norms are individuals' perceptions about other important referents' acknowledgement of the habit (Thatcher and George, 2004; Pavlou and Fygenson, 2006). Subjective norm reflects how the person is affected by the perception of some significant referents, like relatives, friends and colleagues. Normative beliefs and motivation are two basic underlying factors shaping subjective norm. (Crespo and Bosque, 2008). Subjective norm refers the normative influence in both Theory of Reasoned Action and Theory of Planned Behavior. Holsapple and Sasidharan (2005) define the subjective norm as the extent to which one's beliefs that people who are important to him or her think that he should perform the behavior not. Hansen et al. (2004), in their study, claim that online consumers who are not experienced may need guidance, so they are affected by their near friends or relatives.

Research Hypotheses about Subjective Norms are:

H8: Positive Subjective Norm positively affects online shopping intention.

H9: Positive Subjective Norm positively affects perception of usefulness in online shopping.

4.1.6 Enjoyment

Enjoyment is accepted as one of the major drivers for B2C e-commerce (Huang, 2008) and this is conceptually different dimension from perceived ease of use and perceived usefulness (Ha and Stoel, 2009). According to Wen et al. (2011), companies should consider the hedonic dimension of purchasing from electronic shopping online. Positive Emotions during online shop visiting will result as the pretended outcome like actual purchase behavior (Cheng et al., 2009). In online environment, enjoyment of the customer has greater impact on user behavior (Ethier et al., 2006) than expected.

Shopping enjoyment is directly related with intrinsic motivation (Garrity et al., 2007). Intrinsic motivation is the inverse of the extrinsic motivation, in which, person feels motivated to perform an action in order to gain a benefit, whereas intrinsic motivation is stemmed from the performing the activity itself. Flow theory (Csikszentmihalyi,1975) is also an intrinsic motivation theory in which a person feels a holistic sensation during an act. According to Hausman and Siekpe (2009), online flow is related about cognitive state during navigation, at which person feels full intrinsic enjoyment and loses his consciousness. In the former studies, interface design was primarily interrelated with perceived ease of use, but in this study web site design is assumed to be related with enjoyment as in Hausman and Siekpe(2009) research findings.

Like others, also Garrity et al. (2007) assert that in business to consumer shopping environment, crucial intrinsic motivation is shopping enjoyment, in which consumers' interests are captured by computer interaction.

Although in some researches enjoyment is taken as an antecedent of usefulness, in this research, it is regarded as a standalone dimension. Because, in this study, "enjoyment" term refers to pure pleasure for buying in business-to-consumer electronic commerce environment. Koufaris (2002) says online customer performs all the activities of a computer user besides the traditional brick-and-mortar shopper.

He claims that traditional shop is transformed into virtual environment. But in our study the approach we will follow is somewhat different and takes online shopping as an original retail channel rather than trying to resemble it to an another activity.

Research Hypotheses about Enjoyment are:

H10: Perception of Enjoyment positively affects online shopping intention.

H11: Perception of Enjoyment positively affects perception of Usefulness in online shopping.

4.1.7 Intention

Intention is the main determinant of a human's actual behavior. This justification stems from the cognitive dissonance theory which claims that differences between behavior and intention creates a tension and people adjust their intentions to be consistent with their behaviors (Bhattacherjee, 2001). The relationship between intention and behavior accepts that human beings make rational decisions based on the information they have (Kim et al., 2003). Correlation between intention and behaviors was validated by Davis' (1989) research.

Although Jarvelainen (2007) claims that B2C e-commerce is becoming more common, he adds that click and mortar companies are experiencing problems, because the real benefit of online channel for the traditional channel cannot be evaluated correctly. Potential customers are accessing online sites just to gather information about the product and they are using traditional shops to buy. A major challenge for online companies is to convert reluctant Internet users into online purchasers (Wang et al., 2006). Moreover, online sellers would like to know who will buy its products or services. Behavioral intention is a motivational factor and willingness to try to perform that behavior and it is the most influential predictor of the behavior (Crespo and Bosque, 2008). Therefore, in our research, intention is assumed to be the target behavior. Because our intent is to measure the perception against of e-shopping in general sense rather than testing it via a shopping activity

facts from a determined electronic shopping site.

4.2 Survey Instrument Construction

In the former sections, model dimensions and hypotheses were proposed. Questionnaire was determined as being the main data collection instrument for the research. For each of the seven dimensions, six items were developed (42 items total) with five point Lickert Scale as being "Completely Disagree, Disagree, Neutral, Agree and Completely Agree". Items were adopted from current literature and translated into Turkish. Items were translated into Turkish considering semantics rather than one-to-one translation (Appendix F). Survey questions were analyzed for the content validity by the six information system experts and survey was applied to four ordinary people by read-aloud method. According to comments, survey was revised and reworded. At the end of the pilot study, considering the feedback of the respondents and results, some of the items were modified. Following are the questionnaire items in English classified according to model dimensions:

- PEOU1: I think it is easy to shop in Internet shopping sites (Gefen et al, 2003),
- PEOU2: I think it is easy to use Internet shopping sites (Järveläinen, 2007),
- PEOU3: I can easily find the products that I want in the Internet shopping while searching in the sites (Park et al, 2004),
- PEOU4: I can learn using Internet shopping sites in a short time (Gefen and Straub, 2000),
- PEOU5: I think process of transactions in e-shopping sites is clear and understandable (Gefen et al, 2003),
- PEOU6: I can navigate easily in the Internet shopping sites (Heijden and Verhagen, 2004),

- PU1: In e-shopping, I can find products cheaper than the brick and mortar shops (Barkhi etal, 2008),
- PU2: E-shopping enables me to save time (Crespo and Rodri'guez, 2008),
- PU3: In e-shopping, I can find every kind of products (Gefen and Straub, 2000),
- PU4: In e-shopping, I can access all the information about the product I need (Heijden And Verhagen, 2004),
- PU5: I perceive the e-shopping useful in general (Hausman and Siekpe, 2009),
- PU6: I think e-shopping has more advantages than other means (Barkhi et al., 2008),
- TRU1: I think payment transactions are safe in online shopping sites (Palvia, 2009),
- TRU2: I believe that Internet shopping sites are trustworthy (Palvia, 2009),
- TRU3: I trust on what online retailers claim about their products. (Kim et al., 2009),
- TRU4: I think Internet shopping sites will keep my personal data confidential (Heijden And Verhagen, 2004),
- TRU5: I think that Internet shopping sites keep their promises and commitments (Lim et al., 2006),
- TRU6: I would feel comfortable that online retailers have the responsibility for the delivery of the product (Garrity et al., 2007),
- FAM1: I hear names of some Internet shopping sites frequently (Heijden and

Verhagen, 2004),

- FAM2: I tell to my acquaintances abut some well-known electronic shopping sites (Palvia, 2009),
- FAM3: I encounter ads on the mass media about Internet shopping sites (Hsu and Chiu, 2004),
- FAM4: I think, I am familiar with electronic shopping sites (Kim and Ahn, 2007),
- FAM5: In my near environment, it is mentioned about some of the electronic shopping sites (Kim and Ahn, 2007),
- FAM6: I see the news about the Internet shopping located in the mass media (Gefen et al, 2003),
- SN1: My friends' attitudes are positive towards Internet shopping (Järveläinen, 2007),
- SN2: My friends use Internet shopping sites (Järveläinen, 2007),
- SN3: My friends would advise me to use online shopping (Crespo and Bosque, 2008),
- SN4: In my near social environment, it is expected from me to use the Internet to purchase as others (Lin, 2007),
- SN5: Internet shopping is mentioned among my friends (Järveläinen, 2007),
- SN6: My friends would think that I should use the Internet shopping sites (Crespo and Bosque, 2008),
- ENJ1: I am entertained while using electronic shopping sites (Kang etal., 2009),

- ENJ2: I prefer the entertaining shopping sites (Heijden and Verhagen, 2004),
- ENJ3: I think using Internet shopping sites is joyful (Hausman and Siekpe, 2009),
- ENJ4: I use the Internet shopping sites to have good time (Hausman and Siekpe, 2009),
- ENJ5: I feel more entertained than buying from a brick-and-mortar store (Heijden and Verhagen, 2004),
- ENJ6: I perceive the e-shopping sites as interesting (Hausman and Siekpe, 2009),
- INT1: I will definitely buy products from an e-store in near future (Hausman and Siekpe, 2009),
- INT2: I would feel convenient purchasing from e-store (Palvia, 2009),
- INT3: I like to use e-shopping sites (Wu, 2006),
- INT4: I recommend online shopping to my acquaintances (Ahn et al, 2004),
- INT5: I use Internet shopping sites frequently (Vijayasarathy, 2004),
- INT6: I have intention to use Internet shopping sites (Lin, 2007).

4.3 Pilot Study

Pilot Study was prepared in electronic format (Appendix G). It has 52 questions in total. First 10 questions are about demographics and usage of B2C e-commerce. Survey was conducted utilizing a professional Internet site. Link of the survey was shared on a social network page and sent by e-mail. Call for filling was sent to people who were assumed to fill it appropriately and they were required to send

feedbacks. Total number of fifty respondents filled the survey out of fifty-eight calls. Especially, twelve of the respondents who are doing academic work responded invaluable contributions as detailed criticisms and evaluations in order to revise the survey for the main study. Reliability analysis indicates that there seems to be no reliability problem for each item statistically (Appendix H). Cronbach Alpha is well over 0.90 for each item. Correlation matrix is given in Appendix I. Items having higher correlations were analyzed and reworded appropriately. In addition to statistical results, considering the feedback of the respondents about the Trust and Familiarity dimensions, questions were revised in order to reach to more detailed results. Recent version of the survey items are given in Appendix-J

4.3.1 Respondents' Demographics and General B2C Electronic Commerce Usage Habits and Attitude

According to pilot study, B2C e-commerce usage habits and attitude are given in Table 3.35% (15 persons) of respondents are female and 65% (35 persons) are male. Respondents are between the ages of 20 and 54. Average age is 34. 54% (27 persons) of respondents have university, 34% (17 persons) have MSc and 8% (4 persons) have PhD degree. 6% (3 persons) have high school graduates.

Table 3: Pilot Study B2C E-Commerce Usage Habits and Attitude

Item	Options	Percentage(%)
General attitude	<u>Positive</u>	<u>70</u>
towards B2C E-	Negative	20
Commerce	Neutral	10
Daily Internet Usage	Less than 1 Hours	24
	<u>1-3 Hours</u>	<u>50</u>
	More than 3 Hours	26
Frequency of	Once in a year	54
purchasing from an	Once in a month	<u>56</u>
electronic Store	Once in a week	0
Stickness to one Store	Same site	<u>54</u>
to purchase	Different sites	46

Table 3: Cont.

Type of products purchased via Internet (More than one selection is optional)	Every kind of product	22
	Book	44
	Music	10
	Electronics	44
	<u>Plane Ticket</u>	<u>64</u>
	Cloth	8
	Others	10
Internet Connection	<u>Home</u>	<u>98</u>
	School	6
	Office	44
	Public Internet	4
	Cell Phone	8
	Mobile modem	2
	Others	0

4.3.2 Preliminary Findings and Instrument Revision

Within the context of Internet shopping, 70% of respondents claim that their overall attitude is positive. On the other hand, 56% of the respondents claim that they shop once a month.

First, from the perceived usefulness point of view, 70% of the respondents tell that they find products in e-shopping in cheaper than the brick and mortar sites and 75% of the respondents think they pay less time in Internet comparing with the traditional one. In general, considering the other perceived usefulness questions we can conclude that people perceive Internet shopping as useful in general.

According to the Intention questions, 64% of the respondents state that they are willing to use Internet shopping and 59% of the respondents tell that they will use Internet shopping in a very short time. Although respondents' responses proves willingness against Internet shopping, 58% of the respondents assert that they do not use e-shopping frequently.

Considering the PEOU answers, 90% of respondents think that they can learn Internet shopping easily. In addition, other questions relating to PEOU reflects that respondents find Internet shopping as being easy to use.

From the perspective of Trust questions, 92% of the respondents tell that Trustworthiness of Internet vendor is very important for them to shop. 77% of them assert that they shop from a vendor only if they think that vendor is trustworthy. In another question, 64% of the respondents say that they do not have trust on electronic shopping sites. From this problem on and high correlation results of the trust questions, we decided to revise the Trust questions by asking each probable trust element in Internet shopping like security of paying methods, integrity and quality of products, protecting personal data, reliability of delivery service and overall trust rather than trying to capture general trust perception.

According to Store Familiarity questions, 87% of the respondents prefer the same site to shop and they think that 76% of the respondents feel that famous sites are more successful than others. From these results and comments of the experts who filled the survey, it can be inferred that people have a tendency to shop from the sites they feel familiar, but it should be investigated how this familiarity is developed; therefore this construct's questions were reworded in order to capture the sources of store familiarity and if they are really familiar with Internet shopping sites besides the effect of familiarity.

Analyzing the Enjoyment questions, 57% of the respondents do not agree with the idea that they use Internet shopping sites to have a good time. 61% of them do not feel they are entertained while they shopping.

In the Subjective Norm questions, 69% of the respondents say that their friends perform electronic shopping, but on the other hand 73% of them say that they do not agree with the idea that they are expected to shop online among their friends.

At the end of the pilot study, survey questions were revised in order to explore the underlying issues of Trust, Store Familiarity and Enjoyment in the main data collection phase.

CHAPTER 5

QUANTITATIVE PHASE: PLS-SEM

In the previous research phase, after proposing the research model and formulating hypotheses, the survey was constructed and a pilot study was performed. Considering the feedback of the respondents and statistical analysis, some of the questions were revised in order to enhance the reliability and the validity of the research results. In this chapter main data collection phase and quantitative analysis are given.

5.1 Data Collection

In order to collect the data different options were investigated:

- At the first hand, university students were taken into consideration. Although
 the students are in the target audience of the e-commerce, because of the
 common criticisms against the student-based self-reported researches, this
 option was dropped.
- As a second option, announcing the questionnaire on a social network site and requesting to fill by sharing throughout the friends was attempted. Although in the pilot study, this way had been utilized, it should be noticed that upon special personal messages and requests for the limited "serious friends", the pilot study had been succeeded. In the main data collection

phase for a trial, survey was announced on social page; after one-week duration, approximately 100 collected responses were analyzed but it was apparent that, as opposed to pilot study, randomized respondents' answers were evaluated as outliers. Considering these problems, option of collecting data via a social network site was left.

- As another option, survey companies were considered to collect data.
 Different meetings and e-mail conversations were held with those companies.

 Although some of the companies announce themselves as research oriented, as the face-to-face meetings progressed, Qualification of those companies within the context of data collection technique to ensure reliability of the research could not be verified.
- Consequently, collecting data via e-shopping web site was evaluated. Some of the sites even did not answer e-mails. In face-to-face and telephone meetings, generally, web site owners hesitated to make cooperation by asserting that they do not have time and resources despite the explanation that only cost is putting a single link on their web site. Contacts with web site owners proved that managers of those initiatives are highly static in their common perceptions although inherently e-shopping is itself requires a paradigm shift in commerce activities.

At the end, in order to enhance the validity and the reliability of the research by reaching to a wider span of population (Cheung et al, 2008); questionnaire was administered by giving its link on a book selling web site (kitaplik.com). The survey was announced on electronic forums and social network sites. A lottery of the "33 Books" was arranged for the respondents and announced. Since the research main intent is to evaluate the overall perception against e-shopping rather than a specific web site; it was explicitly explained that respondents should reflect consider their perceptions considering their general experiences about e-shopping rather than site specific practices. It was also stated that responses evaluated as outliers will lose the

chance of attending lottery.

During the data collection period, e-mails and nicknames were required and IP numbers were checked to prevent possible redundant responses. Respondents' nicknames were published on the web site every day. At the end of the survey, a book that they choose from the shopping site were gifted 33 respondents. The researcher supplied funding of the campaign. The data collection phase lasted in one month and elicited 1151 full responses. Each of the response was analyzed one by one, responses having monotonously repeating answers were taken as being outliers and dropped from the analysis.

5.2 Respondents' Demographics and General B2C Electronic Commerce Usage Habits and Attitude

Of the 1151, 1115 responses were found to be qualified for the analysis phase. According to main survey, Internet and B2C E-Commerce Usage habits of respondents are given in Table 4.

Table 4: Main Survey - B2C E-Commerce Usage Habits and Attitude

Item	Options	Percentage(%)
General attitude	<u>Positive</u>	86.0
towards B2C E-	Negative	7.0
Commerce	Neutral	7.0
	Less than 1 Hours	5.5
Daily Internet Usage	<u>1-3 Hours</u>	29.1
	More than 3 Hours	65.2
Frequency of	Not Purchased	11.4
purchasing from an electronic Store	Once in a year	24.1
	Once in a month	47.9
	Once in a week	16.7
Stickiness to one Store	Same site	56.7
to purchase	Different sites	43.3
Type of products	Every kind of product	41.3
purchased via Internet (More than one	Book	49.5
	Music	19.5
selection is optional)	Electronics	41.7
betection is optional)	Cloth	17.9

Table 4: Cont.

Tubic ii Colit.				
Internet Connection	<u>Home</u>	92.5		
(More than one selection is optional)	School	33.0		
	Office	26.1		
	Public Internet	5.3		
	Cell Phone	5.3		
	Mobile modem	13.0		

55.4% of respondents are female. Respondents' average age is 26. 35.4% of respondents are university students, 56% of respondents are university graduates. 5.6% of respondents have MSc and 0.9% have PhD degree. 36.5% (421) are from Ankara, 21.1% (244) from İstanbul, 7.1% (82) from İzmir, remnants are from other cities.

In the first phase of the analysis, Cronbach Alpha was found to be over 0.90 for each item that ensured the reliability of the survey. Then, factor analysis (Maximum Likelihood, Direct Oblimin and filtered absolute value below 0.3) was performed using SPSS 19. Results are presented in Appendix K.

Subjective Norm, Trust, Enjoyment, Store Familiarity items were loading on the intended factors. On the other hand, some of the Perceived Usefulness, Perceived Ease of Use items were loading on the same factor together with the Intention. In addition to that, some Perceived Ease of Use and Perceived Usefulness items were loading together on another factor together. Since the content validity and reliability of the survey was tested and enabled by revising the questionnaire in the pilot phase, possible reasons were considered.

In some other e-commerce researches, respondents answer the questions by considering a specific web site as experimental studies. The dilemma with these studies is that, they try to reach to general rule by investigating a specific point doing inductive reasoning. It can be asserted that people's cognitive components of beliefs would be fused in to one belief as Intention if their attitude is positive for task related factors like PEOU and PU, but other factors or beliefs can be discriminated realistically.

5.3 Quantitative Analysis

For now, approximately two decades after Internet began to diffuse into our daily life, e-users gained experience to use generic software application interfaces. There is standardization in user interfaces having components like drop-down menus, combo boxes, check boxes and standard procedures like select an item, drag-and-drop an item. Consequently, even ordinary people have intense interactions with computers in daily life (Barkhi etal., 2008).

As Hernandez et al. (2009) pointed out many e-commerce researches try to investigate the attitudes for the first contact of e-buyers. On the other hand, recently, by the enhancement of accessibility to the Internet, more and more people are experiencing Internet shopping, so loyalty or continuance intention of people should be under research to analyze the enhancing factors in "post-adoption" phase. According to the results of Information and Communication Technology Usage Survey in Households and Individuals carried out in April, 2010 by Turkish Statistical Institute: Individuals use computer mainly at home (70%), while 31.3% use in the workplace, 17.5% use at public access points like Internet cafes. 41.6% of households have Internet access at access to the Internet at home. 15% of people having access to Internet, shopped via electronic markets. 9% of the e-shoppers purchased in the last three month, 3.6% between three months and a year ago and 2.5% for more than one year ago (Turkish Statistical Institute Report No:148, August 18, 2010).

Another point is that, technology acceptance studies have stemmed from organizational IS studies in which IT applications were rather client and server based, text or command line systems. Therefore, as (Garrity et al., 2007) stated, in web shopping, dimensions of classical technology acceptance research like ease of use should be taken into consideration differently.

Accordingly, because of the statistical results (Appendix K) and time dependent contextual realities observed, PEOU construct was taken out from the hypothetical

model.

5.3.1 Partial Least Squares Structural Equation Modeling Analysis

PLS (Partial Least Squares) was employed to analyze the model. PLS is a type of Structural Equation Modeling (SEM) Technique mostly suitable for exploratory research rather than evaluating the fitness between theoretical model and data (Lim, et al., 2006; Thatcher, 2004). In addition to that, from the statistical perspective, if collected data is not in normal distribution as our case, PLS is more appropriate than other techniques (Liu and Wei, 2003) SmartPLS Version: 2.0.M3 as software was used to analyze data.

5.3.2 Assessment of the Measurement Model

Convergent validity was assessed following three criteria (Sarker and Valacich, 2010): First, each of the items load on its planned constructs well above 0.65 (Appendix -L). As the second criteria, all of composite reliabilities are over 0.87 and as the last criteria, Average Variance Extracted (AVE) of constructs are above 0.55 (Table 5).

Table 5: Composite Reliabilities, Correlation between Constructs and Square Root of AVEs

Construct	AVE	Composite Reliability	ENJ	INT	PU	FAM	SN	TRUST
ENJ	0,5541	0,8787	0,7443					
INT	0,6483	0,9364	0,6064	0,8051				
PU	0,6721	0,8579	0,4363	0,5919	0,8198			
FAM	0,6121	0,9033	0,2787	0,3550	0,3602	0,7823		
SN	0,5799	0,8915	0,3060	0,3077	0,2310	0,3476	0,7615	
TRUST	0,6286	0,9100	0,4897	0,7074	0,5190	0,2795	0,2651	0,7928
* Numbe	* Numbers in the diagonal are the square root of the constructs' AVEs							

Discriminant validity was assessed by confirming that (Table 5)measurement items loaded on their assigned factors and square root of each latent constructs' AVE is much larger than the correlation of that specific construct with any of the other constructs in the model (Gefen and Straub, 2005).

5.3.3 Structural Model Analysis

In order to test the significance of the paths between the constructs, at the first hand, the model was calculated by bootstrapping (1115 cases 9000 samples). Then, PLS algorithm was applied. Assessment of the Relationships within the context of Hypotheses are given in the Table 6 and Figure 17.

Table 6: Analysis Results (Tabular form)

Hypothesis	T Value	β Value	Result	
H1 PEOU→INT H2	N/A (PEOU was exclud-	ed from the hypothetical n	nodel)	
PEOU→PU	Twi (1200 was excluded from the hypothetical model)			
H3 PU→INT	7.723	0.216	Accepted (p<0.001)	
H4 TRUST → INT	16.798	0.435	Accepted (p<0.001)	
H5 TRUST→PU	10.947	0.365	Accepted (p<0.001)	
H6 FAM→INT	3.216	0.068	Accepted (p<0.01)	
H7 FAM → PU	7.206	0.201	Accepted (p<0.001)	
H8 SN→INT	1.686	0.037	Rejected (p<0.05)	
H9 SN → PU	0.103	0.003	Rejected (p<0.05)	
H10 ENJ→INT	10.044	0.269	Accepted (p<0.001)	
H11 ENJ→PU	6.010	0.201	Accepted (p<0.001)	
$R^{2}(INT)=0.634, R^{2}(PU)=0.350$				

As seen in the PLS analysis, Trust is the most important dimension in the model for the perception of Usefulness and Intention. Operational definition involves overall trust, safety of payment transactions, product and product delivery quality, confidentiality of personal data. So, if a person feels safe about those issues it enhances the probability to use e-commerce channel.

Enjoyment is another important factor in the model. In other words, if a person enjoys electronic commerce site, he/she will utilize e-commerce channel more than others.

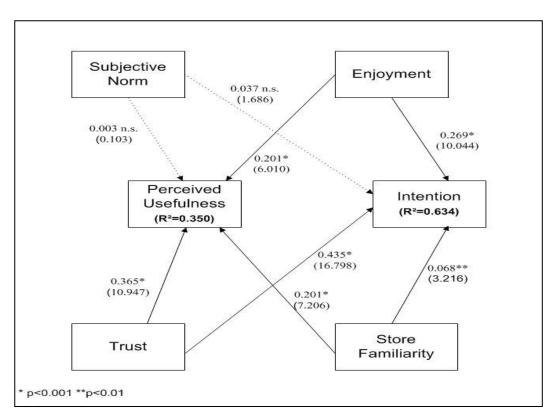


Figure 17: Analysis Results (Pictorial Form)

PU is the third in degree for Internet shopping intention as against the common belief. However, the crucial point in it that, trust and enjoyment has great impact on the perception of usefulness. In other words, if a person has trust and enjoys ecommerce activity then he has intention to buy indirectly.

Store Familiarity has little impact on intention. It has some effect but especially for experienced users, familiarity does not have impact on the intention as much as other dimensions.

In the asserted model, Subjective Norm does not have significant impact according to research results. This result reflects that especially experienced, here it means who purchased at least once, users' behaviors are not shaped by friends or by the people assumed to be important.

CHAPTER 6

QUALITATIVE PHASE: INTERVIEWS AND INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

In the previous chapters, research model and its dimensions were determined, data collection instrument was constructed and a pilot study was conducted. Then, the model was tested by PLS using collected data. In this chapter, need for qualitative analysis will be discussed and qualitative data collection via interviews will be explained. At the end of the chapter, analysis with IPA (Interpretative Phenomenological Analysis) will be presented in order to explore the quantitative and qualitative results; then, findings and implications will be proposed.

6.1 Qualitative Method Rationale: Interpretative Phenomenological Analysis

Information systems research is generally carried out by a methodology of hypotheses formulation using statistical analysis (Kaplan and Duchon, 1988). The quantitative style assumes that there is an objective truth that can be exposed using the scientific method of relationship measurements between variables statistically (Garcia and Quek, 1997). Researchers who select quantitative methods are interested in exploring the degree of variance in causative variance between X and Y (Maxwell, 1996). By this approach, researchers inspect the impacts of one or more variables on another. However, there is a common discontent with the quantitative technique

based researches. This dissatisfaction stems from methods with difficulty of understanding and interpreting the results (Benbasat, 1987). These analyses take users as passive ones. They disregard the cultural environment and social interaction that affect the constructs under research (Kaplan and Duchon, 1988). Therefore, in IS researches, qualitative research should be included to explore the subject by illuminating the context and conditions under which research is carried out (Benbasat, 1987). Qualitative researchers ask the role of X in causing Y and the connection between X and Y (Maxwell, 1996). Despite the fact qualitative methods have less justification of variance statistically than quantitative ones, they produce data to reach theories and richer clarifications of how and why questions (Kaplan and Duchon, 1988)

In the quantitative phase, using Structural Equation Modeling, hypotheses had been tested and the standings of dimensions on the Intention and Usefulness had been determined (Figure 18).

#	USEFULNESS	INTENTION
1	Trust	Trust
2	Enjoyment- Familiarity	Enjoyment
3		Usefulness
4		Familiarity

Figure 18: PLS Analysis Standings

From the research methodology perspective, quantitative phase was rather confirmatory and deductive in a sense that we tested our research model and hypotheses by the support of clear-cut survey questions and a strict statistical methodology. At the end of the quantitative phase, we had found the impact of one factor to another numerically. However, in this research, we have to find out answer for "how" question. Therefore, we applied an exploratory and inductive qualitative approach by interviews and hybrid analysis.

Exploratory and inductive qualitative approach used in this research can be called as Interpretative Phenomenological Analysis (IPA) in which it is intended to explore how people perceive the world (Smith, 2004). IPA, in short, helps researcher to understand a phenomenon by a subjective objectivity. The roots of the IPA goes to Phenomenology by philosopher Husserl; also some traces can be found even in Hegel and Kant (Finlay, 2009). Phenomenology rejects the belief that objects in the external world exist separately and that the knowledge about objects is dependable. The phenomenologist tries to understand the social and psychological phenomenon from the perspective of people involved in the issue. Although a phenomenologist is considered as opposed to positivists in the philosophical debates, we do not reject the positivism but we take IPA as a complementary to quantitative approach used mainly in the Information System researches.

As a starting point, we take the dimensions as phenomenon (An occurrence or fact that is perceptible by the senses) and we acknowledge that there is a gap between what we understand from the factors and what they really are or perceived by the people (Figure 19).

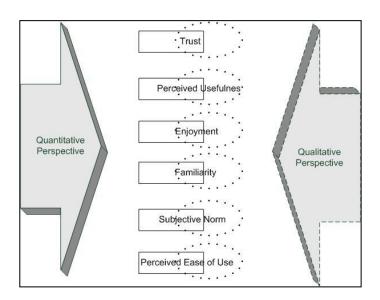


Figure 19: Quantitative versus Qualitative Perspectives

Specifically, for our research, we utilize IPA to comprehend how Trust, Enjoyment,

Familiarity, Perceived Usefulness, Subjective Norms and Perceived Ease of Use perceptions by the consumers are shaped and how those dimensions affect or have impact on Perceived Usefulness and Intention factors in detail within the context of B2C e-commerce.

6.2 Interview as a Qualitative Data Collection Method

Previously, data collection phase and analysis were performed by strict quantitative methodology namely "Structural Equation Modeling". In this phase of the research, qualitative data was collected via interviews. Interviews were conducted using openended semi-structured questions about the dimensions, as IPA requires (Larkin, et al., 2006). This type of interview is situated between the fully standardized (structured-formal) and entirely non-standardized (informal, non-directive) interviewing (Berg, 2000). In-depth interviews were held to be able to validate the results and to grasp the phenomenon. The main idea behind the interviews is to clarify or explore the survey findings.

For each of factors/dimensions (Trust, Enjoyment, Store Familiarity, Usefulness, Store Familiarity, Subjective Norms and Perceived Ease of Use), exploration questions were prepared. In order to limit the boundaries, we used quantitative findings; however, we let the subject to digress to explore the topic in depth during interviews. Perceived Ease of Use could not been factored during the quantitative analysis, but we included the Perceived Ease of Use question in the interviews to catch the possibly missing concept. Additionally, Subjective Norm was found to have insignificant impact on Intention and Usefulness after SEM analysis. In the qualitative phase, it was attempted to understand the possible other relational meaning by including Subjective Norm questions in the interview. In addition, those mentioned dimensions are still valid for B2C e-commerce context but they seem to evolve from their classical operational definitions and perceptions to new conceptions.

Berg (2000) argues that questions must be formulated in words familiar to the people being interviewed and questions should accurately convey meaning to the respondent; questions should motivate interviewees to feel involved and to communicate clearly his attitudes and opinions. Following those suggestions, the questions were reworded as probing questions according to qualitative research techniques. Probing questions are simply probes; provide interviewers with a way to draw out stories that are more complete from subjects. Probes frequently ask subjects to elaborate on what they have already answered in response a given question for example "Could you tell me more about that?"

Interviews were held face-to-face with 16 people. Interviewees were selected from the volunteers who had completed the survey in the previous phase. Semi-structured interviews were performed by asking of a number of prearranged questions. Each semi-structured question was asked in a regular order and the interviewees were allowed to digress and to give comments in order to grasp the phenomenon in a holistic sense and to explore the subject in holistic manner. Each session approximately took 45-55 minutes in average. In the beginning of the meetings, purpose was explained as elaboration, verification and exploration the quantitative findings. After the first three sessions, interview questions were slightly modified according to feedbacks and responses in order to enable to convey the intended meaning to the interviewee.

6.2.1 Interview Questions

Following are the open-ended questions used in interviews and their justifications:

- What do you understand from the term "trustworthiness of an e-shopping site?
 - As stated in the quantitative phase, Trust had been found to be as the main determinant for the purchase decision. In the survey, operational definition of the Trust had included the "Safety of the payment

transactions namely credit card info", "keeping the personal data confidential", "e-shopping sites' keeping their promises and commitments", "responsibility for the delivery of the product", "belief on sellers claims about their products". During the interview, this question was asked to elicit additional concerns about the any other possible antecedents of Trust in e-shopping sites.

- Do you have trust on e-shopping web sites? If not why?
 - o In this question, it is intended to learn the perception of the customer in practical sense within the context of relation between the customer and the e-shop. It is attempted to learn the general understanding of the people about the trust against e-shopping sites. In the second part of the question, customer is motivated to think about his/her negative feelings against e-shopping. This question will clarify the issue if the customer has a normative stance against the trust in shopping or if he can give the explicit reasons for the trust problem.
- Dou you take trustworthiness into consideration of e-shopping site to purchase a good?
 - O In this question, the main intent is to elaborate if the customer takes the trustworthiness of the shopping into consideration while determining the e-shopping site to purchase. Since in the quantitative phase Trust was found to be main determinant for the intention, by this question, it is attempted to understand the causes and underlying perceptions of trust.
- Do you enjoy e-shopping? Could you explain your enjoyment?
 - In the quantitative phase, Enjoyment was found as being the second important factor on intention to use Internet for shopping. The main intent of the question is to understand if the customer thinks that

he/she enjoys electronic shopping or not and this question is expected to motivate the customer to think about enjoyment concept in the electronic shopping. Second part of the question will make the customer think about the possible antecedents of the Enjoyment in electronic shopping applications.

- Do you prefer joyful sites to shop?
 - This question will clarify if the customer decides or determines electronic sites according to his/her Enjoyment. Additionally, it will motivate or cause the interviewee to think about the enjoyment within the context of electronic shopping.
- What are the factors that make you enjoy an e-shopping site?
 - With this question, underlying factors for the Enjoyment in electronic shopping sites will be clarified. In the survey, enjoyment definition was mainly based on intrinsic motivation like "entertaining while eshopping", "having good time while e-shopping", "feeling more entertained than conventional (brick-and-mortar) shops", "perceiving the e-shopping as interesting". In this regard, enjoyment as many other researches in related literature is based on intrinsic motivation as opposed to extrinsic motivation. Therefore, it is important to understand the causes of the Enjoyment in attitude and behavior from the perspective of the customer.
- Do you generally buy from the sites which you are familiar?
 - O According to survey and quantitative phase, another important factor on intention to buy is the Familiarity of the customer with the electronic shopping site. That finding will be scrutinized by this question if the potential customer really takes the familiarity of the site into consideration while choosing the site. In this regard, effect of

the Familiarity with the e-commerce site on the purchase decision will be investigated in detail.

- Do you think that mostly known e-shopping sites are more successful than others?
 - According to quantitative results, people tend to shop from the sites
 with which they are familiar with. This question will clarify the
 reason and main causes of the belief that mostly known sites are more
 successful than others.
- How do you get familiar with e-shopping sites?
 - O Despite the fact that advertisement sector is the main actor in building familiarity, we have to get the real perceptions of the customers and the other possible causes. By this question, we will try to understand the ways of enhancing the Familiarity of the electronic shopping site from customer perspective. Customers are expected to give clues about how to enhance the reputation of the web site from their perspectives.
- Do you think that e-shopping sites are useful?
 - In the quantitative phase, usefulness was found to be another important factor affecting the purchase intention. By this question, it is intended to capture the insights about the Perceived Usefulness of the electronic shopping site.
- What factors do make an e-shopping site useful (lower price, product variety, ease of access etc)?
 - o Considering the survey results, it is apparent that customers perceive the e-shopping sites as useful. According to operational definition of

the usefulness, main indicators of usefulness are "cheaper products compared to brick-and-mortar stores", "time savings with electronic shopping sites", "variety of the products in e-shopping", "enabling essential information about many products" and "general perception of usefulness". In this phase, the main intent is to understand the causes of the Perceived Usefulness and the reasons for usefulness in specific sense. Customers will be motivated to explain or digress from the subject in order to get any other missed sub-dimension of Perceived Usefulness.

- Are you affected by your friends, relatives to buy from an e-shop?
 - Despite the fact that Subjective Norm was found to have very little impact in the quantitative phase, in the interviews it is intended to learn the impact of others in buying decision.
- Do you prefer easy to use e-shopping sites? Can you define which interface functions make the site easy to use?
 - o In the quantitative phase, PEOU could not be factored out. As it had been commented on that, if a person has an intention to use the site and if he perceives that site as a useful tool for shopping then he may perceive that the system is easy to use. Additionally, besides the statistical and quantitative analysis, it was considered as important to comprehend if there is any other missing perception about the PEOU dimension.

6.2.2. Interview Summary

Scripts elicited during the interviews were classified under the research model dimensions in order to discover patterns and emerging issues. For each of the factor, supporting findings, discrepancies and new emerged issues were noted. In order to enhance traceability, each finding was coded. Following are the findings elicited

during the interviews. It should be noted that as the nature of the interviews necessitates the digression from the subject, some of the findings appeared during the interviews.

Trust

- (M-TR-1) Security of payment information namely credit cards' info is the most important factor in Trust. People refrain from disclosing their personal info and/or credit card numbers.
- (M-TR-2) Trust is generally perceived as reputation/familiarity of the site and people prefer the familiar and well-known sites to purchase. Customers think that famous or well-known shopping sites implement crucial policies and procedures against all risky situations.
- (M-TR-3) As the institutionalization is enabled by the e-shopping sites, perceived Trust increases. People think that as the electronic shopping sites get institutionalized, official audit measures are carried out to protect customers by the authorities and well-known companies comply with the regulations in order to cause customers to perceive that they are trustworthy.
- (M-TR-4) Security certificates are not credible enough to convince people that shopping sites are secure. Customers think that security seals put on web sites may be fake.
- (M-TR-5) Customers want to be sure about the delivery of the product and they feel anxious about it (if the ordered product will come or not). In case the ordered product comes with a defect, it is important for the customer to be confident that it will be exchanged or refunded without any problem.
- (M-TR-6) Customer service enhances the probability of success by increasing the trust. People feel satisfied, they rely on the site if the customer support, or call center operate effectively. Because, as electronic shopping involves

ambiguity inherently, people assume that call centers or help desks decrease the negative feeling by the help of real person-to-person interaction like selling representatives as in the brick and mortar store cases.

- (M-TR-7) As customers get familiar with the electronic shopping in broad sense, their trust on electronic shops increase. They assert that they were very reluctant in their initial purchases and as they get used to purchasing from the sites they felt more confident against Internet shopping. On the other hand, they also go further and explain their negative past experiences and they assert that those interactions may hinder their future behaviors.
- (M-TR-8) As the affinity with Internet shopping including techniques and
 procedures used increases also the trust against e-shopping boosts. Some of
 the customers assert that as their awareness level increase with the electronic
 shopping security techniques incorporated into sites, they get more conscious
 and they believe they have more behavioral control for the shopping in the
 Internet.

Enjoyment

- (M-ENJ-1) In the survey, enjoyment had been defined as a pure joy, but in interviews enjoyment meaning was found to be beyond the basic joyful attitude or cheerful psychological state of mind. When asked the question about the enjoyment and joy, their responses or reactions were different than the basic cheerful enjoyment situations.
- (M-ENJ-2) If the customers perceive the site useful then they think that they enjoy the site while shopping. Here the interviewees were asked what they mean by the term "useful", they claimed that useful means having effective search/comparison mechanisms and low prices.
- (M-ENJ-3) As the customers believe that they perform an activity in an effective way then they perceive it as joyful. Within the context of electronic

shopping, their main idea lies under the fact that "feeling of effectiveness" in other areas of the life is also reflected to Internet shopping site.

- (M-ENJ-4) Even though the customers state that they like/enjoy fine pictorial presentation of goods or items; they also add that these audio-visual features of the sites do not impact their purchase decision. At the end, they state that their purchase decision is not affected by pictures or animation techniques. On the other hand, they state that more professional look or style of the web sites make them more satisfied or they feel better while using those shopping sites.
- (M-ENJ-5) Besides the enjoyment, people get bored while surfing in the shopping sites. It is understood that people are bored with much information which they think that they cannot handle and if they do not have purpose while surfing in the shopping sites. They give numerous examples about their dull experiences when they do not have an aim in surfing in the electronic shopping sites. They assert that while they are surfing in the electronic shopping site without a clear intent to buy, they feel as if they are wandering in a huge shopping mall for window-shopping without a purpose.
- (M-ENJ-6) Customers enjoy the site if the shopping sites have the goods within the scope of their interest area. People who have special interests, namely hobbyists, perceive electronic shopping sites as an effective search database for their field of interest like carpets, books, or music. They think that classical electronic shopping interfaces and/or mechanisms do not have enough capability or feature for their needs.
- (M-ENJ-7) As the people feel that they are concerned or focused on a
 product, they feel more satisfied and joyful. Being able to query the product
 in detail cause people to be pleasant. As related with the boredom, people
 assert that if they have a certain focus on their shopping activity they feel
 better.

Store Familiarity

- (M-FAM-1) Customers generally tend to buy from famous or familiar sites. While using the Internet browsers to shop, they go to famous sites by habitually typing the name in the address bar. When asked to give some examples of shopping sites they know, almost all the responses given by the interviewees are the same names of several famous shopping sites.
- (M-FAM-2) People generally get familiar with the sites via their friends.
 However, here is the point that people do not generally make buying
 decisions by the impact of others. Especially word-of-mouth information
 conveyed in informal chats or conversations, cause people to learn or
 memorize some electronic shopping sites.
- (M-FAM-3) Customers generally tend to search for the product in the Internet for the best price. However, at the end, they tend to buy from the sites they are familiar. When asked about the possible reasons of going other sites, they assert that they do not rely on all of the results given by price comparison web sites.
- (M-FAM-4) Potential customers do not depend on Internet search results rankings. They believe that ranking can be manipulated in favor of for some sites to reflect themselves as in higher standings.
- (M-FAM-5) Mostly known e-shopping sites are trusted because they are believed to be institutionalized.
- (M-FAM-6) Despite the common belief that spam mails and pop-ups are considered as useless, they have considerably great role in making people familiar with the shopping sites. In addition, customers add that advertisements on mass media like newspapers and magazines are effective in their familiarity building process. They assert that if companies are giving advertisements on those mass media it means that they are also reliable and

officially accepted by other media companies.

• (M-FAM-7) Customers generally monitor or track the forums for reliability and service quality of the Internet shops. Customers asserted that they use forums or recommendation agents for products and shopping sites.

Usefulness

- (M-PU-1) E-shopping sites are perceived as useful in general. Customers state that especially after their initial purchase from the electronic shopping sites, they use Internet shopping stores more often.
- (M-PU-2) The predominant factor for e-shopping is price. Customers say that price is the main determinant for choosing the site, but when asked if they buy from an electronic shop without a proved confidence with very cheap prices, they accept that the price factor is only valid for the shopping sites that they are familiar. They justified it by mentioning some delivery problems about the less famous shopping sites with the lowest prices.
- (M-PU-3) E-shopping sites are perceived as useful especially if people reside in the geographically secluded region or if the access to goods through conventional shops is problematic.
- (M-PU-4) E-shopping sites are perceived as useful because they facilitate the daily life with simple online transactions. Customers say that they do not have to lose time in traffic or they do not have to compare the prices by looking at various shopping malls. They add that even in the office or school they can shop from e-stores conveniently. Nevertheless, their main concern is that one of the most challenging sides in shopping from electronic store is long shipping time. They assert that they would prefer electronic shopping more if the delivery of the product would be performed in one day.

Subjective Norm

• (M-SN-1) People do not adopt the e-shopping site but they may adopt a product by other referents. Although they may be affected by a product offer, it cannot be generalized to a shopping site in overall sense. They gave the examples of very specific products with specific prices they learned from their friends or they informed others.

Ease of Use

- (M-PEOU-1) The definition for Perceived Ease of Use shifts from conventional meaning to having more effective mechanisms like decision making and search functions for customers' needs. Customers think that they can use the electronic shopping sites effectively in a very short time, but they define the Perceived Ease of Use for the e-shopping sites is as having effective decision making mechanisms and agents for their purchase decision.
- (M-PEOU-2) If people are familiar with the e-shopping site, they feel that usage of the site is easy.

6.3 Interpretative Phenomenological Analysis: Findings and Implications

After interviews, IPA as an in-depth qualitative analysis method was used to understand the implicit cognitions of the individuals. Moustakas (1994), accepting phenomenological analysis as an heuristic inquiry, states that it is a highly personal process and difficult to define with clear cut and well defined sequences. He gives the steps as "epoche, phenomenological reduction, imaginative variation and synthesis of texture and structure". Following and adapting his basic guideline for our research, initially scripts elicited during the interviews were classified under the research model dimensions in order to discover patterns and emerging issues. For each of the factor, supporting findings, discrepancies and new emerged issues were noted. In order to enhance traceability, each finding was coded. Those cognitions in

the form of codified scripts were utilized to reach to social perceptions by illuminating the implicit ideas. It should be noted that as the nature of the interviews necessitates the digression from the subject, some of the findings appeared during the interviews. For each factor, quantitative results and interview results within the context of current B2C literature were revisited. At the end, implications were asserted by synthesizing the quantitative and qualitative results together. This enabled us to get further explanations, clarifications and interpretations for each of the factor. Moreover, some discrepancies between quantitative and qualitative findings were elaborated. In the following sections synthesis of quantitative and qualitative phases are given by proposing implications for each of the research factor (Figure 20).

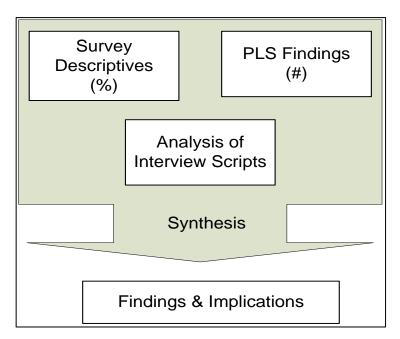


Figure 20: Overall Analysis

6.3.1 Trust

According to results in quantitative phase (Survey (S) descriptive statistics):

• (S-TR-1) 47.40% do not think that payment transactions are safe in online shopping sites.

- (S-TR-2) 46.88% do not believe that Internet shopping sites are trustworthy.
- (S-TR-3) 53.73% do not rely on what online retailers claim about their products.
- (S-TR-4) 48.09% do not think that Internet shopping sites will keep their personal data confidential.
- (S-TR-5) 41.68% do not think that Internet shopping sites keep their promises and commitments.
- (S-TR-6) 43.07% would not feel comfortable that online retailers have the responsibility for the delivery of the product.

Results of hypotheses tests according to SEM analysis:

- **H4:** Perception of Trust positively affects online shopping intention (Accepted)
- **H5:** Perception of Trust positively affects perception of Usefulness in online shopping (Accepted)

As seen above clearly, despite the fact that quantitative analysis indicates trust has positive impact on online shopping intention and usefulness, according to survey descriptive statistics, people seem to be hesitant for the trustworthiness of the electronic shopping sites within the context of general trustworthiness, payment transactions, product quality, personal data, keeping promises and commitments and delivery of the product. Almost half of the respondents feel uncomfortable against online shopping within the trust issue.

In the qualitative phase, during the interview meetings (M), in order to learn the possible facts underlying those perceptions and to explore more meanings, more clarifying ideas were elicited as asserted in the previous phase in detail. Summary of the interview elicitations about Trust are as follows:

- (M-TR-1) Security of payment information namely credit cards' info is the most important factor in Trust.
- (M-TR-2) Trust is generally perceived as reputation/familiarity of the site.
- (M-TR-3) As the institutionalization is enabled by the e-shopping sites, perceived Trust increases.
- (M-TR-4) Security certificates are not credible enough to convince people that shopping sites are secure.
- (M-TR-5) Customers want to be sure about the delivery of the product.
- (M-TR-6) Customer service provided by the sites enhances the probability of success by enhancing trust.
- (M-TR-7) As people get more familiar with the electronic shopping in broad sense, their Trust against electronic shops increase.
- (M-TR-8) As the affinity with Internet shopping including techniques and procedures used increases also the Trust increase.

Analyzing quantitative results and interview elicitations together, following results and implications (I) can be given:

• (I-TR-1) Reputation of the site: Trust is generally perceived as reputation of the site and people generally choose the familiar sites and mostly known sites for shopping. It is seen that trust and familiarity are intertwined semantically from the perspective of users. A strong company reputation contributes to the trust building strategies effectively. This is one of the most important challenges that start-up companies face. Since people prefer mostly known or famous sites to purchase an item, in order to enhance the perception of the trust, vendors should increase the customers' awareness for their site by advertisement campaigns.

- (I-TR-2) institutionalization: Institutionalization with more structured organization makes companies seem more official and reliable for the customers, by this approach, companies may attract more customers. As related with this issue, professional look of the website design can improve the perception of institutionalization. In the web site design, policies and procedures to follow during and after purchase about the payment, refund, warranty issues, point of contact information in case of any need and government permissions should be incorporated on the web site neatly.
- (I-TR-3) Credit card info security: News and rumors or experiences about the leaking personal or payment info are the main obstacles that hinder people to get accustomed to Internet shopping. Besides the safety of payment information, people want to be sure about the protection of their personal info and purchase information. Since online shopping is mainly executed by using credit cards, companies have to implement security measures in order to gain confidence of the customers. These security measures should be made apparent by the vendors on their web sites in order to persuade the potential customers that transactions are reliable without any exception. Since people are hesitant to use credit cards in order not to disclose their info, one-time used virtual cards should be employed in order to gain customer trust. If people are hesitant to use credit cards for online transactions, paying at the door is also an another good option for vendors to persuade the people who have not enough trust against electronic shopping.
- (I-TR-4) Security certificates: Security certificates presented on the shopping sites may not satisfy the potential customers, so different mechanisms should be invented besides security certificates or credibility of the security certificates should be enhanced by various means. Third party assurance companies may be utilized to convince the potential customers about the reliability of the site.

- (I-TR-5) Delivery of the product: Since in online shopping it is not possible to see the vendor, customers are hesitant if the ordered product will come on time and as its promised. Therefore, companies have to construct mechanisms to influence customers in a way that ordered product will be provided and the product will be delivered on time with an agile service.
- (I-TR-6) Warranty of the product: One of the caveats by the customers for the Internet shopping is lack of warranty of products. Online vendors should convince the customers that qualified product will be delivered in preservation against any defects.
- (I-TR-7) Exchange and refund: In case any product comes with a defect or if the customer is not satisfied with the product, the vendor should get back the product and should explicitly state that the product will be exchanged with a new product or if the customer prefers it will be refunded without any hesitation. Placing clear exchange/refund policy on the web site and sticking it in the practice will enhance the probability of initial purchase of the potential customer who has lack of trust against electronic shopping.
- (I-TR-8) Customer services: Customers always want a good customer support especially in online shopping because of its inherent ambiguity and absence of human contact. One of the best solutions for this handicap is to make customers feel that they have an enduring care during both decision processes and/or after purchase. Before buying a product people should be informed very well about the product and after the purchase, people should know that, their problems with the product will be solved immediately. Functional call-centers for online purchases will enhance the perception of trust by the people.
- (I-TR-9) General familiarity for electronic shopping: Companies should not only make advertisements for their organizations in order to enhance familiarity, also they should motivate people about the electronic commerce

in general by cooperating for the common efforts to diffuse habit of electronic shopping into society. People who are motivated against e-shopping or who are familiar with electronic commerce will be more enthusiastic against electronic shopping than others who do not have any prior experience or familiarity.

- (I-TR-10) Internet forums and reviews: Since online customers do not have an advantage to touch to the product or goods anyhow, they assert that they have lack of trust against the companies and they have doubts about the quality of the product, in order to mitigate the risks they have while they are shopping or deciding to buy, rather than motivation by the e-shop, other people's comments and reviews are helpful. People refer to reviews and comments in the forums and products in order to evaluate the quality of the product and the electronic shopping site. People read the comments and review of the products; this seems to be very important for them for their purchase decision. Web sites should build feedback systems in order to grasp the feelings of the customers.
- (I-TR-11) Internet search ranks: Before buying or deciding to purchase an item from an e-shopping site, people search for the product for different models and more feasible prices. In addition, they assert that they do not depend on the search ranking results because they feel or assume that Internet search ratings may be manipulated by different means.
- (I-TR-12) Hybrid approach: One of the main obstacles is lack of confidence because of the virtual nature of the e-commerce. So, companies can set up some liaison offices in shopping malls in order to build the impression that customers can access to company physically.
- (I-TR-13) Third Party Assurance, Credit or Rating Organizations: In order to eradicate the side effects of reliance or trust problems it should be cooperated with third party organizations by startup companies as applied in

some other countries.

6.3.2 Enjoyment

According to results depicted in quantitative phase (Survey descriptive statistics):

- (S-ENJ-1) 61.01% get entertained while using electronic shopping sites.
- (S-ENJ-2) 61.79% prefer the entertaining shopping sites.
- (S-ENJ-3) 64.12% think that using Internet shopping sites is joyful.
- (S-ENJ-4) 52.51% use the Internet shopping sites to have good time.
- (S-ENJ-5) 60.23% feel more entertained in e-shopping than buying from a brick-and-mortar store.
- (S-ENJ-6) 39.77% do not perceive the e-shopping sites as interesting.

Results of hypotheses tests according to SEM analysis:

- **H10:** Perception of Enjoyment positively affects online shopping intention. (Accepted)
- **H11:** Perception of Enjoyment positively affects perception of Usefulness in online shopping. (Accepted)

Despite the fact that quantitative analysis indicates Enjoyment is second important factor having positive impact on "Usefulness" and "Intention to Buy", "Enjoyment" antecedents could not be figure out straightforwardly and apparently as in "Trust" issue just reviewing the descriptive results because descriptive give us the clue that people enjoy e-shopping, but they cannot elucidate the antecedents of enjoyment. In the qualitative phase; during the interviews, it was aimed to get the underlying facts of "Enjoyment" within the context of electronic shopping, and it was attempted to understand how people enjoy e-shopping. Primarily, it was seen that the term

enjoyment changes from classical meaning into somewhat different.

Summary of the interview elicitations about Enjoyment are as followings:

- (M-ENJ-1) The meaning of the enjoyment is beyond the basic joyful attitude or cheerful psychological state of mind.
- (M-ENJ-2) If the customers perceive the site as useful then they enjoy the site.
- (M-ENJ-3) As the customers believe that they perform an activity in an effective way then they perceive it as joyful.
- (M-ENJ-4) Even though the customers state that they like/enjoy fine pictorial presentation of goods or items, they also add that these audio-visual features of the sites do not affect their purchase decision.
- (M-ENJ-5) Besides the enjoyment, people get bored while surfing in the shopping sites if they do not have a clear purpose.
- (M-ENJ-6) Customers enjoy the site if the shopping sites have the goods within the scope of their interest area.
- (M-ENJ-7) As the people feel that they are concerned or focused on a product, they feel more satisfied and joyful.

Analyzing, quantitative results and interview elicitations together, following results and implications (I) are given as followings:

• (I-ENJ-1) Extrinsic motivation: For electronic shopping, enjoyment is not perceived as only a kind of pure joy or pleasure. As opposed to common belief that people have intrinsic enjoyment or motivation for online shopping, it is apparent that, nowadays people enjoy online shopping mainly because of the extrinsic motivation. People prefer online shopping not because they feel

cheered in classical means like hobby or game, but they perform it in order to gain some advantages and this extrinsic motivation entices them to visit online shopping site and to purchase an item. Therefore, online shopping sites should focus on extrinsic motivation increasing measures in order to attract customers.

- (I-ENJ-2) Effectiveness and usefulness: As our era is focused on effectiveness and efficiency and optimal routes or activities are extolled by everyone, people have tendency to behave in a way having useful outcomes in any activity. As people feel that they are doing something useful and effective they have tendency to perceive it as useful and this perception increases the enjoyment level. If people feel that they are purchasing the qualified product with good price in order to satisfy their needs, they enjoy shopping. Therefore, in order to make customers feel that customers are doing something effective, e-shopping companies should devise ways in their web sites or procedures to persuade that they commit to enable customers to buy in the most effective way. Online shopping companies may exploit this fact and they may use it in their advertisement campaigns.
- (I-ENJ-3) Need for physical touch: In Internet shopping customers want to feel the physical goods as they do and enjoy in brick-and-mortar shopping. Internet shopping sites should devise or implement ways to reflect the real world realities in order to enable the feel of reality. Besides the technological ways, vendor may give the nearest address for the products, like name or location of brick-and-mortar shop where the potential customer may see and feel the physical goods.
- (I-ENJ-4) Pictorial representation: Enhanced pictorial representation of goods sold in online shopping make them more attractive and it motivates potential customers to shop online. Also, interface quality also affects people in a positive way. Considering those facts, Internet shopping companies

should also focus on pictorial representation of goods and a qualified web interface.

- (I-ENJ-5) Detailed information about the product: Internet shopping sites should define or advertise the product as detailed as possible, in order to clarify the functionality of the product for the customers.
- (I-ENJ-6) Focus on a specific product: Focus on a specific product increases the enjoyment. Customers should be directed into specific product and people should be targeted in advertisement campaigns by using specific product. Rather than one-shot searching, in order to make people feel that they are getting more input from the same type of product alerting and/or constant information providing mechanisms for the same type of product can be set up.
- (I-ENJ-7) Decision support: One of the problems potential customers face is the boredom while they are surfing on the Internet. Inability to handle much information and having no purpose enhances the boredom. Considering this, sophisticated comparison mechanisms like information classification and representation techniques should be developed and integrated into the sites.
- (I-ENJ-8) Querying the product: Ability to perform to query products in detail increase the enjoyment. Customers enjoy spending time on analyzing the query results for the same type or functional products. Web sites should provide filtering mechanisms to offer the best product the customer is looking for.
- (I-ENJ-9) Focus of interest: If people focus on an area rather than surfing on the various Internet shopping sites, it enhances the feel of the enjoyment and customers feel more satisfied. Therefore, companies can specialize on specific interests to motivate customers with specialized interest. Products can be classified according to focus of interest on the web sites to attract

customers.

6.3.3 Store Familiarity

According to results in quantitative phase (Survey descriptive statistics):

- (S-FAM-1) 93.50% hear names of some Internet shopping sites frequently
- (S-FAM-2) 78.34% tell their acquaintances abut some well known electronic shopping sites.
- (S-FAM-3) 74.44% encounter ads on the mass media about Internet shopping sites.
- (S-FAM-4) 78.86% think that they are familiar with electronic shopping sites.
- (S-FAM-5) 81.85% assert that in their near environment, it is mentioned about some of the electronic shopping sites.
- (S-FAM-6) 71.32% see the news about the Internet shopping located in the mass media .

Results of hypotheses tests according to SEM analysis:

- **H6:** Familiarity with the Internet shopping sites positively affects online shopping intention. (Accepted)
- **H7:** Familiarity with the Internet shopping sites positively affects Perception of Usefulness. (Accepted)

As seen above, in the quantitative phase, it is apparent that people get familiar with web sites via mass media and their friends. Also, they state that they talk about some electronic shopping sites in their near environment. As another important factor influencing usefulness and intention, in the qualitative phase, it is attempted to understand how really this familiarity forms and what are the real effects of

familiarity on electronic shopping behaviors.

Summary of the interview elicitations about familiarity are as followings:

- (M-FAM-1) Customers generally tend to buy from famous or familiar sites.
- (M-FAM-2) People generally get familiar with the sites via their friends.
- (M-FAM-3) Customers generally tend to search for the product in the Internet for the best price but at the end, they buy from the store they are familiar with.
- (M-FAM-4) Potential customers do not depend on Internet search results rankings.
- (M-FAM-5) Mostly known e-shopping sites are trusted because they are believed to be institutionalized.
- (M-FAM-6) Despite the common belief that spam mails and pop-ups are considered as useless, they have considerably great role in making people familiar with the shopping sites.
- (M-FAM-7) Customers generally monitor or track the forums for reliability and service quality of the Internet shops.

Analyzing the interview results and quantitative findings together, following evaluations and implications are given:

• (I- FAM-1) Familiarity: People, before deciding to buy any product from the e-shopping sites, search for the best price in the Internet from various sites but at the end, they have tendency to buy from a familiar shopping site although the price is possibly higher as they have more trust on familiar sites. Considering this, start-up companies should try to build up trust of the customers by enhancing the familiarity of their web site.

• (I-FAM-2) Advertisements: Internet advertisements have great role to make people familiar. Although people may assert that they are not so happy with the Internet advertisements and spam mails, when they are given chance to explain their perceptions in detail, they accept that Internet advertisements published on the Internet magazines or newspaper ads affect their perception about the potential sites, they somehow remember that they saw the Internet sites on the Internet advertisements. So, companies should take this reality into consideration and invest some of their resources on the Internet advertisements.

As it was stated in the Trust analysis, mainly Trust is perceived as a function of Reputation/familiarity of the web site. Hence, overlapping issues were given under that title beforehand.

6.3.4 Perceived Usefulness

According to results in quantitative phase (Survey descriptive statistics):

- (S-PU-1) 75.30% can find products cheaper than the brick and mortar shops.
- (S-PU-2) 83.54% thinks that E-shopping enables them to save time.
- (S-PU-3) 74.78% can find every kind of product in e-shopping.
- (S-PU-4) 72.27% can access all the information about the product they need.
- (S-PU-5) 72.27% perceive the e-shopping as useful in general.
- (S-PU-6) 67.94% think that e-shopping has more advantages than other means.

Results of hypotheses tests according to SEM analysis:

• **H3:** PEOU positively affects online shopping intention. (Accepted)

Quantitative results make clear that people see electronic shopping useful in general from the perspective of price, time saving and product information. In the interview phase, this perception was attempted to be elaborated and also it was tried to understand what other antecedents may have impact on the perception of usefulness.

Summary of the interview elicitations about Usefulness are as followings:

- (M-PU-1) E-shopping sites are perceived as useful in general.
- (M-PU-2) The predominant factor for e-shopping is price.
- (M-PU-3) E-shopping sites are perceived as useful especially if people reside in the geographically secluded regions.
- (M-PU-4) E-shopping sites are perceived as useful because they facilitate the daily life with simple online transactions.

Analyzing the interview results and quantitative findings together, following evaluations and implications are given:

- (I-PU-1) Perceived as useful: Usefulness is one of the most important factors in adoption of the electronic shopping sites. People follow some forum or recommendation sites to find if the focused site is perceived as useful or not by other customers. For the e-shopping sites, in order to increase the adoption by the people, it is urgent to them persuade or convince them that that web shopping site is useful. So, usefulness issue to be solved by technological solutions rather than just marketing oriented approaches. In addition to that, e-shopping companies should encourage their customers to share their good experiences in forum sites or by other means to disseminate their good practices.
- (I-PU-2) Simplification of shopping: People have an impression that electronic shopping makes conventional shopping easier, like accessing

various goods in a very short time and without physical constraints. Consequently, companies should emphasize in their advertisement campaigns that they offer easier and more comfortable shopping experiences than brick-and-mortar stores.

- (I-PU-3) Geographical constraints: E-shopping sites are perceived as useful especially people are in the geographically secluded places or if the access to goods are problematic. People assert and it is a known fact that in big cities, anyone can access any goods just by going to shopping malls and they can find, compare and buy anything if they dedicate some time and effort. In contrast, in particularly in some underdeveloped and secluded areas, customers cannot satisfy their needs because of the market conditions of those places. If they have Internet connection they use Internet to buy items they want; on the other hand because of the some lacking delivery systems people may have hesitancy to buy from electronic shopping sites in those areas. It should be noted that once anyone buys anything via Internethe gets used to it and he continues to shop. In order to attract the potential customers, companies should direct some of their efforts into those geographically secluded areas. So, some innovative solutions for isolated areas may enhance the adoption of the electronic shopping. In this regard, shipping facilities should be enhanced like using local stock depots cooperating with neighborhood wholesalers.
- (I-PU-4) Price: For almost all kind of purchases in classical or modern manner, price is the predominant factor. "Perceived Usefulness" can be fused into one term as price for e-shopping as in others. Thus, companies should invent ways to make agreements with the wholesalers to decrease the price. In addition to that, companies could make some discounts for some specific products for a limited time in order to attract potential customers. Therefore, for the startup companies it is very hard to compete with other companies because of the lack of financial power. Accordingly, for the startup

companies rather than competing with all others it is imperative to be specialized in a focused area, this customization or specification may cause success.

- (I-PU-5) Time saving: One of the most important reasons that people prefer e-shopping is saving time. It can be cooperated with the local shipping services or stores in order to enable shipping or delivery time as short as possible. If short delivery time is accomplished, vendors should emphasize this feature in their advertisement campaigns to attract new customers.
- (I-PU-6) Customization: B2C e-commerce sites should utilize geographical information systems for customization. For example if the customer goes to a coast or near sea, the services may make discounts on marine related products

6.3.5 Subjective Norm

According to results in quantitative phase (Survey descriptive statistics):

- (S-SN-1) 57.38% think that their friends' attitudes are positive towards Internet shopping.
- (S-SN-2) 68.85% assert that their friends use Internet shopping sites.
- (S-SN-3) 49.83% state that their friends would advise them to use online shopping.
- (S-SN-4) 29.77% say that in their near social environment, it is expected from them to use the Internet to purchase as others.
- (S-SN-5) 70.02% say that Internet shopping is mentioned among their friends.
- (S-SN-6) 36.83% state their friends would think that they should use the Internet shopping.

Results of hypotheses tests according to SEM analysis:

- **H8:** Positive Subjective Norm positively affects online shopping intention. (Rejected)
- **H9:** Positive Subjective Norm positively affects perception of usefulness in online shopping. (Rejected)

According to survey results, friends are positive towards e-shopping. Those friends use and advise e-shopping channel. However, majority of the respondents say that in their near social environment it is not expected from them to use the Internet to purchase as others. In addition, SEM analysis indicated that others do not have impact on intention to buy from an e-shopping. Despite those facts, in the qualitative phase it was attempted to understand if it is really the case and what may be the possible impacts of others in B2C process.

Summary of the interview elicitations on Subjective Norm are as followings:

• (M-SN-1) People do not adopt the e-shopping site but they may adopt a product by other referents.

Analyzing the interview results and descriptive finding together, following evaluations and implications are given:

• (I-SN-1) Others' role in familiarity: People state that they prefer the same known sites because of the habits unless it is advised by other people. Although not affected by others in about the e-shopping in general sense, friends has role in making people familiar with e-shopping sites. People get familiar with sites mainly via friends and they generally take their friends' prior experiences in Internet shopping especially if those friends did perform an online shopping. Online shopping companies should devise ways to incorporate social structures into their advertisement campaigns.

• (I-SN-2) Referents for specific products: Friends are important referents for specific products sold in specific shopping sites. Although people are not affected by other people or they do not have much impact in general sense about the e-shopping, others may have impact to introduce some specific products to his acquaintances. For example a person does not e-shop considering that all others are shopping, but if he is familiar with a specific product he may have advice to new potential customer and the customer can make his final decision. So, people can be utilized as advertisement or volunteer selling agents for new customers.

6.3.6 Perceived Ease of Use

According to results in quantitative phase (Survey descriptive statistics):

- (S-PEOU-1) 84.44% think that it is easy to shop in Internet shopping sites.
- (S-PEOU-2) 80.76% think that it is easy to use Internet shopping sites.
- (S-PEOU-3) 77.34% can easily find the products that I want in the Internet shopping while searching in the sites.
- (S-PEOU-4) 80.95% I can learn using Internet shopping sites in a short time
- (S-PEOU-5) 68.80% think that process of transactions in e-shopping sites is clear and understandable.
- (S-PEOU-6) 87.87% can navigate easily in the Internet shopping sites

Hypotheses were:

- **H1:** Perceived Ease of Use positively affects online shopping intention (Excluded)
- **H2:** Perceived Ease of Use positively affects perception of Usefulness in online shopping (Excluded)

Despite the fact that in the quantitative phase, PEOU could not be factored out, it is a known fact that the term PEOU is still articulated through academic and daily discussions. In order to understand this phenomenon, PEOU questions were included in the interviews as given in detail in the previous chapter.

Summary of the interview elicitations about Perceived Ease of Use are as follows:

• (M-PEOU-1) The definition of ease of use shifts from conventional meaning to having more effective mechanisms like decision making and search functions for customers' needs.

Analyzing the interview result and descriptive statistics together, following evaluation and implication is given:

- (I-PEOU-1) Evolving definition of PEOU: PEOU is still an important dimension with an evolving definition from the customers' perspective, the main intent in identifying the ease of use function is new rather than just using as an "easy to drag and drop" graphical interface. Because of the new huge markets, new production techniques and competitiveness between producers, many brands have many models or types in the same functional goods considering the different needs of the people. Therefore, new design paradigm should not only consider the classical paradigm for PEOU like drag and drop type graphical interfaces, electronic shopping sites should enhance their searching and comparing functions in order to support the decision making problem of the customer. It can be asserted that, "Effective incorporation of Decision making enhancing mechanisms" is new definition of PEOU in electronic shopping
- (I-PEOU-2) Familiarity affects PEOU: If people are familiar with the site they feel that usage of the site is easy.

CHAPTER 7

DISCUSSION

In the previous chapter, syntheses of previous phases' findings were given for each of the research factor as implications. In this chapter, findings and implications of the research are discussed by comparing current literature.

7.1 Trust

It is apparent that Trust is an indispensable element of e-commerce environment (Brown and Jayokady, 2008; Park et al., 2004) and people like to feel secure for their transactions and private information while e-shopping (Kim et al., 2009). Perceived low risk enhance the possibility adoption by increasing the trust against target shopping site (Yen, 2010). Our findings are also in the same lane with those studies. Despite the increase in Trust on electronic shopping in general, consumers still feel not-secure for all of the sites; they are generally favor of a few sites to purchase because of their prior experience. As Wang and Emurian (2005) asserted, Trust is a complex and abstract term to define clearly and it is also a subjective matter and can change relatively according to different conditions. Therefore, in our research, possible trust enhancing recommendations rather than clear cut definitions were given.

Barkhi et al. (2008) state that perceived security is not a predictor of attitude, many security issues have been enhanced recently and many customers feel secure and

have trust on electronic shopping sites. This generalization, namely increase in Trust may not be valid for all of the potential customers and sites despite the technical security mechanisms like Secure Socket Layer, authentication solutions with id and enhanced passwords. Creating trust perception by different mechanisms is as important as technical attributes. Unless e-shopping companies convince customers that their sites have high security standards, it may not be easy to convert those reluctant people into enthusiastic customers. Customers do not rely on even price comparison sites; they think that even the search results can be manipulated in favor of some e-shops. This attitude namely lack of trust against Internet search results and price comparison sites may be the extension and the reflection of general problematic perception against Internet.

In electronic shopping site design there is a general tendency to build highly automated autonomous web sites, but it is also apparent that full automation does not satisfy basic human needs like communication with real sellers. Considering this need, rather than using just technical security measures, there should be human-in-the-loop points like customer support agents (Fang et al., 2011) in order to meet this basic need. Hybrid approach or multi-channel shopping (Hsiao et al., 2012) using classical brick-and-mortar stores with virtual ones may also enhance the trust. Initial acceptance of using e-shopping sites needs promotion of technology culture within the society as people get familiar with the technology their willingness to shop from e-store increase as Crespo and Bosque (2008) state. Regulatory measures taken by governments and chambers are also vital for building overall trust against e-shopping.

To build confidence for online retailers, electronic brokerage firms can be used to encourage prospective customers to experience in simulations like "test drives" to lessen the consumer concerns like Vijayasarathy (2004) advises. Reputable third parties may be attributed to build the trustworthiness of a shopping site (Lim et al., 2006), but general problematic attitude against Internet inhibits the effective utilization of those companies.

According to our research, Trust and Store Familiarity are perceived by consumers as intertwined as Eastlick et al. (2006) assert. Trust is an enabler by vital link from willingness to actual buying behavior and this issue is imperative for the sites without an established reputation as Lim et al. (2006) claimed. High reputation of the seller increases the probability of purchase by many consumers(Xu et al, 2010). This fact constitutes a great handicap for the start-up-companies. Customers tend to perceive mostly known sites as being trustworthy. Enhancing the reputation of an especially a startup company may enhance the likelihood of success. Being one of the most important antecedents of Trust, company owners should devise methods for building reputation in order to be able to compete with rivalries.

It is highly important to motivate people for the first purchase as Kim et al. (2003) assert. After the first purchase, there is a dramatic increase of trust against that site. Because, as Gefen et al, (2003) assert, trust is somewhat a social antecedent and as people get familiar with e-shopping site, they rely on sites more than their initial experiences. In other words, despite the fact that trust has great impact on consumer's purchase intention it is more significant in their first purchase rather than re-purchase intention. On the other hand, it should be pointed out that, bad past experiences inhibit the adoption of electronic shops. Therefore, as consistent with Kim and Ahn's (2007) finding, bad past experiences should be investigated and the causes of the negative perceptions are needed to be mitigated.

7.2 Enjoyment

Besides Trust, Enjoyment is the second important factor in our research, similar to Ha and Stoel's (2009) results. Within the context of this research, customers enjoy electronic shopping. There are two types of motivation as extrinsic and intrinsic ones in e-shopping activity. In the web-based, consumer shopping environment, the primary intrinsic motivating factor is shopping enjoyment. That is users are motivated by the holistic experience of interacting with computer technology in a manner that promotes enjoyment and perhaps as Garrity (2007) asserts. It also

captivates their attention and maintains their curiosity. Lingyun and Dong (2008) assert that enjoyment is assumed as having direct relation with intrinsic motivation namely performing an activity for the purpose of doing it, like personal humancomputer interaction is characterized by as playful and exploratory. Hausman and Siekpe (2009) go further and state that customer management should understand "consumers' minds and hearts". On the other hand, as the technology develops, the term "enjoyment" needs to be redefined for the IT systems. When the mentioned subject, namely enjoyment, is examined in a comprehensive manner, it is recognized that currently, the term "enjoyment" does not address the same definition as it was used in the last decade. In our research, we support the Kang et al. (2009), claiming that hedonic and utilitarian benefits can be increased by enhancing the perception of effectiveness. In this manner, Heijden and Verhagen (2004) point that, purchase decision is mainly determined by needs and financial power. They also add that perceived enjoyment is very important especially for non-work systems like videogaming and Internet shopping. Nevertheless, as others, they cannot give how this intrinsic motivation forms, so rather than relating the enjoyment with intrinsic motivation, it may be valuable to think about the extrinsic motivation – utilitarian perception, finding the right product and cheapest product for it- as well as intrinsic motivation for the e-shopping. Because, being different from video-games which require immersion of people into systems, shopping needs to have some utilitarian dimension and perception.

Kim et al. (2007) emphasize that enjoyment has positive impact on staying on the web site and design effects satisfaction. Shen and Khalifa (2012) assert that customers can be affected by effective web sites for impulsive purchase. However, according to qualitative analysis results, we have to emphasize that, people enjoy eshopping if they have a determined intention to do that activity. For example, as in stated in interviews by the customers, if they do not have a specific expected benefit from the shopping site, while doing the window-shopping, they get bored and tired using it despite the best graphical interface and multimedia features. In other words, without an extrinsic motivation it does not seem possible to motivate people for

purchase. Enjoyment is perceived as a utilitarian behavior as opposed to this general view for our context. People enjoy an activity, if they think that performance is useful. Hwang and Kim (2007) implies that containing precise and specific product search functions may cause the success of e-shopping site which is parallel with our findings.

In order to enhance extrinsic motivation, detailed product information, decision support systems or focusing on a product should be provided. From the utilitarian perspective, customers get bored while wandering around the shopping sites without any clear purpose or they enjoy an activity if they do something effective. Our search results show that extrinsic motivation is very important in forming enjoyment against electronic shopping. On the other hand, it cannot be claimed that intrinsic motivation is negligible. There should possibly be relation between extrinsic and intrinsic motivation. Only utilitarian approach cannot explain the immersion in which a person feels a holistic sensation during an act according to Flow Theory (Csikszentmihalyi, 1975). Utilitarian behavior can be taken as an antecedent of the hedonic behavior. In other words, utilitarian and hedonic approaches are not substitutes but they can be taken as rather complementary principles in designing and building shopping sites. Especially in technology centric events, it may not be possible to discriminate between intrinsic and extrinsic behaviors. For example, intrinsic motivations cannot be explained just by hedonic attitudes as they are intertwined with utilitarian acts. Because, extrinsic motivation causes intrinsic type behaviors and activities. Therefore, it is highly necessary to explore the extrinsicintrinsic process. Technological solutions should enable both hedonic and utilitarian views which enable immersion of the individuals into systems.

7.3 Store Familiarity

Our research indicates that customers are familiar with some sites and they prefer shopping from those sites but they cannot give detailed explanations how this knowledge or familiarity formed. Therefore, various technological brand familiarityenhancing mechanisms even mail advertisements can be used for that purpose. According to Heijden and Verhagen (2004) familiarity has a weak relationship with online purchase decision. They claim that rather than spending money on store familiarity investment, efforts should be spent on more enjoyable and useful web site should be preferred. This claim seems accurate for experienced or old companies with a built reputation, but here is the point that, for initial experiences, people need familiarity to use that start up e-shopping sites. As Palvia (2009) claims, positive word of mouth attracts more customers as well as preserving the old ones to the shopping site and people go to same sites mechanically and without thinking on it so much because of the force of habit. It is also a fact that companies should prevent customers spreading their dissatisfaction via negative word of mouth (Fang et al., 2011).

Customers generally feel uneasy about purchasing from the unknown electronic shopping sites and customer-site interaction increases as the buyer-customer relation is extended (Kim and Ahn, 2007). This issue also indirectly affects Trust in the long term. Because, as Vance et al. (2008) state, high brand familiarity increase the trust indirectly. People generally search in a product oriented way and after searching in the Internet; they usually aim to buy from the sites which they are familiar with. It is important to underline that, despite the fact people get familiar with a designated site; their usage of a specific e-shopping site cannot be supported or endorsed by others. Customers prefer familiar sites despite the results of different price comparison sites. In this behavior, bad past experiences and impressions are main determinants for going to familiar sites. There is an intricate point that people generally shop from familiar sites and they do not rely on price comparison sites but on the other hand, this lack of trust is not valid for shopping sites reviews and forum sites. Online discussion forums are being increasingly utilized by the electronic shoppers in order to exchange information about a product or company (Kaiser and Bodendorf, 2012). This privilege namely reliance on forum and review sites should be taken into consideration and utilized by the electronic shopping companies.

7.4 Perceived Usefulness

Usefulness is an important dimension in electronic shopping. In our research, eshopping sites are perceived as useful. Customers are aware of product variety, low prices; easy access which can be attributed to electronic shopping. The main handicap for this fact is the need for the ability to compete against with older companies from the usefulness perspective. For novice users, adoption process is important like motivating them against a designated shop. For inexperienced user, first time is very important to understand these shopping channels' usefulness. Because, inexperienced customers using mainly traditional channel are likely to give up shopping from electronic shops because they perceive it as not quicker, cheaper and useful (Jarvelainen, 2007). In order to increase the adoption of e-shopping sites by the people, it is urgent to persuade or convince them to perceive e-shopping sites as useful. As an advice, special campaigns involving innovative technological solutions like cooperating with social network sites should be utilized in order to increase selling rates by enhancing the usefulness perceptions. Since perceptions of first time user is not the same as with the experienced user (Hernandez, 2009), for the startup companies it is very hard to compete with other competitors in the harsh market conditions. It is imperative for startup companies, rather than competing with all others, to be specialized in a focused area. Hence, this customization or specification would bring success.

Another fact is that, usefulness is not a one-dimensional and all valid term and it evolves by the time. Definition of usefulness changes according to time and context. Considering this fact, different customization strategies have to be implemented by the company owners. One of the most important antecedent of the Usefulness is time saving which has been evolving. Delivery times have to be shortened by different solutions like usage of local depots. In order to attract customers, they have to focus on creating value or differentiating their offering from other retail media. Users of an Internet shopping mall consider the web site not merely as an information system but also as a virtual store which provides the full stages of purchasing process of finding

order and receiving. The practitioners seeking to increase the visits of user and purchasing through their web sites should emphasize not only the online presence of Internet shopping mall but also the back office operations such as product sourcing and delivery services.

7.5 Subjective Norm

Being similar to different researches (Hansen et al., 2004), quantitative phase indicates that Subjective Norm does not have significant impact on the purchase intention. On the other hand, it should be refrained from normative approach by sticking the assertion that referents do not have any impact to buying. Hsu and Chi (2004) claim that interpersonal and social norms have indirect effects on behavioral intention through attitude. According to our qualitative findings, although others do not have direct effect on electronic shopping in general sense, for a specific product purchase, people may take other referents' ideas and words-of-mouth about a specific web site into consideration.

7.6 Perceived Ease of Use

In quantitative phase, Perceived Ease of Use (PEOU) could not be factored out. After the qualitative phase, it was understood that PEOU is still an important dimension affecting the purchase decision but the definition of this dimension seems to evolve and as Manganari et al. (2011) underline it should be investigated in different settings. As people have intent to use a system, they also think the target system as easy to use, but their main intent in identifying the PEOU function is somewhat different from just simple usage of a classical graphical interface. PEOU in conventional meaning has great impact on technology acceptance, recent developments in technology, brings the need for effective search mechanisms and comparison tools by evolving the definition of PEOU term. New design paradigm, concerning PEOU, should not include simply the usage of the system, because the

needs by the people increase as the technology advances. From the technological perspective, it can be concluded that new definition of ease of use includes more sophisticated and intelligent mechanisms and techniques to search and classify the products for the decision making problem. On the other hand, it should be refrained from giving up classical PEOU design paradigms for electronic commerce applications. Because, despite the fact that conventional meaning for ease of use has changed, if it is not applied appropriately it will possibly end with people rejecting to use that shopping site. In other words, classical PEOU principles should be applied in design paradigms as a default attribute.

CHAPTER 8

CONCLUSION

This chapter concludes the dissertation. In this chapter, summary of the study, potential contributions from different perspectives, limitations and future work proposals will be given consecutively.

8.1 Summary of the Study

In this thesis, we intended to develop an adoption model for B2C E-commerce and to propose implications for practitioners in an exploratory way. Research has two perspectives mainly as quantitative and qualitative. Dimensions of the model were determined by interviews and systematic literature review as being Perceived Ease of Use, Perceived Usefulness, Trust, Store Familiarity, Subjective Norms, Enjoyment and Intention. After hypotheses formulation and model development, a questionnaire as a survey instrument was constructed by adopting from the current literature. It was validated and revised by a pilot study with 50 respondents. In the main data collection phase, inputs of 1115 respondents were taken into evaluation and the model was tested with PLS-SEM (Partial Least Squares-Structural Equation Modeling). Trust was found to be the most important factor in the model for the perception of Perceived Usefulness. Enjoyment and Familiarity comes as the second important factors impacting on Perceived Usefulness. On the Intention factor, Trust is the first one, and then comes Enjoyment, Perceived Usefulness and Familiarity respectively. PEOU could not be factored in quantitative analysis. Therefore, PEOU

was taken out from the model. In the qualitative phase, in order to explore the meanings and underlying factors for each relation between factors, one-to-one interviews were held and findings of the interviews were evaluated by using Interpretative Phenomenological Analysis.

Overall analysis indicates that Trust is generally perceived as reputation of the site and people prefer the familiar and well-known sites to purchase. As people get familiar with the electronic shopping sites, Trust against those shops increase. Enjoyment was found to be beyond the basic joyful attitude or cheerful psychological state of mind. In other words, for our context, enjoyment can be defined as a kind of extrinsic motivation rather than an intrinsic one. Therefore, customers enjoy the site if it is within the scope of their interest area and if they perceive the e-shop as useful. Besides the enjoyment, people get bored with much information which they think that they cannot handle and if they do not have purpose while surfing in the shopping sites. Customers generally tend to buy from famous or familiar sites. Despite the fact that people generally get familiar with the sites via their friends, they do not generally make buying decisions by the impact of others. People do not adopt the e-shopping site but they may adopt a product by other referents. It is another interesting finding that spams and pop-ups have considerably great role in making people familiar with the shopping sites. E-shopping sites are perceived as useful in general but the predominant factor for e-shopping sites is still price. The definition of perceived ease of use shifts from conventional meaning to having more effective mechanisms like decision support and search functions for customers' needs.

8.2 Contributions

This research, to the best of our knowledge, is the first attempt to merge qualitative and quantitative techniques with a systematic and well defined mixed methodology in B2C e-commerce adoption literature.

Another contribution to the body of knowledge is the methodology it follows. In these types of assessments there is an ambiguity of methodology, but our research shows step by step approach for every phase of the study to be used as a framework for other prospective research in information systems discipline. This research merges qualitative and quantitative techniques in a precise and systematic way. Findings of the PLS as a strict statistical technique were taken into consideration together with the open-ended semi-structured interview elicitations by the help of interpretative analysis. Utilization of IPA as a complementary to PLS, does not take the person as a passive one selecting one of the choices asserted in the clear cut surveys but they can elucidate their feelings acknowledging that people see model dimensions as a phenomenon.

From the B2C E-Commerce perspective, rather than sticking the definitions of dimensions, evolving operational definition of factors and the underlying issues about each factor are proposed. Trust, Enjoyment, Familiarity, Usefulness, Ease of Use and Subjective Norm factors are analyzed in detail from the perspective of users and their definitions in this context are enriched. The research involving both subjective and objective perspectives proved that as the interaction with the technology gets enhanced, the definitions evolve from their initial meanings into new ones.

Another contribution is that, the practitioners especially startup companies can utilize findings and implications of this thesis as a roadmap to succeed in the highly competitive and harsh market conditions.

8.3 Limitations and Future Research

In this study, research began by interviews with experts and followed a strict statistical methodology and the findings of the quantities phase was attempted to explore by qualitative analysis. Although, in the qualitative phase, during interviews, people were allowed to digress from the frame in order to illuminate possible

neglected issues, evaluation was within the context of research dimensions determined in general.

Survey was conducted by giving link on bookstore web page, despite the generic questions; respondents may be affected by their bookstore experiences.

Although respondents' age and education level overlaps with the B2C E-commerce target audience in our research, different age, education and profession groups can be compared in prospective studies.

Despite the fact that the technology used in B2C e-commerce web sites are the same on the world, impacts of local differences like economics and cultural characteristics can be explored in the future studies.

As complementary to this work, behaviors of the customers can be investigated by ethnographic research methodologies like task based applications utilizing eye-tracking technologies to reach to cognition-based findings within the context of human-computer interaction discipline. With this approach needs and attitudes of the online customers can be gained effectively in future researches.

8.4 Conclusion

In this research, we intended to reach to two objectives:

- To propose a perception based conceptual model to understand the contemporary socio-technical phenomenon,
- To put forward technological implications for practitioners by analyzing the up-to-date factors.

We followed a mixed methodology involving quantitative and qualitative analyses and reached to those objectives.

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APPENDICES

Appendix A: Preliminary Literature Review

Research	Purpose of the Model	Model	Findings	Variables Studied
Crespo and Bosque, 2008	B2C e- commerce adoption model	Extension of theory of planned behavior - adding innovativeness	e-commerce acceptance is determined by attitude, subjective norm and personal innovativeness	Attitude, Subjective Norm, Perceived Control, Innovativeness.
Kang et al., 2009	B2C e- commerce post adoption model to explain continuance intention (repurchasing intention)	Extension of expectation-confirmation model	Self-image congruity and regret plays a key role in forming post adoption beliefs for repurchasing	Regret, Self image Congruity, Confirmation, Perceived Enjoyment, Perceived Usefulness, Satisfaction, Continuance Intention, Past Use.
Bhattacherjee, 2001	B2C e- commerce post adoption model to explain repurchasing intention	Extension and modification of TAM adding satisfaction, confirmation, loyalty incentive, continuance intention	Continuance intention is determined by initial experience satisfaction and perceived usefulness	Confirmation, Satisfaction, Perceived Usefulness, Loyalty, Incentive.
Hsu and Chi, 2003	B2C e-commerce adoption model	Extension of Theory of Planned Behavior adding control behaviors as web specific self-efficacy and general Internet self-efficacy	Web specific Self- efficacy has a direct effect on usage of e-service. Mass media has not effect on e- service usage	Web specific Self Efficacy, Perceived Controllability.
Kim et al., 2007	B2C e-commerce decision making model	A new model based on TAM's intention with trust, risk, benefit dimensions	Trust, perceived risk, and perceived benefit has a direct impact on purchase intentions and decisions,	Trust, Risk, Benefit

Chen et al., 2007	B2C e-commerce acceptance model	Extension of TAM by adding media richness, perceived interactivity and decision satisfaction	Media Richness and Perceived Interactivity has significant impact on perceived ease of use. Perceived Interactivity has significant impact on perceived usefulness and decision satisfaction has significant impact on attitude toward	Perceived Ease of Use, Media Richness, Perceived Usefulness, Decision Satisfaction, Perceived Interactivity, Decision Satisfaction.
Liu and Wei, 2003	B2C e-commerce adoption model	Extension of TAM by adding dimensions Online Features (System Quality, Information Quality, Service Quality), Offline Features (Product Quality, delivery Service)	the system Online Features(System Quality, Information Quality, Service Quality) has a positive impact on ease of and usefulness, Offline Features (Product Quality, delivery Service) has positive impact just usefulness	System Quality, Perceived Ease of Use, Information Quality, Service Quality, System Quality, Information Quality, Product Quality, Delivery Service, Perceived Usefulness.
Lin, 2007	Comparison of TAM with decomposed TPB	Decomposition of TBP (Theory of Planned Behavior). Dimensions: Attitude(Perceived Usefulness, Perceived Ease of Use, Compatibility), Subjective Norms(Interpersonal influence, External influence), Perceived behavioral Control(Self-Efficacy, Facilitating Conditions)	Decomposed TBP (theory of Planned Behavior) provides much more predictive than TAM regarding the information about consumer intentions to shopping online	Perceived Usefulness, Perceived Ease of Use, Compatibility, Attitude, Subjective Norms, Interpersonal influence, External influence, Self-Efficacy, Facilitating Conditions, Control.

Hernandez et al., 2009	To compare the differences that exist between the adoption of ecommerce by potential purchasers and the acceptance of the channel (re-purchase decisions) by experienced ecustomers	Extension of TAM by adding dimensions perceived self-efficacy	In post adoption stages the impact of perceived ease of use cease to exist.	Use, Perceived Self Efficacy, Perceived Ease of Use, Perceived Usefulness, Attitude.
Heijden and Verhagen, 2004	To measure Variables between online store image and attitudes and intentions to purchase online	Extension of TAM by adding dimensions enjoyment, trustworthiness, style, familiarity and settlement	Trustworthiness, settlement performance, usefulness and enjoyment as components of online store image are direct determinants of attitude to purchase.	Online Purchase Intention, Attitude Towards Purchasing, Online Store Usefulness, Online Store Enjoyment, Online Store Ease of use, Online Store Style, Online Store Familiarity, Online store Trustworthiness, Settlement, Performance.
Vijayasarathy, 2004	To explain consumer intention to use on-line shopping	Extension of TAM by adding dimensions compatibility, privacy, security, normative beliefs, and self-efficacy	compatibility, usefulness, ease of use, and security are significant predictors of attitude towards on-line shopping. Attitude toward on-line shopping, normative beliefs, and self-efficacy are predictors of attitude toward online shopping	Usefulness, Ease of Use, Compatibility, Privacy, Attitude, Security, Normative Beliefs, Self-Efficacy, Attitude.

Palvia, 2009 Tsai and Huang,	To explain the role of trust considering the Variables with the vendor and the customer To understand and the	Extension of TAM by adding dimensions Trust, satisfaction, value, loyalty A new model to understand the	Trust has an effect on the exchange directly as well as indirectly through its effect on attitude. Switching cost has the most important	Trustworthiness, Attitude to use. Community Building,
2007	formulate the customer retention (re- purchase) behavior	customer retention with the dimensions community building, customization, overall satisfaction, switching barrier and repurchase intention	role on customer retention in online shopping	Customization, Overall Satisfaction, Switching Barrier.
Wu, 2006	To understand the customer intentions toward online store for different customer groupings based on their life style and personality	A hybrid model of Theory of Reasoned Action and Theory of Planned Behavior	Different group of customer clusters based on characters represent different intentions for online shopping	Attitude toward the Internet, Subjective Norm, Perceived Behavioral Control, Behavior, Intention.
Ha and Stoel, 2009	To understand consumer acceptance of e-shopping	Extension of TAM by adding e-shopping quality, enjoyment, and trust	Consumer perceptions of usefulness and attitude toward e- shopping influence intention to shop online, while perceived ease of use does not influence attitude toward e- shopping. Shopping enjoyment and trust play significant roles in consumers' adoption of e-shopping.	E-shopping Quality, Trust, Ease of Use, Enjoyment , Usefulness, Attitude.

Hausman and Siekpe, 2009	To understand the effects of web site design features on e- shopping behavior	Extension of TAM by adding human factors, computer factor, flow and return intention	Cognitive and psychological factors have effect on online shopping intention	Computer factors, Human factors, Entertainment, Informativeness, Irritation, Usefulness, Attitude toward the site, Flow, Purchase Intentions, Revisit intention.
Garrity et al., 2007	To understand the effects of intrinsic and extrinsic motivation on e- shopping behavior	Modification of TAM with intrinsic and extrinsic motivation	First motivating factor in online shopping is enjoyment. Interface satisfaction is another factor influencing the online shopping. Trust is not important factor.	Ease of Use, Usefulness, Decision Support, Satisfaction Enjoyment.
Park et al., 2004	To understand the effects of transaction risk and product risk on e-shopping behavior	Extension of TAM by adding perceived risk in the context of Transaction and perceived risk with the product or service	Diminishing risk impacts the e- shopping behavior positively.	Perceived Ease of Use, Perceived Usefulness, Perceived Risk with Product or Service, Perceived Risk in the Context of Transaction. Purchase, Behavior
Lim etal., 2006	To understand the effects of Trust on online- shopping.	Modification of Theory of Planned Behavior by Trust dimension	Building trust by the vendors promote the online shopping	Customer Endorsement, Trusting Beliefs, Attitude, Willingness to Buy, Actual Buying Behavior.

Thatcher and George, 2004	To understand the effects of loyalty on online repurchase	Modification of Theory of Reasoned Action by Loyalty dimension and its antecedents	Web shoppers' lack of trust in the Internet did not influence their intent to revisit and purchase goods from a Web site.	Commitment Loyalty, Satisfaction, Affect, Cost.
Barkhi et al., 2008	To develop a model that describes the decision process to purchase from virtual stores	Modification of TAM and TRA by dimensions: Perceived peer influence Perceived behavioral control perceived usefulness	perceived behavioral control, perceived peer influence, and perceived usefulness impact attitude toward using a virtual store for online shopping but perceived security is not a predictor of attitude	Perceived Peer Influence, Perceived Behavioral Control, Perceived Usefulness, Attitude Toward Purchasing, Actual Purchase.
Järveläinen, 2007	To develop a model to understand the effect of the experience on online shopping	Extension of TAM by adding the experience dimension social environment and product complexity	Experience-related factors have a significant role on behavioral intention to use an online shopping site	Product Complexity, Social Environment, Perceived Ease of Use, Perceived Usefulness.
O'Cass and Fenech, 2003	To develop a model to understand the effects of experience on online shopping	Extension of TAM by adding personality, web experiences, shopping orientation	experience positively impacts online shopping	Personality, Web Experiences, Shopping Orientation, Perceived Ease of Use, Perceived Usefulness,
Gefen and Straub, 2000	To develop a model to understand if the perceived ease of use is related to the nature of the task	Extension of TAM by adding Intended Inquiry dimension	Perceived Ease of Use and Perceived Usefulness primarily effects the online shopping and extrinsic motivation is more important than intrinsic motivation in online shopping	Intended Purchase, Intended Inquiry, Perceived Usefulness, Perceived Ease of Use.

Wang et al., 2006	To understand cognitive and psychological factors involved in a potential online buyer's decision-making process To integrate	Extension and modification of Theory of Reasoned Action with cognitive characteristics and personality characteristics	The individuals who were more risk-taking, open to new experience, and had higher level of self-efficacy appeared to be more prone to buying online trust is as	Cognitive Characteristics, Personality Characteristics, Attitude toward online shopping, Intention to shop online. Intended use,
et al., 2003	trust with the perceives usefulness, perceived ed ease of use and trust in a model	adding trust	important to online commerce as the widely accepted TAM antecedents, perceived usefulness and perceived ease of use.	Perceived Usefulness, Perceived Ease of Use, Trust, Structural Assurances, Situational Normality, Familiarity With the e- vendor.
Pavlou and Fygenson, 2006	To explain and predict the process of e-commerce adoption by consumers capturing through two online consumer behaviors: getting information and purchasing a product from a Web vendor.	Extension and Modification of TPB adding two main dimensions as perceived behavioral control for getting information and purchasing	B2C e- commerce adoption as a two- stage process as getting information and purchasing products	Getting Information, Purchasing, Attitude Toward Purchasing, Subjective Norm on purchasing.
Chen and Tan, 2005	To identify factors that have impacted acceptance of virtual store, including product offerings, information richness, usability of storefront,.	Extension and modification of TAM by adding dimensions as perceived trust, compatibility and perceived service quality	TAM's extension is mainly valid for B2C e-commerce	Perceived Trust, Compatibility, Perceived Usefulness, Perceived Ease of Use, Attitude toward use, Intention to use, Actual usage.

Crespo and	To explain e-	Extension and	attitudes toward	Perceived Ease
Rodri'guez,	commerce	modification of TAM	the system and	of Use,
2009	adoption by	adding personal	Subjective Norm	Perceived
	consumers	characteristics,	are the main	Usefulness,
	including the	compatibility,	determinants of	Compatibility,
	simultaneous	innovativeness and	the intention to	Subjective
	influence of	perceived risk	shop on the Net	Norm,
	attitudes, social			Attitude,
	norms,			Innovativeness,
	perceived risk,			Purchase
	personal			Intention,
	innovativeness			Perceived Risk.
	in the field of			
	new			
	technologies			
	and attributes			
	perceived in the			
	technology.			

Appendix B: Reviewed Studies and Factors

#	Year	Authors	Title	Factors
1.	2000	David Gefen, Detmar Straub	The Relative Importance of Perceived Ease of Use in IS Adoption: A Study of E- Commerce Adoption	Perceived Ease of Use, Perceived Easefulness, Intention to Purchase, Informativeness
2.	2003	David Gefen, Elena Karahanna, DetmarW. Straub	Trust and TAM in Online Shopping: An Integrated Model	Perceived Ease of Use, Perceived Usefulness, Perceived Security, Trust, Store Familiarity, Situational Normality
3.	2003	Xiao Liu, Kwok Kee Wei	An empirical study of product differences in consumers' E-commerce adoption behavior	Perceived Ease of Use, Perceived Usefulness, Intention to Purchase, Perceived Risk
4.	2004	Leo R. Vijayasarathy	Predicting consumer intentions to use on-line shopping: the case for an augmented technology acceptance model,	Perceived Ease of Use, Perceived Usefulness, Attitude, INTENTION to Purchase, Perceived Security, Self- Efficacy, Subjective Norm, Compatibility, Personal Confidentiality
5.	2004	Jinsoo Park, Dongwon Lee, Joongho Ahn	Risk Focused E-Commerce Adoption Model: A Cross Country Study	Perceived Ease of Use, Perceived Usefulness, Purchase, Perceived Risk
6.	2004	Jason Bennett Thatcher, Joey F. George	Commitment, Trust, and Social Involvement: An Exploratory Study of Antecedents to Web Shopper Loyalty	Trust, Enjoyment, Satisfaction, Continuance Intention, Loyalty, Price, Product Variety, Artificial Costs, Learning Costs, Transaction Costs, Comparison of Vendors, Positive Effect, Aesthetics, Social Involvement

7.	2004	Hans van der Heijden, Tibert Verhagen	Online store image: conceptual foundations and empirical measurement, Information & Management	Perceived Ease of Use, Perceived Usefulness, Purchase, Attitude, Intention to Purchase, Trust, Enjoyment, Store Style, Store Familiarity, Store Performance
8.	2004	Tony Ahn, Seewon Ryu, Ingoo Han	The impact of the online and offline features on the user acceptance of Internet shopping malls,	System Quality, Information Quality, Service Quality, Product Quality, Product Delivery Service, Perceived Ease of Use, Perceived Usefulness, Attitude, Intention to Purchase
9.	2006	Shwu-Ing Wu	A comparison of the behavior of different customer clusters towards Internet bookstores	Attitude, Intention to Purchase, Purchase, Perceived Behavioral Control, Subjective Norms
10.	2006	Kai h. Lim, Choon Ling Sia, Matthew K.O. Lee, Izak Benbasat	Do I Trust You Online, and If So, Will I Buy? An Empirical Study of Two Trust-Building Strategies	Attitude, Purchase, Trust, Store Familiarity, Satisfaction, Intention to Purchase
11.	2007	Hsiu-Fen Lin	Predicting consumer intentions to shop online: An empirical test of competing theories	Perceived Ease of use, Perceived Usefulness, Attitude, Purchase, Intention to Purchase, Self-Efficacy, Subjective Norms, Compatibility, Interpersonal Effect, External Effect, Conditions,

12.	2007	Jonna Järveläinen	Online Purchase Intentions: An Empirical Testing of a Multiple-Theory Model	Perceived Ease of Use, Perceived Usefulness, Intention to Purchase, Work Ambiguity, Product Complexity, e- Commerce Experience, Willingness to Talk to Vendor, Social environment, Demographic Variables
13.	2007	Hsien-Tung Tsai, Heng-Chiang Huang	Determinants of e- repurchase intentions: An integrative model of quadruple retention drivers	Service Quality, Store Familiarity, Satisfaction, Continuance Intention, Store switching, Customization
14.	2008	Reza Barkhi, France Belanger, James Hicks	A Model of the Determinants of Purchasing from Virtual Stores	Perceived Usefulness, Attitude, Purchase, Perceived Security, Perceived Behavioral Control, Subjective Norms
15.	2008	Ángel Herrero Crespo, Ignacio Rodríguez del Bosque	The effect of innovativeness on the adoption of B2C e-commerce: A model based on the Theory of Planned Behavior	Attitude, Intention to Purchase, Perceived Behavioral Control, Innovativeness in General, Innovativeness Against Technology, Subjective Norms
16.	2009	Young Sik Kang, Soongeun Hong, Heeseok Lee	Exploring continued online service usage behavior: The roles of self-image congruity and regret, Computers in Human Behavior	Perceived Usefulness, Enjoyment, E- Commerce Experience, Congruence with Personal Image, Approval Satisfaction, Continuance Intention

17.	2009	Sejin Ha, Leslie Stoel	Consumer e-shopping acceptance: Antecedents in a technology acceptance model	Perceived Ease of Use, Perceived Usefulness, Attitude, Intention to Purchase, Trust, E-commerce Quality, Enjoyment
18.	2009	Prashant Palvia	The role of trust in e-commerce relational exchange: A unified model	Perceived Ease of Use, Perceived Usefulness, Attitude, Intention to purchase, Store Familiarity, Satisfaction, Belief in Competency, Belief in Integrity, Value
19.	2009	Angel Herrero Crespo, Ignacio A. Rodrı'guez Del Bosque Rodrı'guez	Explaining B2C e-commerce acceptance: An integrative model based on the framework by Gatignon and Robertson	Perceived Ease of Use, Perceived Usefulness, Attitude, Intention to Purchase, Perceived Risk, Innovativeness in General, Subjective Norms, Compatibility.
20.	2009	Angela V. Hausman, Jeffrey Sam Siekpe	The effect of web interface features on consumer online purchase intentions	Perceived Usefulness, Attitude, Intention to Purchase, Informativeness, Enjoyment, Human Factors, Regret, Continuance Intention, Flow.

Appendix C: Classification of Factors up to Frequency

#	Factor	Studies (As given in reviewed studies and factors Appendix-B)	Frequency
1.	System Quality	8	1
2.	Information Quality	8	1
3.	Service Quality	8,13	2
4.	Product Quality	8	1
5.	Product Delivery Service	8	1
6.	Perceived Ease of Use	1,2,3,4,5,7,8,11,12,17,18,19	12
7.	Perceived Usefulness	1,2,3,4,5,7,8,11,12,14,16,17,18, 19,20	15
8.	Attitude	4,7,8,9,10,11,14,15,17,18,19,20	12
9.	Intention to Purchase	1,2,3,4,7,8,9,11,12,15,17,18,19, 20	14
10.	Purchase	5,9,11,14	4
11.	Perceived Trust	2,4,14	3
12.	Perceived Risk	3,5,19	3
13.	Perceived Behavioral Control	9,11,14,15	4
14.	Self-Efficacy	4,11	2
15.	Innovation in General	15,19	2
16.	Innovation against new	15	1
17.	Subjective Norm	4,9,11,12,14,15,19	7
18.	Compatibility	4,11,19	3
19.	Informativeness	1,20	2
20.	Trust	2,6,7,10,17,18	6
21.	Electronic Shopping Quality	17	1
22.	Enjoyment	6,7,16,17,20	5
23.	Human Related Factors	20	1
24.	System Related Factors	20	1
25.	Dislike	16,20	2
26.	Flow	20	1
27.	Store Style	7	1

28.	Store Familiarity	2,7,10,13,18	5
29.	Store Performance	7	1
30.	Work Ambiguity	12	1
31.	Product Complexity	12	1
32.	Electronic Shopping	12,16	2
33.	Eagerness to talk with vendor	12	1
34.	Demographic Variables	12	1
35.	Self image Congruity	16	1
36.	Confirmation	16	1
37.	Satisfaction	6,10,13,16,18	5
38.	Continuance Intention	6,13,16,18,20	5
39.	Willingness to Buy	10	1
40.	Interpersonal Affect	11	1
41.	External Affect	11	1
42.	Environmental conditions	11	1
43.	Belief in integrity	18	1
44.	Belief in competency	18	1
45.	Value	18	1
46.	Loyalty	6	1
47.	Price	6	1
48.	Comfort	6	1
49.	Product Variety	6	1
50.	Artificial Costs	6	1
51.	Learning Costs	6	1
52.	Transaction Costs	6	1
53.	Comparison of vendors	6	1
54.	Positive effects	6	1
55.	Aesthetics	6	1
56.	Social Involvement	6	1
57.	Store switching prevention	13	1

58.	Customization	13	1
59.	Personal confidentiality	4	1
60.	Belief in usefulness	18	1
61.	Situational normality.	2	1

Appendix D: Frequently Researched Factors and Relations

Factor	Relation	Number of Researches	Number of Significant Relation	Significant researches	Number of insignificant Relation	Researches insignificant
	ATT->ACPUR	1	1	14	-	-
Attitude	ATT->COINT	1	1	20	-	-
Att	ATT->INTPU	9	9	4,8,9,11,15, 171,18,19,20	-	-
Continuance Intention	COINT- >STFAM	1	1	18	-	-
	ENJ->ATT	3	3	7,17,20	-	-
ment	ENJ->COINT	1	1	16	-	-
Enjoyment	ENJ->PU	1	1	17	-	-
	ENJ->STS	1	1	16	-	-
Intention to Purchase	INTPU- >ACPUR	2	2	9,11	-	-
Inten Pur	INTPU->STS	1	1	18	-	-
d al	PBC->ACPUR	2	1	11	1	9
Perceived Behavioral Control	PBC->ATT	1	1	14	-	-
Pe Bej	PBC->INTPU	3	1	11	2	9,15

	_		ľ			1
	PEOU->ATT	7	4	4,8,11,18	3	7,17,19
e	PEOU->ENJ	1	1	7	-	-
Perceived Ease Of Use	PEOU- >INTPU	4	2	2,3	2	1,12
ived Eas	PEOU->PU	8	8	1,2,5,8,12, 17,18,19	-	-
Percei	PEOU->PU	1	1	7	-	-
	PEOU- >TRUST	1	1	2	-	-
Perceived Usefulness	PU->ATT	8	8	4,7,8,11, 14,18,19,2 0	-	-
d Use	PU->COINT	1	1	16	-	-
erceive	PU->INTPU	9	8	1,2,3,5,8, 12,17,18	1	4
Д	PU->STS	1	1	16	-	-
ms	SN->ACPUR	1	1	4	-	-
Nor	SN->ATT	2	2	14,19	-	-
Subjective Norms	SN->INTPU	5	5	9,11,12,15, 19	-	-
Su	SN->PU	1	1	12	-	-
	STFAM->ATT	1	-	-	1	7
Store Familiarity	STFAM- >COINT	1	1	13		-
	STFAM- >PEOU	1	1	2	-	-
Store	STFAM->STS	1	1	13	-	-
31	STFAM- >TRUST	2	-	-	2	2,10

facti 1	STS->COINT	3	3	13,16,18	-	-
Satisfacti	STS->TRUST	1	1	10	-	-
	TRUST->ATT	4	4	7,10,17,1	-	-
Trust	TRUST- >COINT	1	ı	-	1	6
	TRUST- >INTPU	2	2	2,18	-	-

ATT: Attitude, COINT: Continuance Intention, ENJ: Enjoyment, INTPU: Intention to Purchase, PBC: Perceived Behavioral Control, PEOU: Perceived Ease of Use, PU: Perceived Usefulness, SN: Subjective Norms, STFAM: Store Familiarity, STS: Satisfaction,

TRUST: Trust, ACPUR: Actual Purchase

Appendix E: Abstracts of Systematically Reviewed Studies

#	Year	Authors	Research Results
1.	2000	David Gefen, Detmar Straub	Perceived Ease of Use and Perceived Usefulness primarily affect the online shopping and extrinsic motivation is more important than intrinsic motivation in online shopping.
2.	2003	David Gefen, Elena Karahanna, DetmarW. Straub	Trust is as important to online commerce as the widely accepted TAM antecedents, perceived usefulness and perceived ease of use.
3.	2003	Xiao Liu, Kwok Kee Wei	Online Features(System Quality, Information Quality, Service Quality) has a positive impact on ease of and usefulness, Offline Features (Product Quality, delivery Service) has positive impact just usefulness within the context electronic shopping.
4.	2004	Leo R. Vijayasarathy	Compatibility, usefulness, ease of use, and security are significant predictors of attitude towards on-line shopping. Attitude toward on-line shopping, normative beliefs, and self-efficacy are predictors of attitude toward online shopping.
5.	2004	Jinsoo Park, Dongwon Lee, Joongho Ahn	Diminishing risk impacts the e-shopping behavior positively.
6.	2004	Jason Bennett Thatcher, Joey F. George	Web shoppers' lack of trust in the Internet did not influence their intent to revisit and purchase goods from a Web site.
7.	2004	Hans van der Heijden, Tibert Verhagen	Trustworthiness, settlement performance, usefulness and enjoyment as components of online store image are direct determinants of attitude to purchase.
8.	2004	Tony Ahn, Seewon Ryu, Ingoo Han	Online features (System features, Information Quality, service quality) have positive effects on perceived usefulness and perceived ease of use, on the other hand offline features (product quality, product delivery service) have only effects on perceived usefulness.

9.	2006	Shwu-Ing Wu	Different group of customer clusters based on characters represent different intentions for online shopping
10.	2006	Kai h. Lim, Choon Ling Sia, Matthew K.O. Lee, Izak Benbasat	Building trust by the vendors promote the online shopping
11.	2007	Hsiu-Fen Lin	Decomposed TPB (Theory of Planned Behavior) provides much more predictive than TAM regarding the information about consumer intentions to shopping online
12.	2007	Järveläinen, Jonna	Experience-related factors have a significant role on behavioral intention to use an online shopping site
13.	2007	Hsien-Tung Tsai, Heng-Chiang Huang	Switching cost has the most important role on customer retention in online shopping
14.	2008	Reza Barkhi, France Belanger, James Hicks	Perceived Behavioral Control, subjective norms, perceived usefulness have effects on attitude but perceived security is not a determinant of attitude.
15.	2008	Ángel Herrero Crespo, Ignacio Rodríguez del Bosque	e-commerce acceptance is determined by attitude, subjective norm and personal innovativeness
16.	2009	Young Sik Kang, Soongeun Hong, Heeseok Lee	Self-image congruity and regret plays a key role in forming post adoption beliefs for repurchasing
17.	2009	Sejin Ha, Leslie Stoel	Consumer perceptions of usefulness and attitude toward e-shopping influence
			Intention to shop online, while perceived ease of use does not influence attitude toward e-shopping. Shopping enjoyment and trust play significant roles in consumers' adoption of e-shopping.

18.	2009	Prashant Palvia	Trust has an effect on the exchange directly as well as indirectly through its effect on attitude.
19.	2009	Angel Herrero Crespo, Ignacio A. Rodrı´guez Del Bosque Rodrı´guez	Attitude and subjective norms are the main determinants of intention to purchase.
20.	2009	Angela V. Hausman, Jeffrey Sam Siekpe	Cognitive and psychological factors have affect on online shopping intention

Appendix F: Survey References and Translations

Item	#	Question	Adapted From	
PEOU1	1	I think it is easy to shop in Internet shopping sites	Gefen et al,	
TEOUT	1	Alışveriş sitelerinden alışveriş yapmanın kolay olduğunu düşünüyorum.	2003	
PEOU2	2	I think it is easy to use Internet shopping sites	Järveläinen,	
TEOUZ	2	İnternetten alışveriş yapılan sitelerin kullanımının kolay olduğunu düşünürüm.	2007	
PEOU3	3	I can easily find the products that I want in the Internet shopping while searching in the sites		
PEOUS	3	Alışveriş sitelerinde gezinirken aradığım ürünleri sitedeki ürünler arasından kolaylıkla bulabiliyorum.	Park et al, 2004	
PEOU4	4	I can learn using Internet shopping sites in a short time	Gefen and	
TLOU4	•	Alışveriş sitelerini kullanmayı kısa zamanda öğrenebiliyorum.	Straub, 2000	
PEOU5	5	I think process of transactions in e-shopping sites is clear and understandable.	Gefen et al.,	
TEOUS	3	Alışveriş sitelerindeki işlemleri oldukça açık ve anlaşılır buluyorum.	2003	
PEOU6	6	I can navigate easily in the Internet shopping sites	Heijden and	
PEOUG	0	Alışveriş sitelerinde istediğim gibi kolaylıkla gezinebiliyorum.	Verhagen, 2004	
PU1	In e-shopping, I can find products cheaper than the brick and mortar shops.		Barkhi et al.,	
	,	İnternet üzerinden alışverişte ürünleri normal alışverişten daha ucuza bulurum.	2008	

PU2	8	E-shopping enables me to save time. İnternet üzerinden alışverişte zamandan	Crespo and Bosque, 2009	
		kazanırım.	Dosque, 2007	
PU3	9	In e-shopping, I can find every kind of products.	Gefen and	
1 00		İnternet üzerinden alışverişte her çeşit ürünü rahatlıkla bulurum.	Straub, 2000	
		In e-shopping, I can access all the information about the product I need.	Haiidan And	
PU4	10	İnternet üzerinden alışveriş sitelerinde almak istediğim ürünlerle ilgili gerekli olan tüm bilgilere ulaşırım.	Heijden And Verhagen, 2004	
		I perceive the e-shopping useful in general.	Hausman and	
PU5	11	İnternet üzerinden alışverişi genelde faydalı buluyorum.	Siekpe, 2009	
DITE	12	I think e-shopping has more advantages than other means	Barkhi et al.,	
PU6		İnternet üzerinde alışverişi diğer yöntemlerden daha avantajlı buluyorum.	2008	
		I think payment transactions are safe in online shopping sites.		
TRU1	13	İnternet üzerinden alışveriş yapılan sitelerdeki ödeme işlemlerinin güvenli olduğunu düşünürüm.	Palvia, 2009	
TDU2	14	I believe that Internet shopping sites are trustworthy	Polyio 2000	
TRU2		Internet üzerinden alışveriş yapılan siteleri güvenilir buluyorum.	Palvia, 2009	
TD112	15	I trust on what online retailers claim about their products.	Vim et al. 2000	
TRU3	15	İnternet üzerinden alışveriş yapılan sitelerin ürünleri hakkında söylediklerine güvenirim.	Kim et al., 2009	

TRU4	16	I think Internet shopping sites will keep my personal data confidential.	Heijden And	
TKU4	10	İnternet üzerinden alışveriş yapılan sitelerin kişisel bilgilerimi koruyacağını düşünürüm.	Verhagen, 2004	
		I think that Internet shopping sites keep their promises and commitments.		
TRU5	17	İnternet üzerinden alışveriş yapılan sitelerin taahhütlerini yerine getirdiklerini düşünürüm.	Lim etal., 2006	
TRU6	18	I would feel comfortable that online retailers have the responsibility for the delivery of the product.		
TRUO		İnternet üzerinden alışveriş yapılan sitelerden satın alınan ürünlerin tesliminde problem yaşamayacağımı düşünürüm.	2007	
FAM1	19	I hear names of some Internet shopping sites frequently	Heijden and	
171111		İnternet üzerinden alışveriş yapılan sitelerden bazılarının adını sıklıkla duyarım	Verhagen, 2004	
FAM2	20	I tell to my acquaintances abut some well known electronic shopping sites.	Palvia, 2009	
TAIVIZ		Arkadaşlarıma İnternet üzerinden alışveriş yapılan bazı sitelerden bahsederim.	Taivia, 200)	
FAM3	21	I encounter ads on the mass media about Internet shopping sites.	Hsu and Chiu,	
TAIVIS		Medyada İnternet alışveriş siteleri hakkında reklamlara rastlarım.	2004	
FAM4	22	I think, I am familiar with electronic shopping sites.	Kim and Ahn,	
FAM4	22	İnternet üzerinden alışveriş yapılan siteleri bildiğimi düşünürüm	2007	

FAM5	23	In my near environment, it is mentioned about some of the electronic shopping sites. Çevremdeki insanlar arasında alışveriş yapılan bazı Internet sitelerinden bahsedilir.	Kim and Ahn, 2007	
		I see the news about the Internet shopping located in the mass media .	Gefen et al,	
FAM6	24	Medyada Internet üzerinden alışveriş yapılan siteler hakkında haberlerin yer aldığını görürüm.	2003	
SN1	25	My friends' attitudes are positive towards Internet shopping	Järveläinen,	
5111	23	Arkadaşlarım Internet üzerinden alışverişe olumlu gözle bakarlar.	2007	
	26	My friends use Internet shopping sites	Järveläinen,	
SN2		Arkadaşlarım İnternet üzerinden alışveriş yaparlar.	2007	
SN3	27	My friends would advise me to use online shopping.	Crespo and	
3113		Arkadaşlarım Internet üzerinden alışveriş yapmamı tavsiye ederler.	Bosque, 2008	
		In my near social environment, it is expected from me to use the Internet to purchase as others	Lin, 2007	
SN4	28	Bulunduğum ortamlarda benim de diğerleri gibi Internet üzerinden alışveriş yapmam beklenir.	Lin, 2007	
GNS	29	Internet shopping is mentioned among my friends	Järveläinen,	
SN5	<i>27</i>	Arkadaşlarım arasında Internet üzerinden alışveriş hakkında konuşulur.		

CNIC	30	My friends would think that I should use the Internet shopping sites	Crespo and	
SN6	30	Arkadaşlarım Internet üzerinden alışveriş yapmamı isterler.	Bosque, 2008	
ENJ1	31	I am entertained while using electronic shopping sites	Kang et al.,	
ENJI	31	İnternet üzerinden alışveriş yaparken eğlenirim.	2009	
		I prefer the entertaining shopping sites	Hajidan and	
ENJ2	32	İnternet üzerinden alışveriş yaparken eğlenceli siteleri tercih ederim.	Heijden and Verhagen, 2004	
ENJ3	33	I think using Internet shopping sites is joyful.	Hausman and	
ENJS	33	Internet üzerinden alışveriş yapılan siteleri keyifli buluyorum.	Siekpe, 2009	
ENJ4	34	I use the Internet shopping sites to have good time	Hausman and	
LIVJ4	34	Alışveriş sitelerine iyi vakit geçirmek için girerim.	Siekpe, 2009	
ENJ5	35	I feel more entertained than buying from a brick-and-mortar store	Heijden and	
ENJS	33	İnternetten alışverişte normal alışverişten daha fazla eğlenirim.	Verhagen, 2004	
ENJ6	36	I perceive the e-shopping sites as interesting.	Hausman and	
ENJU		İnternet üzerinden alışveriş yapılan siteleri ilginç bulurum.	Siekpe, 2009	
INT1	I will definitely buy products from an estore in near future		Hausman and	
11111	37	Yakın bir zamanda Internetten kesinlikle alışveriş yapacağım.	Siekpe, 2009	

INT2	38	I would feel convenient purchasing from estore İnternetten alışveriş yapmayı kendime yakın bulurum.	Palvia, 2009
INT3	39	I like to use e-shopping sites. Alışveriş sitelerini kullanmayı seviyorum.	Wu, 2006
INT4	40	I recommend online shopping to my acquaintances İnternetten alışveriş yapmayı herkese tavsiye ederim.	Ahn et al, 2004
INT5	41	I use Internet shopping sites frequently Alışveriş sitelerini sıklıkla kullanırım.	Vijayasarathy, 2004
INT6	42	I have intention to use Internet shopping sites Alışveriş sitelerini kullanmaya karşı istekliyim.	Lin, 2007

Appendix G: Survey Used in Pilot Study Data Collection

INTERNET ÜZERİNDEN ALIŞVERİŞ EĞİLİMLERİ ANKETİ

Bu çalışmanın amacı,katılımcıların elektronik ticarete yönelik tutum ve eğilimleriyle ilgili bilgi toplamaktır. Çalışmaya katılım tümüyle gönüllülük temelinde olmaktadır. Ankette, sizden kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tümüyle gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir; elde edilecek bilgiler bilimsel yayımlarda kullanılacaktır.

1.	Cinsiyetiniz: □ Kadın □ Erkek
2.	Yaşınız:
3.	Eğitim Durumunuz (Mezun olduğunuz):
	□ İlkokul □ Ortaokul □ Lise □ Yüksek Okul □ Üniversite
	☐ Yüksek Lisans ☐ Doktora
4.	Mesleğiniz (Zorunlu Değil):
5.	İnterneti kullanma sıklığınız nedir?
	☐ Kullanmıyorum ☐ Günde 1 saatten az
	☐ Günde 1-3 saat arası ☐ Günde 3 saatten fazla
6.	İnternet üzerinden alışveriş sıklığınız nedir ? □ Hiç yapmadım □ Yılda 1 □ Ayda 1 □ Haftada 1'den fazla
7.	İnternet üzerinden alışverişe genel anlamda bakışınız nasıldır?
	□ Olumlu □ Olumsuz □ Fikrim yok
8.	İnternet üzerinden alışverişi hangi ürünler için tercih edersiniz
	$\begin{tabular}{ll} \square Her tür ürün için & \square Kitap & \squareMüzik(Cd-İndirilebilir müzik) \\ \end{tabular}$
	□ Elektronik Eşya □ Uçak bileti □ Kıyafet
	□Diğer(Lütfen belirtiniz):
9.	İnternet üzerinden alışveriş için hep aynı siteleri mi tercih edersiniz?
	□ Evet □ Hayır
10.	. İnterneti nereden kullanırsınız?
	☐ Evden ☐ Okuldan ☐ İnternet kafeden ☐ Cep telefonundan ☐ 3G uyumlu modem ile tasınabilir bilgisayardan☐ Diğer (Lütfen belirtiniz):

	Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
İnternetten alışveriş yapmayı kendime yakın buluyorum.	1	2	3	4	5
Alışveriş sitelerine iyi vakit geçirmek için girerim.	1	2	3	4	5
İnternet alışveriş siteleri hakkındaki reklamları seçim yaparken dikkate alırım.	1	2	3	4	5
İnternet üzerinden alışveriş sitelerinde almak istediğim ürünlerle ilgili gerekli olan tüm bilgilere ulaşırım.	1	2	3	4	5
İnternet üzerinde genelde adı sıkça duyulan sitelerden alışveriş yaparım.	1	2	3	4	5
Arkadaşlarım Internet üzerinden alışverişe olumlu gözle bakarlar.	1	2	3	4	5
Alışveriş sitelerinden alışveriş yapmanın kolay olduğunu düşünüyorum.	1	2	3	4	5
Bulunduğum ortamlarda benim de diğerleri gibi Internet üzerinden alışveriş yapmam beklenir.	1	2	3	4	5
Bazı alışveriş siteleri diğerlerinden daha fazla tercih edilir.	1	2	3	4	5
Alışveriş sitelerini kullanmaya karşı istekliyim.	1	2	3	4	5

İnternetten alışveriş yapmayı herkese tavsiye ederim.	1	2	3	4	5
Alışveriş sitelerindeki işlemleri oldukça açık ve anlaşılır buluyorum.	1	2	3	4	5
Arkadaşlarım Internet üzerinden alışveriş yaparlar.	1	2	3	4	5
İnternet üzerinden alışverişte zamandan kazanırım.	1	2	3	4	5
Adı çokça duyulan/bilinen sitelerin daha başarılı olduğunu düşünürüm.	1	2	3	4	5
İnternet üzerinden alışveriş yaparken güvenilir siteleri tercih ederim.	1	2	3	4	5
İnternet üzerinden alışverişte ürünleri normalden daha ucuza bulurum.	1	2	3	4	5
Alışveriş sitelerini sıklıkla kullanırım.	1	2	3	4	5
İnternetten alışverişte kullanımı kolay alış veriş sitelerini tercih ederim.	1	2	3	4	5
İnternet üzerinden alışveriş yaparken öncelikle sitenin güvenilir olup olmadığına dikkat ederim.	1	2	3	4	5
İnternet üzerinde alışverişi diğer yöntemlerden daha avantajlı buluyorum.	1	2	3	4	5
Yakın bir zamanda Internetten kesinlikle alışveriş yapacağım.	1	2	3	4	5
İnternetten alışverişi normal alışverişten daha fazla eğlendiğim için tercih ederim.	1	2	3	4	5

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
	1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4

Alışveriş için adı çokça geçen Internet sitelerini tercih ederim.	1	2	3	4	5
İnternet üzerinden alışveriş yaparken eğlenceli siteleri tercih ederim.	1	2	3	4	5
İnternet üzerinden alışveriş yapılan Internet sitelerinin güvenilir olduğunu düşünürüm.	1	2	3	4	5
Sadece bazı sitelerde alışveriş yaparken eğlenirim.	1	2	3	4	5
Arkadaşlarım Internet üzerinden alışveriş yapmamı tavsiye ederler.	1	2	3	4	5
Alışveriş sitelerinde gezinirken aradığım ürünleri sitedeki ürünler arasından kolaylıkla bulabiliyorum.	1	2	3	4	5

Appendix H: Cronbach's Alpha Values of Pilot Study

	Scale	Scale			
	Mean if	Variance	Corrected	Squared	Cronbach's
	Item	if Item	Item-Total	Multiple	Alpha if Item
	Deleted	Deleted	Correlation	Correlation	Deleted
PU1	143.28	717.022	0.77		0.964
PU2	142.98	720.796	0.679		0.965
PU3	143.34	725.943	0.642	•	0.965
PU4	143.42	733.187	0.454		0.966
PU5	143.32	714.426	0.83		0.964
PU6	143.5	714.051	0.75		0.964
INT1	143.48	719.847	0.713		0.964
INT2	143.2	714.204	0.748	•	0.964
INT3	143.62	717.628	0.752		0.964
INT4	143.62	722.608	0.649	•	0.965
INT5	144.06	722.751	0.615		0.965
INT6	143.38	717.587	0.768		0.964
PEOU1	143.06	727.813	0.57		0.965
PEOU2	143.2	722.041	0.717	•	0.964
PEOU3	143.32	723.732	0.657		0.965
PEOU4	142.9	725.929	0.699		0.965
PEOU5	143.54	729.764	0.547	•	0.965
PEOU6	143.06	722.262	0.747		0.964
SN1	143.62	742.077	0.37		0.966
SN2	143.36	740.031	0.481		0.965
SN3	143.94	734.588	0.473	•	0.965
SN4	144.38	742.934	0.312	•	0.966
SN5	143.46	737.356	0.382		0.966
SN6	144.08	735.3	0.471		0.965
TR1	142.64	731.174	0.582		0.965
TR2	142.68	723.732	0.784		0.964
TR3	142.88	724.353	0.621	•	0.965
TR4	142.7	724.133	0.689		0.965
TR5	143.92	733.177	0.529	•	0.965
TR6	142.58	728.698	0.64	•	0.965
ENJ1	143.88	718.924	0.732	•	0.964
ENJ2	143.96	725.876	0.631	•	0.965
ENJ3	143.8	733.184	0.509		0.965
ENJ4	144.06	737.323	0.377		0.966
ENJ5	144.42	727.759	0.558		0.965
ENJ6	143.68	727.242	0.586	•	0.965
FAM1	143.04	715.509	0.77	•	0.964
FAM2	143.62	715.261	0.727	•	0.964
FAM3	144.02	730.387	0.511		0.965
FAM4	143.02	723.489	0.686		0.965
FAM5	142.88	720.924	0.775		0.964
FAM6	143.02	723.489	0.686		0.965

Appendix I: Correlation Matrix of Pilot Study

	PUl	PU2	PU3	PU4	PU5	PU6	INT1	INT2	INT3	INT4	INT5	INT6	PEOUl	PEOU2	PEOU3	PEOU4	PEOU5	PEOU6	SN1	SN2	SN3	SN4	SN5	SN6
PUl	1.000	.597	.540	.268	.717	.760	.573	.631	.600	.553	.616	.769	.641	.551	.584	.584	.605	.690	.331	.325	.266	.187	.023	.382
PU2	.597	1.000	.416	.130	.659	.567	.600	.682	.591	.598	.448	.579	.552	.596	.419	.457	.408	.551	.186	.257	.132	.198	.111	.204
PU3	.540	.416	1.000	.405	.412	.500	.474	.380	.474	.332	.330	.405	.197	.460	.811	.640	.340	.653	.120	.360	.321	.068	.257	.203
PU4	.268	.130	.405	1.000	.399	.302	.231	.196	.328	.096	.141	.208	.187	.453	.490	.419	.209	.404	.154	.190	.327	.285	.128	.230
PU5	.717	.659	.412	.399	1.000	.855	.730	.838	.770	.756	.620	.801	.626	.668	.500	.615	.590	.631	.218	.257	.269	.191	.221	.321
PU6	.760	.567	.500	.302	.855	1.000	.690	.762	.671	.742	.712	.804	.542	.538	.595	.557	.573	.657	.229	.277	.257	.223	.153	.427
INT1	.573	.600	.474	.231	.730	.690	1.000	.748	.669	.567	.622	.658	.481	.453	.467	.584	.559	.554	.179	.263	.222	.060	.282	.189
INT2	.631	.682	.380	.196	.838	.762	.748	1.000	.663	.784	.651	.803	.647	.542	.371	.454	.526	.490	.259	.246	.191	.274	.334	.270
INT3	.600	.591	.474	.328	.770	.671	.669	.663	1.000	.550	.535	.746	.518	.492	.526	.586	.401	.615	.266	.261	.238	.132	.392	.206
INT4	.553	.598	.332	.096	.756	.742	.567	.784	.550	1.000	.610	.770	.527	.503	.295	.389	.597	.483	.073	.159	.158	.129	.158	.241
INT5	.616	.448	.330	.141	.620	.712	.622	.651	.535	.610	1.000	.645	.640	.385	.356	.399	.559	.517	.221	.275	.179	.211	.203	.406
INT6	.769	.579	.405	.208	.801	.804	.658	.803	.746	.770	.645	1.000	.654	.469	.437	.485	.552	.599	.280	.198	.287	.261	.227	.390
PEOU1	.641	.552	.197	.187	.626	.542	.481	.647	.518	.527	.640	.654	1.000	.393	.325	.364	.655	.452	.387	.196	.133	.149	.057	.276
PEOU2	.551	.596	.460	.453	.668	.538	.453	.542	.492	.503	.385	.469	.393	1.000	.468	.434	.287	.501	.141	.362	.283	.133	.197	.290
PEOU3	.584	.419	.811	.490	.500	.595	.467	.371	.526	.295	.356	.437	.325	.468	1.000	.637	.320	.715	.261	.408	.309	.055	.149	.280
PEOU4	.584	.457	.640	.419	.615	.557	.584	.454	.586	.389	.399	.485	.364	.434	.637	1.000	.426	.757	.214	.410	.268	.054	.338	.232
PEOU5	.605	.408	.340	.209	.590	.573	.559	.526	.401	.597	.559	.552	.655	.287	.320	.426	1.000	.475	.116	.186	.107	.054	.059	.204
PEOU6	.690	.551	.653	.404	.631	.657	.554	.490	.615	.483	.517	.599	.452	.501	.715	.757	.475	1.000	.192	.381	.191	.101	.142	.262
SN1	.331	.186	.120	.154	.218	.229	.179	.259	.266	.073	.221	.280	.387	.141	.261	.214	.116	.192	1.000	.645	.523	.374	.331	.377
SN2	.325	.257	.360	.190	.257	.277	.263	.246	.261	.159	.275	.198	.196	.362	.408	.410	.186	.381	.645	1.000	.611	.253	.407	.438
SN3	.266	.132	.321	.327	.269	.257	.222	.191	.238	.158	.179	.287	.133	.283	.309	.268	.107	.191	.523	.611	1.000	.594	.439	.707
SN4	.187	.198	.068	.285	.191	.223	.060	.274	.132	.129	.211	.261	.149	.133	.055	.054	.054	.101	.374	.253	.594	1.000	.434	.666
SN5	.023	.111	.257	.128	.221	.153	.282	.334	.392	.158	.203	.227	.057	.197	.149	.338	.059	.142	.331	.407	.439	.434	1.000	.434
SN6	.382	.204	.203	.230	.321	.427	.189	.270	.206	.241	.406	.390	.276	.290	.280	.232	.204	.262	.377	.438	.707	.666	.434	1.000

	TRI	TR2	TR3	TR4	TR5	TR6	ENJl	ENJ2	ENJ3	ENJ4	ENJ5	ENJ6	FAMI	FAM2	FAM3	FAM4	FAM5	FAM6
TR1	1.000	.699	.834	.879	.186	.918	.324	.318	.366	.178	.144	.500	.523	.303	.316	.629	.512	.499
TR2	.699	1.000	.670	.802	.396	.739	.548	.499	.419	.184	.349	.566	.682	.499	.332	.617	.577	.756
TR3	.834	.670	1.000	.873	.242	.840	.381	.456	.423	.298	.249	.542	.587	.390	.395	.618	.405	.563
TR4	.879	.802	.873	1.000	.309	.896	.430	.445	.398	.199	.263	.590	.645	.432	.392	.633	.470	.565
TR5	.186	.396	.242	.309	1.000	.235	.390	.256	.285	.175	.181	.228	.498	.469	.221	.130	.462	.364
TR6	.918	.739	.840	.896	.235	1.000	.389	.390	.384	.209	.259	.554	.536	.367	.387	.642	.535	.572
ENJ1	.324	.548	.381	.430	.390	.389	1.000	.618	.490	.427	.598	.477	.562	.515	.402	.591	.457	.615
ENJ2	.318	.499	.456	.445	.256	.390	.618	1.000	.499	.452	.508	.495	.500	.592	.260	.626	.392	.642
ENJ3	.366	.419	.423	.398	.285	.384	.490	.499	1.000	.391	.368	.231	.321	.402	.399	.430	.267	.434
ENJ4	.178	.184	.298	.199	.175	.209	.427	.452	.391	1.000	.352	.384	.361	.162	.263	.413	.223	.376
ENJ5	.144	.349	.249	.263	.181	.259	.598	.508	.368	.352	1.000	.310	.281	.456	.345	.334	.139	.442
ENJ6	.500	.566	.542	.590	.228	.554	.477	.495	.231	.384	.310	1.000	.552	.297	.277	.634	.371	.632
FAMI	.523	.682	.587	.645	.498	.536	.562	.500	.321	.361	.281	.552	1.000	.523	.341	.653	.694	.703
FAM2	.303	.499	.390	.432	.469	.367	.515	.592	.402	.162	.456	.297	.523	1.000	.389	.367	.532	.515
FAM3	.316	.332	.395	.392	.221	.387	.402	.260	.399	.263	.345	.277	.341	.389	1.000	.373	.332	.285
FAM4	.629	.617	.618	.633	.130	.642	.591	.626	.430	.413	.334	.634	.653	.367	.373	1.000	.544	.741
FAM5	.512	.577	.405	.470	.462	.535	.457	.392	.267	.223	.139	.371	.694	.532	.332	.544	1.000	.579
FAM6	.499	.756	.563	.565	.364	.572	.615	.642	.434	.376	.442	.632	.703	.515	.285	.741	.579	1.000

Appendix J: Survey Used in Main Data Collection

İNTERNET ÜZERİNDEN ALIŞVERİŞ EĞİLİMLERİ ANKETİ

Bu çalışmanın amacı,katılımcıların Internet üzerinden alışveriş sitelerine yönelik tutum ve eğilimleriyle ilgili bilgi toplamaktır. Çalışmaya katılım tümüyle gönüllülük temelinde olmaktadır.Ankette, sizden kimlik belirleyici hiçbir bilgi istenmemektedir.Cevaplarınız tümüyle gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir; elde edilecek bilgiler bilimsel yayınlarda kullanılacaktır.Katılımınız için teşekkür ederiz.

	Cinsiyet: Kadın Erkek Yaşınız:
3.	Eğitim Durumunuz (Mezun olduğunuz):
	□ İlkokul □ Ortaokul □ Lise □ Yüksek Okul □ Üniversite
	☐ Yüksek Lisans ☐ Doktora
4.	Mesleğiniz (Zorunlu Değil):
5.	İnterneti kullanma sıklığınız nedir ?□ Kullanmıyorum □ Günde 1 saatten az
	☐ Günde 1-3 saat arası ☐ Günde 3 saatten fazla
6.	İnternet üzerinden alışveriş sıklığınız nedir ? □ Hiç yapmadım □ Yılda 1 □ Ayda 1
	☐ Haftada 1 ☐ Haftada 1'den fazla
7.	İnternet üzerinden alışverişe genel anlamda bakışınız nasıldır ?
	□ Olumlu □ Olumsuz □ Fikrim yok
8.	İnternet üzerinden alışverişi hangi ürünler için tercih edersiniz
	☐ Her tür ürün için ☐ Kitap
	□Müzik(Cd-İndirilebilir müzik)
	□ Elektronik Eşya □ Kıyafet
	□Diğer(Lütfen belirtiniz):
9.	İnternet üzerinden alışveriş için hep aynı siteleri mi tercih edersiniz? \square Evet \square Hayır
10.	İnterneti nereden kullanırsınız?
	□ Evden □ Okuldan □ İnternet kafeden □ Cep telefonundan □ 3G uyumlu modem ile taşınabilir bilgisayardan □ Diğer

Aşağıdaki Soruları "1=Kesinlikle Katılmıyorum", "2=Katılmıyorum", "3=Kararsızım", "4=Katılıyorum" ve "5=Kesinlikle Katılıyorum", şeklinde yanıtlayınız. Lütfen maddeleri eksiksiz olarak işaretleyiniz ve cevabınızı daire içine alınız

içine alınız					
	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
İnternetten alışveriş yapmayı kendime yakın bulurum.	1	2	3	4	5
Alışveriş sitelerine iyi vakit geçirmek için girerim.	1	2	3	4	5
Medyada İnternet alışveriş siteleri hakkında reklamlara rastlarım.	1	2	3	4	5
İnternet üzerinden alışveriş sitelerinde almak istediğim ürünlerle ilgili gerekli olan tüm bilgilere ulaşırım.	1	2	3	4	5
İnternet üzerinden alışveriş yapılan sitelerden bazılarının adını sıklıkla duyarım.	1	2	3	4	5
Arkadaşlarım Internet üzerinden alışverişe olumlu gözle bakarlar.	1	2	3	4	5
Alışveriş sitelerinden alışveriş yapmanın kolay olduğunu düşünüyorum.	1	2	3	4	5
Bulunduğum ortamlarda benim de diğerleri gibi Internet üzerinden alışveriş yapmam beklenir.	1	2	3	4	5
Arkadaşlarıma İnternet üzerinden alışveriş yapılan bazı sitelerden bahsederim.	1	2	3	4	5
Alışveriş sitelerini kullanmaya karşı istekliyim.	1	2	3	4	5

İnternetten alışveriş yapmayı herkese tavsiye ederim.	1	2	3	4	5
Alışveriş sitelerindeki işlemleri oldukça açık ve anlaşılır buluyorum.	1	2	3	4	5
Arkadaşlarım Internet üzerinden alışveriş yaparlar.	1	2	3	4	5
İnternet üzerinden alışverişte zamandan kazanırım.	1	2	3	4	5
Çevremdeki insanlar arasında alışveriş yapılan bazı Internet sitelerinden bahsedilir.	1	2	3	4	5
İnternet üzerinden alışveriş yapılan sitelerdeki ödeme işlemlerinin güvenli olduğunu düşünürüm.	1	2	3	4	5
İnternet üzerinden alışverişte ürünleri normal alışverişten daha ucuza bulurum.	1	2	3	4	5
Alışveriş sitelerini sıklıkla kullanırım.	1	2	3	4	5
İnternetten alışveriş yapılan sitelerin kullanımının kolay olduğunu düşünürüm.	1	2	3	4	5
İnternet üzerinden alışveriş yapılan sitelerin taahhütlerini yerine getirdiklerini düşünürüm.	1	2	3	4	5
İnternet üzerinde alışverişi diğer yöntemlerden daha avantajlı buluyorum.	1	2	3	4	5
Yakın bir zamanda Internetten kesinlikle alışveriş yapacağım.	1	2	3	4	5
İnternetten alışverişte normal alışverişten daha fazla eğlenirim.	1	2	3	4	5
Medyada Internet üzerinden alışveriş yapılan siteler hakkında haberlerin yer aldığını görürüm.	1	2	3	4	5

Alışveriş sitelerinde istediğim gibi kolaylıkla gezinebiliyorum.	1	2	3	4	5
İnternet üzerinden alışveriş yapılan sitelerin ürünleri hakkında söylediklerine güvenirim.	1	2	3	4	5
İnternet üzerinden alışveriş yapılan sitelerin kişisel bilgilerimi koruyacağını düşünürüm.	1	2	3	4	5
İnternet üzerinden alışveriş yapılan siteleri ilginç bulurum.	1	2	3	4	5
İnternet üzerinden alışverişi genelde faydalı buluyorum.	1	2	3	4	5
İnternet üzerinden alışveriş yaparken eğlenirim.	1	2	3	4	5
Arkadaşlarım Internet üzerinden alışveriş yapmamı isterler.	1	2	3	4	5
İnternet üzerinden alışveriş yapılan sitelerden satın alınan ürünlerin tesliminde problem yaşamayacağımı düşünürüm.	1	2	3	4	5
Alışveriş sitelerini kullanmayı seviyorum.	1	2	3	4	5
Arkadaşlarım arasında Internet üzerinden alışveriş hakkında konuşulur.	1	2	3	4	5
İnternet üzerinden alışverişte her çeşit ürünü rahatlıkla bulurum.	1	2	3	4	5
Alışveriş sitelerini kullanmayı kısa zamanda öğrenebiliyorum.	1	2	3	4	5
İnternet üzerinden alışveriş yapılan siteleri bildiğimi düşünürüm	1	2	3	4	5

İnternet üzerinden alışveriş yaparken eğlenceli siteleri tercih ederim.	1	2	3	4	5
Internet üzerinden alışveriş yapılan siteleri güvenilir buluyorum.	1	2	3	4	5
Internet üzerinden alışveriş yapılan siteleri keyifli buluyorum.	1	2	3	4	5
Arkadaşlarım Internet üzerinden alışveriş yapmamı tavsiye ederler.	1	2	3	4	5
Alışveriş sitelerinde gezinirken aradığım ürünleri sitedeki ürünler arasındankolaylıkla bulabiliyorum.	1	2	3	4	5

Appendix K: Main Data Factor Analysis

	INT	SN	REP	ENJ	PU	TRUST
PU1						
PU2					,789	
PU3					,853	
PU4					,307	
PU5	,446					
PU6	,437					
INT1	,582					
INT2	,755					
INT3	,448					
INT4	,581					
INT5	,567					
INT6	,661					
PEOU1	,545					
PEOU2	,340					
PEOU3					,555	
PEOU4					,461	
PEOU5						
PEOU6					,401	
SN1		-,436				
SN2		-,783				
SN3		-,488				
SN4		-,917				
SN5		-,462				
SN6		-,982				
TRUST1						,619
TRUST2						,658
TRUST3						,567
TRUST4						,648
TRUST5						,822
TRUST6						,730
ENJ1				-,629		
ENJ2				-,519		
ENJ3				-,845		
ENJ4	,319			-,447		
ENJ5				-,793		
ENJ6				-,417		
FAM1			,310			
FAM2			,463			
FAM3			,868			1
FAM4			,900			1
FAM5			,838			
FAM6			,914			

Extraction Method: Maximum Likelihood.Rotation Method: Oblimin with Kaiser Normalization. a. Rotation converged in 13 iterations.

Appendix L: Items Cross Loadings

	ENJ	INT	PU	FAM	SN	TRUST
ENJ1	0,8572	0,6163	0,4260	0,2469	0,2555	0,4964
ENJ2	0,6531	0,3052	0,2683	0,1725	0,2258	0,2928
ENJ3	0,8779	0,5221	0,4241	0,2394	0,2365	0,4416
ENJ4	0,6146	0,3698	0,1869	0,1710	0,1558	0,1872
ENJ5	0,8347	0,4979	0,3479	0,2187	0,2590	0,3990
ENJ6	0,5639	0,2752	0,1968	0,1867	0,2534	0,2704
INT1	0,4119	0,7652	0,4181	0,2809	0,2508	0,4864
INT2	0,3998	0,8123	0,4338	0,2890	0,1916	0,5476
INT3	0,6368	0,8347	0,5789	0,2827	0,2676	0,5863
INT4	0,4868	0,8345	0,4915	0,2867	0,2726	0,6240
INT5	0,4867	0,7990	0,4449	0,2563	0,2632	0,5654
INT6	0,5207	0,8362	0,4646	0,2969	0,2541	0,5531
PU5	0,4864	0,7935	0,4569	0,2995	0,2532	0,6181
PU6	0,4418	0,7622	0,5023	0,2962	0,2222	0,5605
PU2	0,3898	0,5255	0,8749	0,2667	0,2002	0,4612
PU3	0,4371	0,5333	0,9064	0,2996	0,2263	0,4479
PU4	0,2197	0,3821	0,6552	0,3350	0,1310	0,3610
FAM1	0,2412	0,3531	0,3375	0,6293	0,2245	0,2541
FAM2	0,2408	0,2377	0,3160	0,6761	0,2826	0,2363
FAM3	0,1725	0,1626	0,1770	0,8188	0,2449	0,1397
FAM4	0,2038	0,2828	0,2730	0,8680	0,2605	0,2105
FAM5	0,2266	0,3210	0,2748	0,8361	0,2823	0,2197
FAM6	0,1500	0,1741	0,1953	0,8347	0,3202	0,1690
SN1	0,1134	0,1535	0,1538	0,2324	0,6192	0,1815
SN2	0,1152	0,1499	0,1354	0,2198	0,7876	0,1330
SN3	0,3231	0,2694	0,1685	0,2488	0,7577	0,2641
SN4	0,2214	0,1761	0,0963	0,2289	0,7628	0,1595
SN5	0,2901	0,3343	0,2769	0,3448	0,8032	0,2344
SN6	0,2350	0,2074	0,1295	0,2468	0,8214	0,1792
TRUST1	0,3895	0,5153	0,3839	0,2418	0,2387	0,7528
TRUST2	0,3917	0,6696	0,4632	0,2241	0,2156	0,8324
TRUST3	0,3041	0,4667	0,4195	0,1637	0,2123	0,7170
TRUST4	0,3464	0,5456	0,3808	0,2121	0,2254	0,7736
TRUST5	0,4716	0,6223	0,4201	0,2480	0,2050	0,8731
TRUST6	0,4177	0,5159	0,3960	0,2377	0,1677	0,7983

VITA

Murat Çakır was born in Isparta in 1975. He received his BS degree in System Engineering from Turkish Military Academy in 1997. He completed his MSc in Information Systems in Middle East Technical University in 2004. His main areas of interest are information systems effectiveness assessment and technology adoption.



TEZ FOTOKOPI İZİN FORMU

	<u>ENSTİTÜ</u>			
	Fen Bilimleri Enstitüsü			
	Sosyal Bilimler Enstitüsü			
	Uygulamalı Matematik Enstitüsü			
	Enformatik Enstitüsü			
	Deniz Bilimleri Enstitüsü			
	<u>YAZARIN</u>			
	Soyadı : ÇAKIR Adı : Murat Bölümü : Bilişim Sistemleri			
	TEZİN ADI (İngilizce) : DEVE B2C E-COMMERCE ADOPT INVESTIGATION USING STRUC INTERPRETATIVE PHENOMENO	TION MODE TURAL EQUA	L: AN TION MOD	EMPIRICAL
	<u>TEZİN TÜRÜ</u> : Yüksek Lisans		Doktora	
1.	Tezimin tamamı dünya çapında eriş şartıyla tezimin bir kısmı veya tama	=		rilmek
2.	Tezimin tamamı yalnızca Orta Doğu erişimine açılsın. (Bu seçenekle tezi Kütüphane aracılığı ile ODTÜ dışına	nizin fotokopisi	ya da elektro	
3.	Tezim bir (1) yıl süreyle erişime kap fotokopisi ya da elektronik kopyası dağıtılmayacaktır.)	•	=	
	Yazarın imzası	Tarih		