The Factors Driving Continuance Intention to Online Shopping (e-Loyalty): Behaviour Differences In The Case of Saudi Arabia

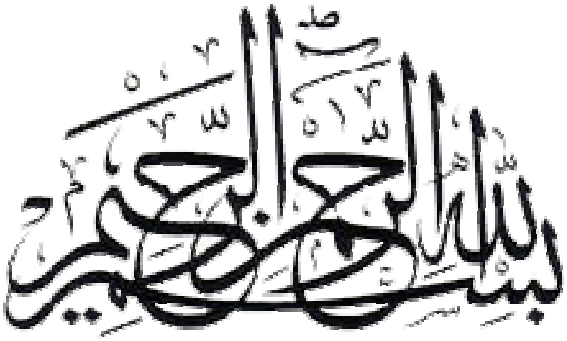
A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy (PhD)

by

Talal Ahmed Abdullah Al-maghrabi

Brunel Business School, Brunel University
United Kingdom

2010



In The Name Of Allah Most Gracious Most Merciful

ABSTRACT

This study proposes a model of e-shopping continuance intentions that incorporate the revised technology acceptance model and expectation confirmation theory to measure continuance online shopping intentions within Saudi Arabia. Using structural equation modelling to confirm the model fit, and a 463-person sample, the author finds that perceived usefulness, enjoyment, and subjective norms determine online shopping continuance intentions, across male (30% of the sample) and female (70%) respondents. The structural weights are largely equivalent, yet the regression paths from site quality to perceived usefulness and perceived usefulness to continuation intentions are not invariant across the research sample. This research thus moves beyond consideration of online shopping intentions to include factors that may affect online shopping continuance. The research model is able to explain 61% of the variance in intentions to continue shopping online. Therefore, online strategies cannot ignore either direct or indirect differences in continuance intentions due to behaviour differences among shoppers in Saudi Arabia. With the high percentages of participants from the main populated regions in Saudi Arabia, the research model can be generalized across Saudi Arabia. Thus, the research has added to the limited literature on online repurchase intention or continuance intention by testing the proposed model in a context that has never before been tested. Furthermore, few prior studies use SEM as their methodological approach, and even fewer apply invariance analysis to verify behavioural differences based on gender, regional, education, e-shopping experience, and e-shopping spending with a sample obtained from Saudi Arabia. This study addresses these various knowledge gaps. Moreover, this thesis provides managers with useful and important information they can use to plan their Web sites and marketing strategies. The findings will help e-retailers to identify which web site attributes influence consumers' e-shopping intentions, and thus improve the effectiveness of their e-shopping sites. A more thorough understanding of e-shopping continuance intention helps e-retailers to entice e-shoppers to shop online more, and entice non-online shoppers to shop online.

Keywords: Internet shopping, e-shopping, technology acceptance, behavioural differences, continuance intentions, online shopping, Saudi Arabia.

ACKNOWLEDGEMENTS

Praise be to Allah, the Lord of the worlds. And the blessings and the peace be upon the last messenger of Allah, Mohammed (Peace Be Upon Him and All Other Prophets and Messengers).

First and foremost, thanks and praise to Allah, the most gracious and most merciful, for his directions and guidance throughout my entire life.

The author is very grateful to Dr. Charles Dennis for his enthusiastic supervision, enlightening inspiration, continuing encouragement and invaluable technical suggestions throughout the course of this investigation. The author also appreciates the guidance given to improve his research skills.

Deep thanks also go to all Doctors, Professors, academic, administrative staff and students at Brunel University for their assistance and support during my study.

Special thanks are due to all the questionnaire respondents and case study participants who made this research possible.

The author is grateful to the Government of Saudi Arabia represented by the Minister of Higher Education for providing the necessary financial support, which allowed this research to continue.

My deep appreciation goes to my colleagues in Saudi Arabian Airlines for their help, support and encouragement during my academy leave, and for providing me with everything possible to enable my research.

I also would like to extend my sincere thanks and appreciation to my colleagues and the staff of the Brunel Business School and Brunel University for supporting me throughout my research and providing me with their knowledge, co-operation and uncomplaining support.

I am also deeply grateful also to all the companies and colleges who participated in this research, particularly their managers who provided me with valuable information and were

generous with their time in interviews. Their generosity in helping me in my data collection is much appreciated.

I am also deeply grateful to all friends whose support and unforgettable companionship I really value.

My deepest thanks and special gratitude go to my dear parents; my mother for her ceaseless prayers and support, and my father for his continuing encouragement and for building a strong belief in my abilities since I was a boy. My deepest thanks to my brothers Wajdi, Naif and Fadi and all my relatives for their support and encouragement during my different research stages.

Finally, I gratefully acknowledge the care, patience, support, and encouragement of my wife who has supported me throughout all my studies abroad including 11 years in USA and 5 years in UK and managing to stay all these years away from home in Saudi Arabia. My thanks to my lovely children Tala and Trad for supporting me throughout my academic research.

COPYRIGHT

talalalmaghrabi@yahoo.com

RESTRICTIONS ON USE

This research may be made available for consultation within the University Library and/or with any other National Library e.g. in UK or Saudi Arabia, and may be photocopied or lent to other libraries for the purpose of consultation.

DEDICATION

My Father

Who always teaches me to be committed to learning as a basis for success and a better future

My Mother

Who brought me up and stood by me throughout my life. Without her support, her prayers, and her blessings, I would never have been able to finish this work. May God bless her.

My Wife

Who supported me in all my education abroad since 1992 in USA for my Diploma, Bachelor, and my Master, and now for my PhD. Her understanding, support, encouragement, acceptance of being away from home, love, and prayers were the fuel and light that drove me to the end of this higher degree journey

My Lovely Two Children

(Tala and Trad)

I love you from the bottom of my heart.

LIST OF PUBLICATIONS, CONFERENCES, AND WORKING PAPERS

Working Papers published at University Research Archive (BURA):

- *The driving factors of continuance intention of e-shopping: Gender differences in behaviour - the case of Saudi Arabia* - Brunel University Research Archive (BURA)
- *The driving factors of continuance online shopping: Gender differences in behaviour among students in Saudi Arabia* - Brunel University Research Archive (BURA)
- *Driving online shopping: Spending and behavioural differences among women in Saudi Arabia* - Brunel University Research Archive (BURA)
- *The factors driving online shopping in Saudi Arabia: Regional and behavioural differences among women* - Brunel University Research Archive (BURA)
- *Understanding the factors that derive continuance intention of e-shopping in Saudi Arabia: Age group differences in behaviour* - Brunel University Research Archive (BURA)

Accepted and Presented Conference Papers:

- *European and Mediterranean Conference on Information Systems 2010 (EMCIS10)*, 12-13/4/2010 Abu Dhabi, United Arab Emirate. "Adapting TAM and ECT: Continuance Intention of e-Shopping in Saudi Arabia",
- *British Academy of Management 2009 (BAM 2009)* 15/9/2009 Brighton, UK. "The Factors Driving Online Shopping in Saudi Arabia: Gender Differences and Behaviour", *Version 3*.
- *European and Mediterranean Conference on Information Systems 2009 (EMCIS09)*, 13-14/7/2009 Izmir, Turkey. "The Factors Driving Online Shopping in Saudi Arabia: Gender Differences and Behaviour", *Version 2*.
- *4th Saudi International Conference 2010 (SIC2010) 30-31/7/2010 Manchester University, UK.* "The factors driving e-loyalty of online shopping in Saudi Arabia".
- *3rd Saudi International Conference 2009 (SIC2009)* 5-6/6/2009 Surrey University, UK. "The Factors Driving Online Shopping in Saudi Arabia: Gender Differences and Behaviour", *Version 1*.

Published Journal Papers:

- *International Journal of Customer Relationship Marketing and Management (IJCRMM)* "The Factors Driving Online Shopping in Saudi Arabia: Regional and Behavioural Differences among Women" Vol. 1, Issue 2, 2010.

- *International Journal of Business Science & Applied Management (IJBSAM)* "Driving Online Shopping: Spending and Behavioural Differences among Women in Saudi Arabia" Vol. 5, Issue 1, 2010.
- *International Journal of Business Information Systems (IJBIS), Special Issue [Web Services and e Commerce]* "The Driving Factors of Continuance Online Shopping: Gender Differences in Behaviour among *students* in Saudi Arabia", Forthcoming.

Journal Paper under peer-review:

- *International Journal of Business Science & Applied Management (IJBSAM)* "Determinants of Customer Continuance Intention of Online Shopping", Authors (Talal Al-maghrabi, Charles Dennis, Brunel University & Sue Vaux Halliday, University of Surrey).
- *International Journal of Retail & Distribution Management (IJRDM)* "The Factors Driving Online Shopping in Saudi Arabia: Gender Differences and Behaviour", Authors (Talal Al-maghrabi & Charles Dennis).
- *Journal of Enterprise Information Management (JEIM)* "Antecedents of Continuance Intention to e-Shop: the Case of Saudi Arabia", (Talal Al-maghrabi, Charles Dennis, Brunel University & Sue Vaux Halliday, University of Surrey).

Award:

- PhD Conference Prize for paper that has the potential for publication '*PhD Doctoral Symposium 2008*' – "*Understanding the Driving Factors that Influence Continuance Online Shopping The Case of Saudi Arabia* - Paper 65", Brunel Business School, Brunel University, UK

Conference and Journal Peer-Review:

- Telecommunications Policy 2010
- European and Mediterranean Conference on Information Systems (EMCIS 2010)
- British Academy of Management (BAM 2009)
- European and Mediterranean Conference on Information (EMCIS 2009)

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ADSL	Asymmetric Digital Subscriber Lines
AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CIL	Continuance Intention to Use
CITC	Communications and Information Technology Commission
CMIN	Chi-square
CMIN/DF	Chi-square/Degrees of Freedom
CR	Critical Ratio
DF	Degrees of Freedom
ECT	Expectation Confirmation Theory
EOU	Ease of Use
ERW	Estimated Regression Weight
FFP	Frequent Flyer Program
GCC	Gulf Co-operation Council countries
GFI	Goodness-of-Fit Index
IATA	International Air Transport Association
KACST	King Abdul-Aziz City for Science and Technology
KSA	Kingdom of Saudi Arabia
LI	Loyalty Incentive
MIAC	Model of Intention of Adoption and Continuance
ML	Maximum Likelihood
PE	Perceived Enjoyment
PNR	Passenger Name Record
PP	Perceived Playfulness
PU	Perceived Usefulness
RMR	Root Mean Square Residual
RMSEA	Root Mean Square Error of Approximation
S.E	Standard Error
SAT	Satisfaction
SN	Subjective Norm
SQ	Site Quality
SRW	Standardised Regression Weight
STC	Saudi Telecommunication
TRUST	Trust
UK	United Kingdom
WTO	World Trade Organization
PE	Perceived Enjoyment
TAM	Technology Acceptance Model
ECT	Expectation Confirmation Theory
TRA	Theory of Reasoned Action
TPB	Theory of Planed Behaviour
BI	Behaviour Intention
AU	Actual Use

CONCEPTS AND THEIR OPERATIONALIZATIONS

Conventionalization	Operationalization
Perceived Usefulness	The degree to which a prospective customer believes that using a website will enhance his or her performance in searching and purchasing products or services (Davis 1989).
Perceived Trust	Trusting beliefs (TB) are the perceptions of: competence; ability of the trustee to do what the trustor needs, benevolence; trustee motivation to act in the trustor's interests, and integrity of the vendor; trustee honesty and promise keeping (McKnight *el al*., 2002). Trusting intentions (TI) indicates a person's willingness to depend on the e-vendor (McKnight *el al*., 2002). The expectation that others will not behave opportunistically or take advantage of the focal partner or situation (Gefen, Karahanna *et al*. 2003); the belief that another party will behave in a dependable (Kumar *et al*. 1995a), ethical (Hosmer 1995), and socially appropriate manner (Zucker 1986).
Perceived Site Quality	If the consumers perceive a vendor's website to be of high quality, the consumer will more likely have high trusting beliefs about the vendor's competence, integrity, and benevolence; and will develop a willingness to depend on the vendor (McKnight *et al*. 2002a).
Perceived Enjoyment	The extent to which the activity of using an e-store's website is enjoyable in its own right, aside from the instrumental value of the site (Davis 1992).
Continuance Intention to Use	A specific desire to continue an e-shopping relationship with a service or product provider (Czepiel and Gilmore, 1987). [Satisfied users] are more likely to continue to use the e-shopping. (Bhattacherjee, 2001b).
Subjective Norms	Social influences on a person's proclivity to engage in a particular behaviour; when social expectations indicate people should engage in behaviour, they are more likely to do so (George, 2004).

CHAPTER 1: INTRODUCTION

1.1. INTRODUCTION TO RESEARCH SUBJECT

Globalization continues to drive the rapid growth of international trade, worldwide corporations, and non-local consumption alternatives (Alden *et al.*, 2006; Holt, Quelch, and Taylor, 2004), even as advances to the Internet and e-commerce have diminished trade boundaries. Both e-commerce and e-shopping create opportunities for businesses to reach out to consumers globally and directly; in turn, business and social science research now focuses specifically on cross-national and cross-cultural Internet marketing (Griffith, Matthew, and Harvey, 2006).

The Internet also has changed how businesses and customers customize, distribute, and consume products. The advantage of low cost gives both businesses and consumers a new and powerful channel for trading information and communication. In 1991, the Internet had less than 3 million users worldwide and no e-commerce applications; by 1999, about 250 million users appeared online, with 63 million of them engaged in online transactions, which produced a total value of $110 billion (Coppel, 2000). Business-to-consumer online sales in the United States grew by 120% between 1998 and 1999 (Shop.org and Boston Consulting Group, 2000). According to a U.K. payment association, the number of consumers who shop online has increased by more than 150%, from 11 million in 2001 to more than 28 million in 2006 (cited in Alsajjan and Dennis, 2009). E-commerce transactions also are growing in the Middle East (19.5 million Internet users) and in the Gulf States. In Saudi Arabia, online transactions have increased by 100%, from $278 million in 2002 to $556 million in 2005 (Al Riyadh, 2006). In 2007, Internet sales increased to more than $1.2 billion worldwide and are expected to continue to rise (World Internet Users and Population Stats, 2007).

Despite these impressive online purchasing growth rates in the previous decade, compelling evidence indicates that many consumers, searching different online retail sites, abandon their purchases, which make the e-commerce market is still small. Likewise, how to persuade customer repurchase remains a concern for e-commerce vendors (Johnson and Hult, 2008). It is stated that only a small minority of website visitors (about 1%) proceeds to make purchases (Gupta and Kim, 2007). This trend, along with the proliferation of business-to-consumer e-

shopping activities, necessitates a better understanding among online businesses of the factors that encourage consumers to complete their e-shopping behaviour by purchasing. Such continuance actions are critical, given the reasonably high cost of acquiring new customers and the economic value of reliable customers (Reichheld and Schefter, 2000). Acquiring new customers, penetrating them and initiating transactions may cost up to five times as much maintaining existing ones (Bhattacherjee, 2001b; Crego and Schiffrin, 1995; Petrissans, 1999). Raising the number of reliable costumers by as slight as 5% can raise profitability by 30-85%, depending upon the business (Reicheld and Schefter, 2000).

Online customer retention is particularly difficult. Currently, consumers have various online and offline options from which to choose. Modern customers demand that their needs be met immediately, perfectly, and for free, and they are empowered with more information to make decisions (Bhattacherjee, 2001b; Crego and Schiffrin, 1995). Given the inconsistent nature of customer behaviour, the growth in global web-stores, the increasing product and service availability and fairly low switching costs, consumers, without a compelling reason to choose one retailer over another, will experiment or rotate purchases among multiple firms (Bhattacherjee, 2001b; Crego and Schiffrin, 1995). All these promote to believe that it is more important than ever to identify the main drivers of online customers' continuance shopping intention.

1.2. TECHNOLOGY AND NEW SHOPPING CHANNELS

Consumers largely find out more about goods and services due to their own experiences. The process of trial and error forms an important part of customer experience and significantly determines consumer choice and preferences (Bettman and Park, 1980; Foxall, 2003). However, experience remains an indefinite concept that contains elements of both the service and the delivery channels. Consumers, therefore, develop experiences by assessing the channels through which they received the service, including the perceived richness of those channels (Carlson and Zmud, 1999). Determining which experience is most important for satisfying customers can be challenging. This research resolves the issue by focusing on a single channel, namely Internet shopping as a method for delivering goods and services, and thereby aims to clarify the drivers and important predictors of consumer continuance use experiences.

Electronic commerce is changing the way people do business in unprecedented ways. In the business-to-consumer (B2C) segment, many customers from developing countries continue to discover this new shopping channel as a means to make purchases, track orders, search, and obtain customer information. Consequently, use of the Internet as a shopping channel in developing countries has increased dramatically in recent years (Cheung, 2005).

Consumer use of this new channel should help reduce consumer uncertainty, build new consumer habits (Sheth and Parvatiyar, 1995), and increase understanding through social exchange processes (Kelley and Thibaut, 1978). For e-retailers, the ultimate goal is to become part of customers' lives, resulting from their need for the seller's product or service, and creating a continuance relationship. According to relational marketing, a series of transactions can form a relationship (Cook and Emerson, 1978; Grönroos, 2001), and according to e-shopping research, duration and interaction frequency provide good predictors of relationship development (Levinthal and Fichman, 1988). In other words, time spent online plays an important role in shopping online; people who spend more time online are more likely to shop online (Lohse, Bellman, and Johnson, 2000). Likewise, theories of social practice indicate that greater use of Internet shopping encourages automatic behaviour, such as continuance usage (Brown and Duguid, 2001).

Unlike traditional shopping, the main interface for e-business or e-commerce is based on information technology, the website, and how the customer and e-retailer interact. In e-commerce, an e-retailer's website replaces the salesperson's functionalities: to represent the company, introduce products, attract customers, provide services, and complete transactions (Kim and Lim, 2003; Li and Zhang, 2005). Customer adaptation to and acceptance of e-shopping is only the first step to overall success; companies that hope to succeed in their e-business initiatives must also work toward creating and maintaining a long-term, sustainable relationship with their customers.

In this sense, the frequency of technology usage (Lang and Colgate, 2003; Ricard, Préfontaine, and Sioufi, 2001) and duration of the experience with the technology (Ricard *et al*., 2001) offer valid representations of technology use. The features, benefits, and values of a technology should influence how consumers make sense of e-shopping services, which also influences use (Griffith, 1999; Carlell, 2001). As Carlson and Zmud (1999) indicate, a new

channel must be easy to use to encourage customers to start using the service, but the importance of this aspect decreases as customers become more accustomed to the service. Once they find the service easy to use, they start to look for more benefits and values from using that service. The same study notes the importance of communicating with customers to explain these benefits and values as an aspect of usefulness perceptions.

Most studies in e-commerce make two assumptions about customers and websites. First, customers usually spend at least a few minutes to determine whether the website offers desirable attributes, such as ease of use, usefulness, enjoyment, or loyalty incentives (Li and Zhang, 2005), regardless of whether they actually like the site. Second, a good website with strong traits receives affirmative cognitive evaluations (Li and Zhang, 2005).

Yet these two assumptions might not hold in the modern business reality. Intense competition among e-companies encourages better product displays and greater customer satisfaction efforts. Customers also have gained more power, with their ability to visit thousands of Websites with ease, greatly increasing their choices and options when shopping. The multitudes of sites that are available allow customers to realize that they can exit any particular website quickly and easily if he or she does not like it for any reason. In this climate, the first impression is very important. It conveys the message that the site is trustworthy, high-quality, and easy to use and, thus, influences the customer to spend more time on the site and enjoy all its features.

1.3. RESEARCH PROBLEM

Despite their widespread popularity, some common theories, such as the technology acceptance model (TAM) and expectation confirmation theory (ECT) have not been tested in some developing countries, such as Saudi Arabia. This gap becomes especially problematic in the context of research question regarding what factors drive consumers' continuance intentions toward e-shopping. These include: Which forces drive customer continuance e-shopping intentions in Saudi Arabia? Do they differ from the drivers in developed countries? That is, do well-established theories from developed (mostly Western) countries also apply in less developed (often non-Western) cultures; in the case of this research is Saudi Arabia?

Theoretical explanations of online shopping intentions consider several factors. Rogers (1995) suggests that consumers re-evaluate acceptance decisions during a final confirmation stage and decide to continue or discontinue. Continuance may be an extension of acceptance behaviour that covaries with acceptance (e.g., Bhattercherjee, 2001a; Davis, Bagozzi, and Warshaw, 1989; Karahanna, Straub, and Chervany, 1999). Researchers are confronted with a multitude of models, and find that they can choose constructs, or choose a favoured model and largely ignore the contributions from alternative models (Venkatesh *et al*, 2003). Given the complementary nature of TAM and ECT, we adopt the extended expectation confirmation theory (ECT; Bhattacherjee, 2001b) and the technology acceptance model (TAM; Davis, Bagozzi, and Warshaw, 1989) as a theoretical basis, to propose a model of e-shopping continuance intentions. This is similar to the way in which the TAM adapts the theory of reasoned action (TRA) from social psychology to postulate a model of technology acceptance.

The TAM, as expanded by Davis *et al*. (1992) and Gefen, Karahanna, and Straub (2003), and the ECT (Bhattacherjee, 2001a; Oliver, 1980) have been used widely in research in the industrialized world but they are less commonly applied to Saudi Arabia, which is part of the developing countries. Moreover, the TAM stops at intention and does not investigate continuance intentions or behaviour. Therefore, we consider that there is a need for more research into e-shopping continuance intentions, particularly in non-western contexts.

Another issue that this thesis attempts to address pertains to the lack of a widely accepted, cross-cultural definition of e-commerce. In recent years, the Internet has grown to include a wider range of commercial activities and information exchanges, including the transaction and exchange of information between government agencies, governments and businesses, businesses and consumers, and among consumers. Coppel (2000) considers it business over the Internet, which includes both business-to-business and business-to-consumer markets. This study focuses mainly on the B2C arena, which provides the source of the most online progress and development. Increasingly, commercial websites seek to provide useful product information in order to attract potential online shoppers (Totty, 2001). Keeney (1999) pointed out that measuring only actual purchases may be too narrow a scope when assessing the online shopping activity of consumers. Based on previous research, this thesis will propose a

comprehensive definition as the following: e-shopping, electronic shopping, online shopping, and Internet shopping, which are the same and include the activities of searching for, buying, and selling products and services through the Internet. The author generalizes the definition; rather than evaluating shopping at a particular site (as in Chen, Gillenson, and Sherrell, 2002); respondents were asked to generalize all online shopping activities.

In this field, which obviously relates closely to new technology decision-making processes, prior research suggests some key gender differences (Van Slyke, Comunale, and Belanger, 2002; Venkatesh and Morris, 2000). Venkatesh *et al.* (2000) report that women tend to accept information technology mainly when they know that others have high opinions of it and that they are more influenced by ease of use. Men rely more on their own evaluations of the usefulness of the technology. Yet in many cultures, women represent the primary decision makers in families and the households' main shoppers, so a cultural comparison of these trends seems pertinent. Greater exposure to e-commerce and more decision-making power also may grant women greater satisfaction from online shopping (Alreck and Settle, 2002).

Finally, as noted previously, existing research largely ignores Internet shopping in Saudi Arabia and other Arabic countries, many of which can be considered to be developing nations. This thesis focuses on Saudi Arabia and, specifically, continuance intentions toward online shopping in Saudi Arabia. It goes further by explicitly addressing potential differences in the online shopping behaviour of Saudi Arabians. In working to fill all these gaps, this research offers a validated, conceptual model that integrates a variety of factors, including gender and regions' differences, and clarifies the theoretical problems of continuance intentions in the unique context of Saudi Arabia.

The issues outlined above prompt the overarching research question, what factors drive consumers' continuance intentions toward e-shopping in Saudi Arabia?

More specifically, the research reported in this thesis aims to explore:

- Which forces drive customer continuance e-shopping intentions in Saudi Arabia?
- Do they differ from the drivers in developed countries?
- That is, do well-established theories from developed (mostly Western) countries also apply in a less developed non-Western culture, i.e. Saudi Arabia?

- What impact do enjoyment, usefulness, and subjective norms have on continuance intention in Saudi Arabia?
- Are gender, education, age, experience, spending, and geographic regions of Saudi Arabia associated with any behaviour differences among online shoppers?
- Do e-retailers in Saudi Arabia recognize the value and cost effectiveness of implementing e-commerce and e-shopping strategy?

1.4. RESEARCH AIMS

In line with the gaps in previous research and the resulting key research question, this thesis adopts an information acceptance point of view. Consumers in Saudi Arabia are increasing their use of online shopping, and a greater understanding of the factors that affect their acceptance and continuance intentions is desperately needed. Online shopping offers e-retailers many advantages. It is a cost effective option that has helped e-retailers to increase their profitability. Part of these cost savings are passed on to customers. Furthermore, by addressing behavioural differences in the development of this understanding, this thesis offers insight into broad ranging issues with wider applications and differing degrees of importance. The conceptual framework proposed herein attempts to describe continuance online shopping intentions in the e-commerce world of Saudi Arabia as a result of the combined influences of Site Quality (McKnight, and Chervany, 2002), Trust (McKnight, 2002), Usefulness (Gefen et al., 2003), Enjoyment (Childers et al., 2001), Subjective Norms (Ya-Yueh, 2004), and Usage Continuance Intentions (Yang and Peterson, 2004). The framework works to explain the relationship among the factors that may attract a customer to use a website and their effects on continuance intentions toward e-shopping in a unique cultural setting, while acknowledging the potential behavioural online shopping differences between gender, age, education, regions, experience, and online spending. Thus, the research aim is to enhance knowledge and understanding in the area of online shopping continuance intention (theoretically and practically) while proposing and validating a model of e-shopping continuance intentions that incorporates different constructs from the modified TAM and ECT, and considers variance of continuance intentions in the context of e-shopping in Saudi Arabia.

1.5. RESEARCH OBJECTIVES

As an overriding objective, this research offers a novel perspective for establishing overarching patterns of e-shopping that drive customer continuance intentions and, thereby, enrich understanding of the factors that influence online shopping in Saudi Arabia. To achieve these objectives, this research relies on TAM and ECT and their extensions to explicate consumer online shopping continuance intentions due to the technological attributes of the website (Davis, Bagozzi, and Warshaw, 1989; Bhattacherjee, 2001b). The subsequent initial actions by consumers represent only a first step toward the creation and maintenance of long-term, sustainable relationships with customers (Bhattacherjee, 2001b).

The TAM can reveal e-shopping intentions (Davis 1989; Davis *et al*. 1989), and many empirical tests confirm it as a parsimonious, robust model of technology acceptance behaviours in various IT categories, including e-commerce (Gefen and Straub 2000; Lee, Park, and Ahn, 2001; Lederer *et al*., 2000), across levels of expertise (Taylor and Todd, 1995), and across countries (Rose and Straub, 1998; Straub, Keil, and Brennan, 1997). The ECT, in turn, suggests that customer satisfaction develops from a customer's evaluation of the difference between expectations about the product or service before purchase and the level to which the purchase meets those expectations (Kristensen, Martensen, and Gronholdt, 1999). Other studies address different e-commerce factors that are important to online shopping such as trust and site quality (Ba, Whinston, and Zhang, 1999; Beatty *et al*., 1996; Bhattacherjee, 2002; Brynjolfsson and Smith, 2000; Czepiel, 1990; Gefen, 2002; Hoffman, Novak, and Perlta, 1999; Jarvenpaa *et al*., 1999; McKnight, Choudhury, and Kacmar, 2002b; Ratnasingham 1998a; Urban, Sultan, and Qualls, 2000). As they reveal, customers must experience a new channel before they can assess it, especially when they cannot see or touch the product or service, or lack experience with the e-retailer. To strengthen the relationship between e-shoppers and e-retailers, site quality and trust have important role to play.

Additionally, the e-retailing industry is interested in stimulating the interest of online shoppers to build on continuance intention towards the online channel, away from the traditional routine shopping, since it is more cost-effective for both parties. Correspondingly, e-retailers would benefit from this research in assessing their websites' quality perceptions as a whole by actual online shoppers, as it provides insight for areas of improvement or different positioning. As a result, the proposed model introduces a new model that predicts and

assesses online continuance intention shopping by determining the determinant factors of continuance intention in the context of Saudi Arabia. This is done by conducting a comprehensive analysis that includes Exploratory Factor Analysis (EFA), Structural Equation Modelling (SEM) and invariance analysis for the data collected for study purposes to examine research model generalizability. Additionally, it is very important to investigate and understand how businesses recognize e-commerce in general and e-shopping in particular. This is done by analysing the semi-structured interview, analysing the documents received from selected companies participated in the research, Finally, the research would provide a base for future research to build on with respect to the proposed model and its application to other contexts.

Therefore, the research blueprint, with the procedural steps for selecting the research design and research methodology, is as follows:

Phase 1. Define the research problem and objectives.

Phase 2. Review previous literature.

Phase 3. Develop the theoretical conceptual framework.

Phase 4. Design the research (i.e., survey questionnaire, pilot study, translation of questionnaires).

Phase 5. Collect and analyze data (i.e., online survey, structured interview, content analysis, descriptive analysis, factor analysis, discriminant validity, structural equation modelling, hypotheses testing).

Phase 6. Discuss research findings.

1.6. THEORETICAL BACKGROUND

This section outlines the key elements involved in the proposed model. First, the TAM (Davis, 1989) reflects an adaptation of the TRA, specifically tailored to users' acceptance of information systems. It helps explain the determinants of computer acceptance and can explicate user behaviours across a broad range of computing technologies and populations. It also is parsimonious and theoretically justified (Davis *et al*., 1989). The major determinants

are attitude toward, perceived usefulness of, and ease of use of the technology. Perceived usefulness significantly influences attitude formation in prior research (Agarwal and Prasad, 1999; Davis, 1989; Dishaw and Strong, 1999; Gefen and Keil, 1998; Igbaria, Parasuraman, and Baroudi, 1996; Moon and Kim, 2001; Taylor and Todd, 1995; Venkatesh, 2000; Venkatesh and Davis, 2000), but evidence regarding perceived ease of use remains inconsistent. Furthermore, other researches (e.g., Bhattachergee, 2001a; Ma and Liu, 2004; van der Heijden, Verhagen, and Creemers, 2003) indicate that ease of use has a greater effect on acceptance up to a certain threshold. That is, with more experience, the impact of ease of use on intention declines. Because our research focuses on continuance intentions, we assume all participants already have e-shopping experience, implying that other factors may be more important than ease of use. Moreover, many studies simplify TAM by dropping attitude and studying just the effect of perceived usefulness and ease of use on intention to use (Venkatesh and Davis, 2000; Venkatesh *et al*., 2003; Gefen and Straub, 2000; Lederer *et al*., 2000; Teo, Lim, and Lai, 1999; Premkumar and Bhattacherjee, 2008).

Updates to the TAM have added antecedents to perceived usefulness and ease of use (Venkatesh and Davis, 2000), such as subjective norms, experience, trust, and output quality. Ample evidence confirms that both usefulness (i.e., external motivation) and intrinsic enjoyment (i.e., internal motivation) offer direct determinants of user acceptance (Davis, Bagozzi, and Warshaw, 1992; Lederer *et al*., 2000; Moon and Kim, 2001; Teo *et al*., 1999; Venkatesh, 1999).

Second, expectation confirmation theory (ECT) helps predict consumer behaviour before, during, and after a purchase in various contexts and for both products and services (Anderson and Sullivan, 1993; Dabholkar, Shepard, and Thorpe, 2000; Oliver, 1980, 1993; Patterson, Johnson, and Spreng, 1997; Spreng, MacKenzie, and Olshavsky, 1996; Swan and Trawick, 1981; Tse and Wilton, 1988). According to the ECT, consumers define their repurchase intentions by determining whether the product or service meets their initial expectations. Thus, the comparison of the usefulness they actually perceive against their original expectation of usefulness influences their continuance intentions (Bhattacherjee 2001a; Oliver, 1980). For example, expectations might derive from knowledge and information collected from mass media or other sources that predict the performance of products or services. As the consumer uses the product, he or she confirms these expectations about the

value and benefits of the product/service. If it meets his or her initial expectation and leaves the consumer happy and satisfied, this consumer experiences positive intentions to repurchase. That is, repurchase intentions depend on satisfaction with the product or service (Anderson and Sullivan, 1993; Oliver, 1980).

However, the ECT ignores potential changes in initial expectations after a consumption experience and also the effect of those changes on subsequent cognitive processes (Bhattacherjee 2001a). Pre-purchase expectations typically rely on others' opinions or information from mass media, whereas post-purchase expectations derive from first-hand experience, which appears more realistic (Fazio and Zanna, 1981). After such first-hand experience, expectations may increase if consumers believe the product or service is useful or contains new benefits and features that were not part their initial expectation.

Venkatesh *et al*. (2003) suggest that continuing usage may also depend on cognitive beliefs about perceived usefulness. Gefen *et al*. (2003) indicates that perceived usefulness reinforces an online shopper's intention to continue using a website, as happens when a person accepts a new information system and is more willing to alter practices and expend time and effort to use it (Succi and Walter, 1999). However, consumers may continue using an e-commerce service if they consider it useful, even if they are dissatisfied with its prior use (Bhattacherjee, 2001a).

The dominant influence of perceived usefulness has led Bhattacherjee (2001) to include this in his revised ECT. In a recent study by Premkumar and Bhattacherjee (2008) it was found that just as perceived usefulness is the strongest predictor of intention in TAM, it continues to be a stronger predictor of continuance intention than satisfaction when TAM is combined with ECT (whereas satisfaction was dominant in the original ECT) (Premkumar and Bhattacherjee, 2008). The relative dominance of usefulness explains its role as a critical driver in continuance decisions, particularly in comparisons of utilitarian value over hedonic value (Premkumar and Bhattacherjee, 2008).

Third, site quality and good interface design enhance the formation of consumer trust (McKnight, Choudhury, and Kacmar, 2002a). If a consumer perceives a vendor's website to be of high quality, he or she is likely to trust that vendor's competence, integrity, and benevolence (McKnight *et al*., 2002a). Gefen *et al.* (2003), therefore, integrate trust into the

TAM in a B2C e-shopping context, finding that trust positively affects consumers' intention to use a website. In this sense, building trust with consumers becomes an essential mission for e-retailers, because purchasing decisions represent trust-related behaviours (Jarvenpaa, Tractinsky, and Vitale, 2000; McKnight *et al*., 2002b; Urban *et al*., 2000).

Fourth, a person's beliefs about what other influential people (e.g., family, friends, and in-group) think about the behaviour should directly influence their subjective norms. Therefore, if e-shopping appears to represent a socially desirable behaviour, a person is more likely to e-shop (George, 2002).

Fifth, Childers *et al*. (2001) argue that enjoyment can predict attitude toward e-shopping, even as much as usefulness can. They also note that usefulness offers a better predictor for grocery items, which tend to be mostly utilitarian, whereas enjoyment provides stronger results for hedonic purchases. When it comes to e-shopping, the hedonic enjoyment constructs in the TAM may entail the pleasure that users obtain from shopping online, which in turn could reinforce their continuance intentions.

1.7. METHODOLOGY

To validate the conceptual model and the proposed research hypotheses, this thesis employs an online survey, developed by the author, which is suitable for collecting data from large geographical areas. In addition, compared with traditional surveys, online surveys offer lower costs, faster responses, and less data entry effort. Chapter 5 describes the methodology in greater details. This thesis pursues the benefits of a multiple method approach by employing questionnaire surveys, measures from previous research, and case study. The research population, defined as Internet users, includes 944 participants who receive the online questionnaires (the research uses 928 of these respondents). This methodological approach is justified on the basis of the reliability and validity of the questionnaires. Because this thesis attempts to determine what drives continuance online shopping intentions, according to a conceptual framework, the research relies on factor analysis, discriminant validity assessments, and structural equation modelling. These tactics are appropriate for ensuring the research can proceed and support the finding derived from the proposed conceptual model.

1.7.1. Measures

The measures of the various constructs come from existing literature, adapted to the context of online shopping, where necessary. All online survey items use a Likert scale, on which 1 indicates strongly disagree and 7 is strongly agree. The site quality and trust items come from McKnight *et al.* (2002a, 2002b). The perceived usefulness items derive from Gefen *et al* (2003). Perceived enjoyment is a measure from Childers *et al*. (2001). Shih and Fang (2004) provide the subjective norm items. The continuance intention items were adapted from Yang and Peterson (2004).

1.7.2. Analysis

The measure analysis relies on the Cronbach's alphas, which all should be greater than 0.7 (Bagozzi and Yi 1988), as well as a squared multiple correlation cut-off point of 0.7 and an average variance extracted (AVE) cut-off point of 0.5 (Bagozzi, 1994; Byrne, 2001; Hair *et al*., 2006). The measures should reveal convergent reliability and discriminant validity. This section is described in more detail in Chapter 6 and 7.

1.7.3. Structural Equation Modelling

The tests of the proposed model, which operationalizes the hypotheses and the factors involved in continuance e-shopping intentions, rely on goodness-of-fit indices. These include Bentler and Bonnett's (1980) chi-square/degrees-of-freedom (CMIN/DF) ratio, which should not exceed five (Bentler, 1989).

A structural equation model (SEM), using AMOS 5.0 software, determines additional goodness-of-fit indices, including the critical ratio (CR), chi-square (CMIN), degrees of freedom (df), root mean square residual (RMR), root mean square error of approximation (RMSEA), goodness-of-fit index (GFI), comparative fit index (CFI), normed fit index (NFI), incremental fit index (NFI), and relative fit index (RFI).

Finally, the analysis examines the regression weights (path significance) of each relationship in the proposed research model and the variance explained (R^2 value) by each path. The AMOS software reports standardized regression weights, standard errors, and CRs for each path.

1.7.4. Invariance Analysis

When comparing cultures or groups, research participants may not recognize the same meaning and understanding of survey items. Scholars, thus, have emphasized the importance of minimizing possible research biases in cross-national and cross-cultural research derived from the data collection (Yi, Merz, and Alden, 2008). To minimize the bias, this thesis undertook a pilot study to test the questionnaire and applied careful back-translation methods (Brislin, 1986). In addition, the testing assesses measurement invariance (equivalence) across groups to determine the constructs' factorial invariance (Cheung and Rensvold, 1999).

1.8. THESIS OUTLINE

This thesis contains eight chapters and proceeds as follows: Chapter 1 is the introduction. Chapter 2 presents a background of IT and e-commerce in Saudi Arabia, and Chapter 3 offer a literature review pertaining to online shopping, TAM, and ECT. Chapters 4 and 5 provide the research question and hypotheses; and describe the methodology, respectively. The data analysis is split between Chapters 6 and 7. Chapter 8 covers the current situation of companies in Saudi Arabia as a case study. Finally, Chapter 9 is the discussion and conclusion, which outlines some practical implications of this thesis.

CHAPTER 2: ORIGIN AND DEVELOPMENT OF THE INTERNET, E-COMMERCE, AND E-SHOPPING IN SAUDI ARABIA

2.1. INTRODUCTION TO COUNTRY AND REGIONAL BACKGROUND

Saudi Arabia is a fascinating country that is often misunderstood and frequently misrepresented. As the powerhouse of the Arab world, it enjoys the single largest economy, is the world's top oil exporter, and, despite its relative youth, has achieved rapid growth rates. It ranks as the 14th largest country in the world, covering more than 2 million square kilometres (Nations Online, 2008).

In addition, its population is young and growing 60% of the total population of 24,069,943 is younger than 30 years (The Middle East Statistics, 2007), with a population growth rate of approximately 2–3%. Its high gross domestic product (GDP) puts it 25th in the world on this measure, and, consequently, investment opportunities are particularly attractive. The demographics of the country also influence the political and economical circumstances that determine the acceptance, development, and spread of technology in the country, which is crucial for the success of e-commerce (Ein-Dor, Segev, and Orgad, 1992; Haley, 2002; Png, Tan and Wee, 2001). In particular, the young population, which is split almost equally in terms of gender (51% male, 49% female), appears more likely to accept the risk of experimenting with new technology and new ideas (Straughn and Alere-Miller, 2001).

More than twenty years ago, Saudis lived in a very restricted environment that forbade most advanced technologies. Only one governmental TV channel was available, satellite was illegal, and women rarely appeared in public alone. Even the use of cordless phones was prohibited!

However, after the first Gulf War, in the early 1990s to 2001, dramatic changes occurred in the country. Saudis began to look to different sources for the latest information about the war, opening the window to satellite imports and also provoking hundreds of new Arabic channels, 60–75% of them targeting the Saudi market. In addition, as Saudi women began working in the media, many other changes resulted. Greater exposure to the external world induced significant changes, including the empowerment of the individual Saudi.

After 9/11/2001 incident in USA, the Saudi government felt pressured to implement even further changes. One of them, especially notable in the traditionally conservative Saudi culture and crucial for this thesis, involved the opening of communication and information exchanged by Saudi youth, both male and female.

From the introduction of Internet services in 1998 to the beginning of 2007, 4.45 million Internet users and more than 10 million mobile technology users appeared in Saudi Arabia. Approximately half of the Internet users represent the younger generation of 30 year olds or younger, who themselves represent 60% of the Saudi population (Okaz newspaper, 2007). These remarkable developments raise a pertinent question: What impact do such changes have on e-commerce in Saudi Arabia, especially among the young generation born after the digital revolution?

Despite global advancements in retailing and marketing communication, retailers throughout Saudi Arabia remain handicapped by several factors. Amazing progress certainly has occurred in terms of creating electronic communication, and storing and processing information, yet few Saudi marketers or retailers have access to modern communication networks that can facilitate and enhance their customer communication (Tuqan, 2004). The King Abdulaziz City for Science and Technology (KACST) is an independent scientific organization whose main functions involve science and technology policy-making, data collection, funding of external research, and services such as the patent office. Also, it operates the Internet backbone in Saudi Arabia, as well as the local registry address space. All Saudi Arabian web traffic will come from the IP block registered to KACST**.** In 2001, KACST undertook a study to determine the penetration of IT into medium and small companies in Saudi Arabia. It found that all companies had personal computers, 82% of possessed servers, and 94% of the companies used local area networks, yet 64% had no independent computer department. In addition, the percentage of Saudi nationals working in the IT field in those companies reached only 12.5%.

It is not clear whether marketers and retailers in Saudi Arabia understand how to employ the principle of sustainable relationships in their practices or the impact of relationships on their consumers. The lack of understanding of the capabilities of the digital revolution may have been prevented the Saudi market from expanding in this sense, which may, in turn, have pushed customers to defect to international competitors. As a member of the World Trade Organization (WTO), Saudi Arabia has gained a great opportunity for attracting foreign

businesses, with their advantages of capital and experience in innovation. Retailers in Saudi Arabia thus face dual competitive pressure, internationally and within their borders, in several areas, including service/product quality, administrative efficiency, and building ongoing relationships.

Yet e-commerce firms may also serve as forerunners in product and service development, financial advances, innovation, and quality improvements. Local businesses, therefore, must react in these same areas.

2.2. E-COMMERCE AND ONLINE SHOPPING

Coppel (2000) defines e-commerce as doing business over the Internet by selling goods and services that might be delivered more traditionally and products that can be digitized and delivered online. E-commerce, or online business, can occur between businesses or between businesses and consumers. In recent years, the Internet has grown to encompass a wider range of potential commercial activities and information exchange. This includes the transaction and exchange of information across government agencies, governments and businesses, businesses and consumers, and among consumers (e.g., auctions), as Table 2.1 outlines.

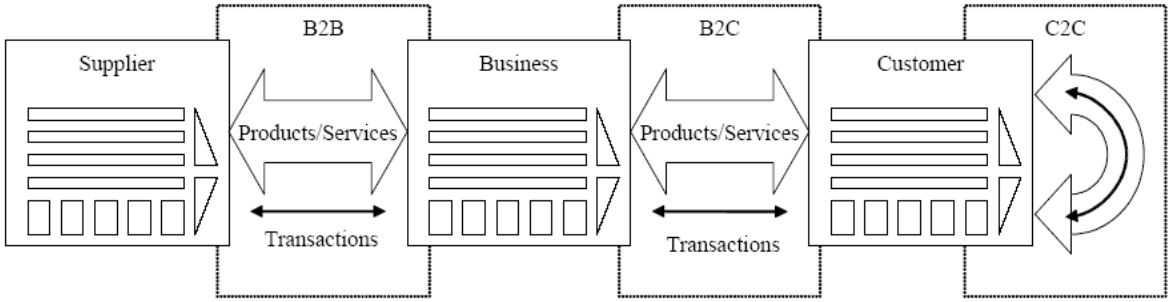
Business to business e-Commerce (B2B) is sometimes called buy-side e-Commerce and involves supporting the supply chain with Information and Communications Technologies (ICT) (Beynon-Davies, 2007). B2B commerce is clearly between organizational actors - public and/or private sector organizations. Business to consumer e-Commerce (B2C) is sometimes called sell-side e-Commerce and concerns the enablement of the customer chain with ICT (Beynon-Davies, 2007). Customers or consumers will typically be individuals, or sometimes might be other organizations. Consumer to Consumer e-Commerce (C2C) is a developing form of e-Commerce and is considered the most radical form of e-Commerce since it overlaps with non-commercial activity in the area of community (Beynon-Davies, 2007). C2C e-Commerce exists in the ‘community’ and a new range of business opportunities emerge within the social communities and virtual networking as a phenomenon driving new levels of content and services(e.g., auctions, ebay). Figure 2.1 illustrates the traditional view of e-Commerce. This research focuses mainly on the business-to-consumer (B2C) context, where most of the progress and development in this area has taken place.

TABLE 2.1: E-COMMERCE AND INTERNET APPLICATIONS

	Government	**Business**	**Consumer**
Government	G2G Example: coordination	G2B Example: information	G2C Example: information
Business	B2G Example: procurement	B2B Example: e-commerce	**B2C** **Example: e-commerce**
Consumer	C2G Example: tax compliance	C2B Example: price comparison	C2C Example: auction markets

Source: Adapted from Coppel (2000)

FIGURE 2.1: FORMS OF E-COMMERCE



Source: Adapted from Beynon-Davies (2007)

Because of these various developments, no widely accepted definition of e-commerce exists. For this research, a comprehensive definition is proposed: online shopping, electronic shopping, and e-shopping are considered synonymous. They are defined as the activity of searching for, buying, and selling products and services through the Internet. For example, if a site enables a customer to search for information, make comparisons, and/or conduct transactions, it qualifies as an online shopping site.

The Internet, which provides the means for e-shopping, is changing how people do business, as well as the way businesses and customers customize, distribute, and consume products. The low cost of using the Internet gives businesses and consumers a new powerful information and communication medium. In 1991, the Internet had fewer than 3 million users worldwide, and no e-commerce applications existed. In 1999, about 250 million people were using the Internet, and approximately 63 million of them engaged in an online transaction from an e-commerce site, for a total value of $110 billion (Coppel, 2000). At present, more than 1.8 billion users around the world are participating in a growing number of online transactions; the Middle East alone hosts approximately 58 million Internet users, and e-

commerce transactions are growing (World Internet Users and Population Stats, 2009). In Saudi Arabia, online transactions have increased by 100% between 2002 and 2005, from $278 million to $556 (Al Riyadh Newspaper, 2006).

In February 2007, in an online poll undertaken by the widely read Alriyadh newspaper, 70% of the respondents had not tried to execute any online transactions, 25% had done so without problems, and 5% had done so but suffered some problems. In addition, a national survey conducted by the Arab Advisors Group at the end of 2007 claimed that 3.5 million (14.3% of the Saudi population) had engaged in e-commerce, spending $3.5 billion (12 billion Saudi Riyals). This puts it at the top of Arab countries in terms of growth in the volume of e-commerce, which reinforces the status of Saudi Arabia as an ideal e-commerce market in the region (Alriyadh newspaper, 2009). The reasons for this boom are a rise in the number of Internet users and the widespread use of credit cards on a large scale, along with the high number of companies with electronic payment. In addition, access to new sectors of e-commerce, such as airlines and the spread of economic interactive electronic games (at a time when the youth is about 50% to 60% of the Saudi population), as well as the growth of electronic commerce in the region by 300% over the past two years (Alriyadh newspaper, 2009) are other factors.

Today, e-commerce in Saudi Arabia covers broad areas of activities include marketing and advertising; the conclusion of electronic contracts and transactions; giving sales and purchase orders; following up e-contracting process; the implementation of transactions and prompt delivery of goods and services across networks, as well as outside the settlement of payments, and the prompt payment of financial commitments (The Communications and Information Technology Commission, 2009). For example, Figures 2.2 illustrates e-Mall (launched on 6th May 2010) and 2.3 illustrate two e-commerce websites (Taufeer and Souq) targeting Saudi customers providing them with the capability to buy and/or sell many product and services, especially to young generation with high security payment options. Table 2.2 lists the values of these transactions in previous years, for comparison.

TABLE 2.2: ESTIMATED VALUE OF E-COMMERCE TRANSACTIONS IN THE MIDDLE EAST IN 2002 AND 2005 (MILLIONS OF DOLLARS)

Country	2002	2005
Saudi Arabia	278	556
Bahrain	15	30

Oman	22	44
Kuwait	27	54
Qatar	8	16
United Arab Emirate	131	262

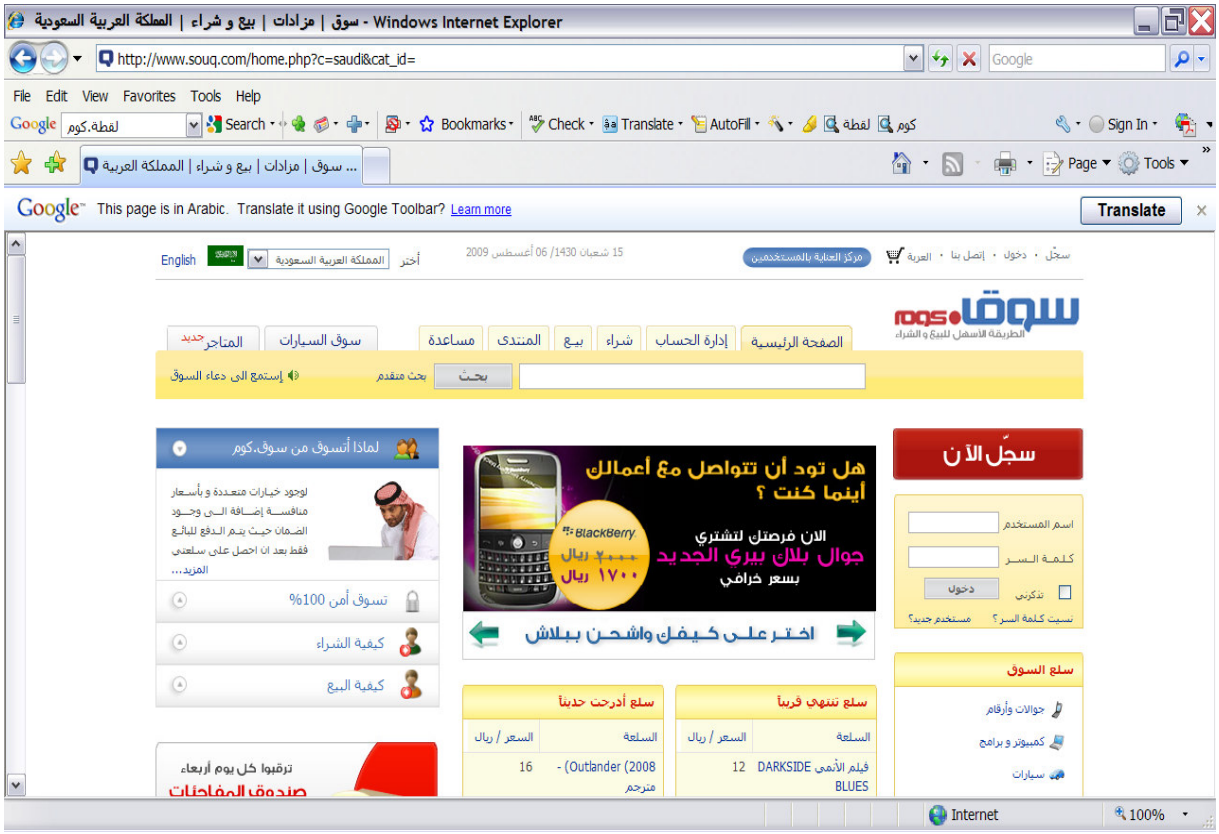
Source: Al Riyadh Newspaper, August 27, 2006
(http://www.alriyadh.com/2006/08/27/article182047.html)

FIGURE 2.2: E-COMMERCE WEBSITE (E-MALL) TARGETING SAUDI CUSTOMERS.

Source: http://www.e-mall.com.sa

FIGURE 2.3: E-COMMERCE WEBSITE (TAUFEER and SOUQ) TARGETING YOUNG GENERATION SAUDI CUSTOMERS.

Source: http://www.taufeer.com/home.php



Source: http://www.souq.com/home.php?c=saudi&cat_id=

2.3. E-COMMERCE AND SAUDI ARABIA

2.3.1. The Internet in Saudi Arabia

Saudi Arabia began allowing public access to the Internet through local service providers in January 1999. However, it was also determined to block the flow of "undesirable" data into the region.

Saudi Arabia has had Internet connectivity since 1994, but its access was restricted to use by academic, medical, and research institutions. Saudi citizens could purchase computers and modems, connect using foreign dial-up Internet service providers (ISPs), and launch sites on foreign servers. However, international calls to the ISPs were expensive; for example, a dial-up call to Bahrain cost U.S. $0.60 - 0.80 per minute; those to the United States and Europe ran $1.70 - $2.10 per minute. Still, according to one estimate, some 30,000 Saudis accessed the Internet in this fashion (Agence France-Presse, 1998).

Although public Internet access was approved in 1997, it was not until January 1999 that local ISPs began connecting ordinary citizens. This delay resulted from authorities' efforts to establish a system that could control the flow of online information. The objective of this monitoring process was to protect society from material on the Internet that would violate the dictates of Islam or encroach on Saudi Arabian traditions and culture (FBIS, 1998).

Saudi Arabia's Council of Ministers endorsed a firewall to keep the public from accessing "inappropriate" information (The Mosaic Group, 1998, p. 216). In addition, the council prepared a wide set of restrictions on Internet content and usage. Decision number 163, made public in May 1998, requires ISPs and users to refrain from:

> "… using the network for illegitimate purposes such as, for example, immoral sites, which include pornography, gambling, drug use, religious conversion of Muslims, carrying out any activities violating the social, cultural, political, media, economic, and religious values of the Kingdom of Saudi Arabia; sending or receiving coded information unless after obtaining the necessary licenses from the administration of the network in question; [and] introducing others into the usage accounts or briefing them on the secret number of the user".
>
> (Al-Jazira newspaper, May 6, 1998).

As another interesting feature, this system encouraged citizens to report "immoral" sites to be blocked, using a provided Web form.

In November 1998, the government approved private ISPs. However, all ISPs must link to a main server at the KACST, which owns the country's sole gateway to the World Wide Web (Al-Jazira Daily, May 6, 1998). More than 95% of the approximately 400,000 blocked websites, according to authorities, deal with pornography; the rest reportedly contain political and social subjects that violate the Saudi Arabia's laws and regulations (Arab News Sunday, July 6, 2003)

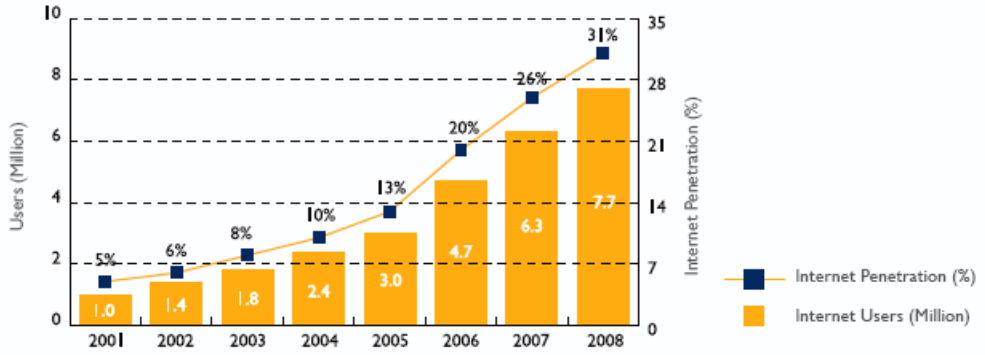
The pricing structure for Internet accounts announced by the KACST appears generally moderate to high, depending on whether the ISPs choose to offer rates closer to the low or high end of the permissible range set by the KACST. A light user, who spends approximately five hours online per month, would pay a monthly rate of $36–$44.

Saudi Arabia also has worked hard to promote an IT culture, and, perhaps due to these efforts, the country accounts for 40% of all computer and IT application sales in the Gulf region's booming $5 billion IT market (Riyadh Exhibition Co. Ltd., 2007). In 1998, the number of personal computers in the country was 860,000, which represented 4.3% of the population. By 2002, the number of PCs had increased to 1,425,000, at a growth rate of 6.5% and a household penetration of 39.4% (The Middle East Statistics, 2007). Internet connectivity, usage of e-commerce and e-banking services, sales of related software and hardware, and sales of computers and laptops all are growing rapidly, stimulated especially by the expansion of the Saudi's young population with its ever increasing interest in technology. Within the next few years, the population of just the Saudi capital, Riyadh, is expected to increase by several million persons, which would likely increase IT demands as well (Riyadh Exhibition Co. Ltd., 2007). Thus, Saudi Arabia has the potential to become the region's communication gateway, if it plans appropriately.

The Global E-readiness Index was developed by UN-DESA/ASPA, and it integrates infrastructure, online presence, e-government, and other indicators in a weighted benchmarking. Saudi Arabia has an index of 1.86, sitting comfortably above the average global index of 1.62 (Anon, 2003). There is no doubt that Saudis are ready for e-commerce and its usage. Internet users in Saudi Arabia in 2000 reached 200,000 (The Middle East Statistics, 2007), then jumped dramatically to 3 million users in December 2005, and 4.7 million users as of December 2006 rising to 7.7 million users by September 2009, with a

population penetration rate of 31% in by the end of 2008; higher than the world average (23%) and more than double the average of Arab countries (14%) (The Communications and Information Technology Commission, 2009). This rapid growth is attributed to increased public awareness; growth in availability of broadband services; decreasing cost of personal computers and Internet access; and enhanced usefulness of the Internet brought about through increased availability of local content, Arabic language sites; e-services such as online banking, e-commerce and e-government applications. It is predicted that the number of Internet users will triple within the next two years. From 2000 to 2008, growth reached approximately 1,170% (The Communications and Information Technology Commission, 2009) - an especially remarkable development in such a short time (Riyadh Exhibition Co. Ltd., 2007). However, precise e-commerce statistics remain difficult to find for the Saudi market, though officials refer to $10 million worth of legal Internet access, yet many businesses seem slow to have caught on to the Internet. A new survey conducted by the Communications and Information Technology Commission (CITC) in 2009 found that only one out of every ten organizations implements 'e-commerce' into their way of doing business in Saudi Arabia, where e-commerce is the least popular among smaller organizations - only 39% of Saudi companies have corporate websites and 9% have implemented e-commerce at the end of 2008, according to a CITC survey (The Communications and Information Technology Commission, 2009).

FIGURE 2.4: INTERNET MARKET EVOLUTION IN SAUDI ARABIA (2001 – 2008), THE COMMUNICATIONS AND INFORMATION TECHNOLOGY COMMISSION ANNUAL REPORT, 2009.



Source: Adapted from the Communications and Information Technology Commission Annual Report, 2009

Another development concerns the connection means, from slow dial-up lines to very fast Asymmetric Digital Subscriber Lines (ADSL). The ADSL connectivity offers 1.5 - 9 mbps downstream and 16 - 640 Kbps upstream capacities - representing unlimited, open access to

the Internet at ten times the speed of ordinary telephone lines (Anon, 2001). The Arab Advisors Group, in its study of available bandwidth and Internet subscriber numbers in several Arab countries including Saudi Arabia, found that available Internet bandwidth in the Middle East grew by 154% to 1.9 Gbps between August 2001 and January 2002. In 2007, it had reached 750 Mbps of bandwidth.

2.3.2. E-commerce in Saudi Arabia

Radical developments in IT have affected Saudi Arabian economic and social life in many ways. The world has experienced a revolution in informatics, with effects that may even outweigh those of the Industrial Revolution. Communications technology and the proliferation of computer networks and the Internet, as well as the integration between IT and communications, have turned the world into a global village in which people can engage in commercial transactions and access information on any subject from anywhere in the world, promptly and cost effectively (Ministry of Communications and Information Technology, Saudi Arabia, 2003).

Since the mid-1990s, developed countries have provided the entire infrastructure needed to expand IT, using the economic, social, and service sectors of their own economic settings. These well-developed infrastructures have had great impacts on IT, enhancing corporate productivity and increasing corporate capacity to reach new markets and transcend geographical and political barriers. They have also allocated essential money and adopted appropriate policies and incentives, together with national programs, to encourage the industry and strengthen research institutions. Consequently, institutions have restructured to cope with the new realities in the regional and international arena, created job opportunities, and improved social services (e.g., education and health care) (Ministry of Communications and Information Technology, Saudi Arabia, 2003). All these efforts have encouraged the development and prosperity of their people.

At the same time, Saudi Arabia, as part of the developing world, has invested in information and telecommunication technologies to the maximum extent possible, considering its financial means and level of development. In general, Saudi Arabia has tried to apply two parallel strategies: using IT to develop basic services, such as education, health, and government institutions, and developing modern industries in the fields of computer hardware and software with assistance from local and foreign investors. Saudi Arabia also has made great efforts to meet the demands of its local markets to match international e-business

trends, including the development and application of IT to national planning, and new initiatives that progress toward an information-based society. The Saudi government has approved a huge budget of $2.7 billion since 2007 to complete all e-transaction projects by 2010 and thus exhibit its full commitment to e-commerce (Okaz Newspaper, 2007).

This brief description of e-commerce–related activities by the government provides an overview. For further information, readers might follow the following links:

- The e-Government Program–Yesser at http://www.yesser.gov.sa/english/default.asp
- Saudi Government Electronic Portal at http://www.saudi.gov.sa/wps/portal/espp
- Ministerial Agency of Civil Affairs at http://www.moi.gov.sa/wps/portal/civilaffairs/home
- Minister of Commerce and Industry at http://www.commerce.gov.sa/english/
- Ministry of Communications and Information Technology at http://www.mcit.gov.sa/english
- Saudi Post at http://www.sp.com.sa/English
- National Center for Digital Certification (NCDC) at http://www.pki.gov.sa/index_english.htm

2.3.3. E-Commerce Challenges in Saudi Arabia

One of the major barriers to the growth of e-commerce in Saudi Arabia is the lack of government support for digital security in online transactions. The Saudi Arabian government has proposed several digital security initiatives and introduced legislation to advance the e-commerce sector. This movement and involvement may be able to address many of the challenges, such that the influence of the government can offer a positive factor that finds the delicate balance between localization and globalization in international e-business standards.

To move forward and demonstrate its commitment to the e-commerce and technology sector, Saudi Arabia created the Ministry of Communications and Information Technology (2003), with the intention of benefiting from the rapid and integrated expansion of the country's social, economic, and administrative life, as well as enhances the development of an information society. This process also may contribute to the increasing diversification of sources of country revenue, the optimum use of available resources, and the achievement of medium- and long-term savings. In addition, it could have a great impact on and contribution to the well-being of the Saudi people, enhancing the country's competitive advantage both

regionally and internationally. Thus, the government support in Saudi Arabia has had the greatest impact in promoting the growth of the e-commerce sector in Saudi Arabia, especially after the Saudi Arabian Monetary Agency has adopted and integrated solutions to the SADAD system "payment system", the central system for the presentation of the various payments electronically, which reflects the keenness of Saudi Arabia to create a special system of financial transactions in a secure electronic environment through the Internet, telephone or ATM systems.

Saudi Arabia has adopted a privatization strategy aimed at improving the efficiency and competitiveness of the national economy by providing incentives for both domestic and foreign capital investment and production, and encouraging participation in the telecommunications sector. To develop the e-commerce industry and establish a legal framework that will provide a competitive edge, the country established the Saudi Communications and Information Technology Commission (CITC) on June 27, 2001, and adopted several telecommunications legislations and regulations.

As a self-directed entity, the Saudi Communications Commission enjoys financial and administrative independence. Its responsibilities include regulating the telecommunication sector; securing the provision of advanced communication services; creating a favourable environment for fair competition; protecting public interests and the rights of telecommunications employees; securing the confidentiality and security of communications; ensuring that the sector adapts to new technologies and developments; and securing the right to access to public network at affordable prices.

Telecommunication regulations specifically define the duties and responsibilities of the Saudi Communications Commission as maintaining the provision of quality telecommunication services at affordable prices. To encourage further and rapid developments, the Commission has opened up the data and mobile markets to competition. By 2007, three mobile phone companies functioned in the Saudi market; a second landline company gained a license in the same year. This movement contributed dramatically to the fast and flexible approach to dealing with changes in domestic, regional, and international environments. This relates to matters not only of economy and competition but also international standards and regulatory rules that would extend the e-commerce and communication sector to the international realm.

Privatization in the telecommunication sector and more foreign investors, with their greater expertise, has generated particular economic interest in this sector. Demand has increased for

Internet services and all their features, as has demand for fixed lines increased by 73% since 1997. The number of subscribers reached 3.4 million by the end of 2002, with a penetration rate of 15% of the total population, such that 84.5% of households have access to a landline (Economist Intelligence Unit, 2007). Mobile service also has grown quickly. The number of subscribers rose from 316,000 in 1997 to more than 5 million in 2002, and 7.24 million in 2003. Penetration rates jumped from around 1.7% in 1997 to 11.8% in 2001, to 22.7% in 2002, and to 29.9% in 2003 (Economist Intelligence Unit, 2007).

Prior to 2006, the Saudi Telecommunication Company (STC) was the only service provider for all communications (telephone, Internet, and mobile). After the Saudi Arabia joined the WTO in 2006, the STC kept reducing its prices as a competitive strategy to maintain its domination over this massive market and to discourage competitors from entering the market. For example, it reduced the cost of connecting to ISPs through the national network by 30%, and installation charges dropped by 70% (Anon, 2001). Yet the telecommunication industry in Saudi Arabia still grew to include three additional communication service providers: Mobily Telecommunications (Ithad Emirate telecommunications company), Zain Telecommunications (a Kuwaiti telecommunications company), and Atheeb (new Saudi landline, communication, and Internet provider)

With these developments the security of information remains a critical issue, so the Saudi Arabian Council of Ministers put forward Decision 163 on March 4, 1997, that authorizes a security information committee, supervised by the Ministry of Interior, with membership for several agencies. The main responsibility of the committee is to increase trust among Internet users by managing the security of information transmitted online. In response, the committee has issued regulations governing the use of the Internet in the country (Ministry of Communications and Information Technology, Saudi Arabia, 2003).

Finally, the government of Saudi Arabia has attempted to build the required environment for technology acceptance by aiming for a better understanding of e-commerce. Programs with the Ministry of Education, the Ministry of Higher Education, and the General Organization for Technical Education and Vocational Training work to increase such understanding among citizens (Ministry of Communications and Information Technology, Saudi Arabia, 2003). These ministries work closely together to improve educational facilities and provide training in IT-related activities in Saudi schools and universities in order to meet both regional and international standards. The main aims are to build knowledge and acceptance of IT and to

provide younger generations with the skills they can use to exploit and benefit from IT and the Internet, thereby moving the country forward as a leader in building an information-based society in the region.

2.4. WEBSITE CLASSIFICATIONS IN SAUDI ARABIA

Since the establishment of the Internet in 1999, companies, both public and private, have established a presence online. Websites are becoming the most common vehicle for communication between companies and customers; they provide digitized versions of companies' brochures, organizational and promotional information for customers and online visitors, financial reports, recruitment details, general information, contacts, and so forth. Most sites also feature both Arabic and English language material. Diniz (1998) suggests three categories of website content (see Table 2.3):

1. Information delivery tool.
2. Customer relationship management tool.
3. Communication.

2.4.1 Using websites as an information delivery tool

At a basic interactivity level, websites act like electronic brochures, providing institutional and promotional information, and contacting and providing customers with special offers or announcements. At an intermediary level, they also provide search engines, download of reports, and links to other sites. Finally, the advanced level in this category uses customized resources, subscription options, advertisements, and discussion groups.

2.4.2 Using websites to improve customer relationships

E-mails and forms provide a method of communication that enables customers to offer suggestions and complaints. Alternatively, websites might provide advising tools that assist customers in making decisions. The advanced level for this usage type involves gathering information from customers to help improve the product, such as through videoconferencing.

2.4.3 Using websites as a vehicle for common communication methods

Customers can use the website to view their accounts and request products or services. At the intermediary interactivity level, customers might access specific information about their accounts, such as bank statements. Finally, at the advanced level, customers can use the site

as a substitute for a physical company branch, as most branch transactions can be conducted online.

The application of this model to websites in Saudi Arabia reveals that companies who have established a presence online (e.g., newspapers, airlines and banks) begin in the first tier, as information delivery systems. The companies with stronger beliefs in online technology gradually have moved into the other two tiers; thus, customers can open an account with Saudi Arabian Airlines to make a booking, obtain a loyalty card, view frequent flyer miles, and request a flight loyalty reward. Bank services offer even more complicated services and transactions.

TABLE 2.3: WEBSITE CLASSIFICATIONS

Information Delivery		
Basic Interactivity Level	**Intermediary Level of Interactivity**	**Advanced Interactivity Level**
Electronic brochure	Report downloads	Use customizing resources
Promotional information	Recruitment forms	Some subscription option
Contact and location details	Hot links to other sites	Advertisement
Special offer announcements		Discussion groups
Use The Web To Improve Relationship With Customers		
Basic Interactivity Level	**Intermediary Level of Interactivity**	**Advanced Interactivity Level**
E-mails and forms for client suggestions and complaints	Advising tools	More advanced technologies, such as videoconferencing
Web Is A Vehicle For The Most Common Transactions		
Lowest Level of Interactivity	**Intermediary Level of Interactivity**	**Advanced Interactivity Level**
Opening accounts	Customers can access their account details and statement online	Promoting electronic transactions
Requesting products and services	Fund transfer	
Card requests	Bill payments	
Investment and credit applications for banks	Customers can have some access to companies databases	

Source: Adapted from Diniz (1998)

2.5. ONLINE CUSTOMER RELATIONSHIP CHARACTERISTICS

2.5.1. Getting to Know the Customer

In recent years, many companies have come to recognize the need for customer relationship to build and sustain ongoing relationships with customers that will satisfy them and make them loyal. Online capabilities can support the company's efforts to understand the customer preferences and behaviours, and thereby segment customers accurately and precisely. Thus, collecting, storing and using customer data becomes of critical significance and is considered a core function for online businesses (Bourlakis 2009). According to theHarvard Business School (2002), companies must encompass different angles of a customer's buying life and concentrate on the point at which the customer becomes exposed to the company. For example, one customer may buy a product for personal use, whereas another could purchase it as a gift. These two customers have different approaches to the product or service; so different sales efforts would entice and motivate them.

To focus on and retain the most valuable customers, companies require the effective use of technology and information resources (Galbreath and Rogers, 1999; Lee, 2006). Having access to such technology and information can help an organization reach a position from which to create products and services that will satisfy customers, especially if the organization can identify segments within the customer base and understand the needs of these specific groups according to their histories and behaviours (Directors and Corporation, 1999).

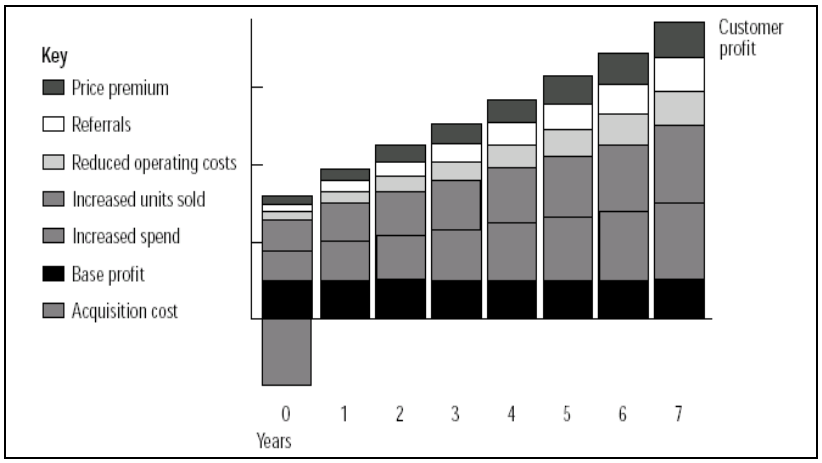
2.5.2. The Reason for Adapting and Maintaining Customer Relationships

Companies should not consider customers from the perspective of a single transaction. Purchase volumes increase as customers sense greater satisfaction with, and are more hooked by, the firm's products or services (Ang and Buttle, 2002).

The primary goal of companies, hoping to take advantage of online business strategy, is to build a long-term customer relationship that will improve the value for both parties (Krueger, 2000). Companies that adopt a customer relationship strategy may do so for various reasons, most of which entail improving customer retention and customer satisfaction. Because of the high costs of acquisition, increasing customer retention rates by 5% can increase company profits by 25% to 95% (Reached and Teal, 2001). Hildebrand (1999) argues that it is 5 to 10

times more expensive to acquire a new customer than obtain repeat business from an existing customer.

FIGURE 2. 5: CUSTOMER PROFIT CONTRIBUTIONS OVER TIME



Source: Adopted from Duffin (1997)

Duffin's (1997) important customer retention model in Figure 2.5 illustrates how retained customers, over time, increase the company value and customer spending. Over the years, retained customers, who exhibit continuance shopping behaviour, purchase more products or services; refer the product to others; tend to become less price sensitive; and demand lower servicing costs. Furthermore, it takes an average of 8 to 10 personal sales calls to sell a product or service; it takes only 2 to 3 calls on average to sell to an existing customer (Gray and Byun, 2001).

Online shopping offers a powerful alternative channel for doing business that can help monitor how customers interact with the company and how to understand their behaviour. This relationship then can increase the value and benefits for customers and companies through cross-selling, up-selling, or some other transaction that generates additional revenue for the organization (Bolton, 2004).

E-commerce thus has changed the way companies and customers conduct business, demanding different tools and strategies to build and maintain relationships with customers (Gray and Byun, 2001). In the e-commerce era, customers do not deal with a salesperson in a physical location or on the phone; instead they remain in front of their computer at home or in the office. With the Internet, competition is increasing because customers can view and compare many options with just a few clicks. They do not need extra effort to move from one physical location to another, or even to dial various numbers. Companies, therefore, should

focus on the advantages derived from possessing tools that enable them to understand the customer and build long-term relationships, instead of focusing on the luxury of skilled salespeople who can convince customers to purchase.

Utilizing the power of online shopping customer relationship as a tool should lead to various benefits, such as higher levels of customer satisfaction, enhanced customer retention, reduced customer acquisition costs, and higher shares of customer spending (Ang and Buttle, 2002).

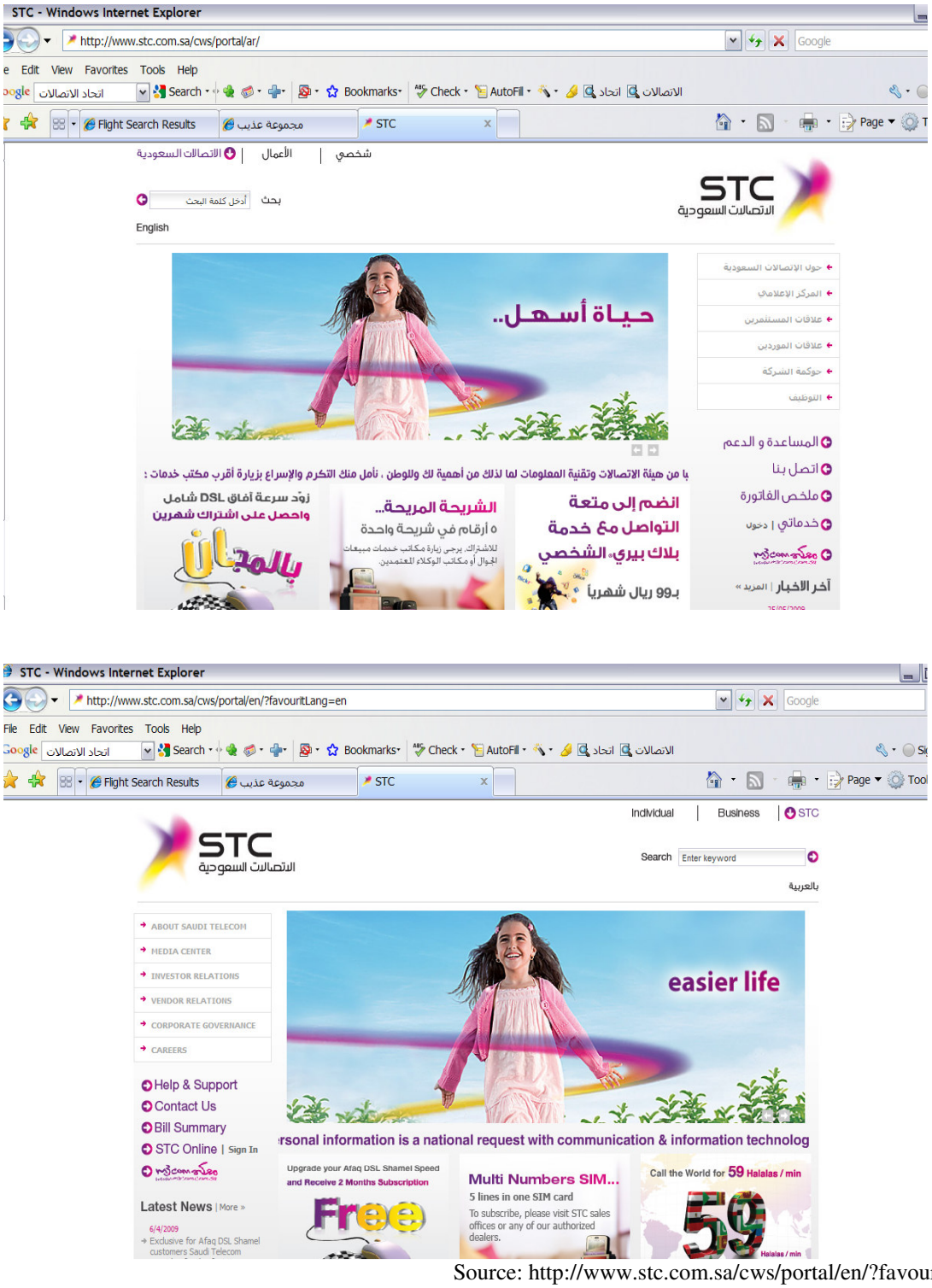
Furthermore, online businesses that apply the right tools can gather and access information about customers' buying histories, preferences, and complaints, thus allowing a better understanding of customer needs (Mukund, 2003). The overall goal is to achieve greater long-term customer loyalty (Al-Ajlan, 2006). Other benefits include:

- Deeper understanding of customers.
- Increased marketing and selling opportunities, including cross-selling and up-selling.
- The identification of different customers.
- Identification of the most profitable customers.
- Faster responses to customer inquiries.
- Increased efficiency through automation.
- Customer feedback that leads to new and improved products or services.
- Information that can be shared with business partners.

In summary, the digital era is pushing businesses to integrate their online business with other tools in order to understand their customers' needs and requirements, based on their histories and preferences, which then helps the organization predict and anticipate customers' future actions, build long relationships, increase satisfaction, and enhance continuance shopping or loyalty.

The Saudi Tele-Communication (STC) offers its customers full control of their accounts (landline, mobile, internet, and business). Additionally, STC customers can see latest offers and redeem their loyalty points for many options such as STC products or services or toward other services provided by STC partners. See Figure 2.6.

FIGURE 2.6: ONLINE SERVICES TO SATISFY AND UNDERSTAND CUSTOMERS: SAUDI TELECOM COMMUTATION (STC)



Source: http://www.stc.com.sa/cws/portal/en/?favouritLang=en

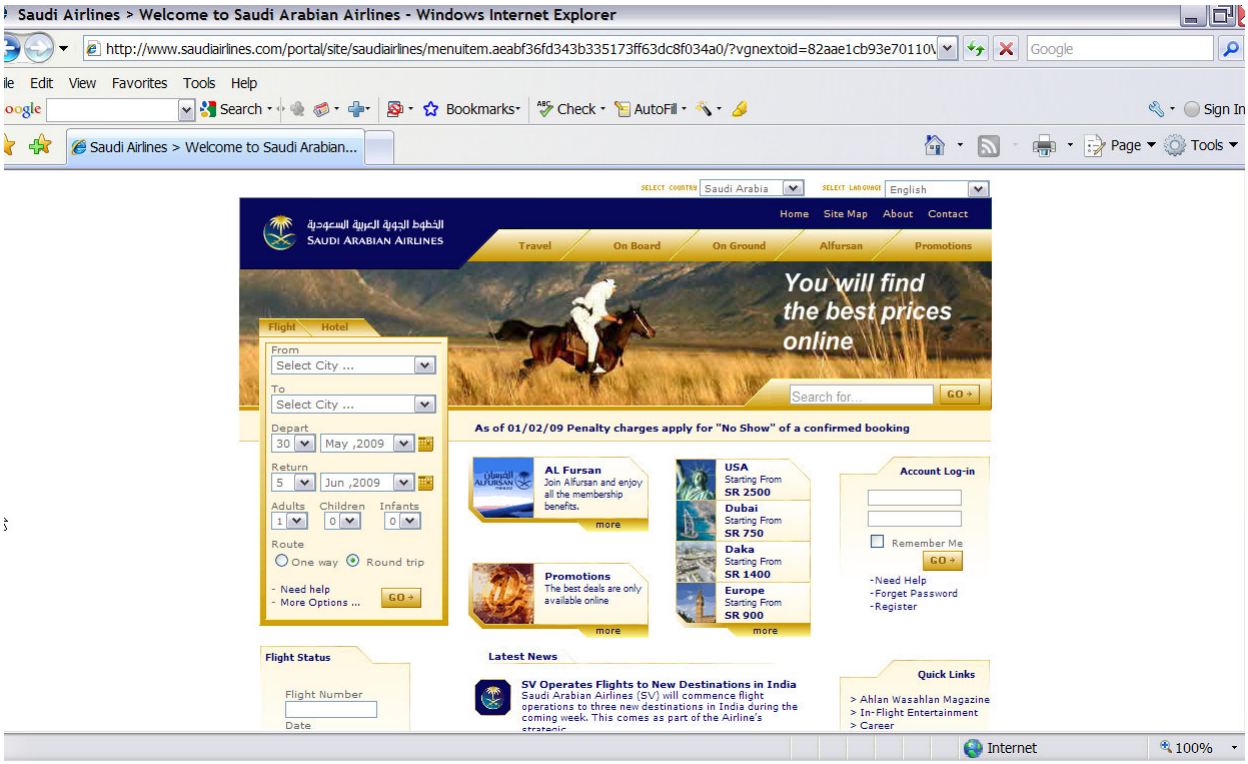
2.5.3. E-Shopping and Customer Satisfaction

Usage and revenue figures regarding e-shopping emphasize the importance of using the World Wide Web for e-business. To enjoy the related benefits and provide a good customer experience, companies need to integrate the Internet channel with their front office (sales,

marketing, and service) efforts. Therefore, e-shopping management tools should consistently help organizations keep closer contact with their customers (Gurau, 2003) as part of a comprehensive customer relationship strategy. According to Sterne (1996), Internet-based business consists of three general areas: pre-sales information, e-commerce services, and post-sales support. These three areas play important roles in building trust, depending on whether customers perceive the site as easy and useful, and confirming their expectations, all of which will lead to customer satisfaction.

An unpublished study by the Centre for Customer Driven Quality also highlights that managing customer relationships online offers significant potential savings. The main goal for companies, when using the Internet to launch their services is to cut marketing costs and reduce the price of their services and products. For example, for one particular retailer the estimated cost of an in-store customer contact was $10, a phone contact was $5, and the cost of a web contact was just $0.01 (Feinberg, *et al.*, 2002) . In the airline industry, the savings appear similar as, according to the International Air Transport Association (IATA), airlines issue 300 million paper tickets per year that each cost $10 (Arab News Newspaper, 2007). An e-ticket instead costs the company $1 - a massive savings of $9 per e-ticket transaction (Arab News Newspaper, 2007).

FIGURE 2.7: SAUDI AIRLINES WEBSITE IN FEBRUARY 2007



Source: www.saudiairlines.com

In the past few years, the economic recession has caused many people to modify their spending habits. Many traditional retail stores have seen a marked decline in sales. Massive layoffs and home foreclosures have also affected the retail sales industry. The low operation cost of online shopping compared to store shopping appears to make online shopping the thriving for retailer during these tough economic recessions (Penn, Schoen and Berland Associates, Inc., 2009).

Many traditional stores face problems with the decline in total sales due to the affect of the economic downturn forcing consumers to modify their spending habits. A recent study carried out by Penn, Schoen and Berland Associates, Inc. (2009), a marketing network, proved that online consumers have become concerned about their purchasing decisions and spend more time browsing the Internet, looking for the best deals before they decide to purchase. Best prices, discounts and coupons, free shipping, and other special promotions influence their decision. This group of consumers is marked as 'recession shoppers'. Results from the study also reported that 68% of recession shoppers purchased items they would not have otherwise chosen because of discount offers, whereas 64% of recession shoppers said they purchased items from a specific retailer they would not have otherwise used because of coupons or discounts.

The Internet is providing shoppers with the tools to compare similar products in order to find the best price. Also, shoppers do not have the fuel expenses associated with travelling to and from traditional retail stores. The results of the study indicate that today's consumer is becoming less of an impulse buyer and more of a careful shopper.

The expanding reach of the Internet not only enables companies to cross borders and reach international customers easily, but also to give more and more consumers web access. The number of Internet users worldwide will just continue to increase, especially among those who have experimented with web access but not purchased online. The growth and importance of online shopping and the management of the needs of current online shoppers seem virtually guaranteed (Reda, 2000). Therefore, most companies should rely on managing the e-business customer relationship to lower their costs and serve their customers more effectively and efficiently, just as Saudi Airlines has moved to offer more online booking and e-ticketing services. See Figure 2.7.

2.5.4. E-Businesses and Customer Segmentation

In the era of one-to-one marketing, many companies neglect market segmentation. However, the power of e-business and customer relationship begins with segmentation, and ends with the individual customer (Crosby, 2002). As Bull (2003) points out, targeting profitable customers reflects a key characteristics of effective long relationship.

Internet shopping can open the door for companies to develop and manage electronic customer relationship as a strategy that identifies, attracts, and retains profitable customers, tying them to the company's products or services through professional relationship marketing, which encourages profitable growth (Kracklauer, Passenheim, and Seifert, 2001). The core of any customer relationship strategy is customer segmentation; some of the world's pickiest companies actually enjoy the successful customer relationship that enable them to pursue selective relationships with only the most profitable customers (Gillies and Rigby, 2002; Newell, 2000).

2.5.5. E-Shopping and Relationship Marketing

Some firms attempt to monitor customers' online purchasing behaviours and habits, but customers demand valuable returns in exchange for providing such personal information. In this context, the meaning of relationship marketing may not be completely clear. For example, Grönroos (1997) defines relationship marketing: "to establish, maintain and enhance relationships with customers and other partners, at a profit, so that the objectives of the parties involved are met. This is done by a mutual exchange and fulfilment of promises". Curry and Curry (2000) reinforce the idea of the customer as king, because all of an organization's revenues, profits, market share, and salaries come from one source: the customer. Therefore, the core of relationship marketing must be to put the customer at the heart of the organization.

The proliferation of B2C e-shopping activities challenges the role and influence of various factors on e-shopping continuance behaviours. This thesis distinguishes between continuance and acceptance; the former is more important as acquiring new customers may cost as much as five times more than retaining existing ones due to the expenses related to searching for new customers, setting up new accounts, and familiarizing new customers with the firm's services (Crego and Schiffrin, 1995; Petrissans, 1999; Bhattacherjee, 2001a).

Maintaining or improving customer retention, thus, positively affects company profits, and relationship marketing has an important role in maintaining existing relationships with current customers (Reached and Teal, 2001; Bull, 2003).

FIGURE 2.8: MOBILY TELECOMMUNICATIONS' SITE PROVIDES SERVICES TO SATISFY AND RETAIN CUSTOMERS.

Source: http://www.mobily.com.sa

As an example, in addition to full control of customer account and loyalty programs, Mobily is succeeded in targeting young population with many offers, games, and attractive handset such as 3G I-Phone. This is shown in Figure 2.8.

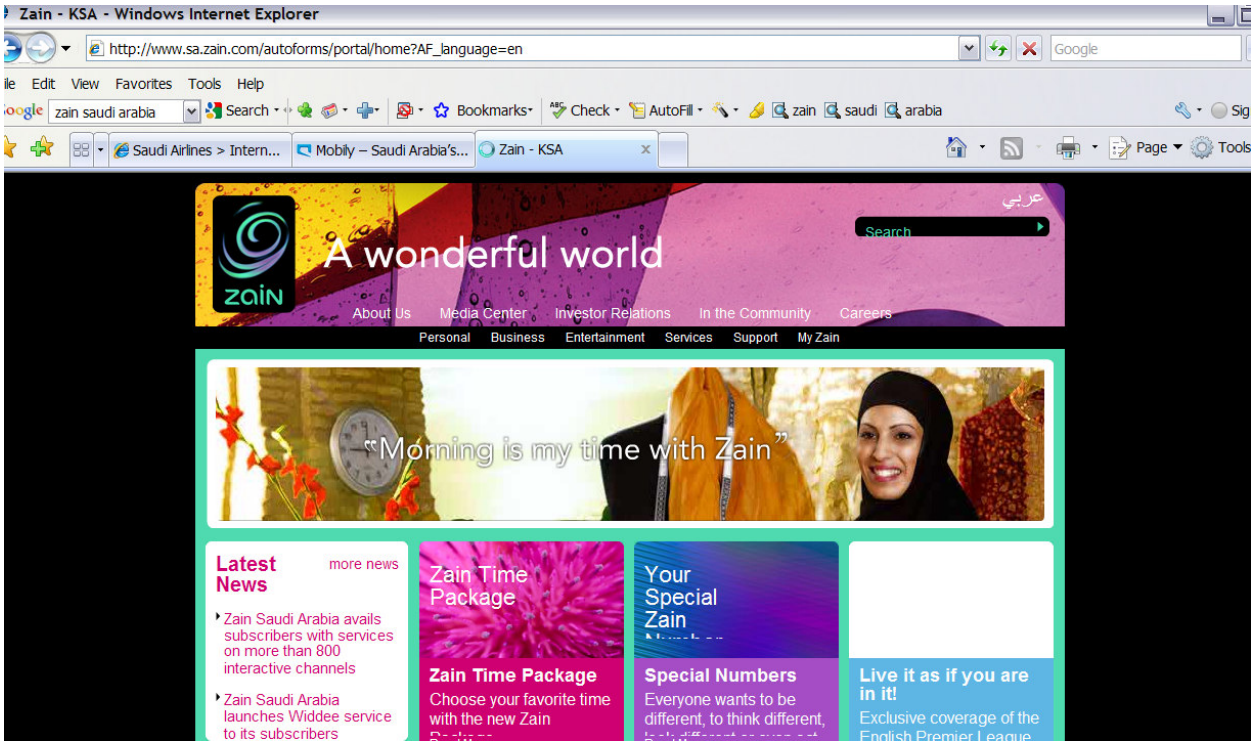
2.5.6. E-Shopping to Create a Customer-Centric Culture

As competition increases, companies must satisfy customers and, thus, become more customer-centric. Such focus on the customer and his or her satisfaction induces more spending on customer relationship management. According to the Gartner group, worldwide spending on customer relationship management reached $76.5 billion in 2005, up from $23.26 billion in 2000 (Starkey and Woodcock, 2002).

Customer relationship management must add value by enhancing the customer's experience of the service and product, whilst also increasing profit, managing relationships across

channels, and pursuing one-to-one marketing. In addition to full control of customer accounts online, Zain Saudi Arabia (www.sa.zain.com), the third largest Mobile provider in the country, provides its customers with unique offers that suite male or female, young or older consumer. It also tries to make each offer reflect the customer personality. Zain customers will also enjoy full entertainment online or through their mobile with games that can be shared with family and friends. See Figure 2.9.

FIGURE 2.9: ZAIN SAUDI ARABIA



Source: www.sa.zain.com

To conclude, e-retailers in Saudi Arabia need to be creative and innovative with new technologies in order to gain competitive advantages to attract and retain online consumers. Collecting, storing and using customers' data as well as tracking their shopping habits can help e-retailers to increase the continuity of online shopping and capitalize on repeat purchasing situations. The new sophisticated technologies that are used by e-retailers will help further on the cross-selling and up-selling opportunities offered by the online shopping medium. A number of techniques can be used that vary in their effectiveness depending on situation and purpose in mind. For example, Amazon, by looking at their customers' group profiles, offer its customer with the most famous cross-selling and up-selling techniques 'users who bought this item were interested in this item as well' (Van Amstel *et al.*, 2000). Table 2.4 illustrates an idea of possible targeted promotion techniques that would increase the continuity of online shopping and increase customer satisfaction.

TABLE 2.4: TARGETED PROMOTION TECHNIQUES FOR INTERNET RETAILERS

Targeted Promotion Techniques	**Example**
Rules-Based Matching	Club members, frequent visitors, etc. (e.g. Tesco.com)
Matching Agents	Established profile can be matched with other profiles displaying similar purchasing behaviour (e.g. Amazon)
Collaborative Filtering	Feedback on products and services defines groups of individuals with similar interests (e.g. Amazon)
Community Ratings	Others help define good from bad (e.g. Like those used on E-bay)

Feedback and Learning	Fields of interest
Attribute Searches	e.g. All books with reduced prices
Full-Text Search	Keywords provided by the user

Source: Adapted from Van Amstel *et al* (2000)

2.6. SUMMARY

Saudi Arabia is a fascinating country that is often misunderstood and frequently misrepresented. This chapter covered prior research investigating the development of e-commerce in the Saudi Arabian market. It focused on the changes that took place since 1991. It also focused on the introduction of the Internet to the local citizens and the growth of Internet usage, and the impact of this to e-commerce. Today, e-commerce in Saudi Arabia covers broad areas of activities, which include marketing and advertising; the conclusion of electronic contracts and transactions; giving sales and purchase orders; following up e-contracting processes; the implementation of transactions and prompt delivery of goods and services across networks, as well as the settlement of payments, and the prompt payment of financial commitments (The Communications and Information Technology Commission, 2009).

The chapter then highlighted the steps taken by the Saudi Government towards improving the Saudi Arabian IT infrastructure, including e-commerce, internet usages, and removal of any obstacles which may be faced by private investors. The Saudi government has approved a huge budget of $2.7 billion since 2007 to complete all e-transaction projects by 2010, and thus exhibit its full commitment to e-commerce (Okaz Newspaper, 2007). The reasons for this boom are a rise in the number of Internet users and the widespread use of credit cards on a large scale, along with the high number of companies using electronic payment.

The proliferation of B2C e-shopping activities challenges the role and influence of various factors on e-shopping continuance behaviours. This thesis distinguishes between continuance and acceptance; the former is more important as acquiring new customers may cost as much as five times more than retaining existing ones due to the expenses incurred in searching for new customers, setting up new accounts, and familiarizing new customers with the firm's services (Crego and Schiffrin, 1995; Petrissans, 1999; Bhattacherjee, 2001a). The main goal for companies, when using the Internet to launch their services is to cut marketing costs and reduce the price of their services and products. For example, for one particular retailer the

estimated cost of an in-store customer contact was $10, a phone contact was $5, and the cost of a web contact was just $0.01 (Feinberg, et al., 2002).

In summary, the field of online shopping is broad, fragmented and relatively new. This chapter has investigated topical issues related to online shopping, such as knowing and maintaining customers. The next chapter will provide a more in depth review of related theories in the context of online shopping, and the factors that affect continuance intention.

CHAPTER 3: LITERATURE REVIEW

3.1 INTRODUCTION

This chapter reviews relevant literature on the subject of established theories in the area of online consumer behaviour. By identifying and evaluating these theories, the researcher is able to make an informed judgement as to which is most suitable for this study. Consequently, the aim is to provide a conceptual and theoretical framework that will inform the subsequent analysis of the empirical data.

Research on consumer behaviour basically depends upon a number of theories that predict and explain human behaviour in several domains. A body of theories recognized in social science - Information System, and Management Information System (MIS) studies - provides researchers with the tools to increase the insight into how consumers react with computing technologies, and at the same time to generate the relationship between the human being and the technology. According to Krauter and Kalucsha (2003), the majority of recognized models in consumer behaviour studies come from three principle theories: the Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1975); the Technology Acceptance Model (TAM) (Davis, 1989); and the Expectation Confirmation Theory (ECT) proposed by Oliver, (1980) and Bhattacherjee (2001).

Based on the authors' knowledge, no previous research has been done on Internet Shopping in Saudi Arabia, or Continuance Intention for Online Shopping in Saudi Arabia, or measuring demographical differences in online shopping behaviour in Saudi Arabia.

The objective of this research is to provide a validated conceptual model that integrates the different factors and clarifies the theoretical problems of continuance intention.

3.2. E-COMMERCE DEVELOPMENT FOR B2C

The rapid development of technology and e-marketing has been an indication of the growing importance of e-commerce, which offers many opportunities for business and consequently influences the development of future economy and international competitiveness of many countries. Forecasts in the past have predicted that the value of goods and services purchased online would increase rapidly. In the last ten years, a significant development and rapid changes have been seen in B2C e-commerce. For this reason, there are opportunities for

marketers, retailers and researchers to better understand how and why people participate and continue to participate in e-commerce. Online shopping is a growing phenomenon all over the world, and Saudi Arabia is no exception since online shopping is a very easy and convenient way to interact and buy.

Until now there has been no single widely acceptable definition for e-commerce. Coppel defined e-commerce as doing business over the Internet by selling goods and services that might be delivered in the traditional way and products that can be digitized and delivered online (Coppel, 2000). E-commerce or online business can be within businesses or between businesses and consumers. In recent years, the Internet has encompassed a wider range of potential commercial activities and information exchange, which includes transaction and exchange of information between government agencies, governments and businesses, businesses and consumers, and among consumers such as auctions. This research will focus mainly on business to consumer (B2C) interaction, where most of the progress and development in this area take place.

E-Commerce includes different forms of activities that cover important fields, such as marketing, electronic negotiations, services and contracting taking place over the Internet and through others channels (Coppel, 2000). In this environment, Chen (2009) indicated that the quick development of B2C e-commerce in its early stage stimulated researchers and scholars to investigate consumer behaviour in cyberspace. Alongside the development of e-retailing, researchers continue to explain online shopping behaviour from different perspectives (Shergill and Chen, 2005). Many previous studies have put forward assumptions depending on conventional models when examining consumer behaviour in different contexts (Butler and Peppard, 1998). However, different researchers propose that online shopping behaviour may be basically different from physical shopping behaviour (Alba *et al*., 1997). There are obvious differences between traditional shopping and shopping through the Internet; the most important being that shopping through an online retailer provides availability and transparency of information (Chen, 2009). Consequently, there are conflicting opinions in this area among authorities on the subject.

Most studies in e-commerce have focused on two assumptions when visiting a website. The first assumption is that customers usually spend at least a few minutes finding out if the website has desirable attributes (Li and Zhang, 2005), such as ease of use, usefulness, enjoyable, loyalty and incentives, regardless of whether they like the website or not. The

other assumption is that good website traits usually obtain affirmative cognitive evaluations and shopping experience (Li and Zhang, 2005). As described by Cambell and Pisterman, people mainly try to base their website judgment on their first impression, based on the stimuli that they get. Thus, if further information is required, customers are likely to be biased in their search in favour of seeking confirmatory evidence, while avoiding contradictory evidence (Campbell and Pisterman, 1996; Lindgaard, *et al*, 2006). Customers might display avoidance behaviour even if the website has excellent products at reasonable prices if the appropriate website message is not conveyed in the first place. The main interface with e-commerce is the Information Technology (IT); the website, which is how customers and e-retailers conduct business. This has been reflected in the empirical research into the nomological network leading to consumer behaviours, such as making a purchase, which lead to the two related antecedents: the technological attributes of the website, and consumer trust in the e-business (Gefen *et al*., 2003). Because of the absence of proven guarantees that the e-retailer will not engage in harmful opportunistic behaviours, trust is also a critical aspect of e-commerce (Gefen, 2000; Kollock, 1999; Reichheld and Schefter, 2000). Other important behaviours include unfair pricing, conveying inaccurate information, violations of privacy, unauthorized use of credit card information, and unauthorized tracking transactions (Gefen *et al*., 2003). Brashear *et al*. (2009) comment that 'as e-commerce has grown, so have concerns of online consumer privacy, the protection of consumer information and the intrusive nature of online communications', and these are considered later in section 3.5.

3.3. ONLINE SHOPPING AND PURCHASING

The definition of a consumer, according to Rostow (1963 cited in Diaz de Rada, 1998) is one who has access to the consumption of goods and services throughout the society. If the needs are socially created, and in line with these needs products are immediately produced to satisfy those needs, the freedom of the consumer is reduced to a choice between the existing products available. The idea of self-controlled consumers has disappeared (Castillo, 1991 cited in de Rada 1998) and nowadays the consumer, who is influenced by publicity, fashion-trend, and the media, is accepted. Hirschman and Holbrook (1982) describe consumers as either "problem solvers" or consumers seeking "fun, fantasy, arousal, sensory stimulation, and enjoyment".

The self-reliant consumer has gone and in his place there is a normalized and hetero-reliant individual whose greatest wish is to be accepted and received by others without standing out

too much, i.e. 'that consumer eager to be lead by others without creating a scandal by his behaviour' (Riesman, 1950, cited in Diaz de Rada, 1998).

All these elements imply a rite in the in the act of shopping. Shields (1992, cited in Diaz de Rada, 1998) feels that this shopping behaviour, which combines shopping and recreation, generates a revaluation of the concept of oneself and of the personal relations within the group and at the same time modifies the use and the distribution of the urban social spaces in the long term. Thus, from the perspective of Hetherington (1992; cited in de Rada 1998, p. 328), as the comment appears in de Rada, the consumerism process should be considered as "something more" than a simple shopping activity given that on some occasions it acquires a basic role in social behaviour.

For over a decade, IT acceptance and usage have received much consideration from different researchers and practitioners (Venkatesh, 2000). Using the Internet for shopping and purchasing products is considered to be innovative, yet this phenomenon is not fully understood. Like most phenomena in the formative stage, there is a perceived requirement to understand what drives and encourage consumers to shop online. Several studies in this field have focused on identifying the information-oriented shopping behaviour of online consumers in the e-commerce environment (Chen, 2009).

Several reasons contribute to the increasing growth of online shopping; for instance, development of more advanced technology has facilitated smoother surfing on the Internet. This facility allows consumers to browse the Internet looking for services and products without leaving their homes. They can further access the Internet, not only from their PC but also from the web TV and mobile phones, maximising the advantage of improved navigation software and search engines. Furthermore, the significance changes in lifestyles offer opportunities for people to shop online at their convenience.

The development of online shopping makes many retailers consider adopting or launching their products or services over the Internet. These considerations are due to a number of different factors that include the need to increase competitiveness, and to improve service for their current and potential customers. Today, the market around the world is dynamic due to increasing competitive power, often coming from multinational corporations. Similarly, organisations are able to take advantage of significant improvement in logistics and information availability, which help create opportunities from global sourcing. Furthermore, increasing information availability gives the perception that the commercial world is

becoming smaller and more accessible. The investment in IT plays an important role in productivity if the technology has been accepted and then used (Venkatesh, 1999).

Online shopping is one of the fastest growing trends all over the world, and it is considered as one of the most successful applications of e-commerce. The Internet has changed the way consumers buy products and services, and has rapidly evolved as a global phenomenon. At the same time, when organisations use the Internet for launching their services the main goal is to cut marketing costs and reduce the prices of their services and products. In addition, organisations use the Internet as a channel to sell their products, to communicate and distribute information, to get feedback about what they sell, and to measure customer satisfaction. In order to offer better services, organisations should enhance their products and services, which is possible only after identifying customers' requirements. This is achieved by investigating existing and potential consumers, and determining what they expect in terms of service quality. In e-commerce, the concept of existing customers is defined as those people dealing with Internet channels for the purpose of purchasing products; whereas potential customers are those people who browse the Internet to search for information regarding products and services they intend to purchase. Customers, therefore, use the Internet to browse, searching for their needs and desires, and to compare prices of brands and reliability, as well as valuing customer service facilities that they may receive after purchasing.

Brashear *et al*. (2009) studied Internet shopping in six countries (the United States, England, New Zealand, China, Brazil and Bulgaria) in order to compare the Internet shopper's profile. Their research findings show that online shoppers around the world share similar beliefs and have favourable attitudes towards direct marketing and advertising.

Khalifa and Limayem (2003) present theoretical explanations of the intention and behaviour of online shopping and proposed different factors (e.g. perceived consequences, attitude, and social influences). For example, their results indicate that the intention of the Internet shopper is significantly affected by the perceived consequences of online shopping (e.g. cheaper prices, convenience, saving time, improved customer service, ability to do comparative shopping, risks of security breach, and privacy violation).

However, consumers' attitudes to e-purchasing are not necessarily universal. Whitcomb (1998, cited in Atchariyachanvanich, 2001) comments in his study of business ethical values in China that the Chinese are more motivated by profit than consumers in the US. Thus, there

may be a greater perceived incentive for Chinese consumers. Similarly, Synodinos (2001, cited in Atchariyachanvanich, 2001) notes that the consumption behaviour of consumers in Japan is notably different from that of other societies. Such studies of differences between the e-purchasing behaviour of consumers in different world market segments provide valuable insight for e-retailers to help them retain customers.

An important strength of e-retailers is that they are able to convey detailed information to customers. However, there is an associated risk that customers will face an information overload, which will lead to the perception of less, rather than more, quality within the subjective state leading to purchasing intentions (Chen, Shang, and Kao, 2009). The results of their research suggest that there are significant differences between the perceptions of experienced consumers and inexperienced consumers when faced with abundant information when purchasing online. Therefore, e-retailers need to consider the volume of information provided and determine how appropriate it is for facilitating the pleasure emotion for different categories of e-purchasers.

Lu and Su (2009) remark that the growth in the use of mobile phones by consumers has had a marked effect on their e-purchasing behaviour, resulting in several managerial implications. Customers' intentions are influenced by three infrastructural elements of perception: Internet accessibility (ease of usage), purpose-oriented functionality (usefulness), and procedure-oriented functionality (enjoyment).

3.4. ONLINE PURCHASING INTENTION

An increasing number and diversity of organisations are exploiting and generating many new business opportunities through the Internet. At the same time, extensive research has been published on business to consumer (B2C) electronic e-commerce about the Internet and virtual shopping. Researchers continue to explain e-commerce behaviour from different perspectives. The recent literature on consumer online purchasing decisions is primarily concerned with investigations of the factors influencing customers engaging in internet shopping.

Numerous studies have distinguished the factors that may affect traditional consumer behaviour and therefore affect purchasing decisions in the context of internet shopping; for instance, the effect of sales promotions (Degeratu, Rangaswamy, and Wu, 2000), the role of brand names and the relationship between involvement and atmosphere and shoppers'

affective and cognitive reactions (Eroglu, Machleit, and Davis, 2001), and the presence of shopping plans before shopping (Dahlén and Lange, 2002). Some findings are specific to the Internet environment. For example, Internet shopping intentions are affected by web search behaviour and web-shopping adoption decisions. Furthermore, decisions are also indirectly affected by web shopping attitude and past/post web shopping experiences (So, Wong, and Sculli, 2005).

Website layout design and information content are important in order to stimulate initial consumer interest to further explore a site (Menon and Kahn, 2002), and the role of brand names, sensory search attributes and price influence their intention to purchase (Degeratu *et al*., 2000). Matching channel characteristics and retail information displays for consumer shopping orientation are also important factors (Mathwick, Malhotra, and Rigdon, 2002). Perceived usefulness and ease of use (O'Cass and Fenech, 2003), previous adoption, perceived risk, Internet use and perceived financial benefits (Eastin, 2002) may also affect web-shopping adoption. Finally, the position trust plays and the influence and force of security and privacy issues on web purchase intentions and decisions are crucial (Salisbury et al., 2000; Liao and Cheung, 2001). The Internet has empowered consumers who now access virtually unlimited selections of products, brands and sellers, and at the same time they can swap between brands, trying different types of products at just a click. However, the truth is that the consumer has infinite choices with limited time (Bhattacherjee 2001b; Crego and Schiffrin, 1995; Cheung, Christy, and lee, 2005).

Many studies have concentrated on identifying the characteristics of the online shopper and the differences between Internet buyers and non-buyers. For example, Jarvenpaa, *et al*. (2000) argue that the consumer can recognize the differences in the size and reputation of Internet stores, which correspondingly influence their evaluation of the level of stores' trustworthiness and related perception of risk. They hypothesize that the perceived reputation and perceived effect of trust on the consumer will produce a positive attitude to their purchasing intention.

Internet usage and e-commerce applications are expected to continue increasing across the world. Certainly, in each part of the world there are differences in cultures, social customs, and infrastructures, and these differences lead to significant variations in the profiles of shoppers and non-shoppers. Also, it is important to understand the similarities and differences between consumers in all regions of the world. Chen and Chang (2003) proposed a descriptive model of the online shopping process with some empirical research that showed

that the online shopping experience is influenced by different factors relating to interactivity, transactions and fulfilment. These factors are considered to be good indictors of overall satisfaction with online shopping.

In the last decade, much research has been conducted on the user evaluation of e-retailers' websites, and how this evaluation could impact customers' attitudes, shopping intentions, behaviour, and satisfaction (Li and Zhang, 2005). Constructs, such as perceived usefulness (PU), perceived ease of use (PEOU), trust, perceived security, perceived convenience, and perceived firmness have received a tremendous amount of attention from many researchers, such as Bhattacherjee (2001), Chen, *et al*. (2002), Liang and Lai (2002), and Liao and Cheung (2002). For example, in the B2C e-commerce context, Gefen and Straub (2000) investigated how the PU and PEOU constructs influence e-shopping websites. They found that PU and PEOU affect the customer intention of product information inquiry. Additionally, PU influences the intention of purchase, and PEOU has significant impact on PU. Later, Gefen *et al* (2003) integrated trust into the Technology Acceptance Model (TAM), finding positive impacts on customers' intention to use e-shopping by PU, PEOU, and trust.

Nowadays, technologies are advancing rapidly, leading to the maturity of e-commerce in terms of satisfactory web design, functionality, and usability. In such case, e-shopping retailers are striving to stand out by achieving favourable customer experience and effects (Tractinsky 2004). In the same context, Kim, Ferrin, and Rao, (2003) determine that customer satisfaction has a positive impact on the way that customers perceive the e-commerce interface. Huang (2003) expresses the importance of emotion towards the e-shopping environment and its relation to the intention to explore or shop online.

The adoption process of e-shopping has been extensively studied by the attitudinal theoretical models, including TRA and TAM, through investigating the antecedent factors of adoption, such as intention, ease of use, usefulness, attitude, subjective norm, and perceived behaviour control (Bobbitt and Dabholkar, 2001; Chau, Au, and Tam, 2000; Goldsmith and Bridges, 2000; Koufaris, Kambil, and Labarbera, 2001; Vellido, Lisboa, and Meehan, 2000; Raijas and Tuunainen, 2001; Limayem *et al*., 2000). Appendix A provides a summary of the most common theories in online shopping.

Most of the international studies have taken into consideration the importance of the differences in culture and demographics (Hofstede, 1984). Many researchers have investigated the demographic factors like age, gender, income, and education as determinants

of e-shopping adoption behaviour (Bellman, Lohse, and Johnson, 1999; Bhatnagar, Misra, and Rao, 2000; Li, Kuo, and Russell, 1999; Phau and Poon, 2000; Ramaswami, Strader, and Brett, 2000). Such factors play an important role and are considered as leading indicators of who prefers to shop online (Lohse, *et al*., 2000). In political and economical situations, they determine how the technology can be accepted, developed, and spread in the country, and this is very important for the success of e-commerce (Ein-Dor, Segev, and Orgad, 1992; Haley, 2002; Png, Tan and Wee, 2001).

Previous research finds that gender differences are instrumental in the decision making process for the use of new technology, and in determining the technology acceptance decision for different individuals (Van Slyke *et al*., 2002; Venkatesh, Morris and Ackerman, 2000). Venkatesh *et al*. (2000) reported that women tend to accept information technology based on the opinion of others. This is often the result of more familiar ease of use. Conversely, men are more influenced by the evaluation of the usefulness of the technology. However, women are the main buying power for families and the traditional households' shoppers in most cultures. With the great increase of the amount of e-commerce exposure, and with women having the potential to be decision makers with regards to shopping in many of the households in different cultures, women would be more likely to find greater satisfaction in online shopping (Alreck and Settle, 2001).

In their paper on cultural influences, Stafford, Turan, and Raisinghani, (2004) draw important links between the works of Hofstede (1984) and Venkatesh (2000) with regard to the understanding of key demographic variables in gender and the use of technology. Bush *et al*. (2005) refer to the power of social influence, particularly within young female age groups and the significance of role models in consumer behaviour within the sports market, both of which are relevant to Saudi Arabian context.

Hofstede, however, found that most of the Arab countries, including Saudi Arabia, are perceived as masculine societies. He found that in masculine societies, men tend to be early adopters of Internet technology and, therefore, men are more active online shoppers. His findings imply that masculine dominated cultures are likely to have more online shopping activities. Nevertheless, most of the literature on consumer behaviour and Internet use (Alreck and Settle, 2002; Otnes and McGrath, 2001; Van Slyke *et al*., 2002) tempers such gender anticipation for online activity based on Hofsted's (1984) masculinity findings. This finds that busy women who conduct online shopping are in more need of the conveniences of online shopping especially, where shopping has been (and continues to be) more positively

linked with females in most modern households (Stafford, Turan, and Raisinghani, 2004). Stafford *et al*. (2004), found no differences between men and women in relation to online shopping connection.

Other researchers have argued that the types of products and services, as well as prices, are important factors when examining the intention of Internet consumer behaviour (Bobbitt and Dabholkar, 2001; Sohn, 1999; Degeratu *et al*., 2000; Liang and Lai 2002). For example, many researches support this argument with products that do not need physical examination before purchase and are not expensive so that they are easier to sell online, such as books and CDs (Sohn, 1999). Service quality and brand reputation have important effects on intentions of e-shoppers (Jarvenpaa *et al*., 2000; Ruyter, Wetzels, and Kleijnen, 2001; Song and Zahedi, 2001). Additionally, trust, as a crucial factor in online purchasing intention, and perceived risk have been widely investigated by many researchers as an effective factor in Internet shopping intention (Pavlou, 2001; Ruyter *et al*., 2001; Jarvenpaa *et al*., 2000).

3.5. THE IMPORTANCE OF TRUST IN ELECTRONIC COMMERCE

Researchers have identified factors that have been shown to have a relationship with the acceptance of shopping online. Although the key factor is recognised to be trust, other factors have been frequently examined by researchers, including privacy and security online (Kim and Lim, 2001; Lee, 2002; Goldsmith, 2001), brand reputation (Ruyter *et al*., 2001; Ward and Lee, 2000), navigation (Chau *et al*., 2000; Liang and Lai, 2002), interface (Schoenbachler and Gordon, 2002), and accessibility (Chen and Sukpanich, 1998; Lee, 2002).

Trust has been defined in several ways, and varies from study to study, but there is a general definition that has prevailed, originally provided by Mayer *et al*. (1995). This states that trust is 'the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.' There are several studies that mention the role of trust in e-commerce and they have identified that trust affects consumers' intention to engage in online activities, both directly and indirectly. In the context of online shopping, trust has been identified as an important factor and it is most cited as the reason for consumers failing to purchase over the Internet (Lee and Turban, 2001). Kräuter and Kaluscha (2003) suggest that due to the open nature of the Internet as a global infrastructure, where online transactions are characterized by uncertainty and mystery, lack of control makes

trust a vital element in e-commerce. Trust can occur when there is a state of dependence between trustor and trustee, and also when acting on this dependence involves risk. In general, trust is an important factor in different social interactions where uncertainty and dependency appear (Kräuter and Kaluscha, 2003).

3.6. CONTINUANCE ONLINE SHOPPING AND SATISFACTION

The ability to retain customers remains an essential requirement for any business. In terms of online shopping, this is even more the case. Customers can easily be influenced to move their interest to other websites simply as a result of better offerings or information provision. Atchariyachanvanich *et al*. (2007) state that 'since keeping the customer repurchasing a product/service is essential to maintain the profitability of any business, the continuance of purchasing through the Internet is vital to businesses'.

The development and maintenance of customer satisfaction is the keystone of online shopping success for e-businesses, and will eventually lead to increasing customer loyalty intentions. Such loyalty is essential to the ongoing success of online sellers, and can only be achieved through an understanding of the importance of fairness and trust. This is identified by the use of the TAM, described in section 3.8. By combining these elements, e-retailers are able to gain a better understanding of their customers' underlying beliefs and, thus, their loyalty intentions (Chiu *et al*., 2009). Further to this, Chiu *et al* (2009) showed that the average customer is likely to shop four times at an online store before the e-store itself profits from that customer. This reinforces the importance of customer continuance shopping intentions. It is, therefore, essential that there is effective interaction between the e-store, the customer, the website, and the environment in order to optimise the online shopping behaviour of the customer.

Since customer satisfaction acts as the main driver to gain customer loyalty, it is impossible to gain such loyal customers without satisfying them. However, consumers may continue using an e-commerce service if they consider it useful, even if they are dissatisfied with its prior use (Bhattacherjee, 2001a). In many industries, a loyal customer is considered as more profitable than the non-loyal customer; the loyal customers cost less to serve and retain because they know the product or service and require less information.

Raman (1999) states that loyal customer's even serve as part-time employees; they can provide strong word-of-mouth, create business referrals, provide references, help promote

products, and serve on advisory boards (Bowen and Chen, 2001). Additionally, loyal customers do make more attempts to purchase than non-loyal customers and are less likely to defect to other competitors. Therefore, customers with more intention to continue e-business with the organization will increase the sales, reduce the operational cost, reduce marketing cost and lead to increase in profit (Gurau, 2003).

E-business enables companies to gather and access information about customers' buying histories, preferences, complaints, and other data, so that companies can better predict what it are the customer's needs and wants. The aim is to encourage deeper relationships with customers and greater customer loyalty. Quinn (1996) states that 'Customer Relationship Management helps to build customer loyalty by serving the customer's needs properly; at a price that offers value. If we do that successfully, we can create not only loyal customers but also customers who will become enthusiastic missionaries for the business and, indeed, become more effective salespersons for the organization than their employees'. Realizing the value of strengthening relationships will enable companies to increase profitability, reduce defection and improve retention and growth rate (Young and Stepankek, 2003).

Satisfaction, building sustainable relationships and loyalty incentive play the main role in keeping and retaining the customers. Many studies found that customers might stop doing businesses with the organization for reasons other than satisfaction with the product or service. One study conducted by Griffin (1995) found that 68% of the customers left with no special reason, only that they felt neglected. This finding goes with research on customer loyalty in the service industry conducted by Jobber (2001), who points out that only 14 % of customers who stopped doing businesses did so because they were dissatisfied with the quality of what they had bought, whereas more than two-thirds stopped purchasing because they found service staff uncaring or unhelpful.

However, Rigby, Reichheld, and Schefter, (2002) argue that many companies are striving to increase the percentage of customer loyalty through huge investment in loyalty programmes. The issue is whether customers will value relationships. The answer depends on the kind of relationships that the company wants to have with the customer. When companies try to establish such relationships and provide loyalty incentives, they often end up trying to build relationships with the wrong customers, or trying to build relationships with the right customers but in the wrong way. There are many such examples of failing to get the full advantage of e-business (Internet shopping) through gathering and accessing information about customers' buying histories, preferences, complaints, and other data. Companies have

to build relationships that are valued by the customers, and thus ensure that the relationships are two-way.

Research on continuance is in its infancy. Bhattacherjee (2001a) is one of the very first attempts to explain consumer online repurchasing behaviour using (Oliver, 1980) ECT that focuses on the post purchase. Bhattacherjee proposed model was formulated on the basis of ECT and postulated satisfaction, confirmation, and loyalty incentives as salient factors affecting consumer online repurchasing.

Bhattacherjee (2001b) examines the key drivers of consumers' intention to continue using business-to-consumer e-commerce services. He concludes that consumers' continuance intention is determined by their satisfaction with initial service use, their perceived usefulness of service use, and the interaction between perceived usefulness and loyalty incentives for service use. He also notes that satisfaction and perceived usefulness are both predicted by consumers' confirmation of expectations from initial service use.

Shun and Yunjie (2006) demonstrate that customer value includes both outcome and process components in online shopping. Their results show that while the outcome component is generally assumed to be the most significant dimension, the process component has a particular impact on satisfaction, and thus should not be overlooked in the development of marketing strategy.

Ahn, Ryu, and Han (2007) introduce the concept of playfulness as a reason for consumer continuance in online shopping. They find a strong relationship between user belief and website quality, and describe this as being closely related to perceived ease of use and usefulness. However, they point out that other factors, such as loyalty incentives, perceived control, technology experience and trust all have significant parts to play.

3.6.1. Research on Customer Loyalty

Oliver (1996) defined customer loyalty as “a deeply held commitment to re-buy or re-support a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour”. Customer loyalty is a recurring research issue for both marketing and IT-related businesses (Chiou, 2004; Chung and Lee, 2003; Oliver, 1996; 1999). An organisation sees loyalty among its customers as a great benefit. Over time, they will increase profitability for the business, increase their purchases, become less price sensitive, cost less to provide the service to, and often help to generate new customers (Reichheld, 1993). Researchers have looked at what represents true

customer loyalty, in some cases using behavioural data as a measure, and exploring attitude and behaviour together as measures of loyalty. This is useful because collecting data is easy and cheap; however it has the disadvantage of tending to overvalue the impact of loyalty, which can lead therefore to an oversimplification.

Loyalty, as a process, involves the evaluation of alternative criteria. Jacoby and Chestnut (1978) state that 'if brand loyalty is ever to be managed, not just measured, it will have to be elaborated in a much more detailed description of cognitive activities rather than focusing only on behavioural aspects of brand loyalty'. Loyalty should be considered to be made up of two distinct dimensions: behaviour and attitude (Day, 1969; Jacoby and Kyner, 1973). To understand the difference between the two dimensions, Beerli, Martin, and Quintana, (2004) differentiate between loyalty based on inertia and behavioural loyalty, where a product or service is used out of habit as it requires less effort. In the latter case, behavioural loyalty can result purely from the presence of convenience, and they emphasize that customers will readily switch brands if another brand becomes more convenient. Attitudinal loyalty arises through repeat purchasing behaviour, showing a conscious decision to continue purchasing the product or service.

A model to predict online customers' loyalty has been developed by Wa, Hom, and Kolwoon (2003), which incorporates variables from TAM to improve loyalty prediction. In other studies, perceived value and trust (Harris and Goode, 2004), and satisfaction (Shankar, Smith, and Rangaswamy, 2003) have been proposed as loyalty determinants, with service quality as an external factor that influences perceived value. Much research has been done to investigate attitudinal loyalty in the loyalty context (e.g. Sirdeshm, Singh, and Sabol, 2002; Henard and Szymanski, 2001; Rust and Oliver, 2000).

The Internet has played a significant role in building customer loyalty and maximizing sales to existing customers (Griffin, 1996). The business value becomes zero if no customer is willing to revisit an Internet shop, regardless of its technical or managerial assets (Lee, Kim, and Moon, 2000). Customer loyalty is crucial because the value of a shop and the growth of its business are mainly determined by the number of continued (loyal) customers in the context of e-commerce (Lee *et al*., 2000), and the number of retained customers in the context of any business (Crosby and Johnson, 2005).

The role played by website quality has been identified as a factor in both loyalty and technology acceptance research. The literature on information systems success has long established system quality as an important antecedent of system use (DeLone and McLean, 1992). In the e-commerce context, previous research has generally supported the link

between perceived online system quality and system usage. If a customer perceives a vendor's website to be of high quality he will be more likely to generate a favourable attitude towards it, demonstrate behavioural control over it, which in turn, translates into a higher intention to reuse it (Pavlou and Fygenson, 2006; Jahng, Jain and Ramamurthy, 2007). Ha and Stoel (2009) suggest that website quality is composed of four factors closely related to service quality: website design, customer service, privacy and security, and atmosphere and experience. Additionally, Chakraborty, Lala, and Warren (2002) Chung and Tan (2004) indicated that perceived website quality is a multi-dimensional latent construct that includes dimensions of playfulness, usefulness, user friendliness, informativeness, technology, organization, and navigability. In this context, website quality has been seen to offer a competitive advantage in the electronic market place in the form of delivering value added services, and offering real time online services (Ruyter *et al*., 2001). Since quality is a fundamental assessment of a product or service (Olshavsky, 1985; Luarn and Lin, 2003), it is viewed by Snoj, Korda, and Mumel (2004) as a driver of perceived value. Customers will be prepared to give time and effort online to interact with a website in order to locate the desired product or service, to checkout quickly, and to receive detailed information about the product or service and its delivery. Interactivity on the Internet refers to the degree to which customers and retailers can communicate directly with one another anywhere, any time (Blattberg and Deighton, 1991). Ghose and Dou (1998) observe that, for e-retailers, the degree of interactivity influences the perceived quality of the website.

3.7. THEORETICAL BACKGROUND

Of the Socio-Cognitive models that predict and explain consumer behaviour; e.g., acceptance of technology and/or continuance intention, the most common is the Theory of Reasoned Action (TRA; Fishbein and Ajzen 1975), and its derivative, the Technology Acceptance Model (TAM; Davis 1989). TAM is a more technology-oriented model, and many empirical tests confirm TAM as a parsimonious, robust model of technology acceptance behaviours in various IT categories, including e-commerce (Gefen and Straub 2000; Lee, Park, and Ahn, 2001; Lederer *et al*., 2000), across levels of expertise (Taylor and Todd, 1995), and across countries (Rose and Straub, 1998; Straub, Keil, and Brennan, 1997). TAM is reported to be valid in both organizational and non-organizational contexts including e-commerce (Gefen *et al*., 2003). The ECT, in turn, suggests that customer satisfaction develops from a customer's evaluation of the difference between expectations about the product or service before

purchase and the level to which the purchase meets those expectations (Kristensen, Martensen, and Gronholdt, 1999). Other studies address different e-commerce issues, such as trust (Ba, Whinston, and Zhang, 1999; Beatty *et al*., 1996; Bhattacherjee, 2002; Brynjolfsson and Smith, 2000; Czepiel, 1990; Gefen, 2002; Hoffman, Novak, and Perlta, 1999; Jarvenpaa *et al*., 1999; McKnight, Choudhury, and Kacmar, 2002b; Ratnasingham 1998a; Urban, Sultan, and Qualls, 2000). These reveal that customers must experience a new channel before they can assess it, especially when they cannot see or touch the product or service, or when they lack experience with the e-retailer. Findings show that TRA and its family theories including TAM and TPB are the dominant theories in online consumer behaviour (Cheung, Chan, and Limayem, 2005). ECT and Innovation Diffusion Theory (IDT) also have been examined in different online consumer behaviour studies. Cheung *et al* (2005) claimed that most studies depend heavily on TRA and its family theories (TAM and TPB), while other theories, such as ECT, are less frequently applied in online consumer behaviour studies. As a result, researchers are encouraged to explore new theories, develop new frameworks and investigate online consumer behaviour from different perspectives, angles, and cultural contexts. Table 3.5 lists a summary of the five most frequently used theories and their corresponding references.

From a theoretical point of view, consumers' continuance online shopping intention can be explained by taking into account different factors. Rogers (1995) suggested that adopters re-evaluate their acceptance decision during a final confirmation stage and decide whether to continue or discontinue an innovation. Additionally, previous researchers view continuance as an extension of acceptance behaviour (i.e., they employ the same set of pre-acceptance variables to explain both acceptance and continuance decisions), implicitly assuming that continuance co-varies with acceptance (e.g., Davis *et al*., 1989, Karahanna, Straub, and Chervany, 1999; Bhattacherjee, 2001).

The theoretical research model used in our study is based on the extended Expectation Confirmation Theory (ECT) of Bhattacherjee (2001a) and the Technology Acceptance Model (TAM) of Davis *et al*., (1989). This theoretical research lens is parallel in spirit to Davis *et al*.'s formulation of the Technology Acceptance Model (TAM) in that it integrates expectation confirmation theory (ECT) from the consumer behaviour literature to propose a model of e-shopping continuance intention, similar to the manner in which TAM adapted the Theory of Reasoned Action (TRA) from the social psychology literature to postulate a model of technology acceptance.

Whilst the TAM model, as expanded by Davis et al., (1992) and Gefen et al (2003), and ECT (Oliver, 1980; Bhattacherjee, 2001) have been used widely in research in the industrialized world, it is not so common in the Arabic nations and Saudi Arabia as part of the developing countries. In fact, for Saudi Arabia in particular, such research is virtually non-existent, especially in the e-shopping context. This has led to the creation of a gap in knowledge and research which is still uncertain.

This research proposes a model that is built on TRA, TAM and ECT. The hypothesized model should offer a better prediction of users' continuance e-shopping intention in Saudi Arabia. Hence, to hypothesize such model it is important to understand the literature that lies behind it. In the following section, the theories and models that have been used to build the proposed framework will be discussed.

TABLE 3.5: MOST COMMON THEORIES IN ONLINE SHOPPING

Theory	References
1. Theory of Reasoned Action (TRA)	• Heijden, H.v.d., Verhagen, T., & Creemers, M. (2001). Predicting online purchase behavior: Replications and tests of competing models. In Proceedings of the 34th Annual Hawaii International Conference on System Sciences, Maui, Hawaii, Los Alamitos, CA: IEEE Computer Society. • Jarvenpaa, S.L. & Todd, P.A. (1996). Consumer reactions to electronic shopping on the World Wide Web. International Journal of Electronic Commerce, 1(2), 59-88. • Jarvenpaa, S.L., Tractinsky, N., & Vitale, M, (2000). Consumer trust in an Internet store. Information Technology & Management, 7(1-2), 45-71. • Keen, C., Ruyter, K.D., Wetzels, M., & Feinberg, R. (2000). An empirical analysis of consumer preferences regarding alternative service delivery modes in emerging electronic service markets. Quarterly Journal of Electronic Commerce, 1(1), 31-47. • Kimelfeld, YM. & Watt, J.H. (2001). The pragmatic value of on-line transactional advertising: A predictor of purchase intention. Journal of Marketing Communications, 7(3), 137-157. • Limayem, M., Khalifa, M., & Frini, A. (2000). What makes consumers buy from Internet? A longitudinal study of online shopping. IEEE Transactions on Systems, Man & Cybernetics, Part A (Systems & Humans), 30(4), 421-432. • Shim, S., Eastlick, M.A., Lotz, S.L., & Warrington, P. (2001). An online prepurchase intentions model: The role of intention to search. Journal of Retailing, 77(3), 397-416. • Vijayasarathy, L.R. & Jones, J.M. (2000b). Print and Internet catalog shopping: Assessing attitudes and intentions. Internet Research: Electronic Networking Applications and Policy, 10(3), 191-202.
2. Theory of Planned Behaviour (TPB)	• Bhattacherjee, A. (2000). Acceptance of e-commerce services: The case of electronic brokerages. IEEE Transactions on Systems, Man and Cybernetics, Part A, 30(4), 411-420. • Bhattacherjee, A. (2001a). An empirical analysis of the antecedents of electronic commerce service continuance. Decision Support Systems, 32(2), 201-214. • Bhattacherjee, A. (2001b). Understanding information systems continuance: An expectation confirmation model. MIS Quarterly, 25(3), 351-370. • Jarvenpaa, S.L. & Todd, P.A. (1996). Consumer reactions to electronic shopping on the World Wide Web. International Journal of Electronic Commerce, 1(2), 59-88. • Limayem, M. & Khalifa, M. (2000). Business-to-consumer electronic commerce: A longitudinal study. In Proceedings of the Fifth IEEE Symposium on Computers and

	Communications, (pp. 286290). • Pavlou, RA. (2001). Integrating trust in electronic commerce with the technology acceptance model: Model development and validation. In Proceedings of the Seventh Americas Conference on Information Systems (AMCIS 2001), Boston, M A, (816-822). • Shim, S., Eastlick, M.A., Lotz, S.L., & Warrington, P. (2001). An online prepurchase intentions model: The role of intention to search. Journal of Retailing, 77(3), 397-416. • Song, J. & Zahedi, P.M. (2001). Web design in e-commerce: A theory and empirical analysis. In Proceedings of the 22nd International Conference of Information Systems (ICIS 2001), New Orleans, Louisiana, (pp. 205-220).
3. Theory of Technology Acceptance Model (TAM)	• Bhattacherjee, A. (2000). Acceptance of e-commerce services: The case of electronic brokerages. IEEE Transactions on Systems, Man and Cybernetics, Part A, 30(4), 411-420. • Bhattacherjee, A. (2001a). An empirical analysis of the antecedents of electronic commerce service continuance. Decision Support Systems, 32(2), 201-214. • Bhattacherjee, A. (2001b). Understanding information systems continuance: An expectation confirmation model. MIS Quarterly, 25(3), 351-370. • Chau, P.Y.K., Au, G., & Tam, K.Y. (2000). Impact of information presentation modes on online shopping: An empirical evaluation of a broadband interactive shopping service. Journal of Organizational Computing and Electronic Commerce, 10(1), 1-22. • Childers, T.L., Carr, C.L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. Journal of Retailing, 77(4), 511-535. • Heijden, H.v.d., Verhagen, T., & Creemers, M. (2001). Predicting online purchase behavior: Replications and tests of competing models. In Proceedings of the 34th Annual Hawaii International Conference on System Sciences, Maui, Hawaii, Los Alamitos, CA: IEEE Computer Society. • Lee, J., Kim, J., & Moon, J. Y. (2000). What makes Internet users visit cyber stores again? Key design factors for customer loyalty. In Proceedings of the Conference on Human Factors in Computing Systems, The Hague, Netherlands, (pp. 305-312). • Limayem, M. & Khalifa, M. (2000). Business-to-consumer electronic commerce: A longitudinal study. In Proceedings of the Fifth IEEE Symposium on Computers and Communications, (pp. 286290). • Lin, J.C.-C. & Lu, H. (2000). Towards an understanding of the behavioral intention to use a Web site. International Journal of Information Management, 20(3), 197-208. • Parthasarathy, M. & Bhattacherjee, A. (1998). Understanding post-adoption behavior in the behavior in the context of online services. Information Systems Research, 9(4), 362-379. • Pavlou, RA. (2001). Integrating trust in electronic commerce with the technology acceptance model: Model development and validation. In Proceedings of the Seventh Americas Conference on Information Systems (AMCIS 2001), Boston, M A, (816-822). • Chiu, C. M, Chang C.C, Cheng, H. L., Fang, Y. H., (2009). 'Determinants of customer repurchase intention in online shopping' Online Information Review, 33(4): 761-784 • Yu, Jieun, Ha, Imsook, Choi, Munkee, Rho, Jaejeung (2005). 'Extending the TAM for a t-commerce' Information & Management, 42(7): 965-976 • van der Heijden, H. (2003) "Factors Influencing the Usage of Websites - the Case of a Generic Portal in the Netherlands", Information & Management, (40)6, pp. 541-549 • Ahn, T., *et al*., (2007). 'The impact of Web quality and playfulness on user acceptance of online retailing', *Information and Management*, 44(3): 263-275. • Kim, J. and Forsythe, S (2009), "Adoption of Sensory Enabling Technology for Online Apparel Shopping", European Journal of Marketing, 43(9/10): 1101-1120.
4. Expectation Confirmation Theory	• Bhattacherjee, A. (2001a). An empirical analysis of the antecedents of electronic commerce service continuance. Decision Support Systems, 32(2), 201-214.

(ECT)	• Bhattacherjee, A. (2001b). Understanding information systems continuance: An expectation confirmation model. MIS Quarterly, 25(3), 351-370. • Khalifa, M. & Liu, V. (2001). Satisfaction with Internet-based services: A longitudinal study. In Proceedings of the 22nd International Conference of Information Systems (ICIS 2001), New Orleans, Louisiana, (pp. 601-606). • Thong, J. Y. L., Hong, S.-J., & Tam, K. Y. (2006). 'The effects of post-adoption beliefs on the expectation–confirmation model for information technology continuance', *International Journal of Human-Computer Studies*, 64(9), 799–810 • Lin, C. S., Wu, S., & Tsai, R. J. (2005). 'Integrating perceived playfulness into expectation–confirmation model for web portal context', Information and Management, 42(5), 683–693. • Kang, Young Sik, Hong, Soongeun, and Lee, Heeseok (2009). 'Exploring continued online service usage behavior: The roles of self-image congruity and regret', Computers in Human Behavior, 25(1): 111-122 • Hong, S.-J., Thong, J. Y. L., & Tam, K. Y. (2006). 'Understanding continued information technology usage behavior: A comparison of three models in the context of mobile internet', *Decision Support Systems*, 42(3), 1819–1834. • Liao, C., Chen, J.-L., & Yen, D. C. (2007). 'Theory of planning behavior (TPB) and customer satisfaction in the continued use of e-service. An integrated model', *Computers in Human* Behavior, 23(6), 2804–2822 • Limayem, M., Hirt, S. G., & Cheung, C. M. K. (2007). 'How habit limits the predictive power of intention: The case of information systems continuance', MIS Quarterly, 31(4), 705–737.
5. Innovation Diffusion Theory (IDT)	• Bhattacherjee, A. (2001a). An empirical analysis of the antecedents of electronic commerce service continuance. Decision Support Systems, 32(2), 201-214. • Goldsmith, R.E. (2000). How innovativeness differentiates online buyers. Quarterly Journal of Electronic Commerce, 1(4), 323-333. • Parthasarathy, M. & Bhattacherjee, A. (1998). Understanding post-adoption behavior in the behavior in the context of online services. Information Systems Research, 9(4), 362-379. • Senecal, S. (2000). Stopping variables in online buying processes: An innovation diffusion approach. In Proceedings of the Sixth Americas Conference on Information Systems (AMCIS 2000), Long Beach, California, (pp. 1380-1385). • Siu, N.Y.M. & Cheng, M.M.-S. (2001). A study of the expected adoption of online shopping: The case of Hong Kong. Journal of International Consumer Marketing, 75(3), 87-106.

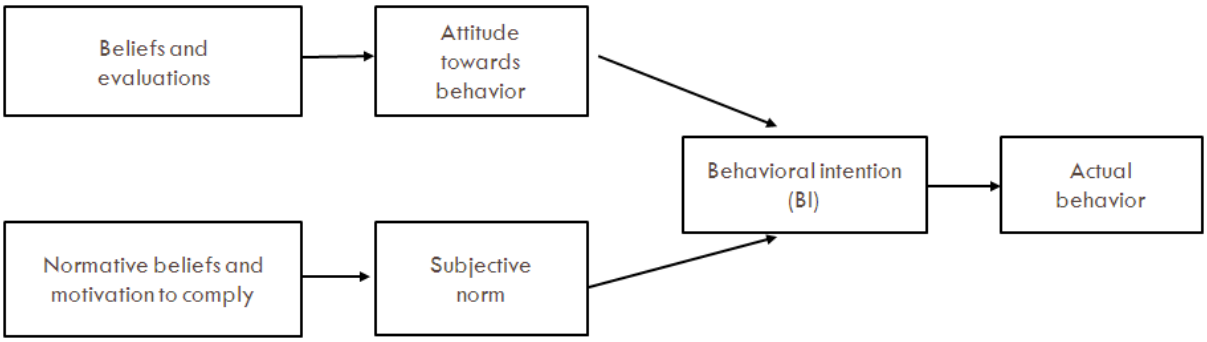
3.8. THEORY OF REASONED ACTION

Liska (1984) declares that during the late 1960s and early 1970s a number of attitude-behaviour theories appeared that specified theoretical and operational definitions of attitude. The most prominent and influential of these theories is the Fishbein and Ajzen Theory of Reasoned Action (TRA), which differentiates between the three components of attitude: cognition (belief), affect (feeling), and conation (behavioural intention). The TRA is very general and is 'designed to explain virtually any human behaviour' (Ajzen and Fishbein 1980). It attempts to predict and explain a person's behaviour, and states that behavioural intention plays an important part in determining the individual's behaviour, and at the same time the intentional behaviour and subjective norm determined by attitudes of the individual.

The TRA asserts that an individual's behaviour is determined by intentions to perform the behaviour. These behavioural intentions are jointly determined by an individual's attitudes and subjective norms regarding the behaviour.

The TRA mainly explains the effect of motivation on consumer behaviour. The TRA is a model, or theory, which has been widely used because it is useful for explaining and predicting human behaviours that influence the salient subjective norm towards the intention of the behaviour.

FIGURE 3.10: THEORY OF REASONED ACTION



Source: Adapted from Fishbein and Ajzen (1975)

Fishbein and Ajzen (1975) describe their model as one that 'focuses on intentions as a strong indicator or predicator of an actual behaviour', and the inclusion of the intention aspect makes the model empirically more valid compared to those models that assess attitude and directly link them to behaviour. Behavioural intention, in turn, is determined by attitudes and subjective norm. An attitude towards behaviour is an individual's evaluation of the benefits or otherwise of performing the action in question, and a subjective norm is the perceived social pressure arising from one's perceptions of the extent to which significant others would like one to perform the action.

In contrast to most other explanations of social behaviour, the TRA is not confined to a specific behavioural domain, but is just as applicable to buying behaviour as it is to voting. This theory also assumes that human beings are rational and consider the affects of their actions before they decide to engage (or not) in a given behaviour (Ajzen and Fishbein, 1980). However, the most important aspect of the TRA is the fact that it specifies a person's attitude towards a particular behaviour and does not include attitude towards traditional elements, such as people, objects or institutions. It is this characteristic that enhances the theory's validity. Liska (1984) states that 'intention is not a necessary and sufficient cause of

behaviour, people do not do what they intend to do, but are constrained by the lack of resources' and opportunities'.

Liska (1984, p 72) states that the TRA specifies a causal structure, which underlies the relationship between behaviour, intention and attitude, yet 'various theoretical traditions and considerable research suggest that behaviour affects both intentions and attitudes'. Therefore, it appears that the hierarchical nature of the TRA is too simple to explain the complex relationship between attitudes, intentions and behaviour.

Ajzen and Fishbein (1980) later refined the TRA with empirical evidence to support its validity and reliability. They proposed that an individual's behavioural intention is the immediate determinant of behaviour; their attitude and subjective norm are mediated through behavioural intention; and their behavioural and normative beliefs are mediated through attitude and subjective norm.

To gain certain competitive advantages marketers need to achieve better understanding of the factors that determine individual's behaviour (Ajzen and Fishbein, 1980). Ajzen and Fishbein relate their theory to the factors that determine consumer's preferences for certain products and individual brands, attitudes and brand preference. In one of their first studies, Ajzen and Fishbein (1975) analysed consumers' attitudes and intentions toward buying Millers beer and found attitudes and subjective norms to be highly accurate predictors of intentions, as long as correspondence was maintained. Ajzen and Fishbein restricted the application of their theory to brand and product attitudes. This represents a single aspect of marketing, and could explain why major academic texts employing the theory also focus on brand and product preference (Peter and Olson, 2005; Foxall and Pallister, 1998). Therefore, it is possible that the use of the TRA in marketing has not been fully utilized.

The TRA and its family of theories have postulated many factors to be the determinants of online intention behaviour, such as attitude, subjective norm, and perceived control (Bhattacherjee, 2000; Keen *et al*., 2000; Limayem *et al*., 2000).

3.8.1 Limitations of TRA

As indicated by Ajzen (1985), TRA theory was limited by what is called correspondence; that is, attitude and intention must agree on action, target, context, and time frame in order for the theory to predict specific behaviour (Sheppared *et al*., 1988). The greatest limitation of the theory stems from the assumption that behaviour is under volitional control; that is, the

theory only applies to behaviour that is knowingly thought out beforehand. Unreasonable decisions, habitual actions or any behaviour that is not intentionally considered cannot be explained by this theory.

Furthermore, Manski (1990) citied in Bemmaor (1995), identifies a limitation of the TRA, explaining that, even if individuals have rational expectations, and given that stated intentions are best predictors of behaviour, intentions and behaviour need not necessarily coincide. Thus, an individual may have the intention to perform an act but they may not follow through with an actual response. There may be outside influences that actually prevent them from performing the behaviour.

3.9. THE TECHNOLOGY ACCEPTANCE MODEL (TAM)

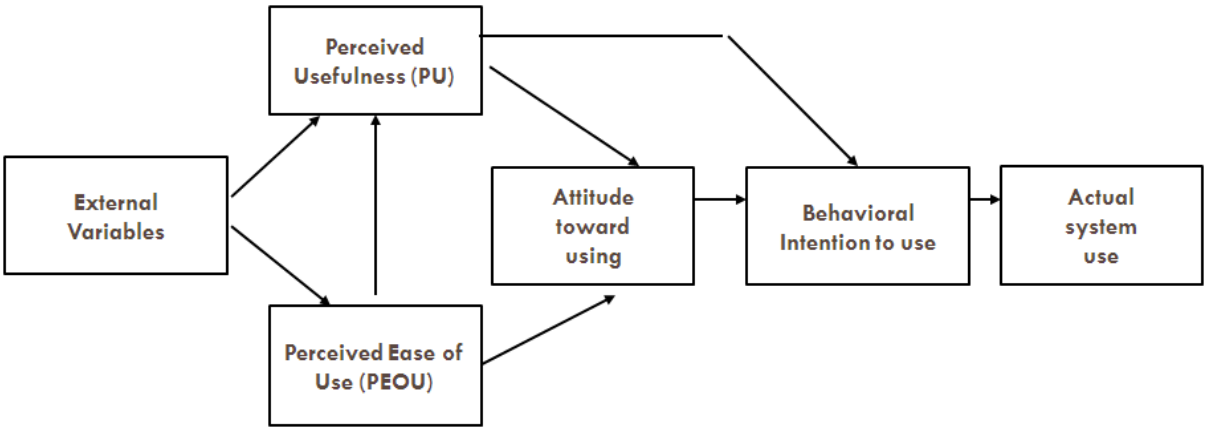
There are many theoretical models employed to study the usage and behaviour in information technology that attempt to explain the relationship between the attitudes, perceptions, beliefs and final system use, i.e. the TRA, the Theory of planed Behaviour (TPB), and the Technology Acceptance Model (TAM). Based on the TRA, Davis (1989) developed the TAM with its main goal to forecast IT behaviours, in particular to explain and predict computer acceptance, whilst on the other hand the TRA concentrates on human behaviour.

The TAM is a theoretical model that evaluates the effects of factors, such as system characteristics, on user acceptance (Davis, 1986). In a similar fashion to the TRA, TAM assumes that a computer user generally acts quite rationally, using information in a systematic manner to decide whether or not to adopt this technology in the workplace. Davis identifies three major determinants of technology acceptance related to cognition and effectiveness, which had been suggested by previous research studies. He began with the TRA and adapted this as a basis for causal links between perceived usefulness, perceived ease of use, attitude towards using technology and behavioural intention to explain technology adoption. Appendix B provides an overview of previous research on e-shopping intentions and adoption.

Researchers have empirically validated the original TAM in a variety of settings, including technology acceptance in internet usage and website usage. TAM, through its empirical assessment, has been validated by Davis (1989) and further validated by several replications and applications (Davis, 1993; Davis *et al*., 1989; Mathieson, 1991; Taylor and Todd, 1995). The result of these studies demonstrates that usefulness is the primary determinant of

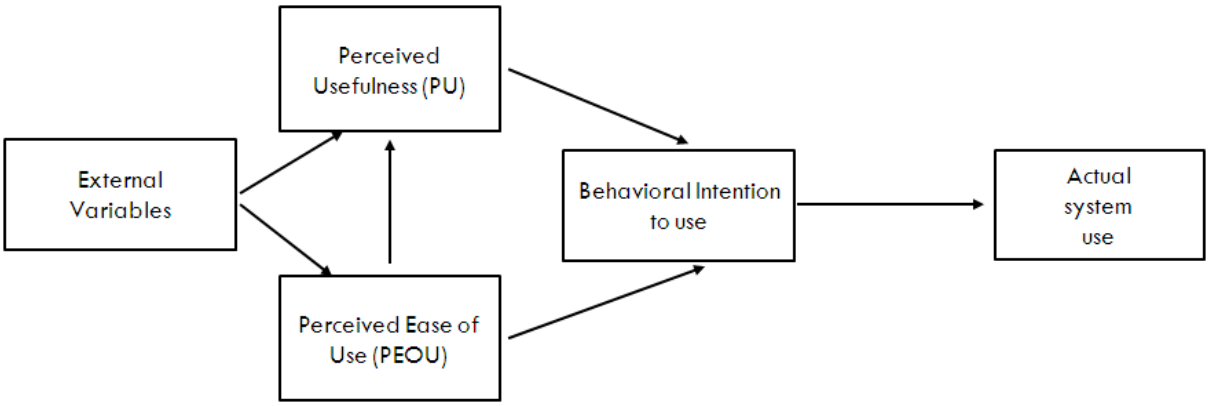
behavioural intention to use a technology in the workplace, with ease of use and enjoyment acting as secondary determinants.

FIGURE 3.11: TECHNOLOGY ACCEPTANCE MODEL (TAM)



Source: Adapted from Davis, F. D (1986)

FIGURE 3.12: DROPPING ATTITUDE FROM TAM



Source: Adapted from Davis, F. D. (1986)

Davis (1993,) later defined perceived ease of use (PEOU) as 'the degree to which an individual that is using a particular system would be free of physical and mental effort'. In contrast, perceived usefulness (PU) is defined as the degree to which a person believes that using a particular system would enhance their job performance or experience (Davis 1993; Venkatesh and Morris 2000). In its simplest form, the easier and the more useful the technology, the more it is likely to be used. Perceived usefulness (PU) and ease of use correspond to the beliefs that lead to favourable attitude and intention to accept and use the

technology. The TAM has been one of the most influential theories in IT literature (Straub *et al*., 1997; Chen *et al*., 2002). According to Davis (1989), perceived ease of use and usefulness affect attitudes, as well as intention to use and accept the technologies. TAM has also been used to explain online purchase intention (Davis 1989; Davis *et al*. 1989). According to TAM, two key beliefs of determining the intention to voluntarily accept and then use a new IT that received enormous attention are the perceived usefulness (PU) and the perceived ease of use (PEOU) of using the new IT (Chau *et al*., 2000; Lin and Lu, 2000). The TAM has proved effective as the prominent theory in IT studies (Straub *et al*., 1997; Chen *et al*., 2002). Empirical research has shown the TAM to be a robust model for studying technology acceptance behaviour in a wide range of IT categories, including electronic commerce (Gefen and Straub, 2000; Gefen, Karahanna, and Straub, 2000) and in studies across countries (Straub *et al* 1997; Rose and Straub, 1998). Mathieson, Peacock, and Chin (2001) extended the TAM to include perceived ease of use of a resource. However, their study identified one limitation for the TAM in the assumption that the usage is volitional, meaning there are no barriers to prevent individual usage.

The TAM is considered the most widely used model by IS researchers (Agarwal and Prasad, 1999). For more than ten years, TAM has been considered as a robust and powerful proven model for predicting user acceptance (Venkatesh and Davis, 2000). As with most information systems, Internet technology adoption and use may be explained by the TAM (Davis, 1989). While the TAM initially focuses on system usage in the work environment, recent research has attempted to use TAM to understand website use (Moon and Kim, 2001). Therefore, intentions to use the Internet for online transactions could take into account the major constructs of TAM: perceived usefulness and perceived ease of use. Both the PU and PEOU beliefs in the TAM model predict the attitudes of individuals towards using the computing system, and influence the behaviour intention (BI) and actual use (AU). Bruner and Kumar (2005) state that the main idea underlying the TAM is that a person's behavioural intention to use the system is determined by its usefulness and ease of use. According to the TAM, perceived usefulness is influenced by perceived ease of use because the easier the system is to use, the more useful it can be (Venkatesh and Davis, 2000). The model has recently been updated (Venkatesh and Davis, 2000) with a number of antecedents of usefulness and ease of use, including subjective norms, experience, and output quality.

One of the main goals of research in the field of Information Systems (IS) is to forecast the adoption and usage of IT, based on an understanding of the individual's acceptance of IT and,

in particular, the consideration of usage (Melone, 1990; Davis, 1989). At the same time, researchers have made significant efforts to build theories that can be used to examine and predict the factors responsible in determining the acceptance of IT (Agarwal and Prasad, 1999). Within TAM framework, usefulness of the interactive media can be thought of as reflecting the more instrumental aspects of shopping, while enjoyment embodies the hedonic aspect of shopping.

The TAM has gained considerable support and its use in different fields of research has demonstrated its ability to explain behaviour. Davis suggests that future technology acceptance research needs to address how other variables affect usefulness, ease of use, and user acceptance (Moon and. Kim, 2001).

In 1989, Davis proposed a revised model of the TAM. Known as TAM2, see section 3.10. TAM2 has advantages that include pre- and post-implementation beliefs and behaviours, and is more concise and easier to understand and use. Szajna (1996) suggests that the original TAM may be more appropriate than the revised version of the TAM, and that adding the experience construct to the original TAM makes significant improvements. The addition to the TAM model of the enjoyment construct, or the extent to which the activity of using the technology is perceived to provide reinforcement in its own right, is separate from any performance consequences that may be anticipated (Davis *et al*., 1989).

Since Davis *et al* (1989) proposed the TAM; the importance of technology acceptance has increased and gained the attention of different researchers and practitioners (Venkatesh, Morris, Davis, 2003). McFarland and Hamilton (2006) propose that the model is influenced by contextual specificity, such as computer anxiety and prior experience, other use, organizational support, task structure, system quality and perceived usefulness. The TAM has been examined in several studies, confirming that TAM consistently explains a substantial proportion of variance in usage intentions and behaviour among a variety of technologies. Amoroso and Hunsinger *et al*. (2009), extending Burton-Jones and Hubona's (2006) study, assume that the external variables have direct effect on the usage behaviour, over and above the indirect effect, and that TAM is significantly and consistently better at predicting frequency than volume of usage. They also tested the relationship between the individual differences of external variables, such as system experience, education and age, with the two beliefs of TAM and IS usage. They found that the individual differences are fully mediated by TAM beliefs, and that there is direct influence for individual variables on usage.

Gefen *et al*. (2003) propose an integrated model for trust and TAM in online shopping with the underlying premise that online customers are influenced by trust in e-vendors and technology aspects of website interface. Consumer trust increases as a result of features of interaction, some of which increase customers' assessments of the ease of use of the e-vendor's website. The major finding of this study is that the intention of consumer experience, resulting from the last transaction with the e-vendor from whom they purchased, depends on trust and the two beliefs of perceived ease of use and usefulness.

Chiu *et al*. (2009) find the extended TAM useful in gaining a better understanding of customers' repurchase intentions. In particular, they identify the importance of the interaction between the online vendor, the customer, the website and the environment, which leads to a method for explaining online shopping behaviour. They stress the subsequent importance of this version of TAM in the post-consumption decision-making processes of customers.

In both studies, enjoyment is a consistent and strong predictor of attitude toward interactive shopping. Similarly, usefulness and ease of use were also significant predictors of attitude across both studies. When comparing the relative effects of the TAM variables, within both studies usefulness and enjoyment are equally predictive of interactive shopping attitude. However, in the hedonic environment of web shopping, enjoyment is a stronger predictor of attitude relative to ease of use.

Not all constructs are included in the original TAM, and Amoroso and Hunsinger (2009) draw attention to the potential role played by institution-based trust and structural assurances in influencing consumer attitudes towards purchasing. Subsequently, Porter and Donthu (2006) developed and extended the TAM to include perceived access barriers, which help to explain the demographic differences in the context of Internet use. They extended it in two ways: including perceived access barriers among key beliefs about technology influence use, and adding four demographic construct keys as external variables (age, education, income and race). These additions suggested that the TAM belief variables are differentially relevant to consumers with different demographic variables. No previous study has collectively included age, education, income and race in a single TAM-based model. The TAM has been functional in the context of the online consumer behaviour (Lai and Li, 2005) and has received empirical support from several studies (Venkatesh and Davis, 2000).

Consumers will not be happy with a product or service that does not meet their expectations. Srinivasan, Anderson, and Ponnavolu (2002) defines e-loyalty as a customer's favourable attitude toward the e-retailer that results in repeat buying behaviour, and Shun and Yunjie (2006) use this concept to demonstrate the usefulness of the customer value on the bottom line of e-commerce performance.

Product value, shopping value and customer value in e-commerce are closely linked with utilitarian and hedonic value. Utilitarian value is seen as an accumulation of functional benefits and sacrifices, and is appropriate for task-specific uses related to online shopping. These include purchase deliberation, whereby consumers consider the product, service and price features before making a purchase (Hoffman and Novak, 1996). Utilitarian value combines different cognitive aspects of attitude, including economic 'value for money' (Zeithaml, 1988) and judgements of convenience and time saving (Jarvenpaa and Todd, 1997; Teo, 2001). The concept bears some similarity to the active source of extrinsic value for Internet shopping (Mathwick, Malhotra, and Rigdon, 2002), but it is important to understand it as being distinctly different to hedonic value, i.e., online shopping may be popular as a result of the ease of location of products or retailers, evaluation of price/quality ratios, and conservation of temporal and psychological resources (Grewal *et al*., 2003; Mathwick *et al*., 2002).

Hedonic value, however, is concerned with experiential beliefs and sacrifices, such as entertainment and escapism. In this case, consumers often shop with the intention of gaining an appreciation of the experience rather than simply for task completion (Babin, Darden, and Griffen, 1994). Much research has been carried out on in-store shopping literature (Babin and Attaway, 2000; Darden and Reynolds, 1971) and has identified hedonic value as an element of online shopping (Hoffman and Novak, 1996). Online and offline shoppers also shop for entertainment and for other non-routine experiences that absorb the users and allow them to escape momentarily from reality (Kim, 2002; Mathwick et al., 2002).

Childers *et al.* (2001) found enjoyment to be a strong predictor of attitude towards e-shopping. In that study, 'usefulness' and 'enjoyment' were equally predictive of attitude overall. Usefulness was the better predictor for grocery shopping; enjoyment more so for the examples that the authors described as 'hedonic' (Amazon, Hot Hot Hot (sauces), Wal-mart, K Mart and Bookstore). In discussing the enjoyment constructs of the TAM model with

regard to e-shopping, this hedonic construct provides the users with pleasure, reinforcing the action and encouraging reputation or repeat continuance intention to shop. Table 3.6 summarizes some of the main relevant research related to e-shopping intentions.

TABLE 3.6: OVERVIEW OF PREVIOUS RESEARCH ON E-SHOPPING INTENTIONS AND ADOPTION

Reference	**Method (Theory) and Sample (survey type)**	**Dependant Variables**	**Significant Explanatory Variables (-: insignificant; +: significant; 1: not tested)**
Ahn *et al*. (2004)	SEM (TAM) 932 Internet users in Korea (Internet, 2003)	e-Shopping intention	Attitude toward using e-shopping (+) Perceived usefulness (+) Perceived ease of use (+, indirect) System quality (+, indirect) Information quality (+, indirect) Service quality (+, indirect) Product quality and delivery service (+, indirect)
Belanger *et al*. (2002)	Regression (none) 140 students in a US south-eastern university (paper)	e-Shopping intention	Importance of privacy and security features(-) Site quality (+)
Bellman *et al*. (1999)	Logistic regression and regression (none) 10,180 Internet users of Wharton Virtual Test Market (Internet)	e-Shopping adoption and annual online spending	Looking at product information (+, +) Months online (+, -) Number of daily e-mails (+, +) Working online at work every week (+, -) Reading news online at home every week (+, -) Total household working hours (+, -) Clicking on banners (+, -) Agreeing Internet improves productivity (+, +) Ordering from catalogues using the Internet (-, +) Using Internet at office regularly for work (-, +) Ordering from catalogues (-, +) Like being first to use new technologies (-, +) Number of years online (-, +) Hours per week online (-, +) Not ordering by mail (-, +)
Chen *et al*. (2002)	SEM (TAM and IDT) 253 email users in the US (Internet)	e-Shopping usage	Behavioural intentions to use e-shopping (+) Attitude toward using e-shopping (+, indirect) Compatibility (+, indirect) Perceived usefulness (+, indirect) Perceived ease of use (+, indirect)
Chen and Tan (2004)	SEM (TAM and IDT) 253 e-mail users in the US (Internet)	e-Shopping intention	Attitude toward using e-shopping (+) Perceived usefulness (+) Perceived trust (+, indirect) Compatibility (+, indirect) Perceived ease of use (+) Perceived service quality (+, indirect) Product offerings (+, indirect) Usability of storefront (+, indirect)
Childers *et al*. (2001)	SEM (TAM) Study 1: 274 students in a large US Midwestern university (paper) Study 2: 266 computer users in the US (paper)	Attitude toward e-shopping	Perceived usefulness (+,+) Perceived ease of use (+,+) Enjoyment (+,+) Navigation (+, indirect, +, indirect) Convenience (+, indirect, +, indirect) Substitutability of personal examination (+, indirect, +, indirect)
Cho (2004)	SEM (TRA) 294 Internet users in	Aborting an online transaction	Lack of physical examination (+) Purchasing experiences from Internet (-)

	the US (paper)		Frequency of purchasing from catalogues (-) Concerns over delivery and return (+) Attitude toward e-shopping (-) Product offerings (-, indirect) Control in information research (-, indirect) Attitude toward catalogue retailing(-, indirect) Effort saving (-, indirect) Time spent on Internet per visit (-, indirect)
Choi and Geistfield (2004)	SEM (TPB) Study 1: 386 students in Korea university (paper) Study 2: 369 students in a US Midwestern university (paper)	e-Shopping intention	Perceived risk (-,-) Perceived self-efficacy (+,+) Subjective norm (+,+) Individualism- collectivism (+ indirect, + indirect)
Corbitt *et al*. (2003)	Correlation analysis (none) 80 students in New Zealand (Internet)	e-Shopping usage	Trust (+) Web experience (+)
Gefen (2000)	SEM (none) 217 students in the mid-Atlantic region, USA (paper)	Intended purchase and intended inquiry	Trust (+, +) Familiarity (+, +) Disposition to trust (+ indirect, + indirect)
Garzioli and Jarvenpaa (2000)	Logistic and linear regression (Social exchange theory) 80 students at a major US university (Internet)	Actual online purchase and willingness to buy	Attitude toward e-store (+, +) Attitude toward web (0, +) Trust (+ indirect, + indirect) Risk (- indirect, -indirect) Risk by high trust (+ indirect, + indirect) Attitude toward web safety (+, +) Assurance mechanism (+ indirect, + indirect) Deception (- indirect, -indirect) Assurance by high deception (+ indirect, + indirect) Trust-building mechanism (+ indirect, + indirect)
Hansen *et al*. (2004)	SEM (TRA and TPB) Study 1: 1,222 Danish Internet users Study 2: 1,038 Swedish Internet users (Internet, 2002)	e-Shopping intentions	Subjective norms (+, +) Attitudes (+, +) Perceived behavioural control (0, +)
Koufaris (2002)	Logistic and linear regression (TAM and flow theory) 280 online customers (Internet)	Unplanned purchase and intention to return	Shopping enjoyment (-, +) Perceived usefulness (-, +) Involvement (-, + indirect) Challenges (-, + indirect) Skills (-, + indirect) Value-added information (-, + indirect)
Koyuncu and Bhattacharya (2004)	Binomial logistic and multinomial logistic models (none) 1,842 Internet users in the US (from GIT GVU Center, 1998)	e-Shopping adoption and e-shopping frequency	Income (+, +) Education (+, +) Male (+, +) Experience (+, +) Quickness (+, +) Better price (+, +) Paying risk (-, -) Longer delivery (-, -)
Li *et al*. (1999)	ANOVA, chi-square test, and regression (channel theory) 999 email users	e-Shopping frequency	Male (+) Income (+) Education (+) Convenience (+)

	(Internet)		Experience (-) Channel knowledge (+) Communication (+) Distribution (+) Accessibility (+)
Liang and Huang (1998)	SEM (TCT) 86 Internet users in Taiwan (paper)	Acceptance of e-shopping for experienced and inexperienced shoppers	Transaction cost (-, -) Uncertainty (-, - indirect) Asset specificity (-, +)
Liang and Lai (2002)	ANOVA (none) 30 students in Taiwan (paper)	Online purchase, revisit and purchase again	Better store design (+, +, +)
Lim (2003)	Focus group (theory of perceived risk) 16 individuals in Queensland, Australia (interview, 2001)	Decision to purchase online	Perceived technology risk (-) Perceived vendor risk (-) Perceived product risk (-) Perceived consumer risk (0)
Limayem *et al*. (2000)	SEM (TPB) 705 email users from four Internet based directories (Internet)	e-Shopping frequency	Intention to use e-shopping (+) Behavioural control (+) Subjective norm (+, indirect) Personal innovativeness (+, indirect) Attitude toward e-shopping (+, indirect) Perceived consequences (+, indirect)
Liu and Wei (2003)	SEM (none) 212 students in a large US Midwestern university (Internet)	e-Shopping intention	Trust (+) Privacy (+, indirect)
Liu and Wei (2003)	SEM (TAM) 308 university students	e-Shopping intention	Perceived usefulness (+) Perceived risk (-)
McKnight *et al*. (2002)	SEM (none) 1,403 students in three large US universities (paper)	Intention to purchase from site (service)	Perceived web risk (-) Trust beliefs in web vendor (+) Willingness to depend on web vendor (+) Perceived vendor reputation (+, indirect) Perceived site quality (+, indirect) Structural assurance of the web (-, indirect)
Phau and Poon (2000)	Discriminant analysis (none) 183 email users (Internet)	e-Shopping intention for 20 productive and service categories	Products and services having low outlay (+) Having intangible value (+) Having high differentiation (+)
Ranganathan and Ganapathy (2002)	Discrimination analysis (none) 213 online purchasers in Illinois, USA	e-Shopping intention	Information content (+) Web design (+) Security (-) Privacy (-)
Shang *et al*. (2005)	SEM and logistic regression (TAM) 478 email users and 650 students in three universities in Taiwan (Internet and paper)	e-Shopping intensity and adoption	Perceived ease of use (+, +) Fashion involvement (+, +) Cognitive absorption (+ indirect, +) Income (1, +) Frequency of using Internet (1, +) Online experience (1, +)
Shim *et al*. (2001)	SEM (TPB) 684 computer users in 15 US metropolitan areas	e-Shopping intention	Intention to use web for information search (+) Attitude (+) Internet purchase experience (+) Perceived behavioural control (+, indirect)
Swaminathan *et al*. (1999)	Regression (theory of exchange)	e-Shopping frequency and amount	Vendor characteristics (+, -) Security of transaction (-, -) Concern for privacy (-, -) Privacy laws (-, +) Social interaction (+, +) Convenience (+, +)

Teo and Yu (2005)	SEM (TCT) 1,171 Internet and email users in Singapore (Internet)	Willingness to buy online	Transaction cost (-) Performance uncertainty (-, indirect) Behavioural uncertainty (-, indirect) Environmental uncertainty (-, indirect) Dependability (+, indirect) Online buying frequency (+, indirect)
Van der Heijden and Verhagen (2004)	Regression (none) 312 students in Vrije Universiteit, Netherlands	e-Shopping intention	Attitude toward online purchasing (+) Online store usefulness (+, indirect) Enjoyment (+, indirect) Familiarity and settlement (+, indirect) Performance (+, indirect)
Van der Heijden *et al*. (2002)	SEM (TAM) 228 students in a Dutch academic institution	e-Shopping intention	Attitude toward online purchasing (+) Trust in online store (+, indirect) Perceived risk (-, indirect) Perceived ease of use (+, indirect)
Yoon (2002)	Regression (none) 122 students at a university in Seoul, Korea (paper)	e-Shopping Intention	Web-site awareness (+) Web-site trust (+) Web-site satisfaction (+) Transaction security (+, indirect) Site properties (+, indirect) Navigation functionality (+, indirect) Personal variables (+, indirect)

Source: Adapted from (Cao and Mokhtarian, 2005)

3.9.1 Limitation of TAM

The most commonly reported limitation of TAM concerns how usage is measured. Most studies measured usage by relying on respondents' self-reporting and assuming that self-reported usage reflects actual usage. Another limitation relates to the type of respondents or the sample choice. In some studies, it was either a university student sample or limited to specific professional users, which made generalization difficult (Legris et al., 2003). Additionally, Moon and Kim (2001) identified another problem with TAM in that the basic constructs do not fully cover the variety of tasks to be achieved. Dishaw and Strong (1999) had already made the point that the basic constructs do not appear to react to the variety of tasks carried out by the user. Thus, they claimed that the TAM lacks task focus, and, in order to increase its validity, they proposed further investigation into the nature and specific influence of technology and potential change in user acceptance. Taylor and Todd (1995) and Venkatesh et al., (2003) referred to that TAM provides only limited guidance about how to influence usage through design and implementation, as another shortcoming. The model provides feedback on usefulness and ease of use but does not provide feedback about aspects of improvement that might enhance adoption such as flexibility, integration, completeness of information, and information exchange. Davis et al., (1989) indicated that such guidelines were at the core of TAM development but failed to receive the appropriate attention. Mathieson *et al*. (2001) identified a further limitation of TAM in the assumption that the usage is volitional, meaning there are no barriers to prevent individual usage. Sun and Zhang

(2006) stated other two major shortcomings of TAM studies: first, the relatively low explanatory power of the model (40 per cent on average) and second, the inconsistent relationships among constructs. The relationships between the major constructs of TAM showed an inconsistent pattern; in some studies the relations were statistically significant indicating TAM as a robust model, while other studies showed the opposite, for example, PEOU effects on attitude, behaviour intentions and usage were inconsistent. In addition, the relationship between PEOU and PU was significant in most studies; however, there were exceptions to that relationship and reasons were attributable to the type of users or their experience (professional users have different intellectual capacities, and the more experienced the users are the less likely the effect of PEOU on PU).

In an attempt to overcome these limitations, TAM2 was developed to cover for the absence of moderators in the original TAM.

3.10. EXTENSION OF THE TECHNOLOGY ACCEPTANCE MODEL (TAM2)

Venkatesh and Davis (2000) extended the original TAM model to explain perceived usefulness and usage intentions in terms of social influence and cognitive instrumental processes. As mentioned earlier, the original TAM model was based on Aizen's TRA model but did not originally include the subjective norms construct. Since TAM's introduction, many additional studies have built on TAM's promising robustness, trying to compare TAM to its origins and with other models used in explaining technology acceptance such as Diffusion of Innovation Theory. Previous studies agreed upon the need for adding other variables to serve as determinants of the major construct, in addition to the original model determinants of PU and PEOU. TAM2, an extension of TAM, includes additional key determinants of perceived usefulness and usage intention constructs aiming to explain the changes in technology acceptance over time as individuals gain experience in using the targeted technology (see Figure 3.13). The new model incorporates additional theoretical constructs covering social influence processes (subjective norm, voluntariness, and image) and cognitive instrumental processes (job relevance, output quality, result demonstrability, and perceived ease of use).

Venkatesh and Davis (2000) explained the role of social influences in computer usage contexts. According to them, TAM2 theorizes that the direct effect of subjective norms on

intention over PU and PEOU will occur in mandatory system usage settings. The model posits voluntariness as a moderating variable to distinguish between mandatory versus voluntary compliance with organizational settings. Nevertheless, subjective norms can influence intention through PU. In addition, TAM2 theorizes that internalization rather than compliance will occur no matter whether the usage context is voluntary or mandatory. That is, even when usage is mandated by the organization, it is the user's perception of a system's usefulness through persuasive social information that will increase his/her intention towards adoption or usage of the system.

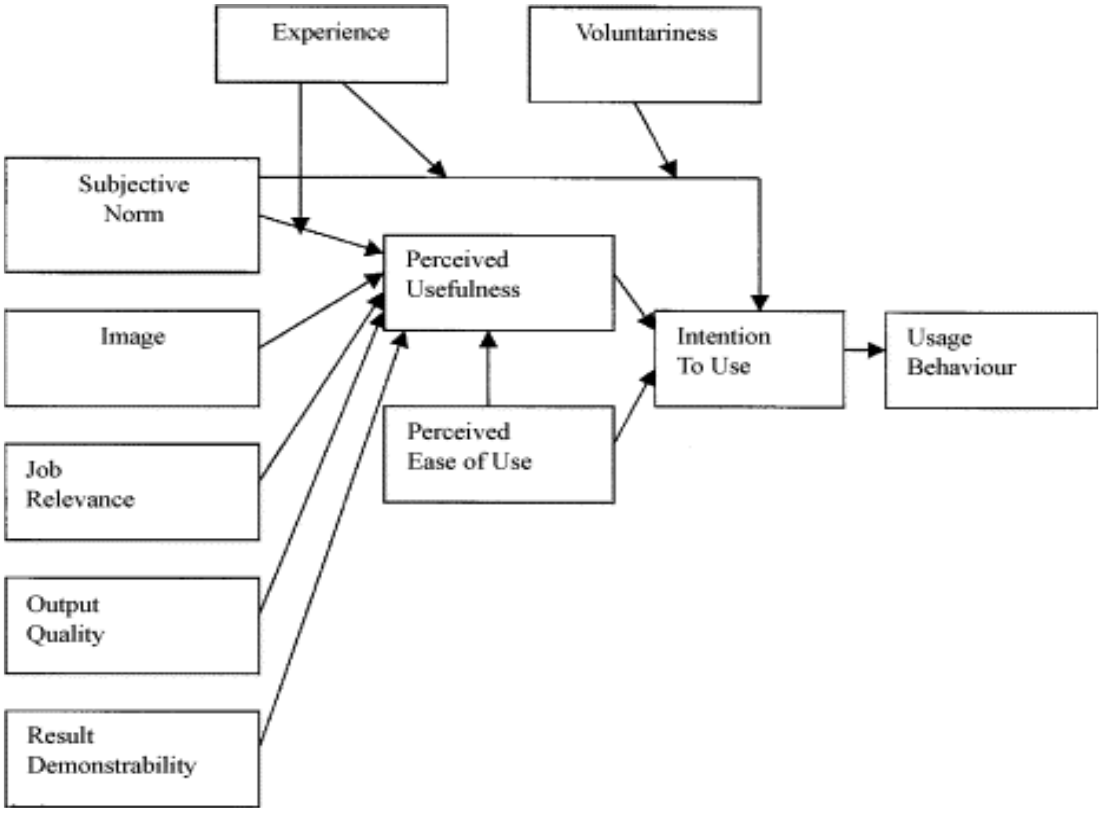
On the other hand, through identification subjective norms will positively influence image. An individual will have stronger intentions to use a target system if important members within his/her social group believe he/she should. Experience is theorized to mediate the relations between subjective norms and intentions on one hand and subjective norms-PU on the other. As mentioned previously, the relation between SN and intention would be stronger in a mandatory usage context and prior to implementation or at early stages of use. Correspondingly, the relationship is expected to weaken with experience gained during system usage. In contrast, TAM2 does not theorize that experience affects the image-PU relation or that such relation might weaken over time.

As for the cognitive instrumental process, TAM2 proposes that individuals rely on the match between their job goals and the outcomes of using the system (job relevance) as a basis for their evaluation of the system usefulness (usefulness perceptions). The same is valid when it comes to result demonstrability and output quality; if both are effective then the system used is perceived as useful. Such relation does not change with increased experience. The results of Venkatesh and Davis' (2000) four longitudinal studies carried out on four different systems at four organizations at three points in time showed that the new model, TAM2, explained 34-52 per cent of the variance in usage intention and up to 60 per cent of the variance in perceived usefulness.

The new model was tested and adopted by other disciplines. For instance, in the health sector field, Chismar and Wiley-Patton (2003) tested the applicability of TAM2 to the acceptance of Internet and Internet-based health applications within 89 paediatric physicians. Results partially confirmed the model; however, a core construct of the model, perceived ease of use, was not supported by the findings. PEOU did not predict intention to use while PU was a strong determinant of intention to use. In their explanation of these findings the authors stated

that in the medical context the important factor for intentions to adopt the new technology was usefulness, relevance and the output quality that is sufficient for the completion of the daily tasks. Furthermore, physicians have relatively high competency and capacity that allows them to comprehend new technology quicker than the average population and be willing to adopt beneficial applications of information technology even if they may not be easy to use. In addition, they have strong staff support for operating medical equipment and related technology, which explains the lack of weight placed for PEOU.

FIGURE 3.13: EXTENDED TECHNOLOGY ACCEPTANCE MODEL (TAM2)



Source: Venkatesh and Morris (2000)

3.11. EXPECTATION CONFIRMATION THEORY (ECT)

ECT states that customer satisfaction develops from a comparison made by a customer of post-purchase evaluation of a product or service with pre-purchase expectations (Kristensen *et al*. 1999). The term expectation refers to what consumers believe they should and will receive from their e-retailers. Consumer satisfaction is the result of a process of post-purchase evaluation and comparison, which affect his or her intention for future repurchase (Anderson, Fornell, and Lehmann, 1994; Bearden and Teel, 1983; Churchill and Suprenant, 1982;

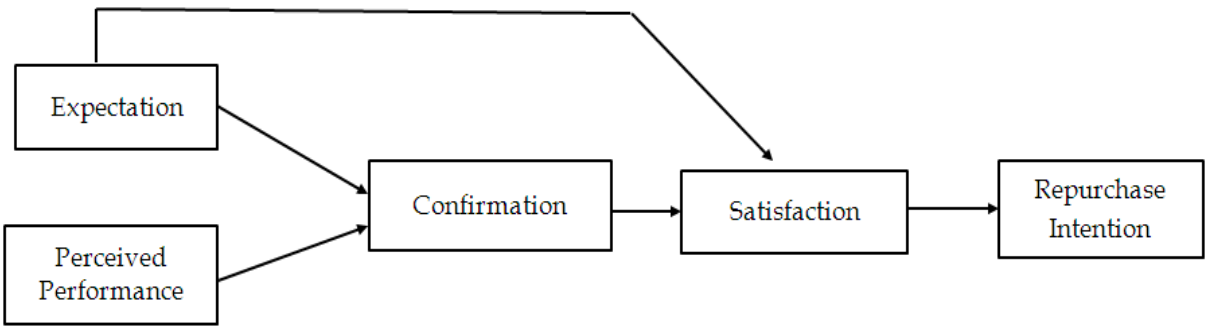
Fornell and Westbrook, 1984; Oliver *et al*., 1981; Yi, 1990). Confirmation of this process is achieved through an evaluation by the customer of the performance of the product or service.

The underlying logic of the ECT framework is described by Oliver (1980; 1999) and Bhattacherjee (2001). Consumers form an initial expectation of a specific product or service prior to purchase, and, after a period of initial consumption, they form perceptions about its performance. They assess its perceived performance vis-à-vis their original expectation and determine the extent to which their expectation is confirmed. They form a satisfaction level based on their confirmation level and the expectation on which that confirmation was based, where confirmation is defined as the judgement of the consumer of the actual performance relative to a pre-purchase comparison standard such as expectation.

The term expectation refers to what consumers believe they should and will receive from their e-retailers. The perceived performance is the perception of the quality or value by the consumer of the product or service after it is purchased (Churchill and Suprenant, 1982).

When performance is greater than expectations, resulting in positive confirmation, a high level of satisfaction occurs. Consumer satisfaction is the result of a process of post-purchase evaluation and comparison, which affects his or her intention for future repurchase (Anderson *et al*., 1994; Bearden *et al*., 1983; Churchill and Suprenant, 1982; Fornell *et al*., 1984; Oliver *et al*., 1981; Yi, 1990). The satisfied consumer forms a repurchase intention. In summary, initial trust leads to expectation, whilst post-trust gives satisfaction, and many of the existing studies have found a direct positive relationship between expectations and product satisfaction (Bearden *et al*., 1983; Churchill and Suprenant, 1982; Oliver *et al*., 1981; Patterson *et al*., 1997).

FIGURE 3.14: EXPECTATION CONFIRMATION THEORY (ECT)



Source: Adapted from Oliver (1980; 1999) and Bhattacherjee (2001)

The ECT has also postulated satisfaction, confirmation, and loyalty incentives to explain consumer online repurchasing behaviour (Bhattacherjee, 2001a). Through the literature review it can be seen that more emphasis of online repurchase was placed on factors coming from the psychological discipline. In the context of online consumer behaviour, for example, trust has been given great attention (Fung and Lee, 1999; Lee, Kim, and Moon, 2000) and satisfaction formation (Khalifa and Liu, 2001). Other studies have examined different factors of consumer online purchase continuance intention, such as web page design, navigation, security, shopping aids (Liang and Lai, 2002), and service quality (Gefen and Devine, 2001).

Atchariyachanvanich, Okada, and Sonehara (2007) propose a theoretical model of purchase and repurchase in Internet shopping that integrates the previously introduced models (the Technology Acceptance Model (TAM) and the Expectation Confirmation Theory (ECT)) with the Model of Intention of Adoption and Continuance (MIAC). They tested their model among Japanese consumers and the results of their study indicate that online consumer purchasing intentions are positively related to the adoption of online shopping and directly influenced by the continuance of the Internet shopping processes.

The ECT is particularly useful because it includes post-acceptance behaviour, which is commonly used in consumer behaviour literature. However, the use of ECT theory within the information systems field is important as the information systems are generally programmed in the web environment. Refinement for use within the web context is, therefore, necessary (Atchariyachanvanich *et al*., 2007). Important links exist between ECT and factors surrounding customer loyalty. In particular, perceived incentives are found to have a profound effect on repurchase intention, which is in contrast to the findings of Bhattacherjee (2001b). Lin, Wub, and Tsaic, (2005) state that the extended model of ECT shows that confirmation is a stronger predictor of satisfaction than perceived playfulness, but did not have a significant effect on satisfaction.

Kim *et al*.'s (2003) research supports ECT's proposition that satisfaction is a strong predictor of consumer continuance intention. They also identified the close link between satisfaction and confirmation, indicating the fulfilment of consumers' expectations. They also cite the work of Hart and Johnson (1999) regarding the trust-satisfaction relationship, stating that it 'can easily be broken when a trust defect is committed', and lead to 'an erosion in a company's trust equity'.

Thong, Hong, and Tam (2006) find strong support for including post-adoption beliefs, such as perceived ease of use and perceived enjoyment, in the expanded model. This contributes to the development of improved IT continuance behaviour. They specifically refer to mobile Internet services as a complex consumer-oriented technology, and suggest the formulation of a richer model.

3.11.1. Limitations of ECT

ECT ignores potential changes in initial expectations following the consumption experience and the effect of these expectation changes on subsequent cognitive processes (Bhattacherjee 2001a). Pre-purchase expectations typically are based on others' opinions or information from mass media, whereas post-purchase expectations derive from first-hand experience, which appears more realistic (Fazio and Zanna, 1981; Lin *et al*., 2005). After such experience, expectations may increase if consumers believe the product or service is useful or contains new benefits and features that were not part of their initial expectation. Thus, consumers keep updating expectation toward using a technology as they gain more experience from using it. Therefore, after assimilation of this experience, a user's expectations toward using a technology might be very different from the initial experience before usage (Fazio and Zanna, 1981; Karahanna *et al*., 1999; Bhattacherjee, 2001b). Other researchers (e.g., Thong et al, 2006) have concluded that expectations coming from consumers' direct experiences (post-adoption expectations) are the main predictors of consumer satisfaction. In the expectation confirmation paradigm, expectation is commonly defined as individual beliefs about the level of attributes possessed by a product or service (Oliver and Linda, 1981; Churchill and Surprenant, 1982, Bearden and Teel, 1983). Based on the previous researches (e.g., Davis *et al*., 1989; Karahanna *et al*., 1999; Venkatesh, 2000), perceived usefulness is the most consistent antecedent of consumer's intention to use IT. Thong (2006) therefore indicated that it is more logical to have usefulness as a surrogate for post-adoption expectations in future research when measuring intention.

3.12. RESEARCH CONSTRUCTS

3.12.1. Trust

Trust is accepted as an important factor in almost all social interactions, especially those involving uncertainty and dependency. Uncertainty, anonymity, lack of control and potential opportunism are essential characteristics of online transactions and exchange relationships,

making risk and trust crucial elements of e-commerce. The process of purchasing on the Internet presents numerous risks for consumers over and above the transaction process itself being perceived as risky (Einwiller, Geissler, and Will, 2000), particularly where there is not a simultaneous exchange of goods and money.

As part of the purchasing process, consumers may well need to share confidential information about themselves, such as address and telephone numbers, as well as financial data in the form of credit card details since a growing number of e-businesses are situated distant from their customers and have a limited history of prior on-line transactions (Bhattacherjee, 2002). The competitive nature of the market means that consumers are often faced with a wide range of similar products or services to choose from, and are often confused by the vast array of marketing messages directed at them. Consumers, however, are unaware of what e-retailers might do with the sensitive information held about them as a result of shopping. Indeed, there appears to be little certainty attached to the process in terms of delivery time, for example. Therefore, consumers seek to reduce uncertainty and complexity of transactions in electronic markets by applying mental shortcuts. One effective mental shortcut is trust, which can serve as mechanism to reduce the complexity of human conduct in situations where people have to cope with uncertainty (Luhmann, 1979).

Lack of consumer trust in e-retailers is one of the most common reasons for failure to purchase from internet vendors (e.g. Lee and Turban, 2001). “In essence, consumers simply do not trust most web providers enough to engage in relationship exchanges with them” (Hoffman *et al.*, 1999). This, the relevance of initiating, building, and maintaining trust between buyers and sellers is of significance to successful trading, and is increasingly recognized.

People develop trust in the web store through a number of factors. One is the perceived size of the company; another is their reputation (Jarvenpaa *et al.*, 2000). Thus, the larger the perceived reputation, the greater the trust in the company. Reputation is closely related to familiarity with the store, which researchers have also identified as an antecedent of trust, and familiarity deals with as understanding of current actions of the store, while trust deals with beliefs about the future actions of other people (Gefen, 2000). Therefore, it is conceivable that trust can be considered a ‘threshold’ variable, along with ease of use, and usefulness.

The intention to behave is the prime determinant of the actual behaviour. This means that once a certain evaluation level is reached, the variable no longer contributes to a favourable

attitude. A shopper may or may not purchase at a trustworthy website, but he or she will definitely not purchase at an untrustworthy site.

The importance of trust and the search for information are alternative mechanisms to absorb uncertainty (Luhmann, 1979; Wicks, Berman, and Jones, 1999). In simple terms, the more a person trusts in a given situation, the less additional information she or he needs to make a certain decision. Conversely, where little trust exists, there will be a need for greater completeness of information so that system-dependent and transaction-specific uncertainty is reduced and to establish better trust. The fear of potential outcomes, resulting from an action in terms of trust and information, creates the need to deal with uncertainty (Tomkins, 2001).

In the initial stages of the introduction of new technologies such as the Internet, it is necessary to provide information about both the basic functioning and security of the e-commerce system. This will have the effect of reducing any system-dependent uncertainty and information-concerning characteristics and processes of the e-retailer so that transaction-specific uncertainty can be reduced.

Trust has been the centre of interest in research for many years in a variety of different contexts. As many types and views of trust as there are, there are also many fields which study the phenomenon (Marsh, 1994). The significance of the importance of trust has been analysed in relation to human affairs, but there also appears to be equally widespread lack of agreement on a suitable definition of the concept (Hosmer, 1995; Rousseau *et al*., 1998; Bhattacharya and Devinney, 1998; Husted, 1998).

Psychologists have viewed trust as a belief, an expectancy, or a feeling that is deeply rooted in the personality and has its origins in the individual's early psychological development (Rotter, 1967; 1971). They also define trust as an expectation about the behaviour of others in transactions, focusing on the contextual factors that serve either to enhance or inhibit the development and maintenance of trust (Lewicki and Bunker, 1995), whilst economists and sociologists have been interested in how institutions and incentives are created to reduce the anxiety and uncertainty associated with transactions (Granovetter, 1985; Zucker, 1986; Williamson, 1993). Other studies have adopted different approaches, including finance (e.g. Güth, 2001; Ferrary, 2002), marketing (e.g. Ganesan, 1994; Morgan and Hunt, 1994; Doney and Cannon, 1997; Geyskens, Steenkamp, and Kumar, 1997; Swan, Bowers, and Richardson, 1999), and management (e.g. Mayer, Davis, and Schoorman, 1995; Gill and Butler, 1996; Inkpen and Currall, 1998; McKnight, Cummings, and Chervany, 1998; Wicks *et al*., Berman,

and Jones, 1999; Luo, 2002). Therefore, trust has been defined in different ways according to the related discipline in question, and a consequent lack of clarity has arisen.

The importance of trust is related to the context of an action and its complexity. An analysis of market transactions shows that different types of trust have to be identified. Trust can be conceptualized on different levels of analysis, reflecting the array of entities, individuals, dyads, groups, networks, systems, firms and inter-firm alliances in which trust and related processes play a role (Rousseau *et al*., 1998). It can also focus on relationships between individuals, but the analysis of trust in the context of electronic commerce should consider impersonal forms of trust as well, because in electronic markets personal trust is a rather limited mechanism to reduce uncertainty. The technology itself, in this case the Internet, has to be considered as an object of trust (Shankar *et al*., 2002). Luhmann (1979) discusses *system trust,* whereby a system is assumed to be operating in a predictable way; for example, an e-commerce system is expected to function as it supposes to be. Such impersonal trust helps to reduce system-dependent uncertainty, but it can also influence the perception of transaction-specific risks.

One of the most frequently cited definitions in the literature on trust in e-commerce is the one worked out by Mayer *et al*. (1995), who define trust as 'the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party'. This can be applied particularly to the personal relationship between at least two parties, such as can be seen between a trustor and a trustee. The object of trust, in this case, is another person or a group of persons, but not an abstract or technical system. In e-commerce, usually the consumer is seen as the party who places him or herself in a vulnerable situation, whilst the Internet merchant is the trustee, in whom trust is placed and who has the opportunity to take advantage of the trustor's vulnerability. Husted (1998) and Mayer *et al*. (1995) have both identified that ability; benevolence and integrity explain a major portion of a trustee's trustworthiness.

McKnight and Chervany (2002) , in proposing a trust typology that comprises different forms of interpersonal trust, distinguish in the context of e-commerce between the constructs of trusting beliefs and trusting intentions. Trusting beliefs include the online consumer's beliefs and expectancies about trust-related characteristics of the Internet merchant (McKnight and Chervany, 2002), whereas trusting intention is the extent to which the online consumer is

willing to depend on, or intends to depend on, the selling party in a given situation even though she/he cannot control the vendor.

Mayer *et al*. (1995) as well as McKnight and Chervany (2002) emphasize the difference between trust and trusting behaviours. "Trust is the willingness to assume risk; behavioural trust is the assuming of risk" (Mayer *et al*., 1995). Whether or not the trustor will take a specific risk is influenced by trusting beliefs, trusting intentions and by the perceived risk of the trusting behaviour.

Thus, trust has been treated as a situational construct, but it can also be conceptualized as a cross-situational, cross-personal construct, encompassing individual characteristics of the trustor. This type of trust is called dispositional trust. Mayer *et al*. (1995) include a very similar construct of propensity to trust in their trust model. Rotter (1967) recognizes that people develop, over the course of their lives, generalized expectations about the trustworthiness of other people, and has established a Trust Index that focuses on a generalized trust in others.

3.12.1.1. Conceptual and Theoretical Description of Trust

Some sources find it difficult to define an appropriate type of trust for a particular context. McKnight *et al* (2002) use the idea of characteristics, suggesting that there are 16 categories of trust, which can be grouped as into five conceptual characteristics. These are competence, predictability, benevolence, integrity and others.

McKnight *et al*. (2002) also argue that in the IT context the most suitable trust conceptualization is trust as a set of beliefs and intentions. Trusting intention is the willingness to depend on, or intention to depend on, another party even though one cannot control that party. They argue that most trusting intentions definitions contain three elements: a readiness to depend or rely on another; trusting intentions which are person-specific; and trusting intentions that involve willingness without having control or power over the other party. Willingness to depend is a trust dimension, such that it reflects volitional vulnerability, a concept commonly used to define trust (Mayer *et al*., 1995). If a buyer is willing to depend on a vendor, and thus accept general vulnerability, then the buyer is more likely to be willing to accept the specific vulnerabilities associated with using the vendor's site. Trusting belief is the belief of one party that the other party has one or more characteristics beneficial to that party (Mayer *et al*., 1995; McKnight and Chervany, 2002; Mishra, Kramer, and Tyler, 1996).

Despite the fact that the parties may have little knowledge and information about each other, trusting beliefs can form quickly; the customer may want the e-vendor to be willing and able to act in the customer's interest, honest in transactions, and both capable of, and predictable in, delivering as promised (McKnight and Chervany, 2002). Looking at characteristics, trusting beliefs are generally cognitive in nature, and are therefore similar to the conceptual beliefs structure of TAM. They are, thus, perceptions of the trustworthiness, often developed from research that has considered the trust fundamentals to be perceptions about the ethical character (Ring and Van de Ven, 1994), ability (Gabarro, 1978), predictability (Rempel *et al*., 1985) of the other party, or combinations of such attributes (McKnight *et al*., 2002). These researchers have viewed them as focused on four concepts: integrity (trustee honesty and promise keeping); benevolence (trustee caring and motivation to act in the trustor's interests); competence (ability of the trustee to do what the trustor needs); and predictability (consistency of trustee behaviour) (McKnight *et al*., 1998).

Technology and trust issues are important in understanding online consumer behaviour, yet their inclusion in traditional consumer behaviour is inconsistent. A greater degree of trust is required in online shopping, for example, than in a physical branch of a retailer. Trust can support and promote interaction between a consumer and an e-vendor when the latter is unknown and the quality of a product or service is uncertain (Tan and Thoen, 2001). According to Keen *et al*., (1999) it is now accepted that trust is an important issue for all those who engage in e-commerce.

3.12.2. Enjoyment

Perceived enjoyment (PE) refers to the extent to which the activity of using an e-commerce website is enjoyable in its own right aside from the instrumental value of the site (Davis, *et al*. 1992). Additionally, Childers *et al*. (2001) stated that "shopping enjoyment is the extent to which one believes that shopping will provide reinforcement in its own right, going beyond performance consequences" and such enjoyment extends to the online channel (Bauer, Falk, and Hammerschmidt, 2006). Perceived enjoyment occurs after at least some exploration of the website. Attractiveness, which is part of the site quality, is found to have significant positive impact on perceived enjoyment (Van der Heijden, 2003).

There is some evidence that online consumers not only care for the instrumental value of the technology, but also the more immersive, hedonic value (Childers *et al*., 2001; Van der Heijden, 2000). There is ample evidence that not only usefulness (external motivation) but also enjoyment (internal motivation) is a direct determinant of user acceptance of technology

(Davis *et al*., 1992; Venkatesh, 1999). This is in line with a more recent evaluation of the TRA, in recognition of the evidence that attitudes are not only based on cognition, but also on affection (Ajzen, 1991). Consumers may, in general, expect to find more enjoyment in interactive environments than they do when shopping in physical environment.

These studies confirm the relevance and appropriateness of ease of use and usefulness in an online context, and find substantial evidence for the intrinsic enjoyment that many consumers have when surfing the web (Teo *et al*., 1999; Lederer *et al*., 2000; Moon and Kim, 2001). Perceived enjoyment or playfulness is a significant antecedent of Internet use (Teo *et al*., 1999).

Childers *et al*., (2001) went on to describe the term 'enjoyment' to embody the hedonic aspects, while usefulness and ease of use denoted the utilitarian ones. However, enjoyment has often been reported as a motivator for 'bricks' shopping, and is thus an important dimension for e-shopping. Childers *et al*. (2001) found enjoyment to be more important for e-shopping that is described as hedonic as opposed to utilitarian. Moreover, Parsons (2003) pointed out that customers could be drawn in by appealing to hedonic motivations, and then switched to buying through the use of utilitarian ones (e.g. price based). Like conventional shoppers, e-shoppers should prefer experience that creates positive feelings. Past research suggests that entertainment-related factors are positively related to attitude to a website (Chen and Wells, 1999; Coyle and Thorson, 2001; Donthu, 2001; Kwon, Kim, and Lee, 2002; McMillan, Hwang, and Lee, 2003). A shopper may or may not purchase at a user-friendly website, but he or she will definitely not purchase at user-unfriendly website.

Entertainment involves all website elements that promote enjoyment while using the site. These include sensory and hedonic stimuli, like colour, music, action, and interactivity. In addition, site designs that promote fantasy or suspense can also provide entertainment, as might games, puzzles, streaming video, and virtual tours. Entertainment also appears to increase attitude to online shopping (Jarvenpaa and Todd, 1997; Vijayasarathy and Jones, 2000), intention to shop online (Lynch, Kent, and Srinivasan, 2001), frequency of online purchases (Korgaonkar and Wolin, 1999), and e-loyalty (Childers *et al*., 2001). They recommended including 'images, video, colour, humour, sound, music, games, animations, and all other aspects of interactive, networked multimedia that make it enjoyable' – i.e. web atmospherics.

3.12.3. Site Quality

An e-vendor's web presence is the main source upon which a customer can judge its trustworthiness in the absence of other 'real world' tangible cues. Website quality is unique to the online context and is unanimously seen as a vital factor during the online initial purchase stage (Yoon, 2002; Koufaris and Hampton-Sosa, 2004). For the first-time buyer with no previous experience with the seller, the initial trust, from the consumers' perspective, is formed by indirect experience such as reputation, recommendation, effective communication, and information quality of the seller website (Kim *et al*., 2003). Website quality has been found as a trust-building lever in the first-time online purchase context (McKnight *et al*., 2002). Wirtz and Lihotzky (2003) argue that online experiences differ from those found in traditional brick-and-mortar shopping, suggesting that consumer evaluation of the quality of online shopping may differ in achieving initial trust, which makes it more complicated than in the traditional (physical) business environment. In any online shopping situation, consumers may face difficulties attributed to: (1) the lack of information available to the online buyer to assess the trustworthiness of the seller; (2) the lack of guidance on how to assess the economic viability or credentials of the online seller; and (3) the fact that usually the online customer has to pay upfront before exchange takes place (Qureshi *et al*., 2009).

E-shopping web site quality refers to "overall consumer perceptions of the excellence and effectiveness of an e-retailer's product and/or service offering through its virtual store" (Ha and Stoel, 2009). Additionally, shopping online includes a number of experiences such as information search, web site browsing/navigation, ordering, payment, customer service interactions, delivery, post-purchase problem resolution, and satisfaction with one's purchases (Ha and Stoel, 2009). Chakraborty, Lala, and Warren (2002) and Chung and Tan (2004) indicated that perceived website quality is a multi-dimensional latent construct that includes dimensions of playfulness, usefulness, user friendliness, informativeness, technology, organization, and navigability. Both the quality of web site features/interface performance and the quality of features going beyond web site interface influences a consumer's perception of Internet shopping (Ahn, Ryu and Han, 2003; Wolfinbarger and Gilly, 2003). Evidence shows that online consumers appear to pay attention to the contents of the website quality of product or service information through which consumers reach their purchase and re-purchase decisions (Pavlou and Fygenson, 2006; Jahng *et al*., 2007).

An e-vendors' site with user-friendly search and navigation functions provides users with a better sense of control over their online shopping experience, which in turn may translate into positive feelings about the competence of the vendor, its overall operational efficiency and

the speed with which navigation is conducted online. Thus, a well-designed and organized web interface, such as layout design and information content, can stimulate initial consumer interest to further explore a site (Menon and Kahn, 2002) and reduce customers' cost and the time required when searching for product information. This can increase the customer's belief that the vendor running the website has high integrity, and will behave in a competent, benevolent and therefore trustworthy manner (Flavian, Guinaliu and Gurrea, 2006). Similarly, research has identified that the accuracy of product descriptions on websites leads to initial customer trust in the online vendor (Yoon, 2002).

Interactivity on the Internet refers to the degree to which customers and retailers can communicate directly with one another anywhere, any time (Blattberg and Deighton, 1991). Customers prefer two-way communication rather than merely being passive recipients of information (Ghose and Dou, 1998). Ghose and Dou (1998) observe that, for e-retailers, the degree of interactivity influences the perceived quality of the website. In a physical store, customers interact with sales personnel, whose friendliness and knowledge can affect consumers' purchasing decision (Berry, 1969; Lindquist, 1974; McDaniel and Burnett, 1990; Tigert, 1983). On the other hand, e-retailers provide several types of online service that can increase this interactivity with customers, such as a toll-free phone number, e-mail addresses, frequent asked questions (FAQs), software downloading, e-form inquiry, order status tracking, customer comment, and customer feedback. Research has found that having FAQ sections and feedback increases e-store visits and sales (Lohse and Spiller, 1998). Such characteristics have been proven to contribute to the enhancement of initial trust in the online vendor (Gefen *et al*., 2003a; van der Heijden and Verhagen, 2004).

3.12.4. Subjective Norm

The research literature shows support for the role of subjective norm on behavioural intentions. For example, in a cross-sectional comparison of pre- and post-adoption of information technology use, Karahanna, Straub, and Chervany (1999) found that top management, supervisors, and peers significantly influenced adoption intention for both potential technology adopters and actual users. In addition, they found that MIS staff and friends were important influences for potential adopters, while computer specialists played a significant role for actual users. In a study of decision support system adoption for health planning, Chiasson and Lovato (2001) also report that subjective norm is a significant antecedent of information system adoption intention. In addition, Morris and Venkatesh (2000) investigated age differences in adoption intentions and continued use of information

technology using the theory of planned behaviour. They found that workers were strongly influenced by subjective norm, although age and length of exposure moderated the effects. Based on the TPB, it is expected that subjective norm will have an influence on the intentions of consumers to engage in online transactions.

Courneya and McAuley (1995a, 1995b) and Courneya et al. (2000) found little or no significance of SN on intention, and argued with others that social support might provide for a greater understanding of the exercise of motivation and behaviour. This can raise the question of SN value and relevance for IS adoption behaviour. As a result, nowadays, scattered research exists about it. When Davis (1989) introduced TAM, he did not find SN to be significant in adopting IS in the organizational context. The reason behind the insignificant relation was not rigorously investigated. This is a serious limitation since SN is in the core of social psychology that has been used widely in IS acceptance research. After going back to the psychology literature, a highly relative human behaviour phenomena may be the reason behind the insignificance; 'the power of situation'. Because using IS in an organization is obligatory, then the situation leaves the users with no option but to comply, regardless what important others think or feel. This is not the case in the e-commerce. For this reason, Davis emphasized the need for more research. His later study in 2000, along with Venkatesh demonstrated the significance of SN in IS adoption.

Courneya *et al*., (2000) argued that social support is more representative for normative beliefs. Social support is the perception of assistance in performing the behaviour. Few studies have examined the social support variable as a part of SN. This is because social pressure can be practised as a way of supporting others in their behaviour.

Subjective norm can be thought of as composed of two components: (a) societal norm and (b) social influence (Pavlou and Chai, 2002). Societal norm refers to the process of adherence to the larger societal fashion, i.e., a large circle of influence. Collectivism, however, refers to the extent to which individuals are integrated into groups, forming their judgments based on group norms (Hofstede and Bond, 1988). Hofstede (1980) has noted that members of individualistic societies prefer self-sufficiency, whereas those in collectivistic cultures acknowledge their interdependent natures and obligations to the group. Other studies have replicated Hofstede's cultural dimension of collectivism, finding that it places greater relative importance on the group's needs and norms than individualism (Triandis, 1989). Social influence refers to the extent to which people accept a hierarchical system with an unequal

power distribution (Pavlou and Chai, 2002), and here is seen to reflect adherence to opinions from family, friends, and peers, i.e., a smaller circle of influence. Large differences in power lead to less powerful individuals accepting large status differences. Furthermore, superiors tend to be autocratic and paternalistic, whilst subordinates willingly do as they are told (Hofstede and Bond, 1988).

Courneya *et al*.'s, (2000) and other researchers' views of SN are rather ambiguous. Accordingly, in the research reported here, SN is recognized as an important variable that worth more investigation, especially in collectivist cultures, such as the Arabic countries in general and Saudi Arabia in particular, where it is rarely examined.

3.13. HOFSTEDE'S CULTURAL DIMENSIONS

In order for managers to optimise the benefits of globalization of markets and corporate multi-nationalism (Straub *et al*., 1997), it is necessary to gain a sound knowledge of cross-cultural adoption and use of IT (Couger, 1986; Kumar and Bjorn-Anderson, 1990). However, there have only been a small number of studies carried out that examine the possible cultural effects on the adoption and diffusion of new IT (e.g. Ho, Raman, and Watson, 1989; Lim, Raman, and Wei, 1990; Raman and Wei, 1992; Straub *et al*., 1997; Pavlou and Chai, 2002; Jarvenpaa *et al*., 1999; McCoy, Galletta, and King, 2007).

One of the most important studies in social science research is Hofstede's (1980) cultural dimension theory (Pavlou and Chai 2002), which has gained widespread empirical support (Sondergaard, 1994). His research, involving about 116,000 respondents and in 66 countries, led to the development of the theoretical foundation for the exploration of the impact of cultural differences on the adoption and diffusion of Internet banking.

Hofstede (1980) suggests that culture can be viewed as a collective programming of the mind, whilst Kluckhohn (1951; cited by McCoy *et al*., 2007) defines culture as 'patterned ways of thinking, feeling and reacting, acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiments in artefacts; the essential core of culture consists of traditional ideas and especially their attached values'. Culture is sometimes referred to as a national character and has, therefore, been thought of as a pattern of personality characteristics found among people within the same nation (Clark, 1990). Hoecklin's (1995) definition of culture contains reference to a shared system of meaning, which is relative, learned and about groups.

Culture is widely believed to shape individual values and to affect behaviour (Hofstede, 1980). Hofstede argues that differentiation between cultures should be based on four main dimensions: uncertainty avoidance, power distance, individualism and collectivism, and masculinity and femininity. In 1998, he added a fifth dimension; short-term and long-term orientation, which was initially driven from culture research in China.

Because of its relevance to the research constructs and to the Saudi Arabian culture, the author will consider the Individualism/Collectivism dimension. This dimension refers to the basic level of behaviour regulation, whether by individuals or groups. People high on the individualism scale view themselves as relatively more important as those on the collective scale (Pavlou and Chai, 2002). In individualistic societies, ties between individuals are loose. If individualism is low, there is likely to be a predisposition against computer-based communications because different media mute the group effect, by facilitating individuality (Ho *et al*., 1989). In contrast, in collectivist societies there tends to be stronger integration.

Collectivist cultures, such as the Arab Countries (Egypt, Lebanon, Libya, Kuwait, Iraq, Saudi-Arabia, UAE), show that people cannot pick up cues about the social situation as readily from computer-based media and, therefore, would favour, overall, media, such as face-to-face communication, and trusting each other more than trusting someone who is not part of the circle. On the other hand, individualist cultures generally trust others unless they are given the reason not to.

Previous studies suggest that individuals place more trust in people similar to themselves and assess trustworthiness based on second-hand information and on stereotypes (Zucker 1986; Morgan and Hunt, 1994; McKnight *et al*., 1998). Additionally, a highly collectivistic cultures, such as the Arab World, is dominated by high collectivism, i.e., an individual's beliefs and actions depend on the social norms of the group and are typically influenced by the expectations of people around him/her (Kluckhorn and Strodtbeck, 1961). Therefore, if e-shopping is a socially desirable behaviour, a person is more likely to e-shop (George, 2002).

However, one criticism of Hofstede's work is that the measures used for assessing these dimensions do not exhibit statistical validity and reliability (Spector, Cooper, and Sparks, 2001). Other research has shown that the dimensions do not represent a sufficiently broad cultural spectrum. Hofstede used only IBM employees and managers in his study and, as a result, it is felt that his sample is not fully representative of the nations investigated. However, Hofstede (1998) contends that in order to compare cultures across nations the

groups examined must be as similar as possible in order for differences to be attributed to the national cultural context.

A further weakness is that assigning the same cultural values to all people within a nation-state may be overly simplistic, given the cultural diversity within many nations, and the unique cultural values held by individuals regardless of national ethnicity (McCoy *et al*., 2005). Nevertheless, as there are relatively few alternative ways of easily conceptualizing culture, Hofstede's work has continued to be used (Brown and Buys, 2005).

3.14. SUMMARY

E-Commerce includes different forms of activities that cover important fields, such as marketing, electronic negotiations, services and contracting taking place over the Internet and through other channels (Coppel, 2000). In this environment, Chen (2009) indicated that the rapid development of B2C e-commerce, in its early stages, stimulated researchers and scholars to investigate consumer behaviour in cyberspace. Additionally, Atchariyachanvanich *et al*. (2007) state that 'since keeping the customer repurchasing a product/service is essential to maintain the profitability of any business, the continuance of purchasing through the Internet is vital to businesses'. This chapter has identified that the study of consumer behaviour is fundamentally dependent on a numbers of theories. These predict and explain human behaviour in several domains, and are derived from basic models and theories. For example, the TRA and the TPB, as the main body of these theories, are recognized by IS researchers as helpful in providing them with an insight into how consumers react with computing technologies, and, at the same time, examine relationships between humans and the technology. The extended TAM and ECT have been adopted as a basis in this research because, across the years, numerous empirical tests have shown them as strong models of technology acceptance intention behaviours and continuance intention in a wide variety of IT and country contexts.

Rogers (1995) suggested that adopters re-evaluate their acceptance decision during a final confirmation stage and decide whether to continue or discontinue an innovation. Additionally, previous researchers view continuance as an extension of acceptance behaviour (i.e., they employ the same set of pre-acceptance variables to explain both acceptance and continuance decisions), implicitly assuming that continuance co-varies with acceptance (e.g., Davis *et al*., 1989, Karahanna, Straub, and Chervany, 1999; Bhattacherjee, 2001). This

chapter has also investigated Hofstede (1980) cultural dimensions. Hofstede indicated that in collectivist cultures, such as the Arab Countries, people cannot pick up cues about the social situation as readily from computer-based media and, therefore, would favour, overall, media, such as face-to-face communication, trusting each other more than trusting someone who is not part of the circle.

Hence, to hypothesize such a model it is important to understand the literature that lies behind it. The next chapter will discuss further the research model built on TRA, TAM and ECT, and then hypothesize a model that is expected to offer a better prediction of users' continuance e-shopping intention in Saudi Arabia.

CHAPTER 4: CONCEPTUAL RESEARCH MODEL AND HYPOTHESES

4.1. INTRODUCTION

The previous chapters have intensively discussed the development of the Internet and e-commerce in Saudi Arabia, online shopping in Saudi Arabia, and the development of different theories used in the context of online shopping.

This chapter presents the research conceptual model and the development of the hypotheses. The focus of the first part is an overview of previous research, which then forms the research question. Then, the remainder of this chapter proceeds as follows: the researcher presents the key research question, and then details the proposed conceptual framework, model, and hypotheses. The chapter concludes with a summary of these hypotheses and framework.

4.2. WEAKNESSES OF THE THEORIES

The popularity of the Internet worldwide has increased researchers' interest in studying electronic commerce and consumers' behaviour. Most studies in the literature review in Chapter 3 focused on constructs that affect customers' intention to use and adopt online shopping. These studies have explored how consumers view e-shopping, with more emphasis on the antecedents of such consumer intentions and adoption.

Because most consumers now consider the technology standard, companies have begun to realize the power of the Internet for expanding their businesses worldwide. Online shopping as a new channel for doing business in B2C segments is becoming popular across all countries. With the digital economy, companies have also become vulnerable to competitors that are just a click away (see Cheung, Chan, and Limayem, 2005).

The popularity of Internet shopping is not limited to any particular business sector but rather is apparent in all types of businesses. Consider the airline industry in general as an example: e-ticketing is becoming the norm for travellers throughout the world. Furthermore, e-ticketing helps airlines meet the requirements of the International Air Transportation Association (IATA), which demanded that by January 1, 2008, all airlines and travellers would be able to enjoy the usefulness and convenience of online ticketing for easier and hassle-free travel (Arab News Newspaper, 2007).

As described in Chapter 1, one e-ticket produces a saving of $9 per transaction compared with a paper ticket. For example, considering that Saudi Arabian Airlines carries approximately 16 million passengers annually, the airlines would be able to save $17 million per year and provide better and convenient services to its customers (Alwatan Newspaper, 2006).

New regulations and factors emphasize what Cheung *et al*. (2005) call environmental factors or structural influences, including market-related issues such as uncertainty, competition, and concentration, as well as national and international issues such as legal structure, trade restrictions, and culture. Markus and Soh (2002) also define structural influences as the 'physical, social, and electronic arrangements that shape e-commerce business models and influence individual and organizational use of the Internet.'

Local government regulations, national and international legal issues, and youthful and demanding customers combine to force businesses to use e-business. Therefore, companies should work to build long, sustainable relationships with their online consumers and focus beyond the first step of online adoption. However, the lack of research into' and understanding of, the capabilities of the digital revolution in the Saudi market might prevent e-businesses from promoting e-shopping, thus causing customers to defect.

Most theories emphasize aspects that affect the intention and adoption of online shopping, ignoring the important aspects that lead to continuance, particular for Saudi Arabia where such research is virtually non-existent, especially in the e-shopping context. Previous research suggests that many factors can build a foundation for constructing a framework of online consumer behaviour. Douglas, Morrin, and Craig (1994) suggest researchers should develop theoretical and conceptual frameworks by integrating different constructs that come from varied research traditions and disciplines. However, few studies attempt to investigate the impact of the key characteristics on e-shopping continuance intentions. Thus, factors such as web site quality, subjective norms, usefulness, trust, enjoyment, online loyalty incentives, and satisfaction are under-researched and demand more investigation.

Furthermore, globalization continues to drive the rapid growth of international trade, global corporations, and non-local consumption alternatives (Alden *et al*., 2006; Holt *et al*., 2004), and advances in e-commerce diminish trade boundaries. E-commerce and e-shopping create opportunities for businesses to reach out to consumers globally and directly. In turn, business

and social science research now focuses specifically on cross-national and cross-cultural Internet marketing (Griffith *et al*., 2006).

The Internet has changed how businesses and customers customize, distribute, and consume products. Its low cost gives both businesses and consumers a new and powerful channel for information and communication. Business-to-consumer online sales in the United States grew by 120% between 1998 and 1999 (Shop.org and Boston Consulting Group, 2000). According to a UK payment association, the number of consumers who shop online has increased by more than 157%, from 11 million in 2001 to more than 28 million in 2006 (cited in Alsajjan and Dennis, 2009). E-commerce transactions also are growing in the Middle East (19.5 million Internet users) and the Gulf States. In 2007, Internet sales increased to more than $1.2 billion worldwide and are expected to continue to rise (World Internet Users and Population Stats, 2007).

Online customer retention is particularly difficult. Modern customers demand that their needs be met immediately, perfectly, and for free, and they are empowered with more information to make decisions (Bhattacherjee, 2001b; Crego and Schiffrin, 1995). Generally, of course, consumers now have various online and offline options from which to choose, and without a compelling reason to choose one retailer over another, they experiment or rotate purchases among multiple firms (Bhattacherjee, 2001b; Crego and Schiffrin, 1995). Within this growing marketplace we focus this research on a single issue. Despite impressive online purchasing growth rates, compelling evidence indicates that many consumers who search different online retail sites abandon their purchase intentions. How to persuade customer repurchase remains a concern for e-commerce vendors (Johnson and Hult, 2008). It is stated that only a small minority of website visitors (about 1%) proceeds to make purchases (Gupta and Kim, 2007). This research is aimed to help online businesses understand which factors encourage consumers to have continuance intention behaviour toward e-shopping. Such continuance is critical, because acquiring new customers may cost as much as five times more than retaining existing ones (Bhattacherjee, 2001b; Crego and Schiffrin, 1995; Petrissans, 1999), given the reasonably high cost of acquiring new customers and the economic value of reliable customers (Reichheld and Schefter, 2000). Raising the number of reliable costumers by as slight as 5% can raise profitability by 30-85%, depending upon the business (Reicheld and Schefter, 2000). Therefore, research into online continuance shopping has recently emerged as an important issue (e.g., Bhattacherjee, 2001a; Kim and Malhotra, 2005; Kim, Malhotra, and Narasimhan, 2005; Liao, Chen, and Yen, 2007; Limayem, Hirt, and Cheung, 2007).

Companies should think strategically and use the savings they earn through their e-business efficiently, while also raising the switching costs to retain customers. E-retailers can either remember details about the customer that reduce the effort customers must exert in future transactions or learn more about the customer to tailor the future interactions to the customer's specific needs (Straub and Watson, 2001). Better product quality, lower prices, better services, and outcome value all help build sustainable relationships with online customers.

Theoretical explanations of online shopping intentions consider several factors. Rogers (1995) suggests that consumers re-evaluate their acceptance decisions during the final confirmation stage and decide whether to continue. Continuance may be an extension of acceptance behaviour that co-varies with acceptance (e.g., Bhattercherjee, 2001a; Davis *et al*., 1989; Karahanna *et al*., 1999). We adopt the extended expectation confirmation theory (ECT; Bhattacherjee, 2001b) and the extended technology acceptance model (TAM; Davis *et al*. 1989) as a theoretical basis, integrating ECT from consumer behaviour literature to propose a model of e-shopping continuance intentions, similar to the way that the TAM adapts the theory of reasoned action (TRA) from social psychology to postulate a model of technology acceptance.

The TAM, as explicated by Davis *et al*. (1992) and Gefen *et al*. (2003), and the ECT (Bhattacherjee, 2001a; Oliver 1980) both have been used widely in research in the industrialized world, but they are less commonly applied to Saudi context, which is part of the developing countries. Moreover, the research contribution is potentially valuable, as the TAM stops at intention and does not investigate continuance intentions or behaviour. Moreover, the cross-cultural aspect to our contribution is also relevant, as both models have been used widely in research in the industrialized world.

Furthermore, no widely acceptable definition for e-commerce exists. Coppel (2000) considers it business over the Internet, which includes both business-to-business and business-to-consumer markets. Increasingly, commercial websites seek to provide useful product information in order to attract potential online shoppers (Totty, 2001). Keeney (1999) pointed out that measuring only actual purchases may be too narrow a scope when assessing the online shopping activity of consumers. He contended that gathering product information is a second aspect of the online shopping activity. One recent e-commerce study (Chen *et al*., 2002) adopted this two-fold definition. The author of this research also employs a similar

definition of online shopping in order to get a more complete picture of continuance intention to online shopping. Online shopping in this study is a combination of both the purchase and the product information search activities. For the purpose of this research, we study the following terms which are frequently used interchangeably: E-shopping, electronic shopping, online shopping, and Internet shopping. We propose a new, comprehensive definition: "All these activities include searching, buying, and selling products and services through the Internet". Additionally, continuance intention in this study means "a specific desire to continue an e-shopping relationship with a service or product provider".

In recent years, the Internet has grown to include a wider range of potential commercial activities and information exchanges, such as the transaction and exchange of information between government agencies, governments and businesses, businesses and consumers, and among consumers. The author focuses mainly on the business-to-consumer (B2C) arena, which has been the source of most online progress and development. The author generalizes the two-fold definition; rather than evaluating shopping at a particular site (as in Chen *et al*., 2002); respondents were asked to generalize all online shopping activities.

In Saudi Arabia approximately 60% of the 24,069,943 people are younger than 30 years of age, and they are almost equally split between men (51%) and women (49%) (The Middle East Statistics, 2007). Therefore, the nearly equal gender split in the population and regional influence could be a key contributor to behavioural differences in online shopping across Saudi culture and determine whether e-shopping intentions will lead to continuance acceptance.

Previous research finds, in particular, that gender differences significantly affect new technology decision-making processes (Van Slyke *et al*., 2002; Venkatesh *et al*., 2000). Venkatesh *et al*. (2000) report that women tend to accept information technology when others have high opinions of it and are more influenced by ease of use. Men rely more on their evaluations of the usefulness of the technology. However, in many cultures, women represent the primary decision makers in families and households'. Greater e-commerce exposure and decision-making power may imply that males and females can attain greater satisfaction from online shopping, especially as the Internet is one of the main environments for young people to play, work, learn and communicate (Alreck and Settle 2002; Spero and Stone 2004). Saudi Arabia has a population of 25 million. Clearly young people's behaviour is of special importance to Saudi trade.

The dearth of literature regarding Arabic countries in general and Saudi Arabia in particular prompted us to pursue this investigation in a country with a young and growing population. Looking to Saudi Arabia, no previous research considers Internet shopping or, specifically, continuance intentions toward online shopping, nor do studies address differences in online shopping behaviour in Saudi Arabia according to gender, education, geographical locations, high and low online spending, and experienced and inexperienced online shoppers. The aim of this study is to fill this research gap. The main objective, therefore, is to establish any overarching patterns of the e-shopping process, as a whole, that drives customer continuance intention.

4.3. RESEARCH QUESTION

The growing body of research still does not appear to address the research questions that e-retailers in this extremely competitive environment now face in the context of Saudi Arabia, as an example of a developing country in the Arabic World. For Saudi Arabia in particular, such research is virtually non-existent, especially in the e-shopping context. Despite the proliferation of research concerning online shopping, to the best of the authors' knowledge, no single study has attempted to examine what factors drive consumers' continuance intentions toward e-shopping? As mentioned in the 'Introduction' chapter, Chapter 1, above, factors to be considered include:

- Which forces drive customer continuance e-shopping intentions in Saudi Arabia?
- Do they differ from the drivers in developed countries? That is, do well-established theories from developed (mostly Western) countries also apply in less developed (often non-Western) cultures; in the case of this research is Saudi Arabia?
- What impact do enjoyment, usefulness, and subjective norms have on continuance intention in Saudi Arabia?
- Are gender, education, age, experience, spending, and regions of Saudi Arabia associated with any behaviour differences among online shoppers?
- Do e-retailers in Saudi Arabia recognize the value and cost effectiveness of implementing e-commerce and e-shopping strategy?

4.4. RESEARCH AIMS AND OBJECTIVES

In line with the gaps in previous research and the resulting key research question, this thesis adopts an information acceptance point of view. Consumers in Saudi Arabia are increasing their use of online shopping, and a greater understanding of the factors that affect their acceptance and continuance intentions is desperately needed.

As explained in chapter 1, section 1.6 and 1.7, our study is aimed at enhancing knowledge and understanding in the area of online shopping continuance intention while proposing and validating a model of e-shopping continuance intentions that incorporate different constructs from the modified TAM and ECT. It and considers variance of continuance intentions in the context of e-shopping in Saudi Arabia. No previous research considers Internet shopping in Saudi Arabia or, specifically, continuance intentions for online shopping in Saudi Arabia, nor do studies address differences in online shopping behaviour in Saudi Arabia. Furthermore, by addressing differences in online shopping behaviour towards the development and understanding of this research model, this thesis offers insight into broad-ranging issues with wider applications and differing degrees of importance.

Practically, the research will help online businesses to understand which factors stimulate online shopping continuance intention in Saudi Arabia. Such continuance is critical because acquiring new customers may cost as much as five times more than retaining existing ones (Bhattacherjee 2001b; Crego and Schiffrin 1995; Petrissans 1999). Increasing the number of repeated customers by as little as 5% can increase profitability by 30–85%, depending upon the industry type (Reichheld and Schefter, 2000). As a result, the objective of the proposed model introduces a new model that predicts and assesses online continuance intention shopping by determining the determinant factors of continuance intention in the context of Saudi Arabia. This is done by conducting a comprehensive analysis that includes Exploratory Factor Analysis (EFA), Structural Equation Modelling (SEM) and invariance analysis for the data collected for study purposes to examine research model generalizability. Furthermore, the research will contribute to knowledge of continuance intention and provide a base for future research to build on with respect to the proposed model and its application to other contexts. As for managerial implications, the model will draw conclusions that should help practitioners utilize the research results and improve customers' continuance usage of the virtual channel, specifically in online shopping and more generally e-commerce. Finally, it is the objective of this thesis to conduct research with the highest possible standards and

produce the best quality results.

4.5. PROPOSED MODEL AND HYPOTHESIS

The focus of this study is on Internet users with similar backgrounds but who come from different geographic areas in Saudi Arabia. The intensive literature review (Chapter 3) indicated appropriate scales, including Likert-type scales. These ask respondents to indicate a number that corresponds to their level of agreement or disagreement with questionnaire items.

The TAM (Davis, 1989) represents an adaptation of the TRA, tailored to users' acceptance of information systems. It helps explain determinants of computer acceptance and can explicate user behaviours across a broad range of computing technologies and populations; it also is parsimonious and theoretically justified (Davis *et al*., 1989). Previous research predicting intentions to use online shopping behaviour has also used TAM (Vijayasarathy, 2004). The major determinants are perceived usefulness and ease of use. Perceived usefulness significantly influences attitude formation (Agarwal and Prasad, 1999; Davis, 1989; Dishaw and Strong, 1999; Gefen and Keil, 1998; Igbaria *et al*., 1996; Moon and Kim, 2001; Taylor and Todd, 1995; Venkatesh, 2000; Venkatesh and Davis, 2000), but evidence regarding perceived ease of use remains inconsistent. Furthermore, other researchers (e.g., Bhattachergee, 2001a; Ma and Liu, 2004; van der Heijden, *et al*. 2003) indicate that ease of use has the single most effect on acceptance after a certain threshold. That is, with more experience, the impact of ease of use on intention declines. Because this research focuses on continuance intentions, we assume all participants already have e-shopping experience, implying that other factors may be more important than ease of use. Moreover, many studies simplify TAM by dropping attitude and studying just the effect of perceived usefulness and ease of use on intention to use (Venkatesh and Davis, 2000; Venkatesh *et al*., 2003; Gefen and Straub, 2000; Lederer *et al*., 2000; Teo *et al*., 1999; Premkumar and Bhattacherjee, 2008).

Customers use cognitive judgment when using an e-commerce web site as they consider both perceived usefulness and perceived ease of use (Li and Zhang, 2005). Behavioural intentions and usage are often enhanced by e-shoppers' extrinsic and intrinsic motivations (Li and Zhang, 2005); perceived usefulness is an extrinsic motivation (Davis *et al*., 1992), and ease of use is an intrinsic motivation in this context (Atkinson and Kydd, 1997). Updates to the TAM

add antecedents of perceived usefulness and ease of use (Venkatesh and Davis, 2000), such as subjective norms, experience, trust, and output quality. Moreover, the enjoyment construct was added to TAM to explain the role of intrinsic motivation in the adoption of new technology (Davis *et al*., 1992; Van der Heijden, 2004). Applying this into a website context, Van der Heijden (2000) identified the concepts of perceived usefulness and perceived enjoyment as strong influential variables to usage. Furthermore, ample evidence confirms that both usefulness (i.e., external motivation) and intrinsic enjoyment (i.e., internal motivation) offer direct determinants of user acceptance online (Davis *et al*., 1992; Lederer *et al*., 2000; Moon and Kim, 2001; Teo *et al*. 1999; Venkatesh, 1999).

Expectation confirmation theory (ECT), in turn, helps predict consumer behaviour before, during, and after a purchase in various contexts, in terms of both product and service repurchases (Anderson and Sullivan, 1993; Dabholkar *et al*. 2000; Oliver, 1980, 1993; Patterson *et al*., 1997; Spreng *et al*., 1996; Swan and Trawick, 1981; Tse and Wilton, 1988). According to ECT, consumers define their repurchase intentions by determining whether the product or service meets their initial expectations. Their comparison of perceived usefulness versus their original expectation influences their continuance intentions (Bhattacherjee, 2001a; Oliver, 1980). For example, expectations might derive from knowledge and information collected from mass media or other sources that predict products or services will perform in a certain way. As the consumer uses the product, he or she confirms these expectations about the value and benefits of the product/service. If it meets his/her initial expectation and leaves the consumer satisfied, the consumer experiences positive intentions to repurchase. Thus, repurchase intentions depend on satisfaction with the product or service (Anderson and Sullivan, 1993; Oliver, 1980).

Nevertheless, ECT ignores potential changes in initial expectations following the consumption experience and the effect of these expectation changes on subsequent cognitive processes (Bhattacherjee 2001a). Pre-purchase expectations typically are based on others' opinions or information from mass media, whereas post-purchase expectations derive from first-hand experience, which appears more realistic (Fazio and Zanna, 1981; Lin *et al*., 2005). Other researcher (e.g., Thong *et al*, 2006) has concluded that expectations coming from consumers' direct experiences (post-adoption expectations) are the main predictors of consumer satisfaction. After such experience, expectations may increase if consumers believe the product or service is useful or contains new benefits and features that were not part of their initial expectation. In the expectation confirmation paradigm, expectation is commonly

defined as individual beliefs about the level of attributes possessed by a product or service (Oliver and Linda, 1981; Churchill and Surprenant, 1982, Bearden and Teel, 1983). Based on the previous researches, including TAM (e.g., Davis *et al*., 1989; Karahanna *et al*., 1999; Venkatesh, 2000), perceived usefulness is the most consistent antecedent of consumer's intention to use IT. Thong (2006) therefore indicated that it is more logical to have usefulness to be surrogate for post-adoption expectations in future research when measuring intention. Therefore, the research model developed in this thesis focuses only on post-acceptance variables and the model assumes e-shopping retailers target users and heighten their loyalty to the site. Hence, the post-expectation in the original ECT is represented by usefulness in our model.

Venkatesh *et al.* (2003) suggest that usage and intentions to continue usage may depend on cognitive beliefs about perceived usefulness. Gefen *et al.* (2003) also indicates that perceived usefulness reinforces an online shopper's intention to continue using a website, such that when a person accepts a new information system, he or she is more willing to alter practices and expend time and effort to use it (Succi and Walter, 1999). However, consumers may continue using an e-commerce service if they consider it useful, even if they are dissatisfied with its prior use (Bhattacherjee, 2001a).

The dominant influence of perceived usefulness has led Bhattacherjee (2001a) to include usefulness in his revised ECT. In their recent study, Premkumar and Bhattacherjee (2008) observed that whilst perceived usefulness is the strongest predictor of intention in TAM, it continues to be a stronger predictor of continuance intention than satisfaction when TAM combines with ECT (whereas satisfaction was dominant in the original ECT) (Premkumar and Bhattacherjee, 2008). The relative dominance of usefulness explains its role as critical driver in continuance decisions, particularly in comparisons of utilitarian value over hedonic value (Premkumar and Bhattacherjee, 2008). Other researchers have found that both perceived usefulness and perceived enjoyment are two evaluation criteria for functional attributes of the target online service in terms of utilitarian and hedonic benefits (Bhattacherjee, 2001b; Lin *et al*., 2005; Thong *et al*., 2006).

Site quality and good interface design enhance the formation of consumer trust (McKnight *et al*., 2002a), and if a consumer perceives a vendor's website to be of high quality, he/she would be more prepared to trust that vendor's competence, integrity, and benevolence (McKnight *et al*., 2002a). Gefen *et al*. (2003) integrate trust into the TAM in a B2C e-

shopping context and find trust positively affects consumers' intention to use a website. Building trust with consumers is an essential mission for e-retailers, because purchasing decisions represent trust-related behaviours (Jarvenpaa *et al*., 2000; McKnight *et al*., 2002b; Urban *et al*., 2000).

Subjective norm can be thought of as composed of two components: (a) societal norm and (b) social influence (Pavlou and Chai, 2002). Societal norm refers to the process of adherence to the larger societal fashion, i.e., a large circle of influence. Collectivism, however, refers to the extent to which individuals are integrated into groups, forming their judgments based on group norms (Hofstede and Bond, 1988). Hofstede (1980) has noted that members of individualistic societies prefer self-sufficiency, whereas those in collectivistic cultures acknowledge their interdependent natures and obligations to the group. Other studies have replicated Hofstede's cultural dimension of collectivism, finding that it places greater relative importance on the group's needs and norms than individualism (Triandis, 1989). Social influence refers to the extent to which people accept a hierarchical system with an unequal power distribution (Pavlou and Chai, 2002), and here is seen to reflect adherence to opinions from family, friends, and peers, i.e., a smaller circle of influence. Large differences in power lead to less powerful individuals accepting large status differences. Furthermore, superiors tend to be autocratic and paternalistic, whilst subordinates willingly do as they are told (Hofstede and Bond, 1988).

Culture in the Arab World countries, such as Saudi Arabia, is dominated by high collectivism, i.e., an individual's beliefs depend on the social norms of the group (Kluckhorn and Strodtbeck, 1961).

Additionally, other studies suggest that individuals place more trust in people similar to themselves and assess trustworthiness based on second-hand information and on stereotypes (Zucker, 1986; Morgan and Hunt, 1994; McKnight *et al*., 1998). In highly collectivistic cultures, such as the Arab World, an individual's actions are typically influenced by the expectations of people around him/her, especially the group he/she identifies with. Therefore, if e-shopping is a socially desirable behaviour, a person is more likely to e-shop (George, 2002).

In today's online shopping, thousands of websites provide similar services in terms of usefulness and benefits. Increasingly, online shoppers are becoming more sophisticated and more experienced at shopping online. They are now looking for enjoyment (Koufaris,

Kambil, and Labarbera, 2001) and excitement (Jayawardhena, 2004) in their shopping experience. Previous researches indicated that individuals who experience pleasure and joy from using a computer and perceive any activity involving the use of online shopping as inherently enjoyable, regardless of any anticipated improvement in performance, are likely to use it more extensively than others (Davis, 1992; Malone, 1981; Webster, 1989). Hedonic motivations exert powerful influences on shopping behaviour in both traditional and online shopping environments (Menon and Kahn, 2002). In traditional shopping channels, fulfilling hedonic shopping motives increase both shopping time and purchases (Forsythe and Bailey, 1996). Childers *et al*. (2001) have confirmed that hedonic motives are important predictors of attitudes toward online shopping, along with usefulness. Davis *et al*. (1989) found that while perceived usefulness emerged as the major determinant of computer acceptance in the workplace, enjoyment and fun had a significant effect beyond perceived usefulness. With regard to e-shopping, the enhanced shopping hedonic enjoyment constructs in the extended TAM (Davis, Bagozzi and Warshaw, 1992) and ECT (Lin, Wu and Tsai, 2005) are likely to fulfil the hedonic shopping motives of shoppers and influence their online shopping, reinforcing continuance intentions. Additionally, work by Donovan and Rossiter (1982) found that enjoyment of a retail experience results in more time being spent shopping and return patronage. Therefore, to the extent that a consumer associates enjoyment with an e-retailer, intent to return should increase.

A satisfactory result of the post-purchase evaluation and comparison process in terms of enjoyment, usefulness, and the expectations of social pressure of people around him/her, is likely to affect intentions toward future repurchases (Anderson, Fornell, and Lehmann, 1994; Bearden and Teel, 1983; Churchill and Suprenant, 1982; Fornell and Westbrook, 1984; Oliver *et al*., 1981; Yi, 1990). Continuance intentions toward online shopping suggest that users with satisfactory results of the post-purchase evaluation and comparison process are more likely to continue to use e-shopping (Bhattacherjee, 2001b). In this setting, a continuance intention toward online shopping (e-loyalty) refers to a specific desire to continue a relationship with a service provider (Czepiel and Gilmore, 1987).

To conclude, theoretical explanations of online shopping intentions consider several factors. Rogers' theory of innovation (1995) suggests that consumers re-evaluate acceptance decisions during a final confirmation stage and decide to continue or discontinue, and this is a clear stage in the purchasing process on-line. As a result, we are looking to understand continuance behaviour of online customers within Saudi Arabia. Ajzen and Fishbein (1975)

and Kim and Hunter (1993) indicated that there is a strong correlation between behavioural intentions and actual behaviour. This supports the use of behavioural intention as a substitute for actual behaviour. This substitute is common in information systems research (Agarwal and Prasad, 1998). The decision to continue may be an extension of acceptance behaviour that co-varies with acceptance (e.g., Bhattercherjee 2001a; Davis et al. 1989; Karahanna et al. 1999). We therefore use continuance intention as a substitute for repurchase behaviour, meaning that continuance intention will lead to repurchase behaviour (loyalty).

Our contribution is potentially valuable, as the TAM stops at intention and does not investigate continuance intentions or behaviour. Moreover, the analysis of the group behavioural differences aspect to our contribution is also relevant, as both models (TAM and ECT) have been used widely in research in the industrialized world, but they are less commonly applied to other Arabic countries, such as Saudi Arabia in particular in this research, which is part of the developing countries.

Finally, researchers are confronted with a multitude of models, and find that they can "pick and choose" constructs, or choose a "favoured model" and largely ignore the contributions from alternative models (Venkatesh *et al*, 2003). Additionally, previous research suggests that many factors can build a foundation for constructing a framework of online behavioural shopping intention (Thong et al., 2006; Taylor and Todd, 1995; Venkatesh and Morris, 2000). As indicated by Douglas *et al*. (1994), researchers should develop theoretical and conceptual frameworks by integrating different constructs that come from varied research traditions and disciplines. The TAM, as expanded by Davis *et al.* (1992) and Gefen (2003), and the ECT (Bhattacherjee, 2001a; Oliver, 1980) have been widely used in research in the industrialized world, but they are less commonly applied to other Arabic countries, such as Saudi Arabia in particular in this research, which is part of the developing countries. Given the complementary nature of TAM and ECT, our research aims to propose a model of e-shopping continuance intentions. This adapts different constructs from the modified TAM and ECT, and considers variance of continuance intentions in the context of e-shopping in Saudi Arabia. The integrated model is depicted in Figure 4.15., where it can be seen that the effect on Continuance Intention, which is adapted from ECT, comes from three constructs: Perceived Usefulness, Enjoyment, and Subjective Norm. The topic of this research was operationalised and its dimensions identified. The dimensions are Site Quality, Trust, Usefulness, Subjective Norms, Enjoyment, and Continuance Intention. In addition, several

indicators were selected and transformed into hypotheses. The research hypotheses and model are summarised in Table 4.7 and Figure 4.15.

4.4.1. Site Quality

E-shopping web site quality refers to "overall consumer perceptions of the excellence and effectiveness of an e-retailer's product and/or service offering through its virtual store" (Ha and Stoel, 2009). In the online context, website quality is unique and unanimously seen as vital factor during the initial online purchase stage (Yoon, 2002; Koufaris and Hampton-Sosa, 2004). For the first-time buyer with no previous experience with the seller, the initial trust, from the consumers' perspective, is formed quickly by indirect experience on the basis of available information such as reputation, recommendation, effective communication, and information quality of the seller website (Meyerson *et al*., 1996; Kim *et al*., 2003). Website quality has been found as a trust-building lever in the e-purchase context for the first-time consumers (McKnight *et al*., 2002). Wirtz and Lihotzky (2003) argue that online experiences differ from those found in traditional (physical) shopping, suggesting that consumer evaluation of the quality of online shopping may differ in achieving initial trust, which make it more complicated. This is due to the lack of information available to the online buyer to assess the trustworthiness of the seller , the lack of guidance on how to assess the economic viability or credentials of the online seller; and the upfront payment before exchange takes place (Qureshi *et al*., 2009).

Additionally, shopping online include a number of experiences such as information search, web site browsing/navigation, ordering, payment, customer service interactions, delivery, post-purchase problem resolution, and satisfaction with one's purchases (Ha and Stoel, 2009). E-retailers provide several types of online service that enhance initial trust in the online vendor, such as a toll-free phone number, e-mail addresses, frequent asked questions (FAQs), software downloading, e-form inquiry, order status tracking, customer comment, and customer feedback (Gefen *et al*., 2003a; van der Heijden and Verhagen, 2004). Previous researches find a significant relationship and a direct link between consumer perceptions of quality and trust (Janda, Trocchia, and Gwinner, 2002; Zeithaml *et al*., 2000; Sultan and Mooraj, 2001). Other researchers produce similar results in various retail settings (Anderson and Sullivan, 1993; Sultan and Mooraj, 2001; Harris and Goode, 2004).

Website quality helps predict behaviour (Business Wire, 1999; Carl 1995; Meltzer, 1999); if the vendor's website is perceived to be of high quality, the consumer is more likely to depend on the vendor (McKnight *et al*., 2002). Furthermore, an e-vendors' site with user-friendly

search and navigation functions provide users with a better sense of control over their online shopping experience which in turn may translate into positive feelings about the competence of the vendor, its overall operational efficiency and the speed with which navigation is conducted online. Thus, a well-designed and organized web interface, such as layout design and information content, can stimulate initial consumer interest to further explore a site (Menon and Kahn, 2002) and reduce customers' cost and the time required when searching for product information. This can increase the customer's belief that the vendor running the website has high integrity, and will behave in a competent, benevolent and therefore trustworthy manner (Flavian, Guinaliu and Gurrea, 2006). Similarly, if a customer perceives a vendor's website to be of high quality with enough product descriptions on websites leads to initial customer trust in the online vendor (Yoon, 2002), and he/she will be more likely to generate a favourable attitude towards it, demonstrate behavioural control over it (Pavlou and Fygenson, 2006; Jahng, Jain and Ramamurthy, 2007), which in turn, translates into an easier experience for consumers to release the product or service value and feature.

Researchers have also found that the perceived attractiveness of someone might influence people's perception of that person's attributes (Dion, *et al*., 1972; Eagly, *et al*., 1991); similarly, better looking university instructors perhaps receive higher teaching evaluations (Hamermesh and Parker, 2005). Applying these finding to e-commerce, e-shoppers might tend to perceive a website as more trustworthy and useful if it seems more attractive due to its friendliness, organization, informativeness, and navigability (Chakraborty *et al*., (2002). On the basis of this research, we therefore predict:

H1a: Perceived Site Quality relates positively to Perceived Usefulness.

H1b: Perceived Site Quality relates positively to customer Trust to use online shopping.

4.4.2. Trust

In general, trust is viewed as a set of specific beliefs dealing primarily with the benevolence, competence and integrity of another party. Benevolence is the belief that the trustee will not act against the trustor, even given the opportunity. Competence is the belief in the trustee's ability to fulfil its obligations, as expected by the trustor. Integrity is the belief that the trustee will be honest and will honour its commitments (McKnight *et al*., 2002a). Also, trust refers to an expectation that others will not behave opportunistically and/or take advantage of a situation (Gefen, 2003). It is the belief that the other party will behave in a dependable (Kumar, Scheer, and Steenkamp, 1995), ethical (Hosmer, 1995; Pavlou and Fygenson, 2006), and socially appropriate manner (Zucker, 1986). Trust, therefore, implies a belief that the

vendor will provide what has been promised (Ganesan, 1994). Some researchers determined that perceived usefulness influences trust (Suh and Han, 2002), while others demonstrated that trust influences usefulness (Gefen, 2004). However, if the e-vendor cannot be trusted to behave in accordance with the consumers' expectations, then there is no reason why consumers should expect to gain any utility or benefit from using the interface (Pavlou, 2003; Gefen, 2004; Chiu, 2009). A lack of trust will, therefore, prevent buyers from engaging in online shopping (Hoffman *et al*., 1999). When consumers initially trust their online retailers, and have a perception that online shopping is beneficial, they will eventually accept that online shopping is useful (Gefen *et al*., 2003). In turn, perceived usefulness should occur only for an e-vendor that can be trusted (Festinger, 1975). Indeed, prior research shows that trust plays a pivotal role in driving perceived usefulness (Gefen *et al*., 2003; Pavlou, 2003) Thus:

H2: Perceived Trust relates positively to Perceived Usefulness.

4.4.3. Perceived Usefulness

Perceived usefulness is defined as the extent to which a consumer believes that online shopping will enhance his or her transaction performance (Chiu, 2009). According to Burke (1997), perceived usefulness is the primary prerequisite for mass market technology acceptance. This depends on consumers' expectations about how technology can improve and benefit their lives (Peterson *et al*., 1997). A website is useful if it delivers services to a customer, but not if the customers' delivery expectations are not met (Barnes and Vidgen, 2000). The usefulness and accuracy of the site also influence customer attitudes. The importance of perceived usefulness as a key motivating factor derives from the TRA and TAM models, which propose that perceived usefulness affects computer usage due to reinforcement values of outcomes (Adams, Nelson, and Todd, 1992). User acceptance of computer systems is driven to a large extent by perceived usefulness (Adams *et al*., 1992; Davis *et al*., 1989). In a robust TAM, perceived usefulness predicts IT use and intention to use (e.g., Adams *et al*., 1992; Agarwal and Prasad, 1999; Gefen and Keil, 1998; Gefen and Straub, 1997; Hendrickson, Massey, and Cronan, 1993; Igbaria *et al*., 1995; Subramanian, 1994), as well as e-commerce adoption (Gefen and Straub, 2000). In addition, Davis *et al*. (1989) found that perceived usefulness exhibited a stronger and more consistent relationship with usage than did other variables reported in the literature, including various attitudes, satisfaction and perceptions measures. Furthermore, Davis *et al*. (1989) indicate that individuals shape behavioural intentions towards online shopping based largely on a

cognitive evaluation of how it will improve their shopping performance. According to Bhattacherjee (2001), an individual is more likely to undertake continued intention to use when such usage is perceived to be beneficial. Customers who have accomplished the task of product acquisition in an efficient manner will be more likely to exhibit stronger repurchase intentions (Babin and Babin, 2001). However, users may continue using an e-commerce service if they consider it useful, even if they are dissatisfied with their prior use (Bhattacherjee, 2001a).

Consumers are likely to evaluate and consider product-related information prior to purchase, and perceived usefulness may, therefore, be more important than the enjoyment (hedonic aspect) of the shopping experience (Babin et al., 1994). Additionally, Davis et al. (1992) identified a positive relationship between perceived usefulness and enjoyment (Chung and Tan, 2004). Furthermore, we, posit that a useful product or service online could make people more likely to use and recommend it to their peers. That is, usefulness will act as persuasive tools that will increase social influences on his/her intention towards continuance usage. Although it does not affect the importance of friends, perceived usefulness is likely to encourage peers to spread recommendations by word-of-mouth, thereby increases enjoyment and continuance intentions. Therefore:

H3a: Perceived Usefulness relates positively to increased customer Subjective Norms.
H3b: Perceived Usefulness relates positively to Enjoyment.
H3c: Perceived Usefulness relates positively to Continuance Intentions.

4.4.4. Subjective Norms

Subjective norms influence a person's proclivity to engage in certain behaviour. If social expectations state that people should engage in the behaviour in question, then the person should be more likely to do so (George, 2004).

According to Venkatesh *et al.* (2003), social influences result from subjective norms, which relate to individual consumers' perceptions about the beliefs of other consumers. Shim *et al*. (2001) consider subjective norms only marginally significant for e-shopping intentions, whereas Foucault *et al*. (2005) confirm a significant link between talking about e-shopping with friends and intention to e-shop.

Ajzen, (1985) uses the term "subjective norms" to refer to the person's perception of the social pressures that put on him or her to perform the behaviour in question. Social pressure

can affect the attitudes and behaviour of individuals in varying degrees in different societies depending on the culture.

Researchers, such as Hofstede (1994) and Adler (1995), maintain that the individualism-collectivism dimension is an important means of understanding the motives of human action and behaviour (Ali, 1988). This perspective refers to an understanding of people's needs to either satisfy personal aspirations or attend to group needs. In highly collectivistic cultures, such as the Arab World, an individual's actions are typically influenced by the expectations of people around him or her, especially the group he or she identifies with. Such in-group identification is typically carried over to the e-shopping environment, where social pressure from family and friends influences the attitudes and behaviour of the individual.

Therefore, in terms of the underlying motivation to accept technology or online shopping, individuals from a collectivistic culture may use online shopping not because of their potential usefulness or the enjoyment to be derived, but because of the perceived social pressure from their family and friends. These individuals will conform to the accepted social norm by using the technology to perform online shopping because of their belief that they will be perceived as being technologically sophisticated by those whom they consider important to their future well-being. Childerset *et al*., (2001), Joines, Scherer, and Scheufele (2003), and Parsons (2002) indicated that social experiences also affect one's shopping activities. Thus, one's tendency to seek enjoyment experiences while shopping online as a means for product shopping might be influenced by surrounded people. Taking that into consideration, social norms is then relevant to enjoyment, because involving consumers in the web sites facilitate e-friendship, discussing experience with friends (Foucault *et al*., 2005), and enforce e-shopping, which produce similar result of greater enjoyable experience. Thus,

H4a: Perceived Subjective Norms relate positively to increased customer Enjoyment.
H4b: Perceived Subjective Norms relate positively to Continuance Intentions.

4.4.5. Enjoyment

Perceived enjoyment (PE) refers to the extent to which the activity of using an e-commerce website is enjoyable in its own right, and beyond the instrumental value of the site (Davis *et al*., 1992). It is also defined as the extent to which online shopping is perceived to be personally enjoyable and fun (Chiu *et al*., 2009). Attractiveness, which is part of site quality, also has a significant positive impact on perceived enjoyment (Van Der Heijden, 2003).

According to self-determination theory, customers are self-determining and intrinsically motivated in online shopping when they are interested in it or enjoy doing it (Chiu *et al*., 2009). In other words, users who have lower perceived enjoyment may feel that the website requires more effort to use (Venkatesh *et al*., 2002). Other researchers indicate that enjoyment has positive effects on the way customers perceive the ease of use of a website mainly in studies focused on information system usage (Venkatesh, 2000; Venkatesh *et al*., 2002; Yi and Hwang, 2003). Because Internet shopping is usually voluntary, and searching and buying are impulsive behaviours, it seems likely that shoppers' intentions become stronger if they perceive higher enjoyment from the website (Li and Zhang, 2005). Along the same lines, Atkinson and Kydd (1997) find that perceived enjoyment is important when predicting the use of the Internet for entertainment purposes.

The use of online shopping may also be motivated by intrinsic psychological rewards. Perceived enjoyment and fun represent intrinsic motivations for the use of online shopping. It represents a type of intellectual playfulness and is defined as an individual characteristic that described an individual's tendency to interact spontaneously, inventively, and imaginatively with the computer. Empirical research indicates that the general characteristics of enjoyment and fun relate positively to creativity and an exploratory type of behaviour during interaction with computers (Webster, 1992). Research indicates that individuals who experience pleasure and joy from using a computer, and perceive any activity involving use of online shopping as inherently enjoyable apart from any anticipated improvement in performance, are likely to use it more extensively than others (Davis, 1992; Malone, 1981; Webster, 1989). Davis *et al*. (1989) found that while perceived usefulness emerged as the major determinant of computer acceptance in the workplace, enjoyment and fun had a significant effect beyond perceived usefulness.

Enjoyment in using a website significantly affects intentions to use (Davis *et al*., 1992; Igbaria *et al*., 1995; Teo *et al*., 1999; Venkatesh *et al*., 2002). Additionally, Triandis (1980) argued that emotions associated with such an affect (e.g. the feelings of joy, elation and pleasure) have an impact on an individual's behaviour. Shopping enjoyment (Koufaris, 2002), entertainment value of the website (O'Keefe, O'Connor, and Kung, 1998), and perceived visual attractiveness all have positive impacts on perceived enjoyment and continuance intentions (van der Heijden, 2003). Furthermore, Hirschman and Holbrook (1982) suggested that positive consumption, related to emotions in a hedonic context, is likely to lead to very high levels of commitment and repurchase intention. Davis *et al*. (1989)

suggested that perceived enjoyment has a direct influence on behavioural intention. Davis *et al* (1989) finding support the role of that enjoyment has commonly been found to have a significant impact on customer attitudes and behaviour on the web, such as increasing customer intention to return (Hampton-Sosa and Koufaris, 2005; Jarvenpaa and Todd, 1997; Koufaris *et al*., 2001; Koufaris, 2002; Bart *et al.,* 2005; Cyr, Head, and Ivanov, 2006; Chiu 2009). Thus:

H5: Perceived Enjoyment relates positively to increased customer Continuance Intentions.

FIGURE 4.15: PROPOSED CONCEPTUAL FRAMEWORK

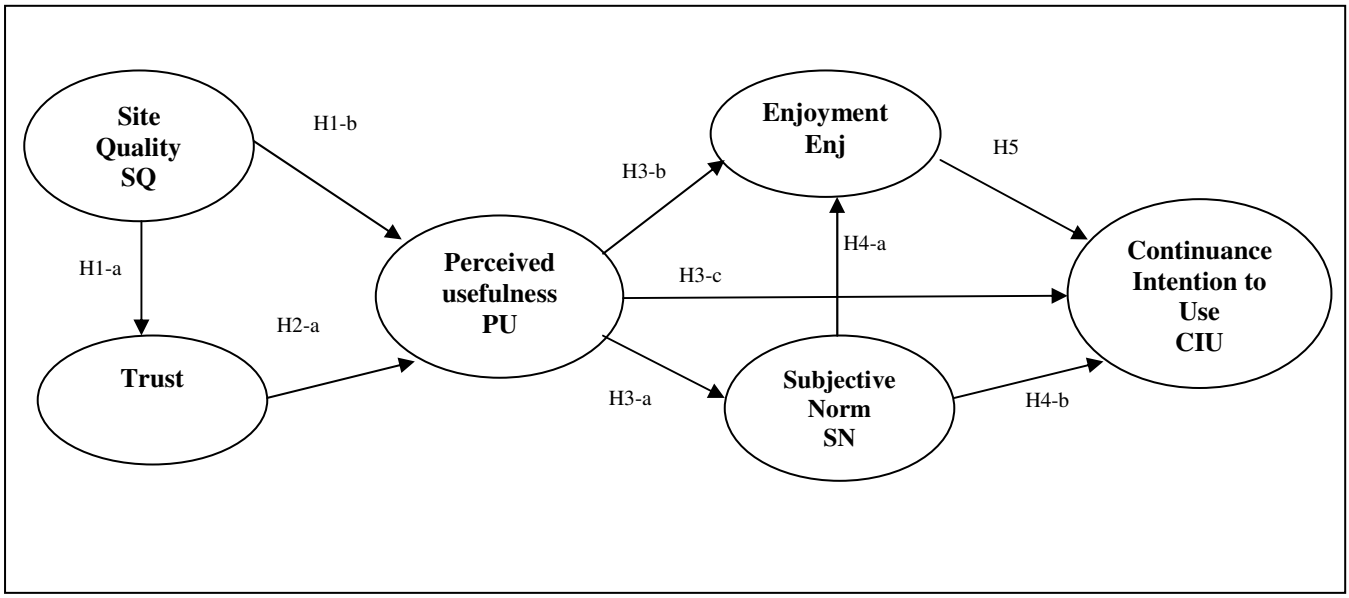


TABLE 4.7: PROPOSED HYPOTHESES

Factor	Hypothesis
Site Quality	**H1a:** Perceived Site Quality relates positively to Perceived Usefulness.
	H1b: Perceived Site Quality relates positively to customer Trust to use online shopping.
Trust	**H2:** Perceived Trust relates positively to Perceived Usefulness.
Usefulness	**H3a:** Perceived Usefulness relates positively to increased customer Subjective Norms.
	H3b: Perceived Usefulness relates positively to Enjoyment.
	H3c: Perceived Usefulness relates positively to Continuance Intentions.
Subjective	**H4a:** Perceived Subjective Norms relate positively to increased customer Enjoyment.

Norm	**H4b:** Perceived Subjective Norms relate positively to Continuance Intentions.
Enjoyment	**H5:** Perceived Enjoyment relates positively to increased customer Continuance Intentions.

4.5. SUMMARY

Online shopping as a new channel for doing business in B2C segments is becoming popular across all countries. With the digital economy, companies have also become vulnerable to competitors that are just a click away (see Cheung, Chan, and Limayem, 2005). Previous research suggests that many factors can build a foundation for constructing a framework of online consumer behaviour. Douglas *et al*. (1994) suggest researchers should develop theoretical and conceptual frameworks by integrating different constructs that come from varied research traditions and disciplines. However, few studies attempt to investigate the impact of the key characteristics on e-shopping continuance intentions in Saudi Arabia. Many researchers have attempted to extend TAM and ECT by integrating variables from other models, theories and contexts to provide a better explanation of users' intention or continuance intention toward online shopping. TAM and ECT were originally applied mostly in developed countries. The generalizability of previous studies across different cultures, such as Saudi Arabia, is questionable. As a result, this research aims to help online businesses understand which factors encourage consumers to have continuance intention behaviour towards e-shopping.

In the proposed model, the author postulates that the effect on continuance intention, which is adapted from ECT, comes from three constructs: perceived usefulness, enjoyment, and subjective norm. The topic of this research was operationalised and its dimensions identified. The dimensions are site quality, trust, usefulness, subjective norms, enjoyment, and continuance intention. In addition, several indicators were selected and transformed into hypotheses.

In the next chapter, the research design and methodology used to examine the model of measurement of online shopping continuance intention, in the context of Saudi Arabia, will be discussed in detail.

CHAPTER 5: RESEARCH DESIGN AND METHODOLOGY

5.1. INTRODUCTION

This chapter presents the research methodology with a focus on the main approaches, types of research, and research design. It also details quantitative and qualitative methods and related processes, along with data collection and sampling approaches, as well as other different techniques used in this research.

To select the right research method to investigate a problem, the chosen method must be appropriate for achieving the objective. The selection process must avoid implementing a method that might look ideal but in reality be inappropriate. The process itself must be precise; that is, "each design and method should be taken on its merits as a means of facilitating (or obscuring) the understanding of particular research problems" (Bryman, 1992: 255).

5.2. RESEARCH DESIGN AND METHODOLOGY

In any research, there are two commonly used terms that must be clearly defined and distinguished: research design and research methodology.

Yin (2008) states that research design is the blueprint for any research which enables possible solutions to be found for the research problems, and it act as guidelines for various stages of the research. Additionally, the research design is the programme that is followed in the process of collecting, analysing, and interpreting the research observations (Nachmias and Nachmias, 2000). Yin (2008) states that research design deals with at least four key problems, which if conducted right will lead to successful research: what questions to study, what data are relevant, what data to collect, and how to analyse the results. Consequently, the research design procedures cover some strategic decisions concerning the choice of data collection methods, as well as more tactical decisions such as measurement and scaling procedures, questionnaire, samples, and data analysis (Zikmund, 2003).

By contrast, research methodology is a system of specific rules and procedures on which research is based and against which claims for knowledge are evaluated. Methodology entails the whole process of carrying out a study or doing research (Creswell, 2003) aimed at capturing or understanding a social phenomenon. Saunders (1997: 3) argues that research

involves a multistage process which is followed in order to undertake and complete a research project or study. The research methodology should contain topic formulation, review of literature, strategy and design, data collection, data analysis, a report of the findings, and details of any limitations or constraints that the researcher faced (Cooper and Schindler, 2003).

To summarise, research design provides a conceptual framework for the study, while research methodology is concerned with the tools that were used to achieve the research aims. Thus, research design is more holistic and it includes research methodology, which is related to strategic issues.

5.3. RESEARCH PURPOSE AND TYPE

Many research experts agree on three main purposes of carrying out research: exploratory, descriptive, and explanatory (Robson, 1993; Saunders *et al*., 2009; Yin, 2003). In fact, Robson (1993) points out that the purpose of the research enquiry may change over time. Depending on the research nature and problem, the research investigation might include more than one purpose of exploratory, descriptive, or explanatory (Babbie, 2004).

5.3.1 Exploratory Research

Exploratory research tries to build descriptions of complex circumstances or phenomena that are unexplored in the literature (Marshall and Rossman, 1999). Yin (2003) considers exploratory research to mean a study of new phenomenon. Thus, exploratory research is often performed in order to clarify the nature of unclear problems. It represents the first stage of investigation of a topic, with the objective of developing hypotheses (Neuman, 2000). Saunders *et al*. (2009) explain that exploratory research as tends "to start with a wide research area, and narrow down as the research develops". Robson (1993) argues that exploratory research is a valuable means of finding out "what is happening; to seek new insights; to ask questions and to assess phenomena in a new light".

Exploratory research always takes place during literature reviews and works to gain a better understanding of the nature of the research problem (Trochim and Donnelly, 2001), as well as gathering background information about the problem to develop research hypotheses (Churchill, 1999). Saunders *et al*. (2009) suggest three ways of conducting exploratory research: (a) researching the literature, (b) talking to experts in the subject or the research area, and (c) conducting focus group interviews and case studies.

5.3.2 Descriptive Research

The aim of descriptive research is to "portray an accurate profile of persons, events or situations" (Robson, 1993:4). It is necessary to have a clear picture and definition of the phenomena on which the researcher wishes to collect data prior to its collection (Dane, 1990). Descriptive research entails the development of the hypothesis, and relies on the information gained through exploratory research and the literature review (Malhotra, 2004). It uses structured survey questionnaires, which involve sufficient participants to minimize errors and maximize reliability (Malhotra, 2004). Therefore, descriptive research should define questions, people surveyed, and method of analysis prior to beginning data collection. It also describes the required variables within a population in relation to person, place, and time (who, what, where, when, and why should be defined) (Zikmund, 2003). It also clarifies previous studies and discusses relevant theories.

5.3.3 Explanatory Research

However, descriptive research does not explain the cause-and-effect relationships between the research variables and the hypotheses (Zikmund, 2003). Explanatory research, therefore, builds on gathered information and seeks to develop an explanation of variable relations (Marshall and Rossman, 1999; Saunders *et al*., 2009; Yin, 2003; Babbie, 2004). It also examines developed hypotheses and attempts to understand the reasons for observed phenomena (Neuman, 2000). Miles and Huberman (1994), implies that understanding the reasons for observed phenomena means "making complicated things understandable by showing how their component parts fit together according to some rule". It is important, therefore, to note that conducting an explanatory research requires a well-defined research problem, and the hypotheses need to be stated. Additionally, explanatory research is regularly used within areas where extensive research has already been done.

5.4. RESEARCH APPROACH

The design of a research study begins with the selection of a topic and a paradigm. A paradigm is essentially a worldview - a whole framework of beliefs, values and methods within which research takes place. It is this worldview within which researchers works. Henning, Van Rensburg, and Smit (2004) define a paradigm as "a theory or hypothesis", i.e., a framework within which theories are built that fundamentally influences how you see the world, determine your perspective, and shape your understanding of how things are connected. Holding a particular worldview influences your personal behaviour, your

professional practice, and ultimately the stance you take with regard to the subject of your research. In very simple terms, a paradigm is a way to 'see' the world and organise it into a coherent whole (MacNaughton, Rolfe, and Siraj-Blatchford, 2007). Just as a picture frame 'frames' a picture, a paradigm frames a research topic; and just as our choice of picture frame influences how we see the picture within it, so our choice of paradigm influences how we see our research topic.

Guba and Lincoln (1994) state that the basic beliefs that define a particular research paradigm may be summarised by the responses given to three fundamental questions: (a) the ontological question, i.e., what is the form and nature of reality; (b) the epistemological question, i.e., what is the basic belief about knowledge (i.e. what can be known); and (c) the methodological question, i.e., how can the researcher go about finding out whatever he or she believes can be known. Appendix C provides more details on the comparison and analysis of the three major research paradigms.

Selecting an appropriate research approach is one of the most critical phases a researcher faces when seeking answers to a problem. Easterby-Smith, Thorpe, and Lowe (1991: p. 21) insist that gaining knowledge about the research approaches is very important for three reasons. First, it enables the researcher to take more informed decisions about the research design. Second, it will help the researcher to think about those research approaches that will work for conducted research and those that will not. Third, understanding the different research approaches enables the researcher to adapt the research design to cater for constraints.

A number of theoretical paradigms are discussed in the literature. Orlikowski and Baroudi (1991), Irani *et al*., (1999) and Straub, Gefen and Boudreau (2005) all specify that researches related to information systems, such as technology acceptance and continuance intention, are not covered in one theoretical perspective. According to Easterby-Smith *et al* (1991), there are two opposing philosophical/methodical approaches in research: positivism and phenomenology.

5.4.1 Positivism vs. Phenomenology

The positivistic approach to research is based on research methodology commonly used in science. It is characterised by a detached approach to research and seeks out the facts or causes of any social phenomenon in a systematic way. Collis and Hussey (2003) state that the "positivistic approach is founded on a belief that the study of human behaviour should be

conducted in the same way as studies conducted in the natural sciences". Gill and Johnson (2002) argue that positivist research has a number of distinguishing features, including; (a) it is deductive (theory tested by observation); (b) it seeks to explain causal relationships between variables; (c) it normally uses quantitative data; (d) it employs controls to allow the testing of hypotheses; and (e) it uses a highly structured methodology to facilitate replication.

In contrast, the phenomenological approach to research is one that believes that human behaviour in not as easily measured as phenomena in the natural sciences. Easterby-Smith *et al*. (1991) state that the phenomenological idea is that reality is socially constructed rather than objectively determined.

Phenomenology is characterised by a focus on the emphasis that research subjects attach to social phenomena, and an attempt by the researcher to understand what is happening and why. Such research should be mainly concerned with in the context in which the events were taking place. Therefore, the research of a tiny sample of subjects may be more appropriate than large number, as expected with the positivist approach. Additionally, the use of phenomenological approach is more likely to work with qualitative methods, which uses a variety of methods to collect data in order to establish different views of phenomena (Easterby-Smith *et al*., 1991). Table 5.8 illustrates the advantages and disadvantages of both positivist and phenomenological philosophical approaches.

TABLE 5.8: ADVANTAGES AND DISADVANTAGES OF POSITIVIST AND PHENOMENOLOGICAL

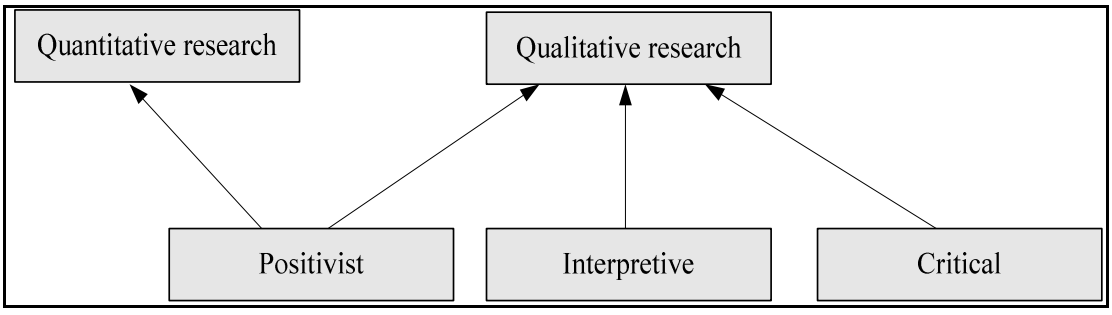
	Positivism	**Phenomenology**
Advantages	• Economical collection of large amount of data • Clear theoretical focus of research at outset • Greater opportunity for researcher to retain control of research process • Easily comparable data	• Facilitates understanding of how and why • Enables researcher to react to changes which occur during research process • Good at understanding social processes
Disadvantages	• Inflexible direction often cannot be changed once data collection started • Weak at understanding social processes • Often does not discover meanings people attach to social phenomena	• Data collection can be time consuming • Data analysis is difficult • Researcher has to live with the uncertainty that clear patterns may not emerge • Generally perceived as less credible by non-researchers

Source: Easterby-Smith *et al*. (1991)

There are many different views about these approaches. Sale *et al*. (2002) argue that because the two paradigms do not study the same phenomena, qualitative and quantitative methods cannot be combined for cross-validation purposes; yet, both paradigms can be combined for complementary purposes. Supporter for this combination state that different methods have different strengths; as a result the combination would produce more than what each method could offer in isolation. Morgan (1998) argues that the mixing can be carried out on the part of generating knowledge, which can be done without violating basic paradigmatic assumptions.

Furthermore, Riege (2003) claims that positivist research is normally combined with quantitative and deductive approaches, whilst in contrast; phenomenological research is mainly associated with qualitative and inductive approaches. However, Orlikowski and Baroudi (1991), Irani *et al*., (1999) and Straub *et al*., (2005) suggest three categories based on the fundamental research epistemology: positivist, interpretive, and critical approaches. This can be seen in Figure 5.16. Furthermore, the positivism approach has been the prime epistemology in IS research, which could be associated to both quantitative and qualitative research approach (Galliers and Land, 1987; Walsham, 1995; Yin, 2003; Straub *et al*., 2004). The following Table 5.9 shows the summary of epistemological stances between the different specified approaches.

FIGURE 5.16: EPISTEMOLOGICAL ASSUMPTION FOR QUALITATIVE AND QUANTITATIVE RESEARCH



Source: Adapted from Straub *et al*., (2005)

TABLE 5.9 : SUMMARY OF EPISTEMOLOGICAL STANCES

Approach	Description	References
Positivist	Positivist studies generally attempt to test theory, in an attempt to increase the predictive understanding of phenomena. Several researchers classified IS research as positivist if there was evidence of formal propositions, quantifiable measures of variables, hypothesis testing, and the drawing of inferences about a phenomenon from the sample for a stated population.	Orlikowski and Baroudi (1991); Straub *et al*., (2004: 2005)
Interpretive	Interpretive studies generally attempt to understand phenomena through the meanings that people assign to them. Interpretive methods of research in IS are 'aimed at producing an understanding of the context of the information system, and the process whereby the information system influences, and is influenced, by the context'.	Walsham (1995b)
Critical	Critical researchers assume that social reality is historically constituted and that it is produced and reproduced by people. Although people can consciously act to change their social and economic circumstances, critical researchers recognise that their ability to do so is constrained by various forms of social, cultural and political domination. The main task of critical research is seen as being one of social critique, whereby the restrictive and alienating conditions of the status quo are brought to light.	Myers and Avison (2002)

Source: Adapted from Straub *et al*., (2005)

5.4.2 Quantitative vs. Qualitative Research

Any academic research relies on two main methodological approaches: quantitative and qualitative (Denzin and Lincoln, 2000). Creswell (2003) has categorised research design into three distinct groups: a) quantitative designs, which focuses on testing theory and hypothesis, b) qualitative designs, which focuses on developing theory and generating knowledge, and c) mixed designs, which tend to combine or mix the two designs. It should be noted, however, that the research design one selects depends on the type of study, settings and the goals of the study. The design selected determines the strategy, which includes methods of data collection and tools to use for data analysis.

Both quantitative and qualitative approaches have advantages and disadvantages. According to Bulmer (1988), "different investigations may have different preferences and lean in one direction or another, but there are no general principles which can be adduced in favour of one or another style of research" (See also Bargagliotti, 1983; Muller, 2002; and Parahoo, 1997). Thus, the two research methods complement each other.

The methodology involves an interpretative, naturalistic approach to its subject matter (Mertens, 1998). The qualitative research is concerned with studying a process and is used when one is interested in gaining an in-depth knowledge of specific cases and to understand

how different factors piece together to influence the occurrence of the phenomena within each case. By studying few cases, the researcher is able to keep record of all that takes place within each case, which is not possible when the number of cases increase. Studying many cases, the researcher would be confronted with unmanageable complexity taking into consideration that social phenomena are complex (Ragin, 1987; Ragin, 2000). Creswell (2003) defines qualitative study as "an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words reporting detailed views of informants, and conducted in a natural setting".

The quantitative method, on the other hand, is often employed when the researchers' intention is to generalise his findings across different cases and situations. The study does not focus on specific outcomes or categories of outcomes. It is theory oriented and is concerned with assessing the correspondence between relationships discernible across many cases and a broad theoretically based interpretation of social phenomenon. According to Ragin (1987: 2), investigators who use this approach focus their interest on testing hypothesis and propositions derived from theory. Thus, Creswell (2003), defines, the quantitative study as "an enquiry into a social or human problem based on testing a theory composed of variables, measured with numbers, and analysed with statistical procedures in order to determine whether the predictive generalization of the theory hold".

Qualitative research expresses the process and meaning of the data collected, whereas quantitative research experimentally examines the data collected in terms of quantity, amount, and frequency (Denzin and Lincoln, 2000). Qualitative research is associated with non-mathematical analysis, resulting from data collected through interviews, conversations, books, articles, and recording (Strauss and Corbin, 1990), while the quantitative research focuses primarily on statistical numerical expressions (Remenyi *et al*., 1998).

The objective of qualitative research is to understand and interpret social phenomena in a real life context and consider people's reactions (Denzin and Lincoln, 2000). Quantitative research investigates common patterns in the targeted population statistically and mathematically, and tries to explain cause-and-effect relationships (Remenyi *et al*., 1998). Most researchers recommend a multiple methods approach (Bartunek *et al*., 1993; Bickman and Rog, 1998; Creswell, 2003). This helps offset the strengths and weaknesses of both methods, giving greater confidence in the results.

Table 5.10 illustrates the differences between quantitative and qualitative research approaches, and Table 5.11 illustrates the advantages and disadvantages of both.

TABLE 5.10: DIFFERENCES BETWEEN QUANTITATIVE AND QUALITATIVE RESEARCH APPROACHES

Qualitative Research	**Quantitative Research**
• Objective is to discover and summarize meanings once the researcher becomes wrapped up in the data.	• Objective to test hypotheses that the researcher generates.
• Concepts tend to be in the form of themes, patterns, generalizations, and taxonomies. However, the objective is still to generate concepts.	• Concepts in the form of different variables.
• Measures are more specific to the individual setting or researcher.	• Measures are systematically created before data collection and standardized as far as possible.
• Data are in the form of words from documents, observations, and transcripts. However, quantification is still used.	• Data are in the form of numbers from accurate measurement.
• Theory can be fundamental or non-fundamental, and is often inductive.	• Theory is largely fundamental and is deductive.
• Research procedures are particular and replication is difficult.	• Procedures are standard and replication is assumed.
• Analysis proceeds by extracting themes or generalizations from evidence and organizing data to present a coherent, consistent picture. These generalizations can then be used to generate hypotheses.	• Analysis proceeds by using statistics, tables, or charts, and discussing how they relate to hypotheses.

Source: Adapted from Neuman (2000)

TABLE 5.11: ADVANTAGES AND DISADVANTAGES OF QUANTITATIVE AND QUALITATIVE RESEARCH

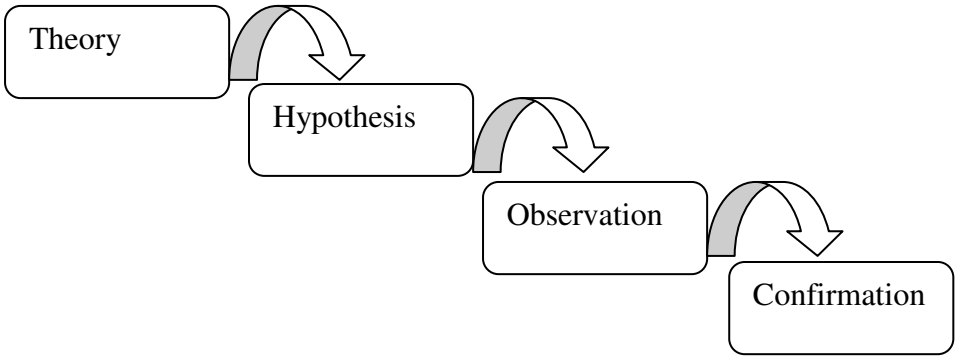
Advantage of Quantitative Research	**Disadvantage of Quantitative Research**
• Methods allow more accurate measure of variables • Methods are structures or standard • Statistical analysis • Generalizations are possible	• Use of inflexible methods • Deterministic character • Disregard of some important factors • Miss subjective aspects of human existence • Assumption of an 'objective' truth • Generation of incomplete understanding • Inapplicable to some immeasurable phenomena
Advantage of Qualitative Research	**Disadvantage of Qualitative Research**
• Methods enhance description/theory development • Describe theories and experience • Allow deep understanding and insight • Holistic and humanistic • Flexible methods • Value placed on participants' views and empowering participants • Subjective dimensions are explored	• No hard data, no clear measuring • Subjective 'non-scientific' • Deep involvement of researchers increases risk of bias • Small samples • Generalization is limited to similar contexts and conditions

Source: Adapted from Neuman (2000)

5.4.3 Inductive vs. Deductive Research

As illustrated in Figure 5.17, deductive research includes within it the creation or design of a theory, determination of assumptions in relation to that theory and analysis of those assumptions in the face of reality (Gummesson, 2000). This is the basis of the positivist/quantitative approach to research. The assumptions are inferred from a theory and examined in order to prove or disprove a theory (Gummesson, 2000). In another word, deductive means "testing the theories".

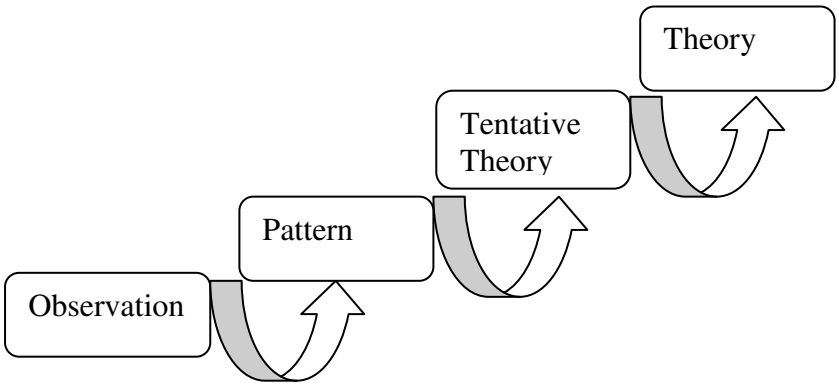
FIGURE 5.17: DEDUCTIVE APPROACH



Source: Adapted from Trochim (2001)

On the other hand, inductive research, as illustrated in Figure 5.18, begins with observation or examination of events or specific processes in order to reach wider and more general statements based on these events or processes (Gummesson, 2000). The assumptions are inferred from the research results (the findings) and create a theory. This is the basis of the qualitative approach to research.

FIGURE 5.18: INDUCTIVE APPROACH



Source: Adapted from Trochim (2001)

To summarise, we use the deductive approach when the researcher develops a theory, hypothesis or hypotheses, and designs a research strategy to test the developed hypotheses; and the inductive approach when the researcher collects data and develops a theory as a result of the data analysis (Saunders *et al*., (2009).

The method(s) the author employs follow the positivism approach, which has been recommended by Galliers and Land (1987), Walsham (1995), Yin (2003), and Straub *et al*. (2004), as the prime epistemology in IS research. This could be associated with both quantitative and qualitative research approaches. Additionally, the research is deductive in the sense that some of the theoretical and conceptual structures were established by previous work and tested empirically in this research, dealing with online continuance intention shopping models. The methods used, thus, stand as a guide for identification and interpretations of the important research factors and frame work. Table 5.12 provides summary of different methodological dichotomies.

TABLE 5.12: SUMMARY OF METHODOLOGICAL DICHOTOMIES

QUALITATIVE	**QUANTITATIVE**
Determining what things exist rather than how many there are. Thick description. Less structured, and more responsive to needs and nature of research situation.	Use of mathematical and statistical techniques to identify facts and causal relationships. Samples can be larger and more representative. Results can be generalised to larger populations within known limits of error.
INDUCTION	**DEDUCTION**
Begins with specific instances which are used to arrive at overall generalisations which can be expected on the balance of probability. New evidence may cause conclusions to be revised. Criticised by many philosophers of science, but plays an important role in theory/hypothesis conception.	Uses general results to ascribe properties to specific instances. An argument is valid if it is impossible for the conclusions to be false if the premises are true. Associated with theory verification/falsification and hypothesis testing
EXPLORATORY	**CONFIRMATORY**
Concerned with discovering patterns in research data, and to explain/understand them. Lays basic descriptive foundation. May lead to generation of Hypotheses.	Concerned with hypothesis testing and theory verification. Tends to follow positivist, quantitative models of research

Source: Fitzgerald and Howcroft (1998)

5.5 RESEARCH STRATEGY

The research strategy provides the general plan for answering the research question(s) (Saunders *et al.,* 2009). Robson (1993) identifies three main research strategies: experiment,

survey, and case study. Yin (2003) complements Robson's research strategies list with archives and histories. The right research strategy can be confirmed by considering three conditions as the type of research question posed, the extend of control an investigator has over behavioural events, and the degree of focus on contemporary events as opposed to historical events (Yin, 2003). Table 5.13 summarises the differences of the research strategies. Since this research uses survey and case study research strategies, only these two research strategies will be reviewed.

TABLE 5.13: DIFFERENT RESEARCH STRATEGIES

Strategy	Form of Research Question	Requires Control over behavioural events	Focuses on Contemporary
Experiment	How, Why?	Yes	Yes
Survey	Who, what, where, how many, how much?	No	Yes
Archival analysis	Who, what, where, how many, how much?	No	Yes/No
History	How, why?	No	No
Case study	How, why?	No	Yes

Source: Yin (2003)

5.5.1. Survey

According to Bryman (1992) and Pinsonneault and Kraemer (1993), the decision to use survey questionnaires (in this research is online survey) rather than other method is an appropriate means of gathering data when it reflects the following:

- The goals of the research call for quantitative data.
- A survey has the advantage of efficiency with regard to speed and cost for generating large amounts of data that can then be used for the statistical analysis.
- Survey questionnaires give participants time to answer at their convenience, after reviewing the context of the survey questions, thus offering another advantage over other methods.
- Survey questionnaires function well for questions about what, how, when, and why.
- The information sought is reasonably specific and familiar to the respondents.

- The researcher has considerable prior knowledge of particular problems and the range of responses likely to emerge.

This is the most efficient strategy when collecting data from a large group of people or a population. It is more often used with quantitative research. According to Remenyi *et al*. (1998), it can be used for description, explanation, and/or hypotheses testing.

The questionnaire method has the following advantages: economical, efficient, much larger sample of respondents, ability of generalisation, versatility, standardisation, ease of administration, and suitability for statistical analysis (McClintock *et al*., 1979; Hammersley, 1987). Furthermore, Saudi society is conservative with gender segregation in education and work. Thus, the online survey in this research will help the researcher to reach more people, who otherwise cannot be reached with traditional paper based surveys. See section 5.9.3 for more information about the online survey.

Surveys can be conducted in several ways, ranging from face-to-face interviews to a postal questionnaire (Bourque and Fielder, 1995), as well as online surveys (Bhattacherjee 2001). A questionnaire survey is defined by McDaniel and Gates (2002) as a set of questions designed to generate the evidence necessary to accomplish the objective of the research.

5.5.2. Case Study

As stated by Bell (2005), a case study is an umbrella term for a family of research methods having in common the decision to focus on an enquiry around a specific instance or event. Additionally, qualitative research or case study is synonymous terms, often fundamentally associated together. The use of a case study is an appropriate methodology when the aim is to gain a better understanding of complex social phenomena. Furthermore, it is an empirical inquiry that investigates a contemporary phenomenon within its real-life context (Bell, 2005), when the preferred research strategy questions of ‘who’, ‘why’, and ‘how’ are being examined (Remenyi *et al*., 1998). Also, case study methodology is particularly useful if the boundaries between phenomenon and context are not clearly evident (Yin, 2003).

The case study method can be used for exploratory, descriptive or explanatory purposes (Yin, 2003). Exploratory case study is a starting point for other research questions, and defines the questions and hypotheses of a subsequent study, and determines the feasibility of the desired research procedures. A descriptive case study provides narrative accounts and presents a complete description of phenomenon within its context. An explanatory case study is used

when testing theories, it always presents data regarding relationships and explaining which causes produced which effects (Yin, 2003).

Case studies have a number of advantages that make them attractive to researchers. Case study data is strong in reality and has the ability to facilitate the recognition of the complexity and the embeddedness of social relationships (Adelman, Kemmis, and Jenkins 1980). Furthermore, it is a means to obtain a more holistic context-based approach that provides an analytic, not a statistical, generalisation (Yin, 2003).

However, several limitations to the case study methodology have been noted. There may be bias in writing the description, which could influence the considerations or emphasise a particular viewpoint. Researchers also question and criticise the case study due to its tendency to generalise from a single case, to be very time-consuming and to generate a massive amount of data, often resulting in unreadable documents (Yin, 2003).

5.5.3. Data Collection Methods

It is important to decide how the empirical data will be collected after having determined the most suitable research strategy (Yin, 2003). Also, it is important to distinguish between the two main types of data: primary data and secondary data. Primary data is the data that a researcher gathers with a specific purpose in mind. Secondary data is the data that has already been gathered by other researchers with different purposes in mind, such as government databases, academic publications, public databases, Internet, and documents provided by companies.

Having established what type of data is required, it is necessary, within the scope of the selected research procedure and the theoretical framework, to decide the most suitable way of collecting the required information. As stated by Roger and Victor (2006), “there is no single best way of collecting data; the method chosen depends on the nature of the research question posed and the specific questions you want to ask respondents. The aim of all methods is to obtain a valid and reliable data”.

The method the author employs for research strategy is the positivism approach (Galliers and Land, 1987; Walsham, 1995; Yin, 2003; Straub *et al*., 2004), which is associated with both quantitative (survey method) and qualitative (case study) research approaches. The survey method is used to collect the primary data for the research constructs. The case study method is used as a complementary method to collect primary data through semi-structured

interviews and secondary data from companies' documents. Thus, the research strategy stands as a guide for identification and interpretation of the data, which is important for the research constructs and framework.

5.6. MULTIPLE METHODS AS AN APPROACH

Establishing a research design is a critical task in any study, since there are various influencing factors associated with the research. Evidently, research approaches, strategies, and data collection methods do not exist in isolation. The call for multi-method research on the methodological level is one solution to the incommensurability of the paradigms. As mentioned above, Sale *et al*. (2002) argue that because the two paradigms do not study the same phenomena, qualitative and quantitative methods cannot be combined for cross-validation purposes or multi-method purposes; however, both paradigms can be combined for complementary purposes. Advocates for this combination state that different methods have different strengths; thus the combination would produce more than what each method could offer in isolation. Morgan (1998) argues that the mixing can be carried out on the technical aspect (means of generating knowledge), which can be done without violating basic paradigmatic assumptions. Therefore, they can be 'mixed and matched' with other approaches. In theory, either quantitative or qualitative methods are the most widely used, but a multiple methods (triangulation) strategy is also recommended in many authoritative studies as a means of applying multiple and complementary methods (Eid, Trueman, and Ahmed, 2002; Teo and Tan, 2000; Tigre and Dedrick, 2004). Furthermore, it is often beneficial to mix approaches, and it is quite usual for a single study to combine quantitative and qualitative methods, using both primary and secondary data (Saunders *et al*., 2009). Ott (1989) argues that each method has its advantages and disadvantages. Reichers and Schneider (1990) claim that such a step may yield the most valid measure; whilst Flick (1992) and Lucchini (1996) state that multiple methods (triangulation) of data collection allow the researcher to obtain a complex picture of the phenomena being researched, which might otherwise be unavailable if only a single method is used.

Denzin (1978) defines multiple methods as the combination of methodologies in the study of the same phenomenon. Their use helps overcome limitations of any particular single method, because any limitation or weakness gets compensated for by the strengths of another method (Brannen, 1992). Using a multiple methods improves internal and external validity (Denzin,

1978), and "the use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question" (Denzin and Lincoln, 2000).

Patton (2002) suggests four types of multiple methods (triangulation):

- Method: Comparing data generated by different methods (e.g., qualitative and quantitative).
- Source: Comparing data from different qualitative and quantitative methods (e.g., observations, interviews, questionnaires).
- Analyst: Using different analysis techniques.
- Theory: Looking at data from different theoretical perspectives.

A multiple methods strategy has been adopted in this research, following frequent recommendations from authoritative researchers to use multiple, complementary methods. In this research, multiple methods (triangulation or mixed method) of multiple data collection in Saudi Arabia are used in a combination of online survey, semi-structured interview, and documentation analysis.

To give an example of how these two approaches have been utilized and complemented each other in this research, the author began a survey research project with a focus group during the pilot study (qualitative method) to develop/check the content of the questionnaire. During the pilot study phase, a few interviews were conducted to explain the developed model and research questionnaire (method triangulation). This approach would use the strengths of qualitative methods for exploratory work to help ensure that the survey is covering the important topics appropriately. Additionally, the semi-structured interview and the documentation analysis of the selected Saudi companies provide a relative understanding of the big picture of the research. Personal, semi-structured interviews with five Saudi Arabian companies and authorities were conducted, including the director of the Internet Division in the Communications and Information Technology Commission, Saudi Arabian Airlines; Saudi Telecommunication; Saudi Budget car hire; and Jarir Bookstore. The interviews enriched the research by revealing phenomena related to continuance Internet shopping in Saudi Arabia from a perspective other than that of the customers. Here, the qualitative methods serve as a follow-up to the main research method, which is the quantitative method. Finally, at the survey data analysis stage, which is a quantitative approach, the collected qualitative data (semi-structured interview and the documentation analysis) can play an

important role and resources in interpreting, clarifying, describing and enabling a richer understanding of the results from the quantitative research. Such benefits include, for example, providing an interesting insight into patterns of association of the research construct and hypotheses clarifying the why and how these patterns exist. The interviewees clarified how the Saudi Communications and Information Technology Commission intends to advance e-commerce in Saudi Arabia, the changes to e-commerce regulations, and advances in e-commerce after Saudi Arabia joined the World Trade Organization (WTO), as well as how companies see themselves in the current state of e-commerce and e-shopping.

5.7. QUALITATIVE METHODS (as a complementary method)

When conducting quantitative research, the researcher must determine the important variables to measure, which may lead to some answers integrated into other variable measures. The qualitative method also gives participants more freedom to describe what is important to them (Patton, 1987). Moreover, researchers can use quantitative findings to achieve a better and deeper understanding, especially through case studies that rely on qualitative research methods. Patton (1987) states that "case studies become particularly useful where one needs to understand some particular problem or situation in great depth, and where one can identify cases rich in information, rich in sense that a great deal can be learned from a few exemplars of phenomenon in question"

A case study, therefore, serves to assess and examine the applicability of the studied variables and explore any potential benefits and obstacles of e-shopping in Saudi Arabia. Because e-shopping represents a new and modern way of shopping, a case study is an effective methodological approach (Yin, 2003) to explore the related "how" and "why" questions,

5.7.1. Qualitative Sample

The five Saudi companies that participated in this research, under the case study strategy, were selected mainly on their relative proximity and willingness to participate, rather than randomly. The five selected companies demonstrated appropriate knowledge and experience relating to this research for the case study.

The process for employee selection for interview was carefully considered to ensure that the selected interviewees represented the companies efficiently. Only senior managers and above were allowed to participate in this interview so that a deeper discussion could be achieved. Furthermore, each manager was encouraged to bring at least one participant from another

related department (i.e. marketing, e-commerce, online business unit) so that a wider picture of the company and the purpose of the research could be obtained.

Key personnel in the selected companies were approached through personal contacts to establish interview dates and times. As the case study and interviews complement the main qualitative research, the size of the sample remained small and limited to the selected companies (Ritchie and Lewis, 2003).

The criteria for selection of the companies were as follows:

- The level of Internet services provided by the company's shopping website.
- Current and future vision of the online shopping.
- The interest of the companies to participate in this research and future related research.

The five Saudi Arabian companies that met these criteria were: Internet Division in the Communications and Information Technology Commission, Saudi Arabian Airlines; Saudi Telecommunication; Saudi Budget car hire; and Jarir Bookstore.

5.7.2. Qualitative Data Collection

Data collection for qualitative data (case study) was mainly obtained from six different sources: documents, interviews, direct observation, participant observation, physical artefacts, and/or archived records (Merriam, 1998; Yin 2003). Each of these sources carried equal importance and weight. (See Table 5.14) In some cases, only one method of data collection was used. However, Yin (2003) argues that research methods should be considered complementary, and therefore, a good qualitative data (case study) will rely on as many sources as possible. Appendix I illustrate the interview questionnaires, which was adapted from Al-Ajlan (2006), and then the selected questions were re-written to reflect the requirement of the research investigations, which cover wide range of the variables derived from the literature review.

Using multiple sources of evidence is appropriate and will increase the reliability and validity of the data, which, in turn, will have a valuable impact on the research findings as there is no single correct way to conduct a case study (Merriam, 1998; Roger and Victor 2006). The companies provided access to their documents, observations, and structured interviews with employees, including managers of marketing, e-marketing, and IT. In each interview, the relevant managers discussed points related to e-commerce and e-shopping in Saudi Arabia,

the company's current and future vision of e-shopping, the benefits of e-shopping for the company, and any obstacles in the market. The structured interview questionnaires also were discussed.

TABLE 5.14: QUALITATIVE STRENGTHS AND WEAKNESSES OF SOURCES OF EVIDENCE

Source of Evidence	Strengths	Weaknesses
Documentation	• Stable: can be reviewed repeatedly • Unobtrusive: not created as a result of the case • Exact: contains exact names, references, and details of an event • Broad coverage: long span of time, many events, and many settings	• Retrievability: can be low • Biased selectivity: if collection is incomplete • Reporting bias: reflects (unknown) bias of author • Access: may be deliberately blocked
Archival Records	• Same as for documentation • Precise and quantitative	• Same as for documentation • Accessibility due to privacy blocked
Interviews	• Targeted: focuses directly on case study topic • Insightful: provide perceived causal inferences	• Bias to poorly constructed questions • Response bias • Inaccuracies due to poor recall • Reflexivity: interviewee says what interviewer wants to hear
Direct Observations	• Reality: cover events in real time • Contextual: covers context of event	• Time consuming • Selectivity: unless broad coverage • Reflexivity: event may proceed differently because it is observed • Cost: hours needed by human observers
Participant Observation	• Same as for direct observations • Insightful into interpersonal behaviour and motives	• Same as for direct observations • Bias due to investigator's manipulation of events
Physical Artefacts	• Insightful into cultural features • Insightful into technical operations	• Selectivity • Availability

Source: Yin (2003)

5.8. QUANTITATIVE METHOD (Principle Method)

The population of Saudi Arabia, with one of the highest levels of Internet usage in the Middle East, is constantly increasing its use of e-business applications, such as banking and retailing. This research measures continuance intentions and the methodology selected is quantitative study. Measuring customer continuance intentions toward e-shopping must be accurate to allow for clear comparisons across different groups of respondents. This research also will be operationalised, requiring more quantification and accurate measurement. The need for relative representativeness and simplifications makes a quantitative methodology an appropriate option as a principle method (Sarantakos**,** 2005).

Additionally, this research went through many steps to ensure valid and reliable results. This section gives an overview of the theoretical perspective of the analyses. Many statistical techniques appear in this research to validate the credibility of research findings, including

coefficient α, factor analysis, and structure equation modelling (SEM) analysis using (AMOS) software. Most of the data analysis was conducted using the well-known statistical software, Statistical Package for Social Science (SPSS) (Norusis and Inc., 2000; Field, 2000).

5.8.1 Variable Measurement

The researcher started by encoding the collected data from Saudi Arabia using SPSS 13.0. Then, an assessment of the internal reliability was conducted, in order to assess the quality of the research constructs' measurements. Reliability means that two or more researchers, studying the same phenomenon with similar purposes should reach approximately the same results (Gummesson, 2000). This necessitates keeping a thorough protocol of the study so that others, who might want to execute the same study, following the same protocol, could reach the same findings and conclusions (Yin, 2003). Therefore, a research with high reliability could be replicated by others (Gummesson, 2000). Additionally, descriptive statistics summarize the large data set to provide more meaningful values of the variables and items being measured (Nachmias and Nachmias, 2000). To support the research findings and offer a better and more meaningful understanding of the total measurable items, the descriptive statistics with averages and percentages appear in the form of simple figures and tables throughout the research.

When conducting an assessment of the internal consistency, and examining the reliability of multiple items for the measured variables, coefficient α is the first and quickest recommended test (Nunnally, 1978). Passing this test is a prerequisite for further analysis. Coefficient α provides the average of the correlations of all variables and their measures that define a variable (Norusis and Inc, 2000; Field, 2000). Nunnally (1978) suggested a criterion for a desirable minimum range of 0.6 - 0.7 for coefficient α (reliability coefficient or composite reliability) to be retained. If there are enough items to measure each variable, and if the coefficient α is low, to improve the coefficient α, some items must not share the common value for measuring the variable and, thus, could be eliminated (Field, 2000). The easiest and recommended method to find items that demand elimination is to calculate the correlation of each item with the total score. Items with correlations of less than 0.3 should be eliminated; the same rule applies to any items that produce a sudden drop in the variable α or items correlation (Field, 2000).

Factor analysis is a helpful tool when testing the correlation of a large number of variables in a quantitative method and then combining them to provide a few but more meaningful

factors. Some variables, called latent variables, cannot be observed directly. The measures of observable variables in this research allow for intensive data analysis to explain the other and the latent variables (Hair *et al*., 2006). In the factor analysis process, the researcher looks for rational items that can be distinguished from one another and examines the correlation among the observable items in the tested model.

The main objective of factor analysis is to find a way of representing the information contained in a number of original variables into a smaller set of factors, with minimal loss of information. Using factor analysis is essential to ensure that the items used in each variable load mainly on a single factor to establish convergent validity. To eliminate any concerns regarding the data normality and unique variances, the Maximum Likelihood method of estimation was employed (Hair *et al*., 2006). Maximum Likelihood analysis is part of the factor extraction method. This procedure is widely used by researchers and considered part of factor analysis (Tabachnick and Fidell, 2007). It is known to be fairly robust to the violation of a normality assumption (Hair *et al*., 2006). Since the factors are expected to be moderately correlated, the Direct Oblimin rotation is employed.

Validity in social science research tries to measure intangibles, such as intentions, behaviours, satisfaction, and trust. This process is carried out to establish whether surveys measure what they are designed to measure. Therefore, social scientists have developed their own means to measure such concepts.

The purpose of validation is to give researchers, their peers, and society as a whole a high degree of confidence that the methods selected are useful in the quest for scientific truth (Nunnally, 1978). Validity refers to the capacity of a model to indicate what researchers want to know (Bannister and Mair, 1968). For example, face validity reveals whether participants believe that the questions represent the actual purpose of the study, as described in the cover letter. All participants in the pilot study agreed that the questions represented the stated purpose of the study. Content validity assesses the research constructs that have been adopted from existing literatures and previous researches. Content validity is an issue of representation. The essential question asked by this validity is: Do the questionnaire items pull in a representative manner from all the ways that could be used to measure the content of a given construct (Straub *et al*., 2004). Content validity is verified through literature reviews and expert judges or panels (Straub *et al*., 2004). Even though the constructs of this research are adapted from exiting previous research that have been validated, several faculty members

in Brunel University, doctoral students, and members of research and statistic departments in Saudi Arabia considered whether the questionnaire items represented the study adequately for both English and Arabic languages. All of them agreed that they did.

5.8.2. Convergent and Discriminant Validity

Reliability tests the stability of individual measurement items across replications from the same source of information (Straub, 1989). Cronbach's α examines the reliability of each construct. Convergent validity indicates the extent to which the measures for a variable act as if they measure the underlying theoretical construct because they share its variance (Schwab, 1980). Internal consistency reliability is generally considered a necessary but not sufficient condition for convergent validity (Schwab, 1980).

Convergent validity examines whether individual indicators are indeed measuring the constructs they are purported to measure. In other words, convergent validity helps verify that different approaches to construct measurements reach the same results (Anderson and Gerbing, 1988). Anderson and Gerbing suggest convergent validity indicates the extent to which indicator items measuring a construct convergence and measure a single construct.

In determining the appropriate minimum loading required to retain items for inclusion within a scale, Fornell and Lacker's (1981) recommended a loading of 0.70 is considered high. They also recommended construct reliability should exceed 0.80, and average variance extracted (AVE) for all constructs should be 0.50 or higher. However, Hair *et al.*'s (2006) guidelines are somewhat less harsh as they recommended factor loading greater than 0.30 to be considered significant; loadings greater than 0.40 are considered important; and loadings of 0.50 or greater are considered to be very significant when determining the relative importance and significance of factor loading of each item. Furthermore, when applying SEM, the standard factor loading of observed variables on latent variables can be used to determine the validity of observed variables (Hulland, Chow, and Lam, 1996). A value of 0.3 or more is considered satisfactory (Hulland *et al.*, 1996).

Discriminant validity is the degree to which components of the theoretically distinct concepts are unique (Hulland *et al.*, 1996). Nunnally also states that discriminant validity is normally established through factor analysis. Fornell and Lacker (1981) said that discriminant validity assess whether individual indicators can adequately distinguish between different constructs, and it is assured if the square root of AVE for each construct is greater than the correlation between that and all other constructs in the CFA model. If the items include an instrument

that measures a construct correlate more highly with each other than with items measuring other constructs in the model, the measure is then determined to have adequate discriminant validity (Grant, 1989).

To summarise, the convergent validity indicates if the theorized components converge together on the appropriate constructs, and discriminant validity reveals the cross-loading of the components on multiple factors (Premkumar, Ramamurthy, and Crum, 1997). The factor analysis of all items should indicate if the items load on the predetermined, theoretically defined constructs, as well as whether there are any cross-loadings of items on other constructs (Premkumar *et al*., 1997).

The split-half testing is another traditional form of reliability assessment. In this procedure, the research sample is split into equal sub-samples, and scores of the halves correlated. In this correlation, a reliability coefficient can be obtained (Nunnally, 1978; Field, 2005) by using the average correlation between items, as in all reliability estimating. The split will result in an approximate Cronback's coefficient alpha (Nunnally, 1978). The Cronbach's α for the two parts should be between >0.60 and <0.95 (Straub *et al*., 2004). Additionally, the Kline's criterion for Spearman-Brown reliability coefficient is 0.7 (Kline, 2005).

5.8.3. Structural Equation Modelling

Structural equation modelling (SEM) using AMOS software further confirms and clarifies variables and the model (Arbuckle, 2003). The objective of SEM in this research is to understand the structure between several variables and then test paths hypothesized in the conceptual model (Hoyle, 1995). In addition, SEM provides a comprehensive, flexible approach to conducting the research design and performing data analysis, better than any other single statistical model (Hoyle, 1995). It is recommended as a confirmatory method to support the proposed hypotheses in the conceptual research model (Hoyle, 1995). Moreover, SEM allows for multiple simultaneous directions of causality, and distinguishes the direct effect from the indirect effect, as well as the total effect of an explanatory variable on each dependent variable (Jöreskog and Sörbom, 2001; Cao and Mokhtarian, 2005). A total effect consists of a direct and one or more indirect effects. The variance-covariance matrix is used because it provides valid comparisons between different populations (Hair *at el*., 2006).

When assessing the proposed model with goodness-of-fit indices, several criteria should be used, such as chi-square, which does not require an alternative model for comparison. The obtained and implied covariance matrices and the maximum likelihood function drive the fit.

The chi-square indices depend on the sample size (Hair *et al*., 2006; Byrne, 2001). Hoelter's (1983) fit index focuses directly on the sample size. It estimates the sample size that would be sufficient to yield an adequate model for a chi-squared test (Hair *et al*., 2006). Hoelter proposed that a value in excess of 200 is indicative of a model that adequately represents the sample data. Because the sample size for this research is high, and to avoid any sensitivity to the sample size in the chi-square measure, other goodness-of-fit indices were also used as follows:

- The root mean square error fit index (RMSEA) takes into account the error approximation in the population. This is recognized as one of the most informative criteria in covariance structure modelling; values less than 0.05 indicating excellent fit (Byrne, 2001).

- The root mean square residual (RMR) is the square root of the average squared amount by which the sample variance and covariance differ from estimates obtained under the assumption that the model is correct (Hulland *et al*., 1996; Byrne, 2001). The smaller the RMR, the better; an RMR of zero indicates a perfect fit.

- The goodness of fit index (GFI) is a measure of the relative amount of variance and covariance in the sample data that is jointly explained by the hypothesized model (Byrne, 2001). The closer the GFI and adjusted GFI (AGFI) are to 1.00; the more indicative they are of goodness of fit. The GFI and AGFI are both classified as absolute indexes of fit because they do not compare the hypothesized model with other models (Hair *et al*., 2006).

- The incremental or comparative indexes: Bentler and Bonnet (1980) developed one of the first subjective indexes, the normed fit index (NFI), which becomes for a time the practical criterion of choice. Bentler (1990), revising the NFI to take sample size into account, has proposed the comparative fit index (CFI). Hair *et al*., (2006) advised a cut-off at 0.90 for the CFI. Values less than 0.90 are not usually associated with a model that fits well (Byrne, 2001; Hair *et al*., 2006).

Further literature suggested that, for a good model fit, chi-square/degrees of freedom should be less than three; adjusted goodness-of-fit index (AGFI) should be greater than 0.8; goodness-of-fit index (GFI), normed fit index (NFI), and comparative fit index (CFI) should all be greater than 0.9; and the root mean square error (RMSEA) should be less than 0.10

(Henry and Stone, 1994). Table 5.15 summarises the acceptable goodness of fit indices values used in this research.

TABLE 5.15: ACCEPTABLE GOODNESS-OF-FIT INDICES

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)
P value	p≤0.05 (Hair *et al*., 2006)
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)

5.8.4. Invariance analysis

Globalization is continuing to drive rapid growth in international trade, global corporations, and non-local consumption alternatives (Holt *et al*., 2004; Alden *et al*., 2006), as evidenced by advances in the Internet and e-commerce that have diminished trade boundaries. Thus, it is not surprising that business and social science research often examines cross-national and cross-cultural markets (Griffith *et al*., 2006). Empirical study has been a dominant research methodology in the IS field. Researchers following this approach adopt surveys and questionnaires to investigate the correlations of the variables of their proposed models. When comparing cultures or groups, there is a concern about whether the research participants interpret the same meaning for the survey items. Hence, measurement equivalence (invariance) across a sample population is an important issue (Lai and Li, 2005). As emphasized by many scholars, invariance analysis is important to minimize the possibility of research biases in cross-national, cross-cultural, and group analysis researches that may arise from the data collection or data analysis (Yi, 2008; Lai and Li, 2005). Furthermore, researchers (e.g., Rensvold and Cheung, 1998) have repeatedly stressed the importance of invariance analysis, with a particular focus on the construct's form, factorial, and intercept invariance, and urged the development of constructs that are operationalised in an unambiguous way to achieve measurement equivalence (Lai and Li, 2005). If survey items do not display a form of invariance, researchers will find it difficult to decide whether the observed difference arises from the hypothesized difference (Drasgow and Kanfer, 1985). Additionally, to minimize the research survey questionnaires bias, back translation (Brislin, 1986) confirms that the scale's linguistic meaning remains the same across language groups (Hair *et al*., 2006). This process also establishes translational equivalence. The next stage

assesses measurement invariance (equivalence) across the groups (Rensvold and Cheung, 1998).

Several scholars question the validity of cross-national, cross-cultural, or group data analysis if measurement invariance is not reported (Hui, 1985; Singh, 1995; Van de Vijver and Harsveld, 1994). Survey participants may not interpret a construct in the same way across cultures (Myers *et al*., 2000), or they may vary in their tendency to respond to certain scales items (Hui, 1989). As a result, Steenkamp and Baumgartner (1998) and Hair (2006) recommend a multi-group confirmatory factor analysis (CFA) approach to measurement invariance in different cultures:

- Configural invariance: Determine if the basic meanings and structure of the research model constructs are understood and conceptualized similarly in the different groups (e.g., culture, age, gender, geographical region).
- Factorial metric invariance: Determine whether the ratings scales are perceived similarly across different groups.
- Scalar invariance: Determine whether the quantifiable meanings of the scale are the same compared with the means from different groups.

Factorial invariance is a prerequisite for any further analysis of invariance. When conducting group comparisons (e.g., age, gender, geographic location), the construct can be described as factorial or measurement equivalence if the item response factor parameter coefficients are not significantly different between groups. Several methods test invariance analysis. Van de Vijver and Harsveld (1994) propose looking for the factor parameters of the unconstrained model. Items with the largest between-group differences are considered non-invariant. Marsh and Hocevar (1985) propose examining the modification indexes in the fully constrained model to highlight non-invariance. Items with large modification indexes are considered non-invariant. However, the most accepted and widely used approach, due to its justifiability and precision (Cheung *et al*., 1999, 2000) for invariance analysis, was introduced by Byrne *et al* (1989). This approach uses CFA to obtain and compare the fit indices, including the chi-square of unconstrained measurement models, estimated without any conditions, and a series of constrained measurement models, estimated with the condition that one or more factor parameters must have the same value for both compared groups (Byrne, 2001).

Byrne *et al.*'s (1989) approach starts with the unconstrained model to examine configural and factorial invariance. If the measurement weights differ significantly between groups, it is unnecessary to move to the next step of the invariance analysis. However, if the measurement weights do not differ significantly between groups, the invariance analysis continues to estimate the invariance of the structural weights. The researcher should then compare the chi-square and fit statistics of the fully constrained model with the unconstrained model and look for differences. If the difference is significant, then at least one of the research model parameters would have at least one non-invariant item. To find the non-invariant item, several tests need to be conducted, with a partially constrained model, to examine the changes in the chi-square statistics between the model's constructs for significance. When comparing the partially constrained model with the fully constrained model, if the chi-square difference is significant, the constraint that is associated with this partially constrained model becomes a source of non-invariance (Lai and Li, 2005). In addition, higher levels of invariance measurement can be considered in order to examine the construct's structural weights and latent means, following a similar process.

Latent means enable the researcher to explore whether the quantifiable meanings of the scales are similar across cultures or compared groups, involving scalar invariance by comparing the mean between the two populations. The latent mean can then be interpreted with regard to how much higher or lower the latent mean constructs are in one group relative to another group (Hair *et al*., 2006).

Byrne (2001) suggests several steps for testing latent mean differences using AMOS, as follows:

- The variance of the six research factors is freely estimated in each group, as are their covariance's.
- Except for those fixed to 1.00, all factor loadings are constrained to be equal across groups.
- All intercepts for the observed measures are constrained to be equal across groups.
- The six factor means are freely estimated for one group, then constrained to be equal to 0 for the other group. The latter group is regarded as the "reference" group.

This invariance measurement analysis examines if the research model achieves measurement invariance. It searches for meaningful differences when validating the calibration sample with

the validation sample, as well as across different genders, ages, education levels, geographical locations, online spending levels, shopping frequencies, and times spent shopping online.

5.9. QUESTIONNAIRE DESIGN

Designing the research questionnaire is important because a poor questionnaire collects data that may not be relevant to the research question and may produce an unwanted output during the analysis stage. Likert scales are the most common and widely used measurement scales (Teo and Tan, 2000; Tigre and Dedrick, 2004). They appear in the survey questionnaire as an instrument to provide quantitative data. The seven-point Likert scale measures participants' perceptions of a wide range of variable relationships. In this research, it ranges from 1 (strongly disagree) to 7 (strongly agree).

Most of the variables and their related questions measure different aspects of the online shopping experience. Some questions may seem repetitive to respondents, so the cover letter of the survey states that the research is about e-shopping. It defines the term, and offers alternative words for e-shopping, such as electronic shopping, online shopping, and Internet shopping. These words appear interchangeably across the questions in both the Arabic and English versions.

In addition to background questions, the survey contains questions about customers' experience with computers, their uses of the Internet, and factors that have convinced them to use e-retailers. The survey examines statistically some of the driving factors that have influenced customers' intentions to continue their use of Internet shopping.

The survey questionnaire includes a cover letter, in both languages (Arabic and English), stating the aim of the research, definition of online shopping, and the different terminology used. Participants were invited to complete the survey with regard to an e-retailer from which they had recently shopped or purchased. The participants were then asked to indicate the degree to which each statement in the survey characterized their thoughts and feelings. The cover letter also emphasizes the voluntary nature of the survey and ensures the complete confidentiality of all responses. The questionnaires consisted of three main areas:

1. Questions related to variables that entice users to increase their intention to use online shopping.

2. Questions related to variables that measure subjective norm, enjoyment, and the intention to continue to use e-shopping.

3. Questions related to the demographics, general information about where people use the Internet, why they use it and what they buy, and a few questions about the benefits of and obstacles to e-commerce in Saudi Arabia.

5.9.1. Measures

All construct measures in this research come from previous literature and research, adapted with appropriate modifications, if necessary, to make them specifically relevant to the context of online shopping in Saudi Arabia. Individuals were asked to indicate the extent of agreement or disagreement with the construct measures statements concerning online shopping.

The site quality and trust items come from McKnight *et al.* (2002a, 2002b). The perceived usefulness items derive from Gefen (2003). Perceived enjoyment is a measure from Childers *et al*. (2001). Shih and Fang (2004) provide the subjective norm items. The continuance intention items were adapted from Yang and Peterson (2004). Table 5.16 and Appendix D provide a listing of the scale items.

TABLE 5.16: QUESTIONNAIRE VARIABLES

Variable	Items of Measurement	Coding	Source
Perceived usefulness	The website I use for my online shopping is useful for searching and purchasing.	PU1	Gefen, Karahanna, and Straub (2003)
	The website I use for my online shopping improves my performance in searching and purchasing.	PU2	
	The website I use for my online shopping enables me to search and purchase faster.	PU3	
	The website I use for my online shopping enhances my effectiveness in searching and purchasing.	PU4	
	The website I use for my online shopping makes it easier to search for and purchase.	PU5	
	The website I use for my online shopping increases my productivity in searching and purchasing.	PU6	
Trusting beliefs benevolence	I believe that the website I use for my online shopping would act in my best interest.	TBB1	McKnight, Choudhury, and Kacmar (2002)
	If I required help, the website I use for my online	TBB2	

	shopping would do its best to help me.		
	The website I use for my online shopping is interested in my well-being, not just its own.	TBB3	
Trusting beliefs integrity	The website I use for my online shopping is truthful in its dealings with me.	TBI1	
	I would characterize the website I use for my Internet shopping as honest.	TBI2	
	The website I use for my online shopping would keep its commitments.	TBI3	
	The website I use for my electronic shopping is sincere and genuine.	TBI4	
Trusting beliefs competence	The website I use for my e- shopping is competent and effective in providing online business.	TBC1	
	The website I use for my online shopping performs its role of giving shopping advice very well.	TBC2	
	Overall, the website I use for my online shopping is a capable and proficient Internet shopping provider.	TBC3	
	In general, the website I use for my internet shopping is very knowledgeable about its service.	TBC4	
Trusting intentions willingness to depend	When an important shopping issue or problem arises, I would feel comfortable depending on the information provided by the website I use for my online shopping.	TIW1	
	I can always rely on the website I use for my e-shopping in a tough shopping situation.	TIW2	
	I feel that I could count on the website I use for my online shopping to help with a crucial shopping problem.	TIW3	
	If I had a challenging shopping problem, I would want to use the website I use for my online shopping again.	TIW4	
Perceived enjoyment	Shopping online in this website would be fun for its own sake.	PE1	Childers, Carr, Peck, and Carson (2001)
	Shopping online in this website would make me feel good.	PE2	
	Shopping online in this website would be boring.	PE3	
	Shopping online in this website would involve me in the shopping process.	PE4	
	Shopping online in this website would be exciting.	PE5	
	Shopping online in this website would be enjoyable.	PE6	
	Shopping online in this website would be uncomfortable.	PE7	

	Shopping online in this website would be interesting.	PE8	
Perceived site quality	Overall, this website worked very well technically.	PSQ1	McKnight, Choudhury, and Kacmar (2002)
	Visually, this website resembled other sites I think highly of.	PSQ2	
	This website was simple to navigate.	PSQ3	
	On this website, it was easy to find the information I wanted.	PSQ4	
	This website clearly showed how I could contact or communicate with online shopping customer service.	PSQ5	
Subjective norms	Most people who are important to me would think that using the website to shop online is a wise idea.	SN1	Shih and Fang (2004)
	Most people who are important to me would think that using the website to shop online is a good idea.	SN2	
	Most people who are important to me would think I should use the Internet to shop online.	SN3	
	My family who are important to me would think that using the website to shop online is a wise idea.	SN4	
	My family who are important to me would think that using the internet to shop online is a good idea.	SN5	
	My family who are important to me would think I should use the website to shop online.	SN6	
Continuance intention of use	I intend to do more business with the present website.	CIU1	Yang and Peterson (2004)
	I would recommend the website I use for my online shopping to those who seek my advice about such matters.	CIU2	
	I would encourage friends and relatives to use the website I use for my online shopping.	CIU3	
	I intend to continue to do business with the present website.	CIU4	
	I would post positive messages about the website I use for my online shopping on some Internet message boards.	CIU5	
	I say positive things about the website I use for my online shopping to other people.	CIU6	

5.10. PILOT STUDY

A preliminary questionnaire for this research was prepared. The reasons for conducting a pilot study are as follows:

- To detect any problems in the research design and instrumentation.
- To delete any irrelevant items from the questionnaire.
- To test the applicability of the measurement scales.
- To discover any error and confusing questions that needs clarification.

The aim of this pilot study is to ensure that the items in the survey used for each construct are understood by the respondents, and thus obtain a high level of content validity (Churchill, 1979). It is important to discover any errors or confusion in the questionnaires beforehand, instead of during the real data collection (Blankenship, Breen, and Dutka, 1999). The participants identified any questions or items that were not clear to them, and provided advice about modifying those items.

The data collection for the pilot study took place between December 24, 2006, and January 24, 2007 in Saudi Arabia and London. A draft of a paper survey was pre-tested by two people to confirm its clarity and layout. After the revision, an informal pre-test group of 35 people produced 22 valid surveys (data were pooled from the 22 respondents, 11 in Saudi Arabia and 11 in London). Six were returned incomplete but with good feedback, and seven were not received.

Participants were asked to apply the questions to the websites that they used mostly for their e-shopping when they considered buying products or services or searching for information. Furthermore, rather than evaluating online shopping continuance intention at a particular site (as in Chen *et al*., 2002), the author asked respondents to generalize on all online shopping activities. Likewise, they examined the survey instrument and commented on its format and length, as well as the wording of each item. The participants on the pilot study were asked to give feedback about the clarity of the questionnaire wording, ambiguity, question consistency, survey layout and presentation, and any difficulty in completing the survey in time. Ambiguous items would be considered for rewording in the final study based on participant feedback. The participant feedback was collected through face-to-face meetings, or e-mail.

Classification and demographic data, such as age, gender, Internet usage, purchase intention, income, issues online, and online spending are an important part of the questionnaire. The demographic section helps measure the online shopping context of Saudi Arabia, which helps reveal differences that might arise in consumers' online shopping activities based on their demographic factors. The demographic data were collected at the beginning of the session in the pilot study. This process reverses for the final data collection, for which is at the end of the session to ensure participants concentrate on the main construct items. Appendix E illustrates the pilot study survey questionnaires in English and Arabic languages.

The 22 people gave their opinion of the survey. The following details represent the findings from the feedback to the pilot survey:

- The survey was slightly long.
- It was hard to keep participants' commitment to participate.
- Layout, length, language, and time are very important items when doing the survey.
- Only the English version was used in the pilot study, even in Saudi Arabia.
- Some questions seem less important, and others were not clear and caused confusion, such as "wise to use" and "good to use."
- Some very similar questions might cause confusion, especially in the final survey where two versions exist (Arabic and English) due to the difficulty of translating closely related concepts.

The pilot study respondents represent online users, including undergraduate and postgraduate students, professionals and experts. The UK samples include some postgraduate Saudi students studying abroad, as well as non-Saudi students. Eighty two percent of the participants were men. Most respondents were in their late 20s (n = 18), with 13.6% between the ages of 18 and 25 years, 68.2% 26–35 years, 13.6% 36–45 years, and 4.5% older than 46 years. Exploratory analysis was performed, and the results were satisfactory. Most Cronbach's alpha values surpassed the commonly adopted threshold value of 0.7. Table 5.17 reports the reliability analysis results. Appendix F provides more details about the pilot study analysis results.

TABLE 5.17: PILOT STUDY RELIABILITY ANALYSIS

Variable	Reliability	
Continuance Intention to Use	α =0.798	
Perceived usefulness	α =0.893	After omission α =0.921
Subjective Norm	α =0.966	
Satisfaction	α =0.897	
Enjoyment	α =0.612	After omission α =0.722
Perceived Site Quality	α =0.694	After omission α =0.784
Loyalty Incentives	α =0.448	After omission α =0.833
Trust beliefs	α =0.924	After omission α =0.929
Trust Intentions	α =0.749	After omission α =0.789
Over all Reliability *Cronbach's α*	**α =0.896**	

After validating the pilot study, the final survey design addresses four important criteria: speed, information, collection costs, and non-response rates (Tull and Hawkins, 1993).

5.11. QUESTIONNAIRE TRANSLATION

Although English is considered the world's business language, the research takes place in Saudi Arabia, where English is not the first language as Arabic is the mother tongue. The sample would, therefore, contain participants who do not understand English, and language differences may also limit their ability to be familiar with the original questionnaire language, as well as their ability to answer all questions with no bias. Thus, the questionnaire was translated into Arabic to avoid miscommunication and misinterpretation. E-shopping and e-commerce terminologies without Arabic equivalents were explained to participants on the Arabic version of the questionnaires. Choosing a person to translate the research questionnaire was an important issue. In this research, a translator was carefully selected using two criteria. First, the translator must have a good of understanding of both Arabic and English and be able to write to a high standard in both languages. Secondly, the person's credentials must show that he or she has extensive experience in developing questionnaires in Arabic.

In this research, the questionnaires were developed initially in English and then translated into Arabic. Through back-translation, this Arabic version was then translated into English, and the English versions of the questionnaires were validated and proofread by a native English speaker in the United Kingdom. The same questions then were translated to Arabic with the support of the Marketing Division, Planning Department (Survey Section), in Saudi

Arabia for final approval of the content, wording, and clarity of the questions. By translating the Arabic questions back to English, Brislin's (1986) back-translation method ensures they have the same meaning. To avoid any bias, this back-translation step was performed by a different person, namely, the Chief Editor of a private college in Saudi Arabia.

5.12. SURVEY POPULATION

Mark (1996) defines population as "the collection of all individuals, families, groups, organizations, communities, and events that researchers are interested in finding out more about." For the purpose of this research, the target population consists of Internet users who engage in online shopping in Saudi Arabia.

Although the research focuses on e-shopping in Saudi Arabia, the research cannot exclude foreigners who live in Saudi Arabia, because it is an online survey. Selecting and defining the topic and methodology helped gear the focus of the study to young Internet users, who have experience of shopping online, as well as people with similar backgrounds from different geographic areas within Saudi Arabia. Additionally, earlier studies have shown that data collected directly from users, rather than from service providers, offer more accurate information about service characteristics and how they lead to higher quality evaluation in the context of e-shopping, especially given that customers' continuance intentions are best assessed through information obtained from the users themselves (Cao and Mokhtarian, 2005).

5.12.1. Selecting the Research Sampling

The population of interest in this study is Internet users in Saudi Arabia over 18 years old who have previous experience of online shopping. However, since this research cannot cover such a massive population, a sample was used for the data collection process. One conventional sampling approach is to randomly distribute surveys to members of the general population, since such a sample is frequently a good representation of the population at large. Additionally, the researcher makes attempt to insure that this sample is an accurate representation of some larger group or population by covering the main five regions in Saudi Arabia. However, non-response bias and non-participants of one of the member of the targeted group are concern. In addition, since online shopping is considered new phenomena in Saudi Arabia, only a minority of the population makes online shopping; and therefore,

such a sample may not contain a substantial number of e-shopping behaviour occurrence (Cao and Mokhtarian, 2005), as a result, the statistical strength of the research results tends to be limited. A convenience choice-based sampling approach is preferred, given that a small proportion of all customers undertake online shopping.

Students are a natural sample, but caution is required when generalizing the results to the larger population due to their homogeneity (Cao and Mokhtarian, 2005). Student samples were added to the research because online customers commonly are younger and more highly educated than conventional customers, making a student sample more representative of the online customer population (OECD, 1998; Al-Diri, Hobbs, and Qahwaji, 2006; Williamson, 2006). Furthermore, adding a student sample may represent the future e-shopping patterns of the population at large. Student samples were extracted from seven universities and colleges, including the five regions of Saudi Arabia.

5.12.2. Sample Size, Methods, and Questionnaire Distribution

Correlation coefficients fluctuate across sample sizes, with much more fluctuation in small samples than in large ones. Therefore, the reliability of the factor analysis depends on sample size. A common rule of thumb suggests 10–15 participants per variable. Nunnally (1978) recommends 10 times as many participants as variables. Field (2000) suggests 5–10 participants per variable, up to 300. Tabachnick and Fidell (2007) agree that "it is comforting to have at least 300 cases for factor analysis," as this is considered a good sample size whereas 100 seems poor. For structural equation modelling (SEM), the sample should range in size from 150 to 400, depending on the number of variables (Hair *et al*., 2006).

To achieve an appropriate sample size for this research, the researcher contacted various Saudi colleges and universities, as well as some Saudi firms, prior to distributing the survey. All of them accepted the research effort taking place at their campuses. Starting with 600 personalized e-mails, the links to the online survey also contained a cover letter that stated the research objective, the definition of online shopping, and the alternative terms for online shopping. The letter also confirms the voluntary and anonymous nature of the survey. Visitors to the online survey were invited to complete the survey in relation to an e-retailer from which they had recently shopped or purchased. The participants were then asked to indicate the degree to which each statement in the survey was characteristic of their thoughts and feelings. The cover letter appeared in both languages, and the link to the survey was posted on seven forums, one for each of the seven Saudi state universities.

To gain the participation of more Internet users, a leading Saudi bookstore agreed to post the survey on its active website and encourage users to participate.

FIGURE 5.19: SCREEN SHOTS: BOOKSTORE WEBSITE WITH ONLINE RESEARCH SURVEY LINK

As suggested by Malhotra (2004), a follow-up strategy helped increase the response rate. 944 complete surveys were received 45 days after it went active online. For this relatively long (97-question) survey, the response rate exceeded expectations. The technical setting of the

online survey did not allow participants to skip any questions, and only completed surveys were captured in the online survey database.

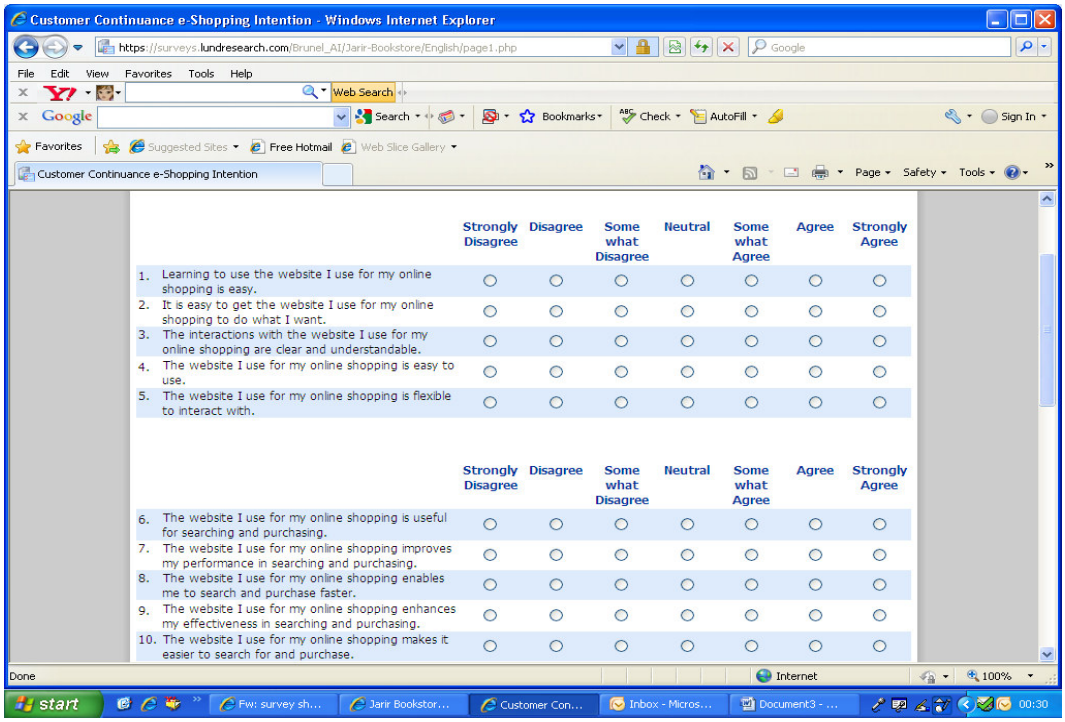
5.12.3. Online Survey

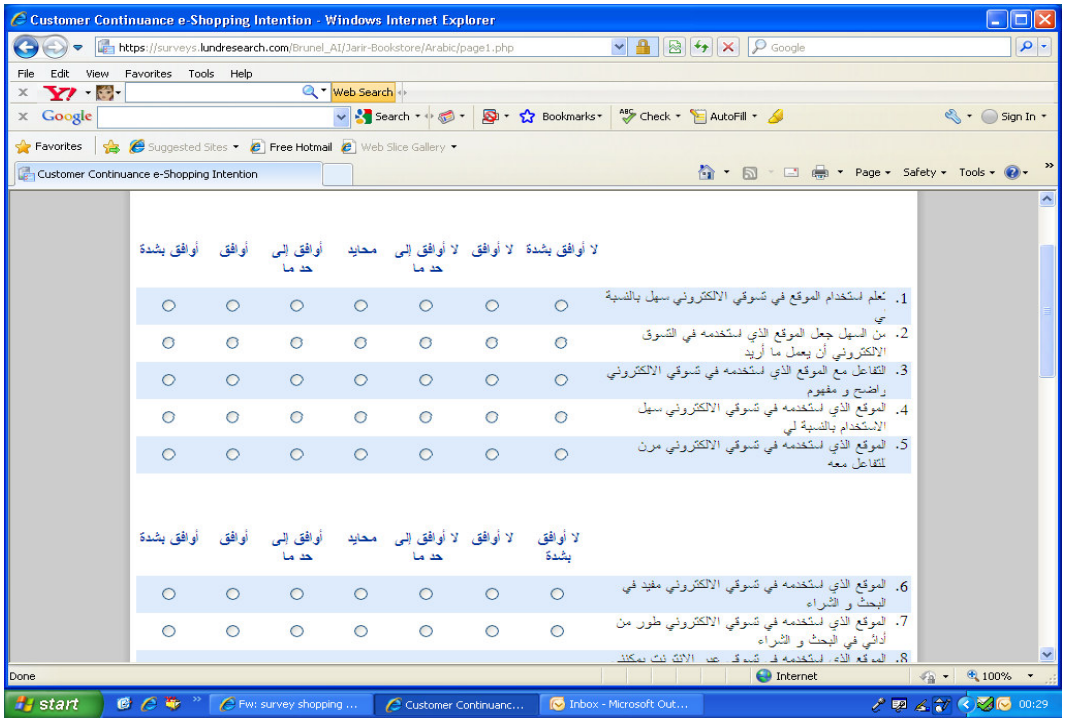
The questionnaire appeared online to make it more convenient for people to participate. The invitation for this research was sent via e-mail to separate, independent groups of Saudi customers living in different areas, covering the southern, northern, eastern, and western provinces. The data were collected in a database, along with information about where the respondents lived.

The online survey also has advantages over traditional paper-based surveys. The sample is not restricted to a particular geographical location. People who meet the sample criteria participate, and they span various geographical regions in Saudi Arabia. The online survey also lowers the cost of collecting and entering the data. Finally, online surveys provide faster responses and live data monitoring (Bhattacherjee, 2001). Because this research deals with understanding the driving factors for online continuance intentions to shop, online behaviours are important. Therefore, an online survey appears most appropriate for targeting online customers. Finally, the pilot test participants indicated they would have been more comfortable with an online survey. Figure 5.20 provides screen shots of the online survey in both English and Arabic versions. Appendix G illustrates the final layout and design of the research online survey for both English and Arabic languages.

However, online surveys create a concern about the representative nature of the respondents for the total population (Koppius *et al*., 2005). To ensure the results are representative for the targeted population in the Saudi market, invitations went to selected researchers in different colleges and universities in different geographical regions. These trusted researchers helped ensure enough participants in each region completed the online survey.

FIGURE 5.20: ONLINE RESEARCH SURVEY (ENGLISH AND ARABIC VERSIONS)





5.12.4. Limitations of the Online Questionnaire

Online surveys tend to induce low response rates, which reduces confidence in the data or the generalization of the research findings (Snow and Thomas, 1994). The lack of interactivity between the researcher and the survey participants, in combination with the potential for

unclear survey wording, may cause other problems and response errors (Pinsonneault and Kraemer, 1993).

5.13 RESEARCH PLAN

The research design process acts as a blueprint for the conceptual framework and determines the proper methodology to evaluate the research aim. Yin (2008) defines research design as "the logic that links data to be collected and the conclusions to be drawn to the initial questions of the study." The research design involves four main issues: what questions to study; what data are relevant; what data to collect; and how to analyze the data to derive results (Yin, 2008).

The initial phase starts with a strategic decision to select the proper data collection method, as well as tactical decisions regarding the measurement and scaling procedures, questionnaire development, sample selection, and data analysis (Zikmund, 2003). The research methodology pertains to the procedures used to develop the research framework. It describes the approaches to be put into practice. The research problem can then be defined formally as an operational framework, in which facts are placed to reveal their meaning more clearly (Cooper and Schindler, 2003).

The research blueprint for this study proceeds through the following steps:

Phase 1: Define the research problem and objectives.

Phase 2: Literature review.

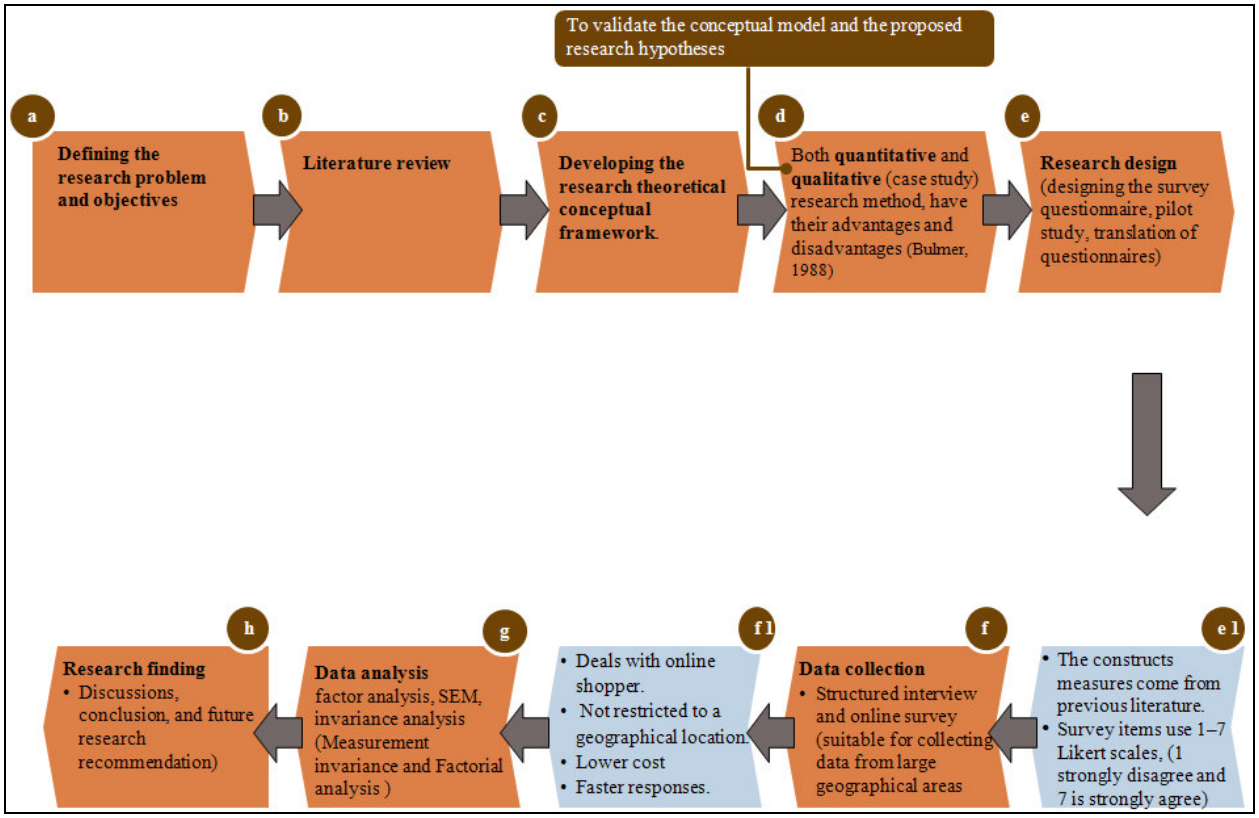
Phase 3: Develop the theoretical and conceptual framework.

Phase 4: Research design (design survey questionnaire, pilot study, and translation of questionnaires).

Phase 5: Data collection and analysis (online survey, structured interview, content analysis, descriptive analysis, factor analysis, discriminant validity, structural equation modelling, and hypotheses testing).

Phase 6: Research findings (discussions, conclusion, and future research).

FIGURE 5.21: RESEARCH PLAN



Source: Developed by the Author

5.14. SUMMARY

This chapter provided an overview of the research design that was used in this thesis. This provides a conceptual framework for the study, while the research methodology is used as a tool to achieve the research aims. Thus, research design is more holistic and it includes research methodology, which is related to strategic issues. There are many different views about how to approach a research phenomenon. Riege (2003) claims that positivist research is normally combined with quantitative and deductive approaches, whilst in contrast; phenomenological research is mainly associated with qualitative and inductive approaches. However, the positivism approach has been the prime epistemology in IS research, and could be associated to both quantitative (survey method) and qualitative (case study) research approaches (Galliers and Land, 1987; Walsham, 1995; Yin, 2003; Straub *et al*., 2004; Orlikowski and Baroudi, 1991; Irani *et al*., 1999; Straub *et al*., 2005). The positivistic approach to research is based on research methodology commonly used in science. It is characterised by seeking out the facts or causes of any social phenomenon in a systematic way (Collis and Hussey, 2003). Additionally, the research is deductive in the sense that some

of the theoretical and conceptual structures were established by previous work and tested empirically in this research, dealing with online continuance intention shopping models. To benefit from the multi-method approach (Mixed Approach), this research uses both questionnaire-based surveys, containing measures used in previous research, and case studies of Saudi companies. The survey method is used to collect the primary data for the research constructs. The case study method is used as a complementary method to collect primary data through semi-structured interviews and secondary data from companies' documents. The research pertains to online shopping, so the research population includes Internet users and online questionnaires. The process for the methodological approach is justified for examining questionnaire reliability and validity. Because this research aims to determine factors that influence continuance online shopping intentions and develop an appropriate conceptual framework, factor analysis, discriminant validity, and structural equation modelling are used throughout. The methods used stand as a guide for identification and interpretations of the important research factors and frame work. Thus, all these methods are appropriate and indicate the research path is ready to proceed into the actual data and findings derived from the proposed conceptual model, which are explored in details in chapter 6.

CHAPTER 6: DESCRIPTIVE STATISTICS AND RELIABILITY

6.1. INTRODUCTION

To collect the research data and highlight the online shopping trends in Saudi Arabia, this research study uses online survey distributed by direct personal e-mail to 600 Internet users in Saudi Arabia as well as a survey posted on the website forums of seven local Universities and Colleges in Saudi Arabia, covering most of the targeted geographical areas. This chapter examines the descriptive statistics, looking particularly at frequencies, means, and percentages.

As a first test of the internal consistency of the multiple-item variable reliability, the coefficient α, or Cronbach's α, is applied (Nunnally, 1978). With Cronbach's α as an indicator, all variable scales were tested using the reliability. This chapter further investigates the Individual Construct Analyses, tests the research scales and variables by Exploratory Factor Analysis (EFA) using SPSS, and the Validity of Factor Analysis.

6.2. DATA PREPARATION

Data preparation is an important step for the survey, influencing the outcome quality of the data analysis produced. The data preparation can be structured, according to Richardson (2005), as follows:

- **Questionnaire editing before data entry**: Although the research occurs online, with systematic rules that leave no questions unanswered, all collected data were double checked for completeness.
- **Coding and data entry**: All variables and related items are coded for faster analysis and grouping, using a computer-based program, SPSS.

A few questions offer the option of "other" or to allow participants to add in an answer. The coding of the questionnaire helped transfer the data from the online Excel database to the SPSS statistical software.

6.3. SAMPLE PROFILE

This research targets people actively engaged in Internet and online shopping in Saudi Arabia, including undergraduate and postgraduate students, and professionals (government

employee, Private sector, Business people). Only native participants (Saudi nationals) were used in the analysis of this research to ensure country sample. The five participated regions, including the most populated cities (Riyadh, Jeddah, and Dammam), in addition to the seven universities and colleges, that were chosen to extract the sample ensure representation in the sample of the main population centres in Saudi Arabia.

As a convenience sample, this cannot be considered as representative of the population as a whole. Nevertheless, the profile is examined to ensure that sufficient numbers of gender, age, education, and region are included, as detailed below. The survey collects data from 928 participants in Saudi Arabia, of which 70% were women and 30% were men. Most of the participants (92.8%) come from three main regions in Saudi Arabia: 26.2% from the East, 26.4% from the Central (Middle) region, 40.2% from the West, and 7.2 from North and South regions. This was unsurprising because information technology is concentrated in three major areas of the country, the most advanced regions major cities: Riyadh, the capital; Jeddah on the West Coast (known as the gateway to the two holy Mosques); and Dammam on the East Coast. Moreover, 25.2% of the overall participants were students, 31% of them work in the public sector (government employees), 36.7% in the private sector, 7% consider themselves business people, and less than 1% selected others which indicate house-wife. Since Saudi Arabia is a big country with multiple traditions and subcultures, the developed online survey is suitable for collecting data from large geographical areas. See the sample statistics in Table 6.18.

Education levels are as follows: 1.6% never attended high school, 10.7% had some high school education, 12.4% earned a high schools diploma, 53.4% had bachelor degrees, and 21.9% were postgraduates. Almost half (45.8%) earned an income between £1,000 and £4,000. Most respondents were in their late 20s: 3% younger than 18 years old, 29.5% between the ages of 18 and 25 years, 40.8% aged 26–35 years, 19.9% aged 36–45, and 6.7% older than 46 years. Similarly, 60% of the Saudi population is younger than 30 years of age.

A good portion of respondents (32.7%) visited at least five different shopping sites to purchase online per month, and 46.2% had used the Internet for actual shopping, spending £100–£500 (35.5%) or £501–£1,000 (32%) per year. For example, 66.1% of the respondents used the Internet to make flight booking and purchase airline tickets, 58.1% bought books, and 43.9% purchased music, DVDs or games. Online booking for airlines tickets, hotel rooms, and buying books, for instance, is increasing in popularity despite the notion that

consumers are apprehensive about making large purchases online. When respondents were asked why they used the Internet, 92.5% indicated they used it to search for information, 67.1% used it for social purposes (e-mails), 68.2% used it for banking, 71.2% used it for entertainment, 63.6% used it for work, and 57.4% used it to study. For these questions, respondents were able to choose more than one option, if appropriate.

To measure actual usage, the questionnaire asked them how many different online shopping places they visited , on average, in a given month, with the majority (78.8%) visiting between 1 and 5 sites. With regard to the time spent engaging in online shopping activities per week, 32.1% spent 16–60 minutes for online shopping activities, 42.9% spent less than 16 minutes, and 25.4% spent more than an hour. Finally, with regard to the frequently of using the Internet for shopping activities, 11.9% of them used it daily, 46.2% used it monthly, 30.3% used it two to three times a year, and 11.2% used it once a year.

TABLE 6.18: SAMPLE STATISTICS

Question	**Count**	**Percentage (%)**
Gender		
Male	278	30%
Female	650	70%
Age		
Less than 18	28	3.0%
Between 18 and 25	274	29.5%
Between 26 and 35	379	40.8%
Between 36 and 45	185	19.9%
Education Level		
Less than high school	15	1.6%
High school	99	10.7%
Diploma	115	12.4%
Bachelor	496	53.4%
Post-graduate	203	21.9%
Occupation		
Government employee	288	31.0%
Private sector	341	36.7%
Business people	65	7.0%
Student	234	25.2%
Income Level		
<SR4,000 in KSA or £1,000 in UK	162	17.5%
SR4,000-SR6,000 in KSA or £1,000-2,000 in UK	137	14.8%
SR6,001-SR8,000 in KSA or £2,001-4,000 in UK	126	13.6%
SR8,001-SR10,000 in KSA or £4,001-7,000 in UK	95	10.2%
SR10,001-SR15,000 in KSA or £7,001-10,000 in UK	149	16.1%
>SR15,001 in KSA or >£10,000 in UK	141	15.2%
Dependent on others	118	12.7%
Region		
East region	243	26.2%
West region	373	40.2%

Central region	245	26.4%
North region	37	4.0%
South region	30	3.2%
Internet Spending		
None	106	11.4%
SR100-1,000 in KSA or £100-500 in UK	329	35.5%
SR1,001-5,000 in KSA or £501-1,000 in UK	297	32%
>SR5,001 in KSA or £>1,001 in UK	196	21.1%
Items purchased in the last six months		
Buying books	539	58.1%
Music, videos / DVDs / games	407	43.9%
Clothing/accessories/shoes	269	29.0%
Sports equip	171	18.4%
Travel reservation and ticketing	613	66.1%
Hotel booking	464	50.0%
Reason for using the Internet		
Info. search	858	92.5%
Entertainment	661	71.2%
Social communication	623	67.1%
Work	\590	63.6%
Study	533	57.4%
Purchasing	759	81.8
Banking	633	68.2%
Types of companies trusted		
Local companies	108	11.6%
International companies	391	42.1%
Trust them both the same	429	46.2%
Important issues to e-shoppers		
Security	745	80.3%
Price	563	60.7%
Service, delivery	572	61.6%
Quality	674	69.7%
Payment	614	66.2%
Language barrier	430	46.3%
Online preferred payment methods		
Credit Card/Visa	649	69.9%
Cheque	24	2.6%
Cash at delivery	225	27.5%

Kingdom of Saudi Arabia (KSA); United Kingdom (UK)

6.4. RELIABILITY ASSESSMENT

The constructs measured in this study are usefulness, trust, subjective norms, enjoyment, site quality, and continuance intention to use. All constructs were measured using multiple-item, fully anchored, seven-point, and Likert scales.

Reliability tests the stability of individual measurement items across replications from the same source of information (Straub, 1989). The initial scientific test, therefore, is to determine the reliability of the research instrument. Before proceeding with any data analysis, all research instruments were tested for their reliability and validity. Cronbach's α and the corrected item-to-total correlations provide the statistical criteria for any item modifications

or eliminations (Nunnally and Bernstein, 1994). Cronbach's α is used to examine the reliability of each construct; passing this test is a prerequisite for further analysis. All initial scale items were taken from previously validated measures in IS literature or TAM and ECT research. Scale items were reworded to relate to the e-shopping continuance usage context. Whenever possible, at least three items were included per construct to ensure adequate reliability, as recommended by Nunnally (1978).

The cut-off for acceptable corrected item-to-total correlations is 0.3 (Nunnally and Bernstein, 1994). Any item with negative corrected correlations is eliminated from any further consideration. The Cronbach's α measures the internal consistency and reflects how each item correlates with other items or with the entire scale; the acceptable cut-off point is 0.8 (Fornell and Larcker, 1981), though a value of greater than 0.7 (Hair *et al*, 2006) or even 0.6 (Nunnally, 1978) are considered satisfactory. The criteria suggested by Hair *et al* (2006), Nunnally (1978) and Fornell and Larcker (1981) were applied to determine the adequacy of the reliability coefficients (composite reliability or The Cronbach's α) obtained for each measure.

The reliability assessment considers the responses to the online shopping survey from Saudi Arabians, which contained 35 items for measuring internal consistency and item correlations. All items used Likert scales.

The Cronbach's α scores of the variables are high, ranging from 0.928 to 0.961. This is well above the accepted lower limit of 0.7 (Hair *et al*, 2006). In addition, all item-to-total correlation values are significantly greater than 0.3 (Nunnally and Bernstein, 1994). The Cronbach's α values in Table 6.19 are all greater than 0.7 (Hair *et al*., 2006; Bagozzi and Yi, 1988). Furthermore, each variable indicates good reliability. Therefore, the initial reliability assessment indicates that all variables have sufficient reliability. This is a prerequisite for the next analysis stage.

Because social science research often tries to measure intangibles, such as intention, behaviour, satisfaction, enjoyment, and trust, it is hard to know for certain whether items measure variables accurately. Validity indicates the capacity of a test to indicate what is already known (Bannister and Mair, 1968).

As noted in Chapter 5, the face validity measure asks participants if they feel that the questions represented the purpose of the study. Participants in the pilot study phase agreed

that the questions represented the introduced propose of the study. Additionally, content validity assesses constructs taken from existing research. Expert academics confirmed that the questionnaire items represented the study adequately.

TABLE 6.19: SUMMARY OF MEASUREMENT SCALES

Coding	Variable / Measurement Item	Item-to-Total Correlation	Cronbach's α
Total Cronbach's α			**0.967**
PU	**Perceived usefulness**		**0.945**
PU1	The website I use for my online shopping is useful for searching and purchasing.	0.767	
PU2	The website I use for my online shopping improves my performance in searching and purchasing.	0.799	
PU3	The website I use for my online shopping enables me to search and purchase faster.	0.865	
PU4	The website I use for my online shopping enhances my effectiveness in searching and purchasing.	0.879	
PU5	The website I use for my online shopping makes it easier to search for and purchase.	0.877	
PU6	The website I use for my online shopping increases my productivity in searching and purchasing.	0.820	
Trust	**Trust**		**0.948**
TBI1	The website I use for my online shopping is truthful in its dealings with me.	0.860	
TBI2	I would characterize the website I use for my Internet shopping as honest.	0.890	
TBI3	The website I use for my online shopping would keep its commitments.	0.847	
TBI4	The website I use for my electronic shopping is sincere and genuine.	0.899	
Enj	**Perceived Enjoyment**		**0.819**
PE1	Shopping online in this website would be fun for its own sake.	0.613	
PE2	Shopping online in this website would make me feel good.	0.700	
PE3	Shopping online in this website would be boring.	0.198	
PE4	Shopping online in this website would involve me in the shopping process.	0.708	
PE5	Shopping online in this website would be exciting.	0.760	
PE6	Shopping online in this website would be enjoyable.	0.741	
PE7	Shopping online in this website would be uncomfortable.	0.200	
PE8	Shopping online in this website would be interesting.	0.687	
SQ	**Perceived Site Quality**		**0.928**
PSQ1	Overall, this website worked very well technically.	0.829	
PSQ2	Visually, this website resembled other sites I think highly of.	0.817	
PSQ3	This website was simple to navigate.	0.841	
PSQ4	On this website, it was easy to find the information I wanted.	0.810	
PSQ5	This website clearly showed how I could contact or communicate with online shopping customer service.	0.755	

SN	**Subjective Norms**		**0.945**
SN1	Most people who are important to me would think that using the website to shop online is a wise idea.	0.793	
SN2	Most people who are important to me would think that using the website to shop online is a good idea.	0.797	
SN3	Most people who are important to me would think I should use the Internet to shop online.	0.833	
SN4	My family who are important to me would think that using the website to shop online is a wise idea.	0.887	
SN5	My family who are important to me would think that using the Internet to shop online is a good idea.	0.858	
SN6	My family who are important to me would think I should use the website to shop online.	0.824	
CIU	**Continuance Intention of Use**		**0.961**
CIL1	I intend to do more business with the present website.	0.850	
CIL2	I would recommend the website I use for my online shopping to those who seek my advice about such matters.	0.917	
CIL3	I would encourage friends and relatives to use the website I use for my online shopping.	0.932	
CIL4	I intend to continue to do business with the present website.	0.915	
CIL5	I would post positive messages about the website I use for my online shopping on some Internet message boards.	0.869	
CIL6	I say positive things about the website I use for my online shopping to other people.	0.773	

6.5. INDIVIDUAL CONSTRUCT ANALYSES RELIABILITY ASSESSMENT

For the purpose of this research, the overall Cronbach's α is maximized by testing each construct and determining if any items could be deleted to improve the reliability. The following sections cover the reliabilities for each individual item.

6.5.1. Usefulness

The Cronbach's α for perceived usefulness (Gefen *et al*., 2003) is 0.945; greater than the recommended limit of 0.7. No deletion is recommended, because it would not improve the current α. This claim is supported by the corrected item-to-total correction, which is greater than the recommended range of 0.3 (Field, 2005).

6.5.2. Subjective Norm

The Cronbach's α for subjective norms (Shih and Fang, 2004) is 0.945, which is considered excellent and much better than the recommended α. No deletion is necessary to improve the

current α. The corrected item-to-total corrections are all greater than the recommended level (Field, 2005).

6.5.3. Trust

The Cronbach's α for trust (McKnight *et al*., 2002) is 0.948; greater than 0.7. No deletion is recommended. The corrected item-to-total correction is greater than 0.3 (Field, 2005).

6.5.4. Perceived Enjoyment

The Cronbach's α for enjoyment (Childers *et al*., 2001) is 0.819; above the recommended α level. However, the overall item statistics indicate that the deletion of items 3 and 7 would improve reliability and, therefore, improve the Cronbach's α to 0.934. This deletion receives support from the corrected item-to-total corrections of 0.198 and 0.200, which are less than the recommended level (Field, 2005).

6.5.5. Perceived Site Quality

The Cronbach's α for perceived site quality (McKnight *et al*., 2002) is 0.928; well above the recommended level. No deletion is recommended, as supported by the corrected item-to-total corrections, which are greater than the recommended range of 0.3 (Field, 2005).

6.5.6. Continuance Intentions

The Cronbach's α for continuance intentions (Yang and Peterson, 2004) is 0.961; again above the recommended α of 0.7. No deletion is recommended or necessary. The corrected item-to-total corrections are all greater than 0.3 (Field, 2005).

6.6. SPLIT-HALF MODEL RELIABILITY STATISTICS

The split-half model divides a scale into two parts and examines the correlation between them (Nunnally 1979; Field, 2005). The split-half model shows a value of 0.867 for the Spearman-Brown reliability coefficient, which is better than the 0.7 value required by Kline's criterion and most other researchers. The Cronbach's α for the two parts also is very close (0.947 and 0.947), which meets Straub *et al*.'s (2004) requirement of Cronbach's $\alpha > 0.60/0.70$ and < 0.95, see Table 6.20.

TABLE 6.20: RELIABILITY STATISTICS

Cronbach's α	**Part 1**	Value	0.947
		N of Items	18(a)
	Part 2	Value	0.947
		N of Items	17(b)
	Total N of Items		35
Correlation Between Forms			0.766
Spearman-Brown Coefficient	Equal Length		0.867
	Unequal Length		0.867
Guttman Split-Half Coefficient			0.867

6.7. EXPLORATORY FACTOR ANALYSIS

To examine the questionnaire dimensions and make sure all items are loading on the relevant constructs, exploratory factor analysis is used in the research (Kline, 2005). Using the SPSS package, version 13.0, exploratory factor analysis was conducted with maximum likelihood and direct Oblimin rotation. This was used to check that items loaded on the correct variable and to identify any substantial cross loading.

As stated by Hair *et al*., 2006, exploratory factor analysis consists of several steps:

- First, the correlation matrix of all proposed variables is produced.
- The next stage is to decide the number of factors to be extracted, or the rule for the number of factors to be extracted.
- To make the data and factors more understandable and meaningful, the choice of selecting the rotation method is decided.
- The statistical findings of the selected factors can be then used in the research.

The Pearson's correlation analysis was conducted as a first step to explore the relationship between the variables and test multicollinearity between the independent variables. The correlation between the independent variables should have Pearson's r not exceeding 0.80, as variables with a coefficient exceeding 0.80 may indicate multicollinearity, which is considered to be a problem because it is more difficult to ascertain the effect of any single construct owing to the interrelationships that may exist (Hair *et al*., 2006;.

6.7.1. Validity of Factor Analysis

Using SPSS 13.0 statistical software, Kaiser-Myer-Oklin's (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity were used to test the collected research data in order to determine whether a factor analysis should be carried out (Field, 2005). KMO is known as one of the best measures for discovering the suitability of a set of data for factor analysis (Field, 2000). The value of KMO should be greater than or equal to 0.5 (Field, 2000).

The next stage is to determine the number of factors extracted by using the eigenvalues method (Hair *et al*, 2006). In addition, communalities for all the items and factor analysis extraction with maximum likelihood (ML) procedure with direct Oblimin rotation were tested. The purpose of using ML procedure in all cases was because it continues to be the most widely used approach and is the default in most Structural Equation Modelling (SEM) programs. Actually, ML has proven fairly robust to violations of the normality assumption (Hair *et al*., 2006). Other researchers compare ML with other techniques and it produces reliable results under many circumstances (Olsson *et al*., 2000; Olsson, Foss, and Breivik, 2004). Additionally, ML provides a simple structure that is needed for easy interpretation. Direct Oblimin is used in this research as factor rotation method. No specific rules or compelling analytical reasons have been developed to guide researchers when choosing one rotational method over another (Hair *et al*., 2006). The choice of selecting the rotational method should be made on the basis of the particular research problem need. Oblique rotation methods, which include direct Oblimin, are "best suited to the goal of obtaining several theoretically meaningful factors or constructs because, realistically, few constructs in the real world are uncorrelated" (Hair *et al*., 2006). Furthermore, the oblique rotation was used as it represents the clustering of variables more accurately (Tabachnick and Fidell, 2007).

It is very important to decide how the factors will be effectively extracted. Researchers are always faced with the dilemma of how to decide the correct number of indicators needed per construct. By default, SPSS 13.0 uses Kaiser's criterion, which states that factors with eigenvalues greater than 1 are retained. This rule applies provided that the sample size exceeds 250 observations, there are less than 30 variables and the average communalities exceed 0.5. Jolliffe's (2002) criterion calls for factors with eigenvalues greater than 0.7 to be retained, but there is little reason to recommend it over Kaiser's (Field, 2005). As suggested by Hair *et al*. (2006), only factors with eigenvalues greater than 1 were maintained in the proposed model. Additionally, Hair indicated that to determine the minimum acceptable

loading for any measuring construct, only items with loading of 0.5 or greater are considered practically significant (Hair *et al*., 2006).

Latent constructs should be indicated by at least three measured variables, preferably four or more (Hair *et al*., 2006). Some researchers prefer many indicators per construct in an attempt to fully represent the construct and maximize reliability (Hair *et al*., 2006). In contrast, other researchers encourage using the smallest number of indicators per construct to adequately represent a construct, even though more items produce higher reliability estimates and generalization (Bacon, Sayer, and Young, 1995). Here, Kaiser's cut-off criterion was used in this analysis by accepting only factor loadings of 0.5 or greater; the sample size met the requirements, and maintaining at least four items per construct (Hair *et al*., 2006). Items with low factor loading, less than 0.5, can be dropped from the reflective model without serious consequences as long as a construct maintains a sufficient number of indicators, i.e., a minimum of three (Hair *et al*., 2006). As suggested by Hair, all problematic items were deleted and not considered for any further statistical analysis after the pilot test and the initial factor analysis (Hair, 2006). (See Appendix F for pilot study initial statistical analysis.) After the deletion, the factor analysis was conducted again. In the repeated statistical factor analysis using the maximum likelihood procedure with direct Oblimin rotation, the scale reduced to 34 items. As shown on Table 6.21, the KMO test resulted in a value of 0.963: an excellent value according to Hutcheson and Sofroniou (1999) and Kaiser (1974), and Bartlett's Test of Sphericity (chi-square = 18207.596 with 561 degrees of freedom). These results allow us to establish with confidence that the factor analysis is appropriate for this data (Field, 2000).

Using the eigenvalues method (Hair, 2006), the initial maximum likelihood procedure with direct Oblimin rotation for the thirty four items generated six factors that account for 79.417% of the variance at a total of 1.039 eigenvalues, see Table 6.22. The six extracted factors represent the following variables:

- Factor 1 consists of six items that represent continuance intention to shop.
- Factor 2 consists of six items that represent subjective norm.
- Factor 3 consists of four items that represent trust.
- Factor 4 consists of six items that represent perceived usefulness.
- Factor 5 consists of five items represent perceived enjoyment.
- Factor 6 consists of five items represent perceived site quality.

Furthermore, factor loading with maximum likelihood procedure with direct Oblimin rotation and communalities were investigated. To start, the researcher retested Cronbach's alpha reliability, where all scales had very high alpha ranging from 0.928 to 0.961, which is well above the recommended acceptable limit of 0.7 (Hair *et al*, 2006). All factors loaded above 0.5, the acceptable value suggested by Hair, 2006, as seen in Table 6.23. There were no cross-loadings above 0.4 in any items. Items loaded with values of 0.5 or above are used in the statistical analysis. Table 6.24 indicate that the communalities for all items were above the acceptable value 0.5, which is considered to be a satisfactory outcome.

TABLE 6.21: KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		**0.963**
Bartlett's Test of Sphericity	Approx. Chi-Square	18207.596
	df	561
	Sig.	0.000

TABLE 6.22: TOTAL VARIANCE EXPLAINED

Factor	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**			**Rotation Sums of Squared Loadings(a)**
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**	**Total**
1	18.723	55.067	55.067	18.283	53.775	53.775	11.553
2	2.978	8.758	63.825	2.631	7.738	61.513	7.332
3	1.780	5.236	69.061	1.519	4.467	65.980	11.095
4	1.359	3.998	73.058	1.253	3.684	69.664	13.118
5	1.123	3.303	76.362	0.875	2.573	72.236	13.600
6	1.039	3.055	79.417	0.877	2.580	74.817	13.512
7	0.864	2.542	81.959				
8	0.714	2.100	84.059				

Extraction method: maximum likelihood.
a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

TABLE 6.23: EXPLORATORY FACTOR LOADING (PATTERN MATRIX)

	Factor					
	1	**2**	**3**	**4**	**5**	**6**
Continuance Intention to Use - 3	0.912					
Continuance Intention to Use - 4	0.887					
Continuance Intention t Use - 2	0.835					

Continuance Intention to Use - 5	0.681					
Continuance Intention to Use 1	0.626					
Continuance Intention to Use - 6	0.599					
Subjective Norms 4		0.887				
Subjective Norms 5		0.857				
Subjective Norms 6		0.833				
Subjective Norms 3		0.621				
Subjective Norms 2		0.535				
Subjective Norms 1		0.530				
Trusting Beliefs Integrity 4			0.943			
Trusting Beliefs Integrity 2			0.942			
Trusting Beliefs Integrity 1			0.796			
Trusting Beliefs Integrity 3			0.733			
Perceived Usefulness 4				0.932		
Perceived Usefulness 5				0.916		
Perceived Usefulness 3				0.871		
Perceived Usefulness 6				0.857		
Perceived Usefulness 2				0.768		
Perceived Usefulness 1				0.653		
Perceived Enjoyment 5					0.884	
Perceived Enjoyment 6					0.878	
Perceived Enjoyment 4					0.625	
Perceived Enjoyment 8					0.551	
Perceived Enjoyment 2					0.514	
Perceived Site Quality 3						0.880
Perceived Site Quality 2						0.868
Perceived Site Quality 1						0.803
Perceived Site Quality 4						0.723
Perceived Site Quality 5						0.646

a Rotation converged in 9 iterations.

TABLE 6.24: COMMUNALITIES

	Initial	**Extraction**
Perceived Usefulness 1	0.641	0.627
Perceived Usefulness 2	0.668	0.665
Perceived Usefulness 3	0.783	0.808
Perceived Usefulness 4	0.794	0.832
Perceived Usefulness 5	0.800	0.833
Perceived Usefulness 6	0.721	0.736
Trusting Beliefs Integrity 1	0.776	0.793
Trusting Beliefs Integrity 2	0.811	0.858
Trusting Beliefs Integrity 3	0.765	0.779
Trusting Beliefs Integrity 4	0.824	0.878
Perceived Site Quality 1	0.761	0.785
Perceived Site Quality 2	0.708	0.742
Perceived Site Quality 3	0.728	0.781

Perceived Site Quality 4	0.704	0.713
Perceived Site Quality 5	0.617	0.627
Perceived Enjoyment 2	0.740	0.736
Perceived Enjoyment 4	0.566	0.611
Perceived Enjoyment 5	0.804	0.854
Perceived Enjoyment 6	0.830	0.886
Perceived Enjoyment 8	0.736	0.735
Subjective Norms 1	0.767	0.609
Subjective Norms 2	0.776	0.618
Subjective Norms 3	0.766	0.601
Subjective Norms 4	0.904	0.945
Subjective Norms 5	0.880	0.899
Subjective Norms 6	0.834	0.839
Continuance Intention to Use - 1	0.801	0.772
Continuance Intention to Use - 2	0.888	0.885
Continuance Intention to Use - 3	0.915	0.943
Continuance Intention to Use - 4	0.891	0.909
Continuance Intention to Use - 5	0.788	0.761
Continuance Intention to Use - 6	0.675	0.622

Extraction method: maximum likelihood.

6.8. SUMMARY

This research targets people actively engaged in online shopping in Saudi Arabia. The survey collects data from 928 participants in Saudi Arabia, of which 70% were women and 30% were men. Most of the participants (92.8%) came from three main regions in Saudi Arabia: 26.2% from the East, 26.4% from the Central (Middle) region, 40.2% from the West, with the remaining 7.2% from North and South regions. Moreover, 25.2% of the overall participants were students, 31% work in the public sector (government employees), 36.7% in the private sector, 7% consider themselves business people, and less than 1% others which includes housewives. Since Saudi Arabia is a big country with multiple traditions and subcultures, the online survey is suitable for collecting data from large geographical areas. This investigation attempted to analyze the demographics of the survey participants using descriptive statistics, such as frequencies and percentages, which help display the data meaningfully for the purposes of reporting and supporting the survey findings.

This chapter summarizes the reliability tests conducted, using the corrected item-to-total correlations and Cronbach's α to determine the reliability of the proposed model. Cronbach's α was used to examine the reliability of each construct; passing this test is a prerequisite for further analysis. All initial scale items were taken from previously validated measures in IS literature or TAM and ECT research. The Cronbach's α scores of the variables were high, ranging from 0.928 to 0.961. This is well above the accepted lower limit of 0.7 (Hair *et al*,

2006). As suggested by Hair *et al*. (2006), only factors with eigenvalues greater than 1 were maintained in the proposed model. Additionally, Hair indicated that to determine the minimum acceptable loading for any measuring construct, only items with loading of 0.5 or greater were considered practically significant (Hair *et al*., 2006). Moreover, the researcher used Kaiser's cut-off criterion in this analysis by accepting only factor loadings of 0.5 or greater; the sample size met the requirements, maintaining at least four items per construct (Hair *et al*., 2006).

The next chapter reports further quantitative data analysis, including factor analysis, discriminant validity, and structural equation modelling (SEM) using AMOS software, in order to test the hypotheses.

CHAPTER 7: QUANTITATIVE ANALYSIS

7.1. INTRODUCTION

It is crucial in any research or data analysis to make sure that the measurement tools are able to clarify and illustrate the research constructs. In the previous chapter, a reliability test was conducted using the corrected item-total correlations and Cronbach's α to test the reliability of the proposed model. The findings indicate that the variable instruments used in the survey contain good content and construct reliability for the items measured in the survey. Also, descriptive results of the questionnaires were outlined.

In this chapter, deeper quantitative analysis will be conducted to test the research variables Convergent and Discriminant validity by Confirmatory Factor Analysis (CFA) using AMOS. Furthermore, this chapter will validate the research model using Structural Equation Modelling (SEM) using AMOS software and then will illustrate the modified model after taking into consideration the recommendation from the modification indices (MI). Finally, several invariance analyses will be conducted using group comparisons, such as gender, age, geographical locations, and online shopping spending. The coming sections will illustrate the results of each analysis in more detail and then present the final research constructs.

7.2. CONVERGENT AND DISCRIMINANT VALIDITY

Convergent validity reveals the extent to which the measures for a variable act as if they measure the underlying theoretical construct because they share variance (Schwab, 1980). In other words, convergent validity examines whether individual indicators are indeed measuring the constructs they are purported to measure (Premkumar and Bhattacherjee, 2008). Internal consistency reliability is generally considered a necessary, but not sufficient, condition for convergent validity (Schwab, 1980). Hair *et al*. (2006) suggest that variables with factor loadings greater than 0.5 exhibit evidence of convergent validity. Table 7.25 and Table 7.26 show that all exploratory and confirmatory factor loadings for all selected constructs are greater than 0.50 (Hair *et al*., 2006).

The average variance extracted (AVE) is the average measure of convergence among a set of items representing a latent construct; that is, the average percentage of variation explained by the items (Hair *et al*., 2006). It can be calculated by summing the squared factor loadings. Fornell and Larcker's (1981) and Hair *et al*.'s (2006) criterion that an average variance

extracted (AVE) should be 0.50 or more was used in this research to access the average variance extracted for all constructs. Values of 0.5 or higher indicate significant variance captured by the measurement model (Fornell and Larcker, 1981; Hair *et al*., 2006). All AVEs in this study exceed the cut-off value of 0.5, see Table 7.25.

Discriminant validity exists if the component items of a scale assess only one construct (Kerlinger, 1986). Discriminant validity thus refers to the degree to which components of the theoretically distinct concepts are unique (Hulland *et al*., 1996). It assesses whether individual indicators can adequately distinguish between different constructs, and is assured if the square root of AVE for each construct is greater than the correlation between that and all the other constructs in the CFA (Premkumar and Bhattacherjee, 2008). It is normally established through factor analysis. The correlations between constructs range from 0.298 to 0.778. The correlation matrix in Table 7.26 indicates that the square root of AVE (listed in bold and italic along the principal diagonal) of each construct was higher that the corresponding correlation values for that variable in all cases, meeting Hair *et al.*'s criterion (2006).

To conclude, the variables reliability of the model was tested through the squared multiple correlation value (average variance extracted). The squared multiple correlation is considered high if it is above 0.5; moderate if it is between 0.3 and 0.5; and poor if less that 0.3 (Holmes-Smith, 2000). The squared multiple correlation of variance ranges from 0.67 to 0.95 (AVE from 75% to 87%), illustrating an acceptable variance (Holmes-Smith, 2000), see Table 7.26. The research findings support that the research constructs are distinct. Therefore, the convergent and discriminant validity of the research measurements are satisfactory.

TABLE 7.25: MEASUREMENT MODEL (CONFIRMATORY FACTOR ANALYSIS)

Constructs/Indicators	S. Factor Loading	S.E	C.R.	AVE	Squared Multiple Correlation
Site Quality (SQ)				0.758	
SQ 1	0.918	0.043	24.143		0.84
SQ 2	0.850	0.042	23.400		0.72
SQ 3	0.841	0.041	22.731		0.71
SQ 4	0.872	—	—		0.76
Perceived usefulness				0.817	
PU 3	0.906	0.031	31.931		0.82
PU 4	0.892	0.030	32.097		0.80
PU 5	0.937	—	—		0.88
PU 6	0.880	0.031	30.848		0.77

Trust				0.814	
Trusting Beliefs Integrity 1	0.903	0.032	31.167		0.82
Trusting Beliefs Integrity 2	0.897	0.025	38.232		0.80
Trusting Beliefs Integrity 3	0.889	0.030	30.023		0.79
Trusting Beliefs Integrity 4	0.919	__	__		0.85
Subjective Norm				0.819	
SN 3	0.757	__	__		0.67
SN 4	0.976	0.057	23.251		0.95
SN 5	0.966	0.057	22.815		0.93
SN 6	0.904	0.059	21.415		0.82
Enjoyment				0.756	
Enj 4	0.704	__	__		0.79
Enj 5	0.931	0.066	19.223		0.87
Enj 6	0.935	0.067	19.479		0.88
Enj 8	0.887	0.066	18.058		0.68
Continuance Intention				0.872	
CIU 1	0.872	0.026	34.199		0.76
CIU 2	0.938	0.020	47.621		0.88
CIU 3	0.975	__	__		0.95
CIU 4	0.946	0.020	50.386		0.90

TABLE 7.26: FINAL SCALE PROPERTIES AND CORRELATIONS

				Factor Correlations					
Model Constructs	**Mean**	**Std. Dev.**	**Cronbach's α**	**SQ**	**PU**	**Trust**	**SN**	**Enj**	**CIU**
SQ	21.52	5.31	0.926	***0.871***					
PU	21.89	5.59	0.949	0.740	***0.904***				
Trust	21.68	5.31	0.949	0.676	0.719	***0.902***			
SN	18.73	6.19	0.947	0.298	0.316	0.440	***0.905***		
Enj	20.80	5.07	0.935	0.464	0.494	0.686	0.547	***0.869***	
CIU	21.30	5.49	0.961	0.440	0.468	0.650	0.565	0.778	***0.934***
Total Cronbach's α			0.967						

Diagonal elements represent square root of the AVE value (listed in bold and italic)

7.3. TESTING THE HYPOTHESES WITH STRUCTURAL EQUATION MODEL ANALYSIS

For the purpose of this research, 9 hypotheses have been formulated to test the conceptual framework of online continuance intention shopping. Hypotheses are summarised in Table 7.81, at the end of the chapter. The next stage is to examine how the proposed variables are

related. The Structural Equation Model (SEM) is used with AMOS 5.0 software (Arbuckle, 2003). SEM has an advantage over other statistical methods in its capability to include several observed and latent variables at the same time when predicting paths (Sharma, 1996). Additionally, SEM focuses more on the pattern of relationships across the samples than on individual observations (Hair *et al*., 2006). Since latent variables cannot be observed or measured directly, unobserved variables are linked to indicators that are observable. Therefore, SEM can facilitate their measurement (Byrne, 2001).

The research then takes a further step is to explain how well the observed indicators serve as a measurement instrument for the proposed model latent variables. The model was evaluated with the use of CFA on the basis of maximum likelihood (ML). Before conducting the Confirmatory Factor Analysis (CFA), Cronbach's alpha was used to examine the reliability of the measures. All scales had very high alpha, ranging from 0.928 to 0.961, well above the recommended acceptable limit of 0.7 (Hair *et al*, 2006). The goodness-of-fit for the proposed model was assessed using various criteria, as recommended by Hair (Hair *et al*, 2006). Chi-square (CMIN) is used in the model assessment to test the closeness of fit between the unrestricted sample covariance and the restricted covariance matrix (Byrne, 2001; Hair *et al*., 2006). Having a larger value for chi-square compared to the degrees of freedom suggests that the observed matrices and estimated matrices are significantly different. On the other hand, an insignificant chi-square (CMIN) ($p>0.05$) indicates a satisfactory fit of the model (Holmes-Smith, 2000). In other words, the higher the probability, the closer the model to a great fit (Byrne, 2001). When working with large research samples, like this research with 928 participants, it is rare to find a non-significant chi-square, which makes it preferable to examine a range of other fit indices before a model is rejected (Anderson and Gerbing, 1988). As chi-square is sensitive to sample size and model size, it is not considered a very good measure of fit (Hair *et al*., 2006). Other goodness-of-fit indices were therefore considered in this research. These included chi-square/degrees-of-freedom (CMIN/DF), root mean square residual (RMR), root mean square error of approximation (RMSEA), goodness-of-fit index (GFI), comparative fit index (CFI), normal fit index (NFI), incremental fit index (NFI) and relative fit index (RFI).

The CFI is a measure of the covariance in the data; values close to one indicate good fit (Hair *et al*., 2006). The goodness-of-fit (GFI) is another measure of absolute fit that used in this research. It is a measure of the relative amount of variance and covariance in the sample that

are explained by the model (Hair *et al*., 2006). As with the CFI, the GFI index ranges from zero to one, with values closes to one indicating a good fit (Hair *et al*., 2006).

The root mean square residual (RMR) is the average value of all standardised residuals. It ranges from zero to one, where a value less than or equal to 0.08 indicates that the model fits the data well (Hair *et al*., 2006; Hulland *et al*., 1996). Furthermore, the root mean square error of approximation (RMSEA) takes into account the error of approximation in the research population. It represents how well the collected data from the surveyed sample fits the population covariance matrix (Hair *et al*., 2006). The limiting value of RMSEA for a good model is debatable, but values that are below 0.10 are acceptable (Hair *et al*., 2006). Byrne suggested that RMSEA values less than 0.05 indicate a good fit, whilst values as high as 0.08 indicate a reasonable fit (Byrne, 2001).

Finally, the critical ratio (CR) for standardised estimates of regression weight measures of the model was used in this research. It (CR) is the estimate divided by its standard error, and should be greater than 1.96 for the factor loading (Hair *et al*., 2006). Thus, if the CR of a regression weight is greater that 1.96 (CR>1.96), then that proposed path parameter covariance is significant at the 0.05 level (Hair *et al*., 2006).

Structural Equation Modelling (SEM) requires a larger sample size compared to other multivariate approaches because some of the statistical algorithms used by SEM programs are unreliable with small sample sizes (Hair *et al*., 2006). On the other hand, sample sizes greater than 400 make SEM more sensitive to goodness-of-fit measures that suggest poor fit (Quinones, Ford, and Teachout, 1995). Therefore, when the number of variables in the model is six or more, sample size in the range of 150 to 500 is suggested when using SEM with AMOS software (Hair *et al*., 2006). Taking this into consideration, the research collected data will be split randomly into two halves. First, a model will be fitted to a calibration sample (one random half of 463 participants) using SEM with AMOS as discussed later in this chapter. Then, the model fit is checked on the validation sample (the other half of the sample 465 participants) for the purpose of validation.

7.4. CONFIRMATORY FACTOR ANALYSIS (CFA)

The purpose of the questionnaire was to test the proposed model, which describes the relationship between the proposed critical e-shopping factors and the continuance e-shopping intention in Saudi Arabia. The questionnaires reflect the proposed research model and its

variables. The results of the statistical analysis from the collected data presented in the previous chapter and the confirmatory factor analysis will discussed in this section. Then the proposed research hypotheses, and their reliability and validity will be discussed.

Using Structural Equation Modelling with AMOS software, the maximum likelihood method was used to measure the overall variable paths. The six variables in this model explained a total of 61% of the variance (Holmes-Smith, 2000). Since the CR, CMIN/DF, RMR, RMSEA, GFI, and CFI are all within the acceptable level, the model fitted the data well. As illustrated by Table 7.28, each factor of the hypothesised paths loaded statistically significantly positive, with critical ratio exceeding 1.96 (CR>1.96) ranging from 5.045 to 15.781, indicating a acceptable result (Hair *et al*., 2006; Holmes-Smith, 2000).

Additionally, skew and kurtosis all lay within the acceptable range of -2.5 and +2.5, which indicate research data are normally distributed (Hair 2006). See Table 7.27.

TABLE 7.27: ASSESSMENT OF NORMALITY (FINAL MODEL)

Variable	**Skew**	**C.R.**	**Kurtosis**	**C.R.**
SN6	-0.341	-4.238	-0.744	-4.626
SN5	-0.552	-6.863	-0.455	-2.829
SN4	-0.476	-5.919	-0.564	-3.508
SN3	-0.422	-5.252	-0.537	-3.341
PSQ1	-1.143	-14.218	1.097	6.822
PSQ2	-0.816	-10.151	0.223	1.386
PSQ3	-1.152	-14.327	1.045	6.498
PSQ4	-0.944	-11.737	0.478	2.970
CIL1	-0.940	-11.690	0.627	3.900
CIL2	-0.911	-11.332	0.414	2.572
CIL4	-0.822	-10.221	0.238	1.478
CIL3	-0.837	-10.404	0.240	1.494
PE6	-0.809	-10.056	0.261	1.621
PE5	-0.656	-8.159	0.040	0.246
PE8	-0.972	-12.093	0.841	5.230
PE4	-0.531	-6.606	-0.150	-0.934
TBI1	-0.817	-10.166	0.387	2.406
TBI2	-0.911	-11.333	0.754	4.686
TBI3	-0.888	-11.038	0.631	3.925
TBI4	-0.899	-11.182	0.640	3.979
PU6	-0.983	-12.223	0.515	3.203
PU3	-1.087	-13.514	0.617	3.836
PU5	-1.222	-15.200	1.140	7.086
PU4	-1.098	-13.652	0.729	4.532
Multivariate			462.839	199.557

Figure 7.22 and Table 7.28 illustrates the regression weights and Table 7.29 shows the goodness-of-fit indices. The proposed model of continuance intention to e-shopping fits the data reasonably well.

TABLE 7.28: REGRESSION WEIGHTS FOR ORIGINAL MODEL

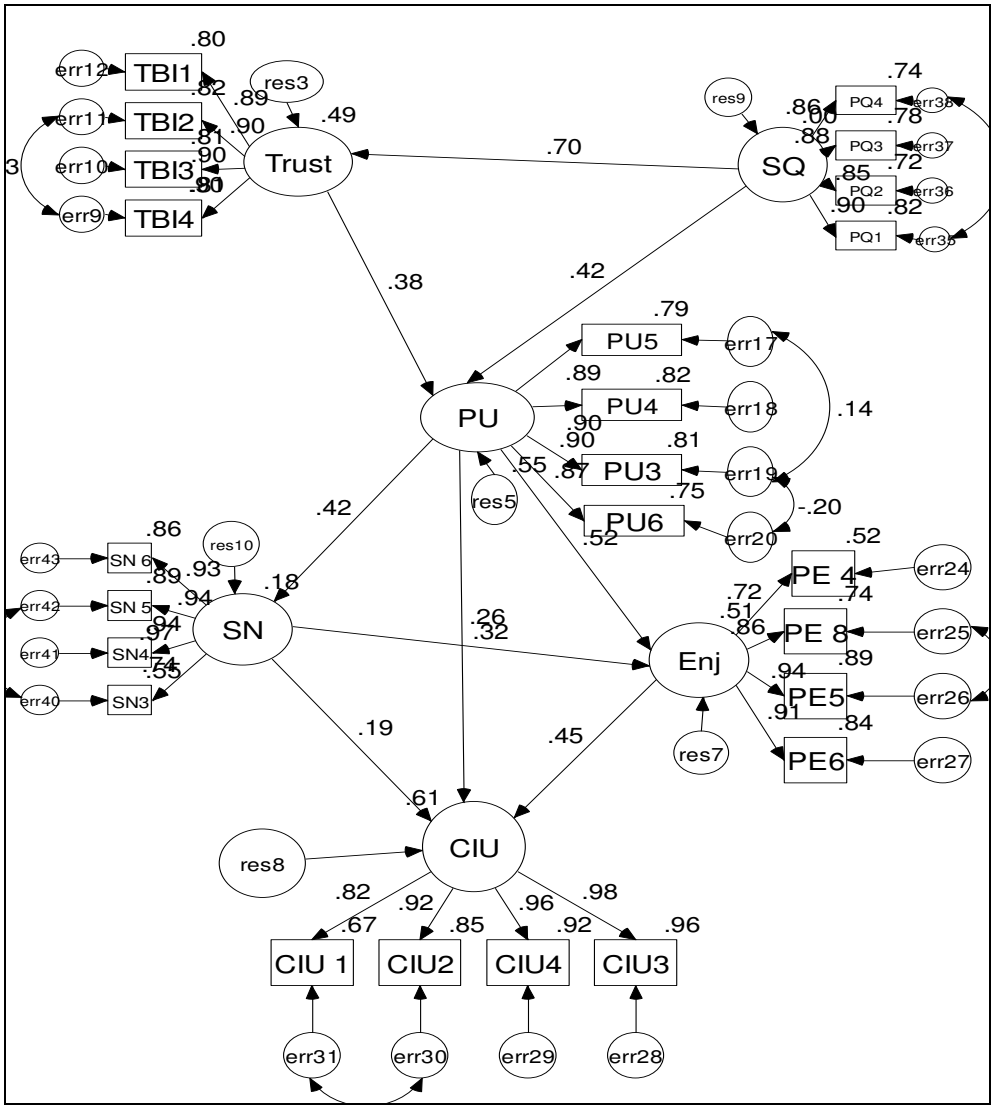
Paths			Standardized Regression Weights (B)	Standard Error S.E.	Critical Ratio C.R.	P Value
Trust	<---	SQ	0.698	0.042	15.781	***
PU	<---	SQ	0.422	0.051	7.927	***
PU	<---	Trust	0.381	0.055	7.150	***
SN	<---	PU	0.422	0.048	8.556	***
Enj	<---	PU	0.518	0.042	10.845	***
Enj	<---	SN	0.322	0.039	7.427	***
CIU	<---	SN	0.194	0.046	5.045	***
CIU	<---	Enj	0.453	0.067	8.933	***
CIU	<---	PU	0.263	0.052	5.957	***

*** $p < 0.001$.

TABLE 7.29: GOODNESS-OF-FIT INDICES FOR ORIGINAL MODEL

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**	**Value**
Chi-Square CMIN	NA	656.880
Degree of freedom	NA	236
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)	2.783
P value	p≤0.05 (Hair *et al*., 2006)	0.000
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)	0.176
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)	0.897
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)	0.966
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)	0.062

FIGURE 7.22: THE INITIAL PROPOSED STRUCTURAL MODEL



A closer examination on the SEM output finding in AMOS indicates that the model fit can be improved slightly. Table 7.30 illustrates the modification indices of the possible new paths, along with the predicted Regression Weights. A modification index is calculated for every possible relationship that is not free to be estimated that will show how much the overall model chi square (χ^2) value can be reduced by freeing that single path (Hair *et al*., 2006). A modification index of 4 or greater would suggest that the model fit could be improved significantly by freeing the corresponding path (Hair *et al*., 2006). The modification index suggests that if the analysis is repeated using Site Quality to predict Enjoyment as a free parameter, the chi square will fall by at least 21.599. As a result, its estimate will become larger by approximately 0.137 than it is in the present analysis. This suggested path is supported by previous literature. Thus, high quality e-shopping sites may result in the

perception that one's e-shopping experience is fun and enjoyable. Consumers are likely to experience greater enjoyment and have more fun completing a given task at an e-store that establishes high quality in terms of information-related as well as marketing-related attributes (Ha and Stoel, 2009). Furthermore, all other conditions being equal, e-store features that appeal to one's hedonic motivations, such as personalization and experiential/atmospheric quality dimensions, will support greater enjoyment and fun for the consumer (Childers *et al*., 2001).

Additionally, the modification index recommends another modification for the model. If the analysis is repeated using Trust to predict Subjective Norm as a free parameter, the chi square will fall by at least 5.206. As a result, its estimate will become larger by approximately 0.102 than it is in the present analysis. The suggested path to the research model by the modification indices is supported by previous literatures. Saudi Arabia is a gateway to the two holy mosques and is considered to be a conservative religious country. Previous research has reported that religion enhances trust among community members (e.g., Boudon 1987; Collins 2004; Shield 2002; Steadman and Palmer 1995; Weber 1958). In such cases, potential consumers of e-shopping are likely to look among their trusted opinion leaders, with initial experience for evaluative information and cues, within their social environment to increase their familiarity with the target site or the e-shopping site (Venkatesh and Davis 2000). Also, Luhmann (1979) stated trust increases the perceived certainty concerning other people's expected behaviour, e.g., recommending others to use a certain e-shopping site. Moreover, trust leads people to use a social complexity reduction strategy by being more ready to believe in people who are important to them (Luhmann, 1979).

TABLE 7.30: MODIFICATION INDICES (MI) (REGRESSION WEIGHTS)

Paths			**MI**	**Par Change**
SN	<---	Trust	5.206	0.102
Enj	<---	SQ	21.599	0.137

The recommendation from the modification indices above was applied to the model and retested for goodness-of-fit and path significance using SEM with AMOS software. Figure 7.23 and Table 7.31 and Table 7.32 illustrate the revised model goodness-of-fit indices. The revised model of continuance intention to e-shopping demonstrates better fit compared to the initial model in all goodness-of-fit metrics. These can be confirmed with the chi square CMIN = 598.081, CMIN/df = 2.556, RMR = 0.117, GFI = 0.904, CFI = 0.971, RMSEA =

0.058, which all fall within the required limits (Hair *et al*., 2006). Each factor of the hypothesised paths loaded statistically significantly positive, and with critical ratio exceeding 1.96 (CR>1.96) ranging from 3.215 to 15.856 (Hair *et al*., 2006; Holmes-Smith, 2000).

TABLE 7.31: REGRESSION WEIGHTS CALIBRATION SAMPLE (463 PARTICIPANTS)

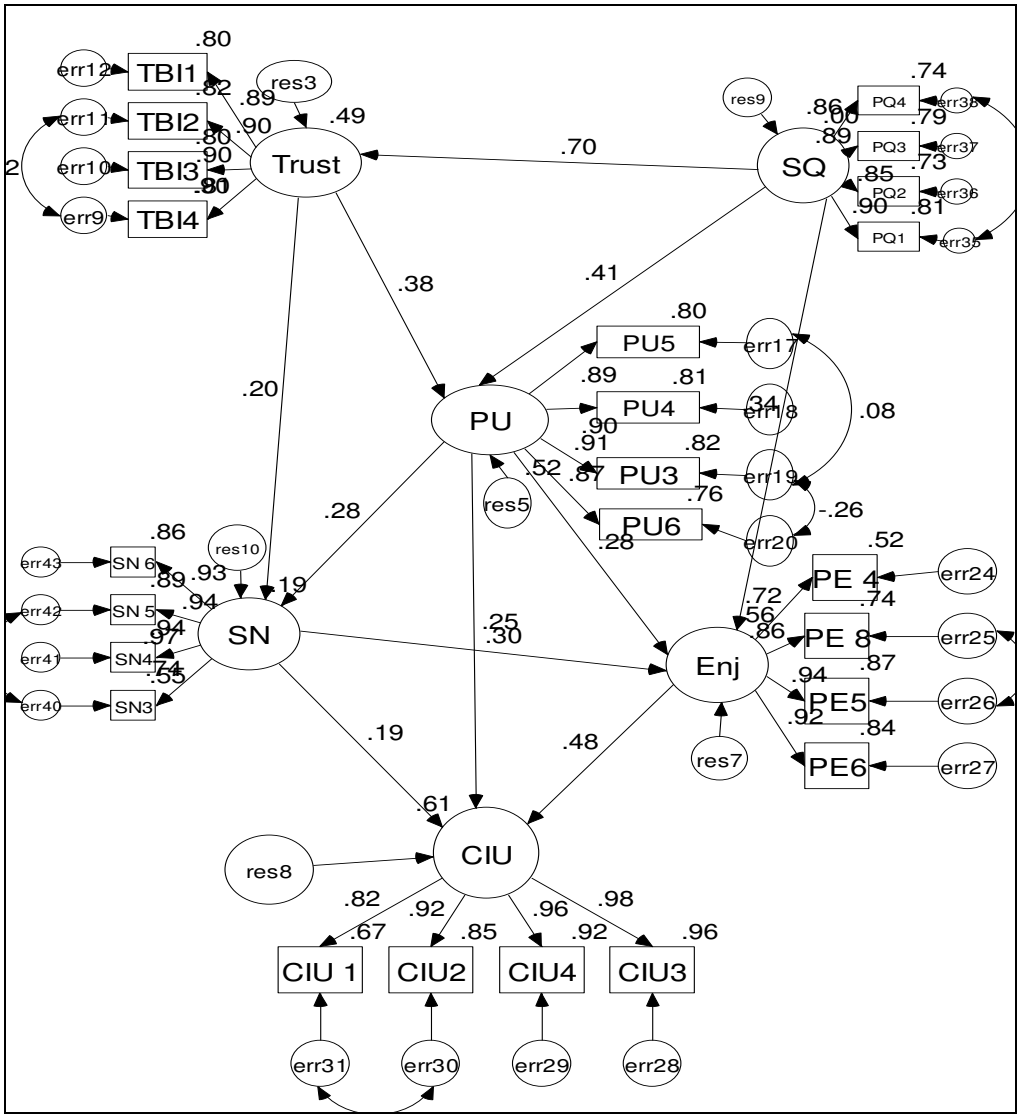
Paths			**Standardized Regression Weights *(B)***	**Standard Error S.E.**	**Critical Ratio C.R.**	**P Value**
Trust	<---	SQ	0.702	0.042	15.856	***
PU	<---	SQ	0.407	0.053	7.475	***
PU	<---	Trust	0.379	0.056	6.938	***
SN	<---	PU	0.279	0.062	4.395	***
SN	<---	Trust	0.201	0.063	3.215	0.001
Enj	<---	PU	0.285	0.045	5.591	***
Enj	<---	SN	0.304	0.037	7.388	***
Enj	<---	SQ	0.343	0.043	6.699	***
CIU	<---	SN	0.191	0.046	4.979	***
CIU	<---	Enj	0.476	0.067	9.402	***
CIU	<---	PU	0.245	0.050	5.693	***

*** $p < 0.001$.

TABLE 7.32: GOODNESS-OF-FIT INDICES FOR THE CALIBRATION SAMPLE (463 PARTICIPANTS)

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**	**Value**
Chi-Square CMIN	NA	598.081
Degree of freedom	NA	234
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)	2.556
P value	p≤0.05 (Hair *et al*., 2006)	0.000
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)	0.117
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)	0.904
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)	0.971
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)	0.058

FIGURE 7.23: FINAL RESEARCH MODEL



7.5. RE-TEST THE RESEARCH MODEL WITH THE REMAINING SAMPLE

SEM is sensitive to sample size which affects the goodness-of-fit indices (Quinones, Ford and Teachout, 1995). As this is relatively large total sample, it was split randomly into two halves, for re-validation and generalization purposes. When applying the same model to the validation sample, including the two paths recommended by the modification index, all factors of the hypothesized paths loaded statistically significantly positive, and with critical ratio exceeding 1.96 (CR>1.96), ranging from 2.226 to 17.598 (Hair *et al*., 2006; Holmes-Smith, 2000). See Table 7.33.

Applying the model to the validation sample shows a reasonable fit of the data as indicated in by the chi square CMIN = 616.514, CMIN/df = 2.635, RMR = 0.129, GFI = 0.902, CFI = 0.971, RMSEA = 0.059 (Hair *et al*., 2006), see Table 7.34.

TABLE 7.33: REGRESSION WEIGHTS FOR THE VALIDATION SAMPLE (465 PARTICIPANTS)

Paths			**Standardized Regression Weights *(B)***	**Standard Error S.E.**	**Critical Ratio C.R.**	**P Value**
Trust	<---	SQ	0.750	0.044	17.598	***
PU	<---	SQ	0.289	0.061	5.078	***
PU	<---	Trust	0.489	0.061	8.441	***
SN	<---	PU	0.138	0.055	2.226	0.026
SN	<---	Trust	0.405	0.061	6.180	***
Enj	<---	PU	0.257	0.033	5.720	***
Enj	<---	SN	0.204	0.031	5.372	***
Enj	<---	SQ	0.495	0.041	9.484	***
CIU	<---	SN	0.182	0.041	4.975	***
CIU	<---	Enj	0.567	0.071	10.873	***
CIU	<---	PU	0.178	0.040	4.328	***

*** $p < 0.001$.

TABLE 7.34: GOODNESS-OF-FIT INDICES FOR THE VALIDATION SAMPLE (465 PARTICIPANTS)

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**	**Value**
Chi-Square CMIN	NA	616.514
Degree of freedom	NA	234
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)	2.635
P value	p≤0.05 (Hair *et al*., 2006)	0.000
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)	0.129
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)	0.902
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)	0.971
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)	0.059

Finally, the researcher re-applied the same method by using the whole sample, 928 participants, to re-test the proposed model. Table 7.35 illustrates that when applying the same model to the whole sample, including the two paths recommended by the modification index, each factor of the hypothesised paths loaded statistically significantly positive, with the

critical ratio exceeding 1.96 (CR>1.96), ranging from 4.664 to 23.693 (Hair *et al*., 2006; Holmes-Smith, 2000).

Applying the whole collected data to the proposed model of continuance intention to e-shopping shows a reasonable fit of the data, which all fall within the required limit (Hair *et al*., 2006), see Table 7.36.

TABLE 7.35: REGRESSION WEIGHTS FOR THE WHOLE SAMPLE (928 PARTICIPANTS)

Paths			**Standardized Regression Weights *(B)***	**Standard Error S.E.**	**Critical Ratio C.R.**	**P Value**
Trust	<---	SQ	0.728	0.030	23.693	***
PU	<---	SQ	0.347	0.041	8.824	***
PU	<---	Trust	0.433	0.042	10.842	***
SN	<---	PU	0.207	0.041	4.664	***
SN	<---	Trust	0.305	0.044	6.731	***
Enj	<---	PU	0.271	0.027	8.012	***
Enj	<---	SN	0.258	0.024	9.240	***
Enj	<---	SQ	0.419	0.030	11.538	***
CIU	<---	SN	0.186	0.031	7.006	***
CIU	<---	Enj	0.521	0.049	14.331	***
CIU	<---	PU	0.212	0.032	7.111	***

*** $p < 0.001$.

TABLE 7.36: GOODNESS-OF-FIT INDICES FOR THE WHOLE SAMPLE (928 PARTICIPANTS)

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**	**Value**
Chi-Square CMIN	NA	857.610
Degree of freedom	NA	234
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)	3.665
P value	p≤0.05 (Hair *et al*., 2006)	0.000
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)	0.120
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)	0.930
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)	0.975
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)	0.054

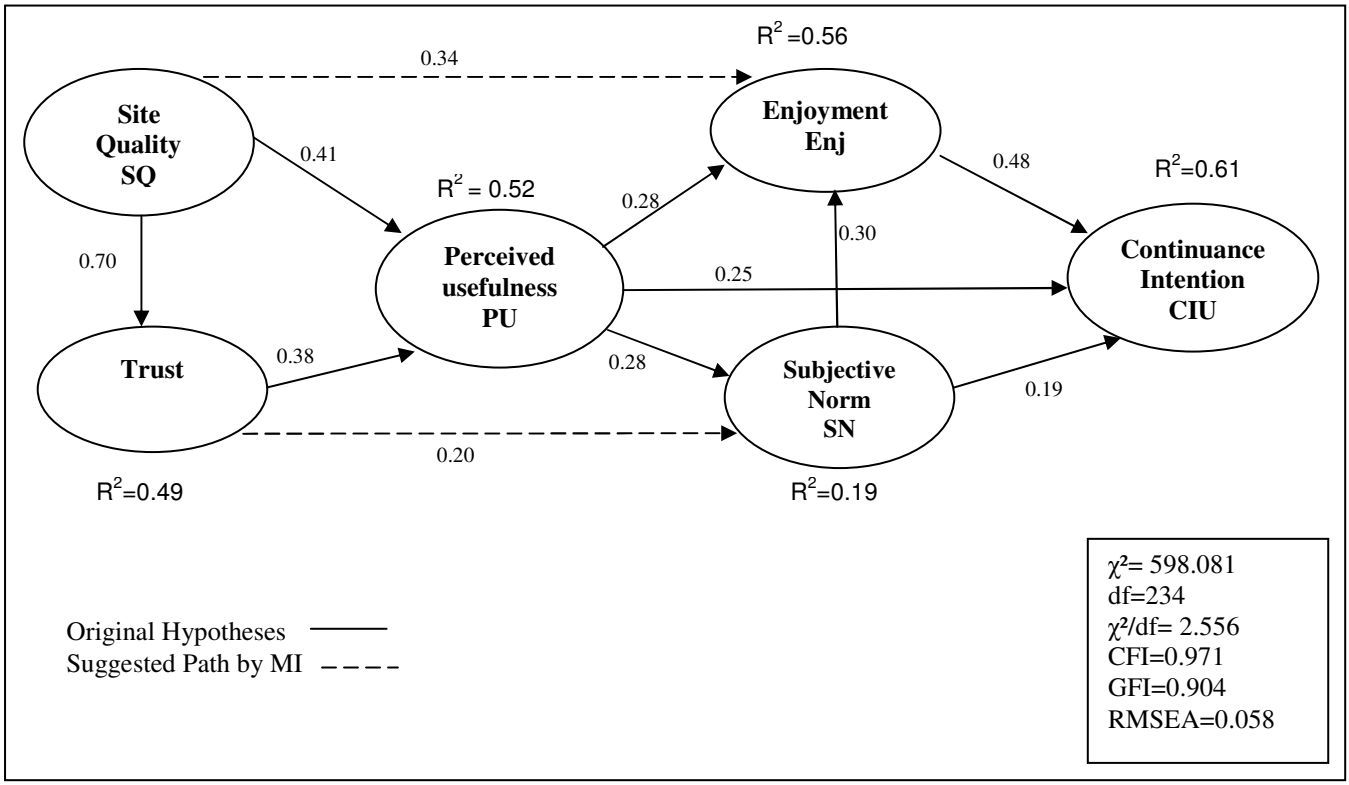
Therefore, the re-test process confirms that the changes to the model regarding the calibration sample, including the two paths recommended by the modification index, is confirmed on the

validation sample and the whole sample. As illustrated in Tables 7.31, 7.33, and 7.35, all hypothesised paths were statistically significant, positive, and with critical ratio exceeding 1.96 (CR>1.96). Additionally, Table 7.37 summarise that CR, CMIN/DF, RMR, RMSEA, GFI, and CFI all are being within the acceptable level, the goodness-of-fit of the researched model indicate that the model fitted the collected data well. Figure 7.24 provides a summary of the final revised research model.

TABLE 7.37: COMPARING GOODNESS-OF-FIT INDICES FOR THE CALIBRATION SAMPLE, THE VALIDATION SAMPLE, AND THE TOTAL SAMPLE

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**	**Value for the Calibration sample (463 participants)**	**Value for the Validation sample (465 participants)**	**Value for the total sample (928 participants)**
Chi-Square CMIN	NA	598.081	616.514	857.610
Degree of freedom	NA	234	234	234
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)	2.556	2.635	3.665
P value	p≤0.05 (Hair *et al*., 2006)	0.000	0.000	0.000
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)	0.117	0.129	0.120
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)	0.904	0.902	0.930
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)	0.971	0.971	0.975
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)	0.058	0.059	0.054

FIGURE 7.24: SUMMARY OF FINAL REVISED RESEARCH MODEL



7.6. DIRECT AND INDIRECT EFFECT ANALYSIS

SEM distinguishes between direct, indirect, and total effects (Jöreskog and Sörbom, 2001). A total effect consists of a direct, and one or more indirect effects. The direct effect is the relationship linking two constructs with a single arrow between them, i.e., a direct link between two constructs without any mediation (Hair *et al*., 2006). On the other hand, the indirect effect is a sequence of relationships with at least one mediating constructs involved (Hair *et al*., 2006), i.e., a sequence of two or more direct effects represented visually on the researched model by multiple arrows between constructs. The sum of the indirect and direct relationships between the constructs will constitute the total effect (Hair *et al*., 2006).

Both the indirect effect and the total effects can facilitate understanding of important questions and relationships that are not addressed when investigating the direct effect alone (Kline, 2005). The direct and indirect effects in Table 7.38 reveal that the greatest total influences of direct effects on continuance intentions come from Enjoyment (0.476). The next greatest influences derive come from Perceived Usefulness (0.245), followed by Subjective Norm (0.191). Additionally, Site Quality and Trust have indirect effect on continuance intention.

Furthermore, the direct and indirect effects can be seen in Table 7.38, Table 7.39 and Table 7.40. The findings revealed that Site Quality (SQ) received a positive indirect effect from Perceived Usefulness (PU), Subjective Norm (SN), Enjoyment (Enj), and Continuance Intention Use (CIU) via Trust. Additionally, Perceived Usefulness (PU) also has a positive indirect effect on Enjoyment (Enj), and Continuance Intention to Use (CIU) via Trust and SN. Trust also has a positive indirect effect on Enj, and CIU, and SN via PU. Finally, Subjective Norm (SN) has a positive indirect effect on Continuance Intention to Use (CIU) via PU, Trust and Enj.

Therefore, Site Quality, Trust, Perceived Usefulness, Enjoyment and Subjective Norm all play significant roles for continuance intentions regarding online shopping in Saudi Arabia.

TABLE 7.38: DECOMPOSITION OF EFFECTS ON CONTINUANCE INTENTIONS

Construct	**CIU**		
	Direct	Indirect	Total
SQ	--------	0.529	0.529
TRUST	--------	0.247	0.247
PU	0.245	0.229	0.474
SN	0.191	0.144	0.336
Enj	0.476	--------	0.476
$R^2 = 0.61$			

TABLE 7.39: STANDARDIZED DIRECT EFFECTS

	SQ	**Trust**	**PU**	**SN**	**Enj**	**CIU**
Trust	0.702	.000	.000	.000	.000	.000
PU	0.407	0.379	.000	.000	.000	.000
SN	0.000	0.201	0.279	.000	.000	.000
Enj	0.343	.000	0.285	0.304	.000	.000
CIU	0.000	.000	0.245	0.191	0.476	.000

TABLE 7.40: STANDARDIZED INDIRECT EFFECTS

	SQ	**Trust**	**PU**	**SN**	**Enj**	**CIU**
Trust	0.000	.000	.000	.000	.000	.000
PU	0.266	.000	.000	.000	.000	.000
SN	0.329	0.106	.000	.000	.000	.000
Enj	0.291	0.201	0.085	.000	.000	.000
CIU	0.529	0.247	0.229	0.144	.000	.000

TABLE 7.41: STANDARDIZED TOTAL EFFECTS

	SQ	Trust	PU	SN	Enj	CIU
Trust	0.702	.000	.000	.000	.000	.000
PU	0.672	0.379	.000	.000	.000	.000
SN	0.329	0.307	0.279	.000	.000	.000
Enj	0.634	0.201	0.369	0.304	.000	.000
CIU	0.529	0.247	0.474	0.336	0.476	.000

7.7. INVARIANCE ANALYSIS

To compare the calibration sample versus validation samples, factorial invariance (metric equivalence) assesses the extent to which measures of the two groups have the same meaning (Hair *et al*., 2006). The findings in Table 7.42 indicate outstanding goodness-of-fit indices across the groups. Assuming the unconstrained model to be correct, compared with constraining all factorial paths, they remain invariant across the groups, see Table 7.43. According to these results, the changes in chi-square and df are not significant (p = 0.088), exceeding the 0.05 Byrne (2001) cut-off; and the goodness-of-fit indices are quite comparable between the two groups, justifying the invariance of the unconstrained and the constrained models. Thus, metric equivalence is established and the analysis proceeds to regression paths.

TABLE 7.42: GOODNESS-OF-FIT INDICES FOR THE CALIBRATION AND VALIDATION SAMPLE

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**	**Value**
Chi-Square CMIN	NA	1225.548
Degree of freedom	NA	469
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)	2.613
P value	p≤0.05 (Hair *et al*., 2006)	0.000
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)	0.133
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)	0.902
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)	0.970
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)	0.042

TABLE 7.43: INVARIANCE ANALYSIS (CALIBRATION SAMPLE AND VALIDATION SAMPLE)

Model	Δdf	$\Delta\chi^2$	p
Measurement weights	18	26.524	0.088
Structural weights	11	18.125	0.079

The next step is conducting the structure coefficient (regression paths) invariance analysis to determine if the calibration sample and the validation sample have the same relationship with the variables in the research model. The findings in Table 7.43 indicate that the two groups have coefficient invariance (equivalence).

7.7.1. Invariance Analysis for Gender (Male and Female)

A second invariance analysis was conducted to examine the differences between the genders on online shopping. The factorial analysis is again performed to determine whether males and females conceptualize the research model's constructs for continuance online shopping in the same way. If there is an effect of gender on the measurement invariance of the construct, and the obtained score of the group analysis is significant, then the construct measurement is different for the two groups, and they cannot directly be comparable.

To compare the male and female samples, factorial invariance (metric equivalence) assesses the extent to which measures of the two groups have the same meaning (Hair *et al*., 2006). The findings in Table 7.44 indicate outstanding goodness-of-fit indices across the groups. Assuming the unconstrained model is correct, compared with constraining all factorial paths, they remain invariant across the groups, with changes in df (Δdf) = 18, chi-square ($\Delta\chi^2$) = 16.251, and p = 0.628, exceeding the 0.05 Byrne (2001) cut-off. Tests of measurement invariance freely estimating the other loadings are in Table 7.45. According to the results, the changes in chi-square and df are not significant (p = 0.628); and the goodness-of-fit indices are comparable between the two groups, justifying the invariance of the unconstrained and the constrained models. Thus, metric equivalence is established and the analysis proceeds to regression paths.

TABLE 7.44: GOODNESS-OF-FIT INDICES FOR THE GENDER SAMPLE

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	Acceptable Values	Value
Chi-Square CMIN	NA	1200.891
Degree of freedom	NA	468
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)	2.566

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**	**Value**
P value	p≤0.05 (Hair *et al*., 2006)	0.000
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)	0.133
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)	0.906
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)	0.971
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)	0.041

Then, the coefficient (regression paths) invariance analysis was conducted to determine if the two compared gender groups have the same relationship with same variables in the research model (structural weights). The findings suggest that the compared gender (male and female) groups indicate that model is found to have coefficient non-invariance (non-equivalent), across the research model with all regression paths constrained as illustrated in Table 7.45. The two compared gender groups, male and female, were non-invariant in respect to structural weights, as shown in Table 7.46. The differences of the sample's behaviour in the context of continuance online shopping resulted from the difference in the coefficients of Site Quality → Perceived Usefulness with change in chi-square = 5.123 and p value = 0.024, and from the difference in the coefficients of Perceived Usefulness → Continuance Intention to Use with change in chi-square = 6.797 and p value = 0.009.

TABLE 7.45: INVARIANCE ANALYSIS (GENDER ANALYSIS)

Model	**Δdf**	**$\Delta\chi^2$**	**p**
Measurement weights	18	16.251	0.628
Structural weights	11	20.677	**0.025**

TABLE 7.46: STRUCTURAL WEIGHTS DIFFERENCES FOR THE GENDER SAMPLE (MALE – FEMALE)

Paths			**Male Sample**			**Female Sample**			**Invariant**		
			ERW	C.R.	P value	ERW	C.R.	P Value	Δ DF	Δ CMIN	P Value
PU	<---	SQ	0.484	7.257	***	0.293	5.546	***	**1**	**5.123**	**0.024**
CIU	<---	PU	0.346	6.599	***	0.176	4.568	***	**1**	**6.797**	**0.009**

*** $p < 0.001$.

The result of the latent mean analysis is reported in Table 7.47. The findings suggest that gender has latent mean non-invariance for the research constructs. This difference between male and female, in the context on continuance Internet shopping, resulted from the differences of the latent mean of Trust. The standardized latent mean of Trust in male sample is estimated to be -0.190, with a standard error (SE) of 0.096, and CR (t-value) of -1.980. The result is significant ($p<0.05$, p = 0.048). Thus, the difference in Trust between the male and female samples is -0.190.

TABLE 7.47: MEANS: (MALE - DEFAULT MODEL) - FOR THE GENDER SAMPLE (MALE – FEMALE)

	Latent mean	S.E.	C.R.	P Value
PU	0-.133	0.098	-1.366	0.172
Trust	**-0.190**	**0.096**	**-1.980**	**0.048**
Enj	-0.066	0.097	-.675	0.500
CIU	0.012	0.099	.125	0.901
SQ	-0.099	0.098	-1.014	0.311
SN	0.008	0.092	0.083	0.934

7.7.1.1. Decomposition of Effects (Gender Analysis)

The direct and indirect effects in Table 7.48 reveal that the greatest total influences of direct and indirect (mediated) effects on continuance intentions come from Site Quality for the male (0.635) samples and Enjoyment for the female (0.752) samples. The next greatest influences come from Enjoyment (0.574) for men and Site Quality (0.621) for women. Additionally, Perceived Usefulness has more influences on continuance intention for males (0.549) than females (0.399). Therefore, Site Quality, Trust, Perceived Usefulness, and Subjective Norm all play significant roles for continuance intentions regarding online shopping in Saudi Arabia for both men and women.

TABLE 7.48: DECOMPOSITION OF EFFECTS ON CONTINUANCE INTENTIONS

Construct	**CIU (Male)**			**CIU (Female)**		
	Direct	Indirect	Total	Direct	Indirect	Total
SQ	--------	0.635	0.635	--------	0.621	0.621
TRUST	--------	0.314	0.314	--------	0.307	0.307
PU	0.346	0.204	0.549	0.176	0.222	0.399
SN	0.231	0.136	0.367	0.210	0.171	0.381
Enj	0.574	--------	0.574	0.752	--------	0.752
$R^2 = 0.63$						

7.7.2. Invariance Analysis for Regions (West – East – Centre)

Further invariance analysis was conducted to examine the differences between the main three populated regions in Saudi Arabia; West, East and Central regions. To compare the regions, the researchers compared the East to the West region, then the East to the Central region, and finally, the West and Central regions were compared.

Factorial invariance (metric equivalence) assesses the extent to which measures of the two groups have the same meaning (Hair *et al*., 2006). The findings in Table 7.49 indicate outstanding goodness-of-fit indices across the compared regions. Assuming the unconstrained model correct, compared with constraining all factorial paths, they remain invariant across the groups. Tests of the measurement invariance freely estimating the other loadings are in Table 7.50. According to these results, the changes in chi-square and df are not significant (p = 0.279), exceeding the 0.05 Byrne (2001) cut-off; and the goodness-of-fit indices are quite comparable between the compared region, justifying the invariance of the unconstrained and the constrained models. Thus, metric equivalence is established and the analysis proceeds to regression paths.

TABLE 7.49: GOODNESS-OF-FIT INDICES FOR THE REGION SAMPLES

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**	**Value**
Chi-Square CMIN	NA	1794.131
Degree of freedom	NA	757
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)	2.487
P value	p≤0.05 (Hair *et al*., 2006)	0.000
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)	0.128
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)	0.855
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)	0.954
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)	0.042

TABLE 7.50: INVARIANCE ANALYSIS (REGIONS ANALYSIS)

Model	**Δdf**	**$\Delta\chi^2$**	**p**
Measurement weights	36	40.483	0.279
Structural weights	33	34.719	0.118

Then, the coefficient (regression paths) invariance analysis was conducted to determine if the three compared regions have the same relationship with the variables in the research model.

The findings shown in Table 7.50 suggest that the model has over whole coefficient invariance (equivalent), with all regression paths constrained. However, with such a big research sample, and even though the structural weight shows invariance among the three regions, the author realised the need to minimize the possibility of research biases in cross-national, cross-cultural, and group analysis among constructs relationship (path) that may arise from the data strength and weakness when applied to every constructs' path. Therefore, to look for significant path differences, the author decided to test each factorial path separately while the rest of the paths are freely estimated across the compared regions, to look for any non-invariance path. In Table 7.52, 7.53, and 7.54, it could be seen that non-invariance is found in the individual path, even though it was not so over whole. Therefore, in this case testing the individual path has demonstrated to be a more rigorous test for non-invariance.

The findings in Table 7.52 suggest that West and East were non-invariant in certain structural paths. The differences between the West and East samples' behaviour resulted from the different in the coefficients of Perceived Usefulness → Enjoyment with change in chi-square = 6.060 and p value = 0.014.

When comparing the East and Central regions (Table 7.53), the differences of East and Central samples' behaviour resulted from the difference in the coefficients of Perceived Usefulness → Enjoyment with change in chi-square = 13.437 and p value = 0.000. Additionally, there are differences in the coefficients of Site Quality → Enjoyment with change in chi-square = 6.207 and p value = 0.013.

The last regional comparison in this stage was between the sample of the Western and Central regions. The only differences between the West and Central samples' behaviour resulted from the different in the coefficients of Site Quality → Enjoyment with change in chi-square = 5.643 and p value = 0.018, see Table 54. These differences in the structural weights are considered further in the discussion chapter (chapter 9.3.6).

TABLE 7.51: INVARIANCE ANALYSIS (REGIONS)

Region	**Model**	**Δdf**	**$\Delta\chi^2$**	**p**
East\West Sample	Measurement weights	18	26.416	0.091
	Structural weights	11	13.370	0.270
East\Centre Sample	Measurement weights	18	25.883	0.102
	Structural weights	11	16.268	0.131
West\Centre Sample	Measurement weights	18	15.974	0.594
	Structural weights	11	15.915	0.144

TABLE 7.52: STRUCTURAL WEIGHTS DIFFERENCES FOR THE GENDER SAMPLE (EAST - WEST)

Paths			**East Sample**			**West Sample**			**Invariant**		
			ERW	C.R.	P value	ERW	C.R.	P Value	Δ DF	Δ CMIN	P Value
Enj	<---	PU	0.101	2.202	.028	0.261	5.658	***	**1**	**6.060**	**0.014**

*** $p < 0.001$.

TABLE 7.53: STRUCTURAL WEIGHTS DIFFERENCES FOR THE GENDER SAMPLE (EAST - CENTRE)

Paths			**East Sample**			**Centre Sample**			**Invariant**		
			ERW	C.R.	P value	ERW	C.R.	P Value	Δ DF	Δ CMIN	P Value
Enj	<---	PU	0.101	2.201	0.028	0.371	6.177	***	**1**	**13.437**	**0.000**
Enj	<---	SQ	0.395	6.998	***	0.192	3.312	***	**1**	**6.207**	**0.013**

*** $p < 0.001$.

TABLE 7.54: STRUCTURAL WEIGHTS DIFFERENCES FOR THE GENDER SAMPLE (WEST – CENTRE)

Paths			**West Sample**			**Centre Sample**			**Invariant**		
			ERW	C.R.	P value	ERW	C.R.	P Value	Δ DF	Δ CMIN	P Value
Enj	<---	SQ	0.373	7.920	***	0.192	3.313	***	**1**	**5.643**	**0.018**

*** $p < 0.001$.

7.7.2.1. Latent Mean

The result of the latent mean for the regional analysis is also reported in Table 7.55, Table 7.56 and Table 7.57. The findings in Table 7.57 suggest that regions (East and Centre) were found to have latent mean invariance for the research constructs. On the other hand, the findings in Table 7.55 and Table 7.56 suggest that regions East and West, and West and Centre were found to have latent mean non-invariance for the research constructs. These differences between East and West, and West and Centre, in the context on continuance Internet shopping in Saudi Arabia, resulted from the differences of the latent mean of Trust in the West and Central region and the latent mean of Enjoyment in the West and East region (Table 7.55). This could be because the Eastern region has been exposed to more industrialised industries and became more westernised when the first American geologists came ashore at Jubail, in the Eastern region of Saudi Arabia on September 23, 1933 to look for oil (Saudi Aramco World 2010). Since then the Eastern region has been in close contact with leading world companies which bring with them their expertise and resources making the region a pioneer in the use of IT. This section is considered further in the discussion chapter (chapter 9.3.6).

The standardized latent mean of Enjoyment in West region sample is estimated to be -0.246, with a standard error (SE) of 0.111, and CR (t-value) of -2.211. The result is significant (p<0.05, p = 0.027). Thus, Enjoyment is – 0.246 less (lower) favourable among the West region sample than it is among the East region sample, even though Enjoyment in the West and East samples are invariant. (Enjoyment is perceived equally among the West and East.)

Finally, from the results in Table 7.56, the standardized latent mean of Trust in West region sample is estimated to be -0.266, with a standard error (SE) of 0.108, and CR (t-value) of -2.463. The result is significant (p<0.05, p = 0.014). Thus, Trust is – 0.266 less favourable among the West region sample than it is among the Centre region sample, even though Trust in the West and Centre regional sample is invariant. (Trust is perceived equally among the West and Centre). According to Hofstede (1980), collectivist cultures tend to trust each other more than trusting someone who is not part of the circle. The Central region in Saudi Arabia is known to be a very conservative culture with more tribes' communities. The Western region, on the other hand, is known to be the "gate to the two holy Mosques", where millions of people worldwide with different cultures are visiting this region during the year, making it more open to others. This section is considered further in the discussion chapter (chapter 9.3.6).

TABLE 7.55: MEANS: (*WEST* REGION - DEFAULT MODEL) - FOR REGIONS (WEST – EAST)

W/E	Latent Mean	S.E.	C.R.	P Value
PU	0.039	0.109	0.361	0.718
Trust	-0.201	0.109	-1.843	0.065
Enj	-0.246	0.111	-2.211	**0.027**
CIU	-0.198	0.110	-1.799	0.072
SQ	-0.010	0.112	-0.085	0.932
SN	-0.173	0.092	-1.876	0.061

TABLE 7.56: MEANS: (*WEST* REGION - DEFAULT MODEL) - FOR REGIONS (WEST – CENTRE)

W/C	Latent Mean	S.E.	C.R.	P Value
PU	-0.050	0.106	-0.469	0.639
Trust	-0.266	0.108	-2.463	**0.014**
Enj	-0.082	0.111	-0.737	0.461
CIU	-0.114	0.109	-1.046	0.295
SQ	-0.087	0.104	-0.832	0.405
SN	-0.100	0.091	-1.110	0.267

TABLE 7.57: MEANS: (*CENTRE* REGION - DEFAULT MODEL) - FOR REGIONS (CENTRE - EAST)

C/E	Latent Mean	S.E.	C.R.	P Value
PU	0.066	0.126	0.525	0.599
Trust	0.051	0.123	0.416	0.677
Enj	-0.184	0.126	-1.456	0.146
CIU	-0.100	0.123	-0.813	0.416
SQ	0.037	0.125	0.296	0.767
SN	-0.089	0.101	-0.877	0.381

7.7.2.2. Decomposition of Effects (Region Analysis)

The direct and indirect effects in Table 7.58, Table 7.59, and Table 17.60 for the three compared regions reveal that the greatest total influences of direct and indirect (mediated) effects on continuance intentions come from Enjoyment for the East (0.741), Centre (0.669), and then West (0.651) regions. The next greatest influences come from Site Quality for East (0.663), Centre (0.612), and then West (0.590) region. Additionally, perceived usefulness has more direct influences for the Centre region (0.310) on continuance intention than the East (0.273) and the West (0.230). Therefore, based on these results Site Quality, Trust, Perceived Usefulness, Enjoyment, and Subjective Norm all play significant direct and indirect roles for continuance intentions regarding online shopping in Saudi Arabia for the three compared regions (East, West, and Centre).

TABLE 7.58: DECOMPOSITION OF EFFECTS ON CONTINUANCE INTENTIONS (EAST – WEST)

Construct	**CIU (East)**			**CIU (West)**		
	Direct	Indirect	Total	Direct	Indirect	Total
SQ	--------	0.663	0.663	--------	0.590	0.590
TRUST	--------	0.278	0.278	--------	0.290	0.290
PU	0.273	0.140	0.413	0.230	0.255	0.485
SN	0.167	0.128	0.295	0.219	0.144	0.363
Enj	0.741	--------	0.741	0.651	--------	0.651
$R^2 = 0.67$						

TABLE 7.59: DECOMPOSITION OF EFFECTS ON CONTINUANCE INTENTIONS (EAST – CENTRE)

Construct	**CIU (East)**			**CIU (Centre)**		
	Direct	Indirect	Total	Direct	Indirect	Total
SQ	--------	0.663	0.663	--------	0.612	0.612
TRUST	--------	0.278	0.278	--------	0.376	0.376
PU	0.273	0.140	0.413	0.291	0.310	0.600
SN	0.167	0.128	0.295	0.220	0.137	0.357
Enj	0.741	--------	0.741	0.669	--------	0.669
$R^2 = 0.65$						

TABLE 7.60: DECOMPOSITION OF EFFECTS ON CONTINUANCE INTENTIONS (WEST - CENTRE)

Construct	**CIU (West)**			**CIU (Centre)**		
	Direct	Indirect	Total	Direct	Indirect	Total
SQ	--------	0.590	0.590	--------	0.612	0.612
TRUST	--------	0.290	0.290	--------	0.376	0.376
PU	0.230	0.255	0.485	0.291	0.310	0.600
SN	0.219	0.144	0.363	0.220	0.137	0.357
Enj	0.651	--------	0.651	0.669	--------	0.669
$R^2 = 0.59$						

7.7.3. Invariance Analysis for Age (Younger than 35 – Older than 35)

Participants' ages ranged from 18 years to over 46 years, but most respondents (40.8%) were aged between 26 and 35 years. The researcher used 35 years of age as a separation line, 379 (73.4%) participants were categorized as 'young' while the remaining 26.6% were 'old'.

Factorial invariance (metric equivalence) assesses the extent to which measures of the two groups (young and old sample) have the same meaning (Hair *et al*., 2006). The results in Table 7.61 indicate outstanding goodness-of-fit indices across the two compared groups. Assuming the unconstrained model is correct, compared with constraining all factorial paths, they remain invariant across the groups. Tests of measurement invariance freely estimating the other loadings are in Table 7.62. According to these results, the changes in chi-square and df are not significant (p = 0.115), exceeding the 0.05 Byrne (2001) cut-off; and the goodness-

of-fit indices are comparable between the two groups, justifying the invariance of the unconstrained and the constrained models. Thus, metric equivalence is established and the analysis proceeds to regression paths.

TABLE 7.61: GOODNESS-OF-FIT INDICES FOR YOUNGER THAN 35 – 35 AND OLDER

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**	**Value**
Chi-Square CMIN	NA	1206.661
Degree of freedom	NA	468
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)	2.578
P value	p≤0.05 (Hair *et al*., 2006)	0.000
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)	0.123
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)	0.906
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)	0.971
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)	0.041

TABLE 7.62: INVARIANCE ANALYSIS (YOUNGER THAN 35 – 35 AND OLDER)

Model	**Δdf**	**$\Delta\chi^2$**	**p**
Measurement weights	18	25.365	0.115
Structural weights	11	11.923	0.369

The coefficient (regression paths) invariance analysis was conducted to determine if the two compared educational groups have the same relationship with variables in the research model (structural weights). The findings shown in Table 7.62 suggest that the compared age groups (younger than 35 – 35 and older) indicate that model is found to have coefficient invariance (equivalent), across the research model with all regression paths constrained. The two compared age groups, (younger than 35 – 35 and older), were invariant in respect to structural weights. Nevertheless, even though the structural weight in Table 7.62 shows invariance among the groups, the author realised the need to minimize the possibility of research biases in the age group analysis among constructs relationship (path) that may arise from the data strength and weakness when applied to every constructs' path. Therefore, as explained previously in section 7.7.2, the author decided to test each factorial path separately, while the rest of the paths are freely estimated across the two age groups to look for any non-invariance path. Again, Table 7.63 indicates that non-invariance is found in the individual path, even though it was not so over whole. Therefore, in this case testing the individual path

has demonstrated to be a more rigorous test for non-invariance. The differences of the sample's behaviour in the context of continuance online shopping resulted from the different in the coefficients of Subjective Norm → Enjoyment with change in chi-square = 5.609 and p value = 0.018. According to Rainie and Horrigan (2005), younger internet users are more likely to engage in communication and creative activities, but might be less likely to purchase online than older users. Additionally, Bush *et al*. (2005) refer to the power of social influence, particularly within young female age groups and the significance of role models in consumer behaviour within the sports market. This section is explored further in the discussion chapter (chapter 9.3.5).

TABLE 7.63: STRUCTURAL WEIGHTS DIFFERENCES FOR THE GENDER SAMPLE (YOUNGER THAN 35 – 35 AND OLDER)

Paths			**Younger than 35 Sample**			**35 and older Sample**			**Invariant**		
			ERW	C.R.	P value	ERW	C.R.	P Value	Δ DF	Δ CMIN	P Value
Enj	<---	SN	0.186	7.039	***	0.322	5.694	***	**1**	**5.609**	**0.018**

*** $p < 0.001$.

The result of the latent mean analysis is reported in Table 7.64. The findings suggest that age has latent mean non-invariance for the research constructs. This difference between younger than 35 and 35 and older, in the context on continuance Internet shopping, resulted from the differences of the latent mean of Trust, Enjoyment, and Continuance Intention to Use. The standardized latent mean of these in younger than 35 sample is estimated to be Trust = 0.278; Enjoyment = 0.401; Continuance Intention to Use = 0.217, with a standard errors (SE) of 0.097, 0.095, and 0.097 respectively. The CR (t-value) of Trust = 2.875; Enjoyment = 4.209; Continuance Intention to Use = 2.237). The result is significant (p<0.05; Trust p = 0.004, Enjoyment p = *** (p < 0.001). Continuance Intention to Use p = 0.025). Thus, Trust (0.2780, enjoyment (0.40), and continuance intention (0.217) are higher in the younger sample than it is in the older sample. Previous research indicates that younger people are more linked to technology and are using the Internet more. According to Alreck and Settle (2002), younger people are considering the Internet world to be the main environment for them to play, work, learn, communicate, and share experiences. This section is explored further in the discussion chapter (chapter 9.3.5).

TABLE 7.64: MEANS: (YOUNGER THAN 35 - DEFAULT MODEL) - FOR THE GENDER SAMPLE (YOUNGER THAN 35 – 35 AND OLDER)

	Latent mean	S.E.	C.R.	P Value
PU	0.096	0.092	1.037	0.300
Trust	0.278	0.097	2.875	**0.004**
Enj	0.401	0.095	4.209	***
CIU	0.217	0.097	2.237	**0.025**
SQ	0.070	0.091	0.769	0.442
SN	0.149	0.091	1.644	0.100

*** $p < 0.001$.

7.7.3.1. Decomposition of Effects (Age Analysis)

The direct and indirect effects in Table 7.65 reveal that the greatest total influences of direct and indirect (mediated) effects on continuance intentions come from Enjoyment for the 35 years and older (0.749) sample, and (0.741) for the younger than 35 years sample. The next greatest influences derive come from Site Quality (0.624) for the 35 years and older and (0.620) for younger than 35 years samples. Additionally, Subjective Norm has the second most direct influences for younger than 35 years (0.215) on continuance intention compared with the 35 years and older sample (0.212). Therefore, Site Quality, Trust, Perceived Usefulness, Enjoyment, and Subjective Norm all play significant direct and indirect roles for continuance intentions regarding online shopping in Saudi Arabia for both these age groups.

TABLE 7.65: DECOMPOSITION OF EFFECTS ON CONTINUANCE INTENTIONS (YOUNGER THAN 35 – 35 AND OLDER)

Construct	**CIU (Younger than 35)**			**CIU (35 and older)**		
	Direct	Indirect	Total	Direct	Indirect	Total
SQ	--------	0.620	0.620	--------	0.624	0.624
TRUST	--------	0.318	0.318	--------	0.269	0.269
PU	0.211	0.215	0.426	0.263	0.244	0.506
SN	0.215	0.131	0.346	0.212	0.241	0.453
Enj	0.741	--------	0.741	0.749	--------	0.749
$R^2 = 0.63$						

7.7.4. Invariance Analysis for the Education Level (Below Bachelor and Bachelor and Above)

The researcher asked the respondents to indicate their education level and select from the given choices. These were: less than high school, high school, diploma, bachelor, and post-graduate. Of the participants, 1.6% holds a degree less than high school, 10.7% are high school educated, and 12.4% hold diplomas. Most respondents (53.4%) hold bachelor degree

and the remaining 21.9% hold a post-graduate degree. The separation line used in this research was Below Bachelor (24.7%) (Less than high school, high school, and diploma) and Bachelor and above (75.3%), (bachelor and post-graduate).

In educational group factorial invariance (metric equivalence), the findings indicate outstanding goodness-of-fit indices across the compared groups, see Table 7.66. Assuming the unconstrained model to be correct, compared with constraining all factorial paths, they remain invariant across the groups. Tests of the measurement invariance freely estimating the other loadings are in Table 7.66. According to the results in Table 7.67, the changes in chi-square and df are not significant (p = 0.214), exceeding the 0.05 Byrne (2001) cut-off; and the goodness-of-fit indices are quite comparable between the compared educational groups (below bachelor and bachelor and above), justifying the invariance of the unconstrained and the constrained models. Thus, metric equivalence is established and the analysis proceeds to regression paths.

TABLE 7.66: GOODNESS-OF-FIT INDICES FOR BELOW BACHELOR AND BACHELOR AND ABOVE

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**	**Value**
Chi-Square CMIN	NA	1287.338
Degree of freedom	NA	468
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)	2.751
P value	p≤0.05 (Hair *et al*., 2006)	0.000
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)	0.144
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)	0.898
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)	0.968
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)	0.043

TABLE 7.67: INVARIANCE ANALYSIS (BELOW BACHELOR AND BACHELOR AND ABOVE)

Model	Δdf	$\Delta\chi^2$	p
Measurement weights	18	22.414	0.214
Structural weights	11	28.413	**0.003**

The coefficient (regression paths) invariance analysis was conducted to determine if the two compared educational groups have the same relationship with variables in the research model (structural weights). The findings shown in Table 7.67, suggest that the compared educational

groups indicate that model is found to have coefficient non-invariance (non-equivalent), across the research model with all regression paths constrained. The compared educational groups, below bachelor and bachelor degree and above, were non-invariant in respect to structural weights (Table 7.68). The differences of the sample's behaviour in the context of continuance online shopping resulted from the different in the coefficients of Site Quality → Trust with change in chi-square = 8.640 and p value = 0.003, Trust → Perceived Usefulness with change in chi-square = 4.033 and p value = 0.045. Additionally, there are differences in the coefficients of Subjective Norm → Enjoyment with change in chi-square = 9.500 and p value = 0.002, and in the coefficients of Site Quality → Enjoyment with change in chi-square = 6.173 and p value = 0.013. These differences are explored further and in more details in the discussion chapter (chapter 9.3.4).

TABLE 7.68: EDUCATIONAL STRUCTURE INVARIANT – REGRESSION FOR THE SIGNIFICANT INVARIANT EDUCATIONS

Paths			**Below Bachelor Sample**			**Bachelor and above Sample**			**Invariant**		
			ERW	C.R.	P value	ERW	C.R.	P Value	Δ DF	Δ CMIN	P Value
Trust	<---	SQ	0.864	13.706	***	0.663	19.223	***	**1**	**8.640**	**0.003**
PU	<---	Trust	0.618	6.340	***	0.404	8.775	***	**1**	**4.033**	**0.045**
Enj	<---	SN	0.097	2.510	0.012	0.252	8.523	***	**1**	**9.500**	**0.002**
Enj	<---	SQ	0.477	7.453	***	0.306	9.272	***	**1**	**6.173**	**0.013**

*** $p < 0.001$.

The result of the latent mean for the regional analysis is also reported in Table 7.69. The findings suggest that the group analysis of education between the below bachelor degree and bachelor and above degree has latent mean invariance for the research constructs.

TABLE 7.69: MEANS: (BELOW BACHELOR - DEFAULT MODEL) - FOR THE EDUCATIONAL LEVEL

	Latent Mean	**S.E.**	**C.R.**	**P Value**
PU	-0.040	0.104	-0.386	0.699
Trust	0.036	0.107	0.338	0.736
Enj	0.184	0.106	1.738	0.082
CIU	0.085	0.108	0.788	0.431
SQ	-0.090	0.102	-0.882	0.378
SN	0.170	0.105	1.613	0.107

7.7.4.1. Decomposition of Effects (Educational Analysis)

The direct and indirect effects in Table 7.70 reveal that the greatest total influences of direct and indirect (mediated) effects on continuance intentions come from Site Quality for the below bachelor degree sample (0.719) and Enjoyment for the bachelor degree and higher sample (0.735). The next greatest influences come from Enjoyment (0.636) for below bachelor and Site Quality (0.586) for bachelor and higher. Additionally, Subjective Norm acts as the second highest direct influence, after Enjoyment and Site Quality. Based on the result in Table 7.68, we can conclude that Site Quality, Trust, Perceived Usefulness, Enjoyment and Subjective Norm all play significant direct and indirect roles for continuance intentions regarding online shopping for both Below Bachelor and Bachelor and above groups.

TABLE 7.70: DECOMPOSITION OF EFFECTS ON CONTINUANCE INTENTIONS (BELOW BACHELOR AND BACHELOR AND ABOVE)

Construct	**CIU (Below Bachelor)**			**CIU (Bachelor and above)**		
	Direct	Indirect	Total	Direct	Indirect	Total
SQ	--------	0.719	0.719	--------	0.586	0.586
TRUST	--------	0.371	0.371	--------	0.287	0.287
PU	0.204	0.258	0.462	0.226	0.210	0.435
SN	0.270	0.062	0.332	0.198	0.185	0.384
Enj	0.636	--------	0.636	0.735	--------	0.735
$R^2 = 0.63$						

7.7.5. Invariance analysis for the Online Spending

The researcher asked the survey participants, 'how much is your annual spending on online shopping?' Participants had to select from: none, between £100 - £500, between £501 - £1,000, and more than £1,000. Of the respondents, 11.4% have no annual spending on online shopping, 35.5% spend £100 - £500, 32% spend £501 - £1,000, and 21.1% spend more than £1,000. The researcher considered the mean as a separation line. Thus, 435 (46.9%) participants were categorized as 'Low Spenders £0 - £500' while the remaining 493 (53%) were 'High Spenders £501 – and more'.

As described by Hair *et al*., (2006), this section examines the factorial invariance (metric equivalence) and assesses the extent to which measures of the two groups (low online spenders and high online spenders) have the same meaning. The results in Table 7.71 indicate outstanding goodness-of-fit indices across the compared groups. Tests of the measurement invariance freely estimating the other loadings are in Table7.72. According to these results, ,

the changes in chi-square and df are not significant (p = 0.234), which is above the Byrne (2001) cut-off point (0.05); and the goodness-of-fit indices are comparable with the compared online spending groups, justifying the invariance of the unconstrained and the constrained models. Thus, metric equivalence is established and the analysis proceeds to regression paths.

TABLE 7.71: GOODNESS-OF-FIT INDICES FOR THE LOW ANNUAL ONLINE SPENDERS – HIGH ANNUAL ONLINE SPENDERS SAMPLE

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**	**Value**
Chi-Square CMIN	NA	1327.638
Degree of freedom	NA	468
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)	2.837
P value	p≤0.05 (Hair *et al*., 2006)	0.000
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)	0.125
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)	0.896
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)	0.967
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)	0.045

TABLE 7.72: INVARIANCE ANALYSIS (LOW ANNUAL ONLINE SPENDERS – HIGH ANNUAL ONLINE SPENDERS)

Model	**Δdf**	**$\Delta\chi^2$**	**p**
Measurement weights	18	21.963	0.234
Structural weights	11	19.818	**0.048**

Then, the coefficient (regression paths) invariance analysis was conducted to determine if the two compared groups (Low and High annual online spenders) have invariant structural weights. The findings shown in Table 7.72, suggest that the compared groups indicate that the model is found to have coefficient non-invariance (non-equivalent), across the research model with all regression paths constrained ($\Delta\chi^2$ = 19.818, Δdf = 11, p = 0.048). To determine the source of non-invariance of structural weights, the researcher looked at the relationships between the model constructs for any non-invariance. The findings in Table 7.73 suggest that there are differences of the samples' behaviour in the context of continuance online shopping resulting from the different in the coefficiences of Site Quality → Trust with change in chi-square = 4.259 and p value = 0.039, Site Quality → Perceived Usefulness with change in chi-square = 9.279 and p value = 0.002. Additionally, there are

differences in the coefficients of Trust → Perceived Usefulness with change in chi-square = 5.619 and p value = 0.018. This section is explored further in the discussion chapter (chapter 9.3.3).

TABLE 7.73: ASSUMING DEFAULT MODEL TO BE CORRECT

Paths			**Low Spender Sample**			**High Spender Sample**			**Invariant**		
			ERW	C.R.	P value	ERW	C.R.	P Value	Δ DF	Δ CMIN	P Value
Trust	<---	SQ	0.780	17.933	***	0.656	15.846	***	**1**	**4.259**	**0.039**
PU	<---	SQ	0.218	3.873	***	0.464	8.016	***	**1**	**9.279**	**0.002**
PU	<---	Trust	0.555	10.024	***	0.356	5.692	***	**1**	**5.619**	**0.018**

*** $p < 0.001$.

The result of the latent mean analysis is reported in Table 7.74. The findings suggest that the group analysis of low and high online annual spenders' samples has latent mean invariance for the research constructs.

TABLE 7.74: MEANS: (LOW ANNUAL ONLINE SPENDERS - DEFAULT MODEL) - FOR THE RANDOM SAMPLE AND HOLD-OUT SAMPLE

	Latent Mean	**S.E.**	**C.R.**	**P Value**
PU	-0.143	0.086	-1.677	0.094
Trust	-0.124	0.088	-1.403	0.161
Enj	0.027	0.089	.308	0.758
CIU	-0.062	0.090	-0.696	0.486
SQ	-0.053	0.089	-0.595	0.552
SN	0.014	0.076	.178	0.859

7.7.5.1. Decomposition of Effects (Spending Analysis)

The figures in Table 7.75 reveal that the greatest total influences of direct and indirect (mediated) effects on continuance intentions come from Enjoyment for both the low online spender sample (0.700) and for the high online spenders' sample (0.705). The next greatest influence comes from Site Quality (0.618) for both low and high online spenders. Additionally, Subjective Norm acts as the second highest direct influence, after Enjoyment and Site Quality, with the low online spenders (0.248) and high online spenders (0.185) for continuance intention. To conclude and based on these result, Site Quality, Trust, Perceived Usefulness, Enjoyment and Subjective Norm all play significant direct and indirect roles for continuance intentions regarding online shopping in Saudi Arabia for both low and high online spenders.

TABLE 7.75: DECOMPOSITION OF EFFECTS ON CONTINUANCE INTENTIONS (LOW ANNUAL ONLINE SPENDERS – HIGH ANNUAL ONLINE SPENDERS)

Construct	**CIU (Low Spenders)**			**CIU (High Spenders)**		
	Direct	Indirect	Total	Direct	Indirect	Total
SQ	--------	0.618	0.618	--------	0.618	0.618
TRUST	--------	0.381	0.381	--------	0.249	0.249
PU	0.229	0.255	0.484	0.221	0.197	0.417
SN	0.248	0.145	0.394	0.185	0.158	0.343
Enj	0.700	--------	0.700	0.705	--------	0.705
$R^2 = 0.63$						

7.7.6 Invariance Analysis for the Frequency of Using the Internet for Shopping Activities

The researcher asked the survey participants, 'on average, how frequently do you use the internet for your shopping activities?' Participants have to select one category from: Once a year, Two or three times a year, Monthly, or Daily. Of the respondents, 11.2% show that their online shopping frequency was once a year, 281 participants (30.3%) did online shopping two to three times a year, 433 participants (47.7%) indicated monthly frequency of online shopping, and 110 participants (11.9%) indicated daily frequency of online shopping. The researcher considered the mean as a separation line. 385 (41.5%) participants were categorized as 'Low frequency of online shopping', while the remaining 543 (58.6%) were 'High frequency of online shopping'.

As described by Hair *et al*., (2006), this section examines the factorial invariance (metric equivalence) and assesses the extent to which measures of the two groups (low and high frequency of online shopping) have the same meaning. The tests of the measurement invariance freely estimating the other loadings as shown in Table 7.76 indicate outstanding goodness-of-fit indices across the compared groups. . According to the results in Table 7.77, the changes in chi-square and df are not significant ($p = 0.524$), which is above Byrne (2001) cut-off point (0.05); and the goodness-of-fit indices are quite comparable between the compared frequency of online shopping groups, justifying the invariance of the unconstrained and the constrained models. Thus, metric equivalence is established and the analysis proceeds to regression paths.

TABLE 7.76: GOODNESS-OF-FIT INDICES FOR THE INTERNET SHOPPING ACTIVITIES (LOW AND HIGH FREQUENCY SAMPLE)

Confirmatory Factor Analysis CFA (Goodness-of-fit measure)	**Acceptable Values**	**Value**
Chi-Square CMIN	NA	1367.892
Degree of freedom	NA	468
CMIN/DF	Chi square/ df ≤5 (Bentler and Bonnett, 1989)	2.923
P value	p≤0.05 (Hair *et al*., 2006)	0.000
Root mean square residual (RMR)	No established thresholds (the smaller the better) (Hair *et al*., 2006)	0.141
Goodness-of-fit (GFI)	≥ 0.90 (the higher the better) (Hair *et al*., 2006)	0.892
Comparative fit index (CFI)	≥ 0.90 (Hair *et al*., 2006)	0.963
Root mean square error of approximate (RMSEA)	< 0.08 (Hair *et al*., 2006)	0.046

TABLE 7.77: INVARIANCE ANALYSIS (LOW AND HIGH FREQUENCY OF USING THE INTERNET FOR SHOPPING ACTIVITIES)

Model	**Δdf**	**$\Delta\chi^2$**	**p**
Measurement weights	18	16.983	0.524
Structural weights	11	11.945	0.368

The next step is conducting the coefficient (regression paths) invariance analysis to determine if the low and high frequency of online shopping have the same relationship with the same variables in the research model. As explained previously in section 7.7.2, even though the structural weight shows invariance among the groups, the author considered a more rigorous test for non-invariance between individual paths. However, the findings in Table 7.77 suggest that the two groups have coefficient invariance (equivalent) when testing each factorial path of the low and high frequency of online shopping separately, across the research model with all regression paths constrained.

TABLE 7.78: STRUCTURAL FACTORIAL OF THEORETICAL CONSTRUCT (STRUCTURE INVARIANT – REGRESSION) FOR THE FREQUENCY OF USING THE INTERNET FOR SHOPPING ACTIVITIES

Paths			**Low Frequency of e-shopping**			**High Frequency of e-shopping**			**Invariant**		
			ERW	C.R.	P value	ERW	C.R.	P Value	Δ DF	Δ CMIN	P Value
Trust	<---	SQ	0.727	15.423	***	0.628	16.181	***	1	2.640	0.104
PU	<---	SQ	0.318	4.962	***	0.407	8.262	***	1	1.191	0.275
PU	<---	Trust	0.502	7.624	***	0.368	7.023	***	1	2.535	0.111
SN	<---	PU	0.209	3.640	***	0.146	2.820	0.005	1	0.664	0.415
SN	<---	Trust	0.208	3.431	***	0.275	4.928	***	1	0.670	0.413
Enj	<---	PU	0.205	4.987	***	0.203	5.727	***	1	0.002	0.963
Enj	<---	SN	0.264	6.001	***	0.201	6.330	***	1	1.344	0.246
Enj	<---	SQ	0.312	6.995	***	0.297	7.813	***	1	0.064	0.800
CIU	<---	SN	0.245	4.224	***	0.227	5.647	***	1	0.061	0.805
CIU	<---	Enj	0.651	8.271	***	0.756	11.226	***	1	1.008	0.315
CIU	<---	PU	0.254	4.990	***	0.202	4.988	***	1	0.642	0.423

*** $p < 0.001$.

Additionally, a further level of invariance measurement was considered examining the latent mean. The result of the latent mean for the low and high frequency of online shopping analysis is reported in Table 7.78. The findings suggest that low and high frequency of online shopping group analysis has latent mean non-invariance for all research constructs. These differences between the low and high frequency of the online shopping sample, in the context on continuance Internet shopping, resulted from the differences of the latent mean of PU, Trust, Enjoyment, Site Quality, Subjective Norm, and Continuance Intention to Use.

From the result in Table 7.79, the standardized latent mean of PU in the Low Online Frequency Shopping sample is estimated to be -0.437, with a standard error (SE) of 0.090, and CR (t-value) of -4.857. The result is significant ($p < 0.001$, p = ***). Thus, PU is -0.437, less favourable among the Low Online Frequency Shopping sample than it is among the High Online Frequency Shopping sample, even though PU in the two samples are invariant (perceived equally).

The second significant latent mean was Trust with standardized latent mean of the Low Online Frequency Shopping sample is estimated to be -0.507, with a standard error (SE) of 0.087, and CR (t-value) of -5.838. The result is significant ($p < 0.001$, p = ***). Thus, Trust is -0.507 less favourable among the two groups.

The third significant latent mean was Enjoyment with standardized latent mean of the Low Online Frequency Shopping sample is estimated to be -0.642, with a standard error (SE) of 0.091, and CR (t-value) of -7.073. The result is significant ($p < 0.001$, p = ***). Thus, Enjoyment is -0.642 less favourable among Low Online Frequency Shopping sample than it is among Higher Online Frequency Shopping sample.

The fourth significant latent mean was Site Quality with standardized latent mean of the Low Online Frequency Shopping sample is estimated to be -0.486, with a standard error (SE) of 0.088, and CR (t-value) of -5.535. The result is significant ($p < 0.001$, p = ***). Thus, Site Quality is 0.486 less favourable among Low Online Frequency Shopping sample than it is among Higher Online Frequency Shopping sample.

The fifth significant latent mean was Subjective Norm with standardized latent mean of the Low Online Frequency Shopping sample is estimated to be -0.477, with a standard error (SE) of 0.076, and CR (t-value) of -6.256. The result is significant ($p < 0.001$, p = ***). Thus, Subjective Norm is -0.642 less favourable among Low Online Frequency Shopping sample than it is among Higher Online Frequency Shopping sample.

The last significant latent mean was Continuance Intention to Use with standardized latent mean of the Low Online Frequency Shopping sample is estimated to be -0.651, with a standard error (SE) of 0.089, and CR (t-value) of -7.331. The result is significant ($p < 0.001$, p = ***). Thus, Continuance Intention to Use is -0.651 less favourable among Low Online Frequency Shopping sample than it is among Higher Online Frequency Shopping sample. This section is explored further in the discussion chapter (chapter 9.3.2).

TABLE 7.79: MEANS: (LOW ONLINE FREQUENCY SHOPPING - DEFAULT MODEL) - FREQUENCY OF USING THE INTERNET FOR SHOPPING ACTIVITIES

	Estimate	S.E.	C.R.	P Value
PU	-0.437	0.090	-4.857	***
Trust	-0.507	0.087	-5.838	***
Enj	-0.642	0.091	-7.073	***
CIU	-0.651	0.089	-7.331	***
SQ	-0.486	0.088	-5.535	***
SN	-0.477	0.076	-6.256	***

*** $p < 0.001$.

7.7.6.1. Decomposition of Effects (Experience Analysis)

The direct and indirect effects in Table 7.80 reveal that the greatest total influences of direct and indirect (mediated) effects on Continuance Intentions to Use come from Enjoyment for the low online frequency (0.651) and high online frequency (0.756) samples. The next greatest influences derive come from Site Quality (0.590) for low online frequency (0.552) and for high online frequency samples. Additionally, Perceived Usefulness has the most direct influences for the low online frequency sample (0.254) on Continuance Intention to Use, and Subjective Norm act as the most direct influences for high online frequency sample (0.227). Therefore, Site Quality, Trust, Perceived Usefulness, Enjoyment and Subjective Norm all play significant direct and indirect roles for continuance intentions regarding online shopping for both low and high e-shopping frequency.

TABLE 7.80: DECOMPOSITION OF EFFECTS ON CONTINUANCE INTENTIONS (LOW AND HIGH E-SHOPPING FREQUENCY)

Construct	**CIU (Low e-shopping Frequency)**			**CIU (High shopping Frequency)**		
	Direct	Indirect	Total	Direct	Indirect	Total
SQ	--------	0.590	0.590	--------	0.552	0.552
TRUST	--------	0.325	0.325	--------	0.256	0.256
PU	0.254	0.220	0.474	0.202	0.208	0.410
SN	0.245	0.172	0.416	0.227	0.152	0.379
Enj	0.651	--------	0.651	0.756	--------	0.756
$R^2 = 0.63$						

7.8. HYPOTHESES TESTING

Figure 7.22 shows the initial structural model. This contrasts with Figure 7.23, which demonstrates the final research model. The links specify which latent variables directly or indirectly influence changes in the values of other latent variables in the model (Byrne, 2001; Hair *et al*., 2006). A path analysis was conducted to test the overall model, which is summarized in Figure 7.24. The analyses include a test of the overall path model and also test the hypothesized relationship between latent variables. All of the hypotheses were supported, as presented in Table 7.81.

The findings in Table 7.31 indicate that all of the research hypotheses associations were strongly significant at $P < 0.05$. Perceived Enjoyment was the strongest predictor of Continuance Intention to Use online shopping ($B = 0.476$). Perceived Usefulness ($B = 0.245$) and Subjective Norm come ($B = 0.191$) next. These predictors explained 61% of the total variance of Continuance Intention to Use e-shopping. When applying the research total

sample, perceived Enjoyment was still the strongest predictor of Continuance Intention to Use online shopping (B = 0.521). Perceived Usefulness (B = 0.212) and Subjective Norm (B = 0.186) come next. These predictors explained 63% of the total variance of Continuance Intention to Use e-shopping in Saudi Arabia. About 39% of the Continuance Intention to Use online shopping in Saudi Arabia remained unexplained.

TABLE 7.81: PROPOSED HYPOTHESES

Factor	**Hypothesis**	**Result**
Site Quality	**H1a:** Perceived Site Quality relates positively to Perceived Usefulness.	**Supported**
	H1b: Perceived Site Quality relates positively to Customer Trust in online shopping.	**Supported**
Trust	**H2a:** Perceived Trust relates positively to Perceived Usefulness.	**Supported**
Usefulness	**H3a:** Perceived Usefulness relates positively to increased customer Subjective Norm.	**Supported**
	H3b: Perceived Usefulness relates positively to increased customer Enjoyment.	**Supported**
	H3c: Perceived Usefulness relates positively to increased customer Continuance Intention.	**Supported**
Subjective Norm	**H4a:** Perceived Subjective Norms relate positively to increased customer Enjoyment.	**Supported**
	H4b: Perceived Subjective Norms relate positively to increased customer Continuance Intention.	**Supported**
Enjoyment	**H5:** Perceived Enjoyment relates positively to increased customer Continuance Intention.	**Supported**
Paths suggested by Modification Indices (MI)		
Perceived Site Quality_is positively related to increased customer Enjoyment to use online shopping.		**Supported**

Perceived Trust_is positively related to increased customer Subjective Norm_to use online shopping.	**Supported**

7.9. SUMMARY

Research scales and variables were first tested by Exploratory Factor Analysis (EFA) using SPSS. Then, the Confirmatory Factor Analysis (CFA) validated the research variables Convergent and Discriminant validity. Hair *et al*. (2006) suggested that variables with factor loadings greater than 0.5 exhibit evidence of convergent validity. All exploratory and confirmatory factor loadings for all selected constructs were greater than 0.50 (Hair *et al*., 2006). The correlations between constructs range from 0.298 to 0.778. The correlation matrix indicated that the square root of AVE of each construct was higher that the corresponding correlation values for that variable in all cases, meeting Hair *et al*.'s criterion (2006). The reliability of the model was tested through the squared multiple correlation value of AVE. The squared multiple correlation of variance ranged from 0.67 to 0.95 (AVE from 75% to 87%), illustrating an acceptable variance (Holmes-Smith, 2000). The research findings support that the research constructs are distinct. Also, the factor analysis demonstrated that 34 items from the questionnaire met the criteria. These items loaded as predicted on six factors, extracting 74.817% of the variance. Therefore, the convergent and discriminant validity of the research measurements were satisfactory.

To examine how the proposed variables are related, the Structural Equation Model (SEM) was used with AMOS 5.0 software (Arbuckle, 2003). SEM has an advantage over other statistical methods in its capability to include several observed and latent variables at the same time when predicting paths (Sharma, 1996). Additionally, SEM focuses more on the pattern of relationships across the samples than on individual observations (Hair *et al*., 2006). Furthermore, SEM tested the model's goodness-of-fit measurements, including chi-square, df, chi-square/df, RMR, GFI, CFI, and RMSEA, which all were within the acceptable range. The analysis of direct, indirect and total effects was also presented to facilitate an understanding of important questions and relationships that are not addressed when investigating the direct effect alone (Kline, 2005). The SEM supported all nine hypotheses, as well as those suggested by Modification Indices (MI) in the research. The findings indicated that all of the research hypotheses associations were significant at $P < 0.05$. Perceived

Enjoyment was the strongest predictor of Continuance Intention to Use online shopping (B = 0.476). Perceived Usefulness (B = 0.245) and Subjective Norm come (B = 0.191) next. These predictors explained 61% of the total variance of Continuance Intention to Use e-shopping.

Finally, to minimize the possibility of research biases in cross-national, cross-cultural, and group analysis among constructs relationships (paths) that may arise from the data strength and weakness when applied to every construct's path, intensive invariance analysis was conducted to compare behaviour among gender, age, education, regions, experience and spending among internet shopping in Saudi Arabia.

The next chapter will explain the findings of informal interviews, supported by semi-structured questionnaires, illustrating how businesses view online shopping in Saudi Arabia.

CHAPTER 8: QUALITATIVE ILLUSTRATION CASE - E-RETAILING: THE CASE OF SAUDI ARABIA

8.1. INTRODUCTION

This research uses a combination of both quantitative method, as main research method, and qualitative method, as a complimentary method. The goal in applying both methods is to overcome any weaknesses and maximize the strengths of the quantitative and qualitative methods, as described by Merriam (1998) as the best way to conduct a research and case study.

When conducting a quantitative method, the participants have more freedom to describe what is important to their organizations or themselves (Patton, 1987). Patton encourages researchers to determine quantitative findings at a better and deeper understanding by conducting a case study using qualitative research methods, because "case studies become particularly useful where one needs to understand some particular problem or situation in great depth, and where one can identify cases rich in information (rich in the sense that a great deal can be learned from a few exemplars of phenomenon in question)" (Patton, 1987).

As an additional approach in this research, the case study allows for a means to assess and examine the applicability of the studied variables and explore any potential benefits of and obstacles to e-shopping in the Saudi Market. Because e-shopping is considered a new and modern way of shopping, case studies are appropriate; they are effective methodological approaches when the researcher wants to explore the "how" and "why" questions (Yin, 2003b). This approach will help clarify the meaning of the research question from the provider prospective.

Managers and staff from relevant marketing and IT departments, whose knowledge and experience relate to this research, were selected as key informants. They represent four leading companies and one government authority of e-commence and Internet in Saudi Arabia. In addition, key personnel in a small number of selected companies were approached through personal contacts for interview dates and times (Ritchie and Lewis, 2003).

Companies' documents, observations, and structured interviews with related employees - including managers of marketing, e-marketing, and IT - provide information for the case studies. It is worth mentioning that the interviews were conducted to collect information

about e-commerce and e-shopping in Saudi Arabia; the company's current and future e-shopping vision; the benefits of e-shopping to the company; and obstacles in the market. Subject to the participants' time restraints, the qualitative research covered the information collected from the semi-structured interview, face-to-face discussions, and companies' previous surveys and documents.

The criteria used when selecting the five Saudi Arabian participated companies are:

- The level of Internet services provided by the company's Internet shopping Website.
- Current and future vision of the company for online shopping.
- The interest of the company in participating in this research and any future related research.

This chapter starts with brief background information about the companies, followed by the results gained from the semi-structured interview questionnaires. Next, the key points arising from the face-to-face interview are outlined. The chapter concludes with a brief summary of the findings.

8.2. PARTICIPATING COMPANIES

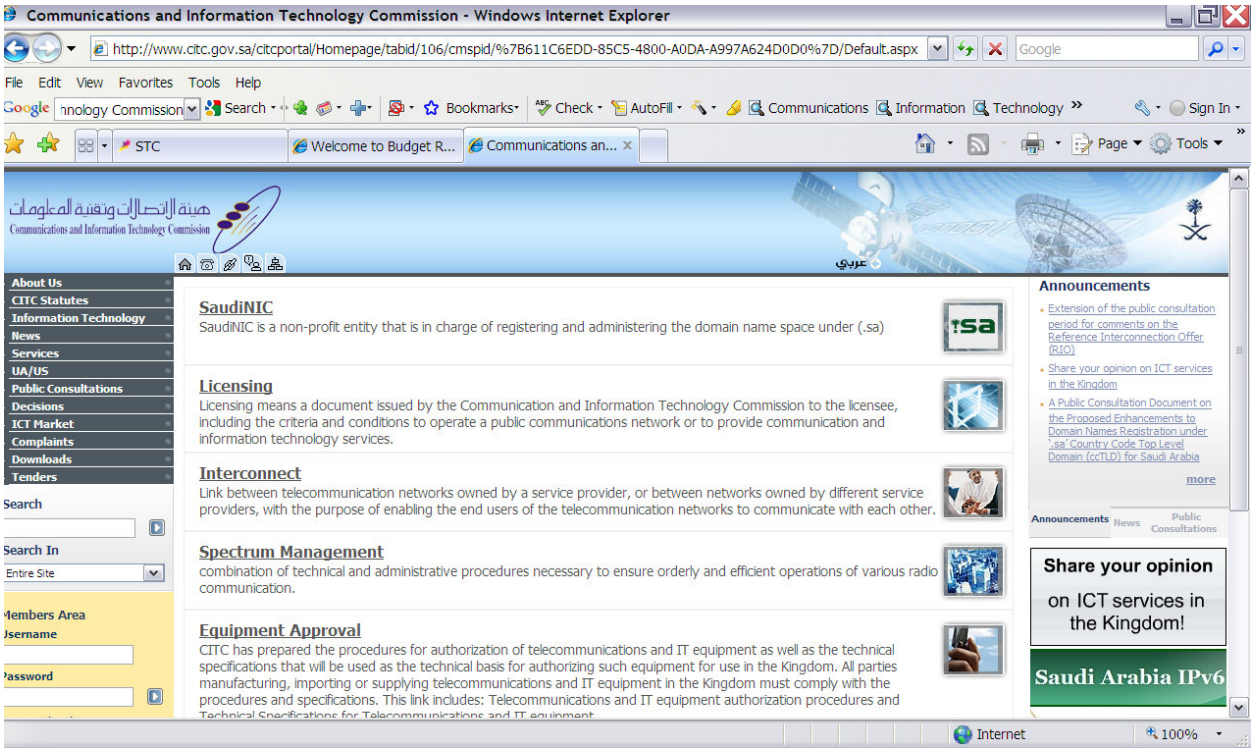
8.2.1. Communications and Information Technology Commission

The Communications and Information Technology Commission (CITC) in Saudi Arabia (www.citc.gov.sa) was established as the Saudi Communications Commission in 2002. The name changed after the Commission was entrusted with new tasks relating to information technology, becoming the Communications and Information Technology Commission (CITC) in 2005.

The vision statement of the Commission is to provide "universally available, high quality and affordable communications and information technology services". Thus, it is very important for the organization to keep pace with the major developments in the field of telecommunications on the international level, which often lead to regulatory changes in the competitive and investment environment of this sector, as well as recognize how these developments create fundamental changes in the infrastructure and regulation of the telecommunications sector in Saudi Arabia.

The CITC is working to meet the challenges of development in the field of telecommunications, as well as creating a competitive environment based on equity and transparency emerging from its provision of high quality, universal telecommunications services at affordable prices, which should activate the role of the private sector and motivate investments in that field.

FIGURE 8.25: SAUDI COMMUNICATIONS AND INFORMATION TECHNOLOGY COMMISSION WEBSITE, 15 MAY 2009



The CITC also has started preparing statutes to regulate telecommunications bylaws, including encouraging Internet usage and e-commerce among all sectors in Saudi Arabia (i.e., individual consumers, business establishments, health sectors, educations sectors, banking sectors, and government sectors). In addition, it is writing a plan to open the telecommunications sector to compete in landline and mobile communication industries.

The Saudi Communications and Information Technology Commission interview was conducted at the company headquarter in Riyadh, Saudi Arabia. The interview was with the General Manager of the Internet and e-commerce department.

8.2.2. Saudi Arabian Airlines

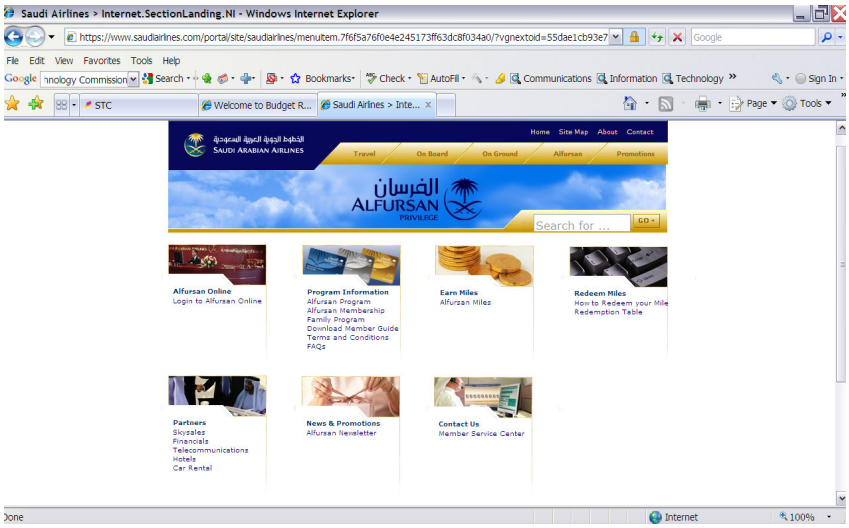
Saudi Arabian Airlines, the country's national carrier (www.saudiairlines.com), started out in 1945 with a single twin-engine DC-3 (Dakota) HZ-AAX, given to King Abdul Aziz as a gift by the U.S. President, Franklin D. Roosevelt. Months later, the purchase of two more DC-3s created the nucleus of what, in a few years, would become one of the world's largest airlines.

Today, Saudi Arabian Airlines has 139 aircraft, including the latest and most advanced wide-body jets presently available, such as B747-400s, B747-300s, B747-100s, B777-200s, Airbus A300-600s, MD-11s, and MD90s. The airline carries approximately 13 million passengers every year.

Customer satisfaction is a top priority, from reservations, check-in, and boarding to in-flight service, disembarking, baggage handling, and assistance upon arrival. The customer care that the airline aims for is manifested in its new slogan, "A New Era...."

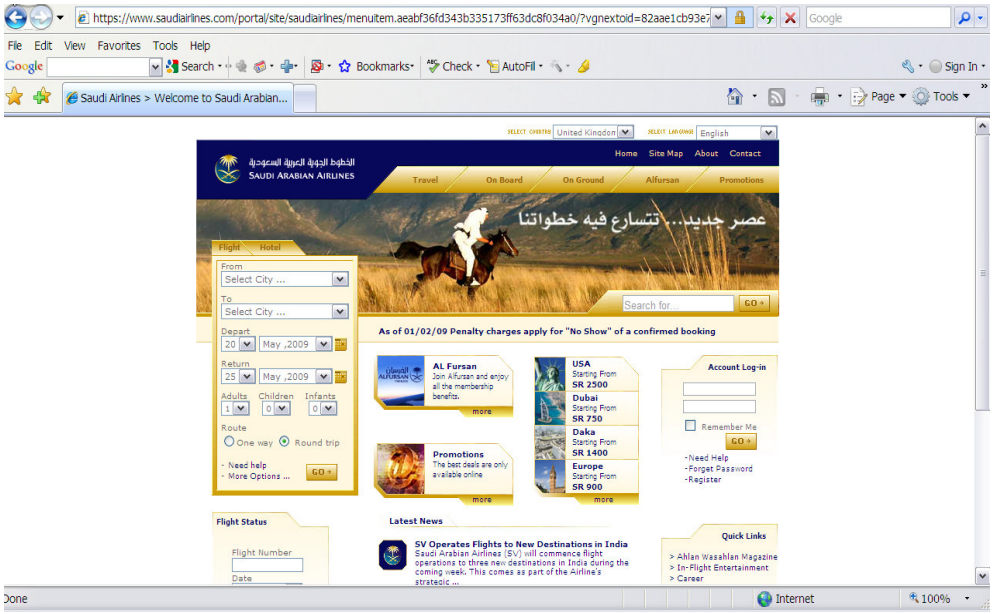
Alfursan is the company's frequent flyer program, designed to recognize and reward regular fliers with Saudi Arabian Airlines and thank them for their loyalty. Alfursan members receive personalized services and earn reward miles that can be redeemed for free upgrades and flights. They also can enjoy additional privileges designed to make flying easier, including a generous luggage allowance, priority wait listing, and personalized luggage tags. Alfursan miles can eventually earn passengers complimentary flights. Alfursan members receive offers, rewards, and preferential rates on a range of selected services through global program partnerships, such as hotels, car rental companies, and credit card organizations.

FIGURE 8.26: SAUDI ARABIAN AIRLINES LOYALTY PROGRAM (ALFURSAN) WEBSITE, 15 MAY 2009



Saudi Arabian Airlines offers most of its services online, which it considers an additional channel to reach its customers. By visiting the airline's website, customers can book a flight, purchase tickets, log into their accounts, join the frequent flyer program, and check flight schedules, flight status, catering, cargo information, in-flight entertainment, promotions, and so on.

FIGURE 8.27: SAUDI ARABIAN AIRLINES WEBSITE, 15 MAY 2009



The interview with Saudi Arabian Airlines was conducted in the airlines' headquarters in Jeddah, Saudi Arabia. The interview included the airline's Internet booking engine manager (online reservation system) and the marketing support team for the airline's loyalty program.

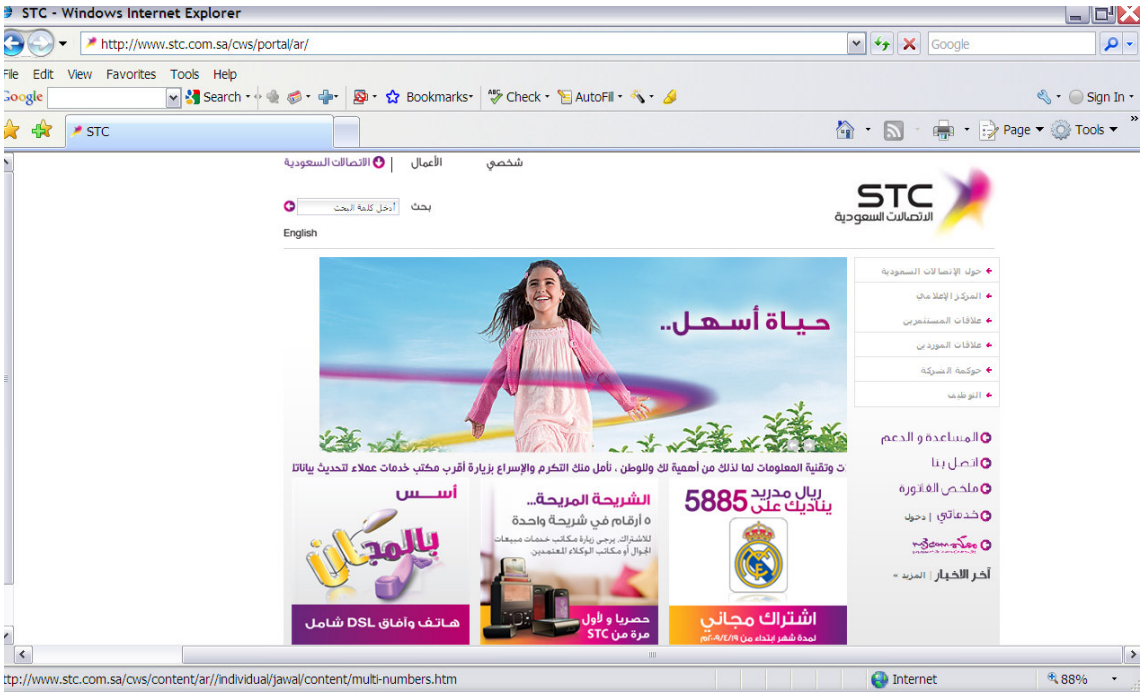
8.2.3. Saudi Telecommunication

The newly privatized Saudi Telecom Company (STC) (www.stc.com.sa) was incorporated in 1998, after which it adopted a challenging program to transform its business from a government system into a company that could meet recognized commercial business standards. The Saudi Telecom Company (STC) has developed clear strategies focused on internal reorganization, retraining and developing its staff, enhancing its internal processes, and studying its customers' needs and requirements, while still continuing to carry out its national and social duties and responsibilities.

As the leading national provider of telecommunication services in Saudi Arabia, STC works to fulfil and satisfy market requirements, keep pace with emerging technologies in the telecommunications sector, and satisfy customers' needs. Its website provides a channel of

communication with customers, which they can also use to receive promotions and services, such as account management, SMS, and loyalty points.

FIGURE 8.28: SAUDI TELECOMMUNICATION (STC) WEBSITE, 15 MAY 2009



In addition, STC recently adopted its FORWARD Strategy, which aims to support and reinforce its competitive position. With this strategy, STC hopes to enhance its customer-centric culture in all its business fields. This culture has been reflected in the organizational design of the company, which comprises a Corporate Centre, multiple Functional Units, and four Key Business Units focused on the Key STC Customer Categories:

- Personal BU
- Home BU
- Enterprise BU
- Wholesale BU

In the last few years, STC has extended beyond its local borders into international markets, forming a network of businesses and investments with various Gulf Cooperation Council countries (Bahrain, Kuwait, Oman, Qatar, and the United Arab Emirates), Asia, and Africa. The company has footprints in Kuwait, India, Indonesia, Malaysia, Turkey, and South Africa. Therefore, STC serves more customers, and seeks to expand further internationally through potential investments in line with its FORWARD Strategy.

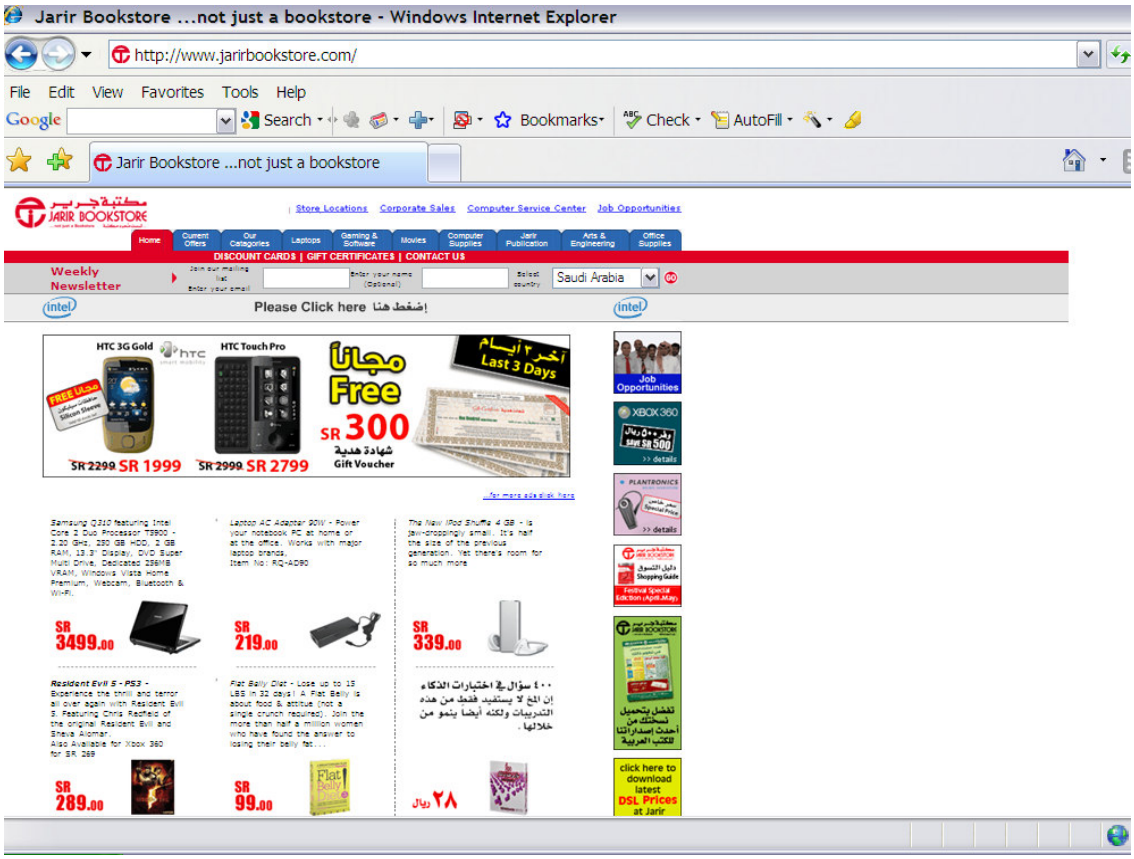
The STC interview, conducted at the company headquarters in Riyadh, Saudi Arabia, included the marketing loyalty manager and the customer satisfaction support team.

8.2.4. Jarir Bookstore

The Jarir Bookstore chain (www.jarirbookstore.com) is the result of the effort and commitment of the visionary Al-Agil brothers, who started the project in 1979 with a small store located on Jarir Street, in Riyadh, Saudi Arabia. This single store specialized in the supply of office and school products to meet customers' demand with high levels of satisfaction. Today Jarir, with its 22 stores, three of which are international (Qatar, UAE, and Kuwait), is recognized as the market leader in office and school supplies, IT products, and books. The Jarir Bookstore chain is highly respected in Saudi Arabia, among both customers and the wider business community. The company is led by a strong management team with effective leadership skills, which respects individual initiative and provides opportunities for personal growth to employees. The company achieves this position through the dedication, commitment, and professionalism of its employees.

The Jarir Bookstore website provides customers with a great deal of information about its products, prices, products, specifications, and promotions. Customers can view the current catalogue but cannot make any purchases at this stage. The company is working to implement online shopping soon.

FIGURE 8.29: JARIR BOOKSTORE WEBSITE, 15 MAY 2009



Jarir Bookstores' main objectives are as follows:

- To maintain leadership in the quality of services to its customers.
- To provide products of superior quality at the best prices to its customers.
- To respect individual initiative and provide opportunities for personal growth to its employees.
- To build a strong management team with effective leadership skills.
- To be the market leader in office and school supplies, IT products, and books.
- To achieve sufficient profit and growth to make all of the other values and objectives possible.

The interview with Jarir Bookstore was conducted at the company headquarters in Riyadh, Saudi Arabia. The interviewees were the general manager, marketing manager, and e-marketing support team.

8.2.5. Budget Car Hire, Saudi Arabia

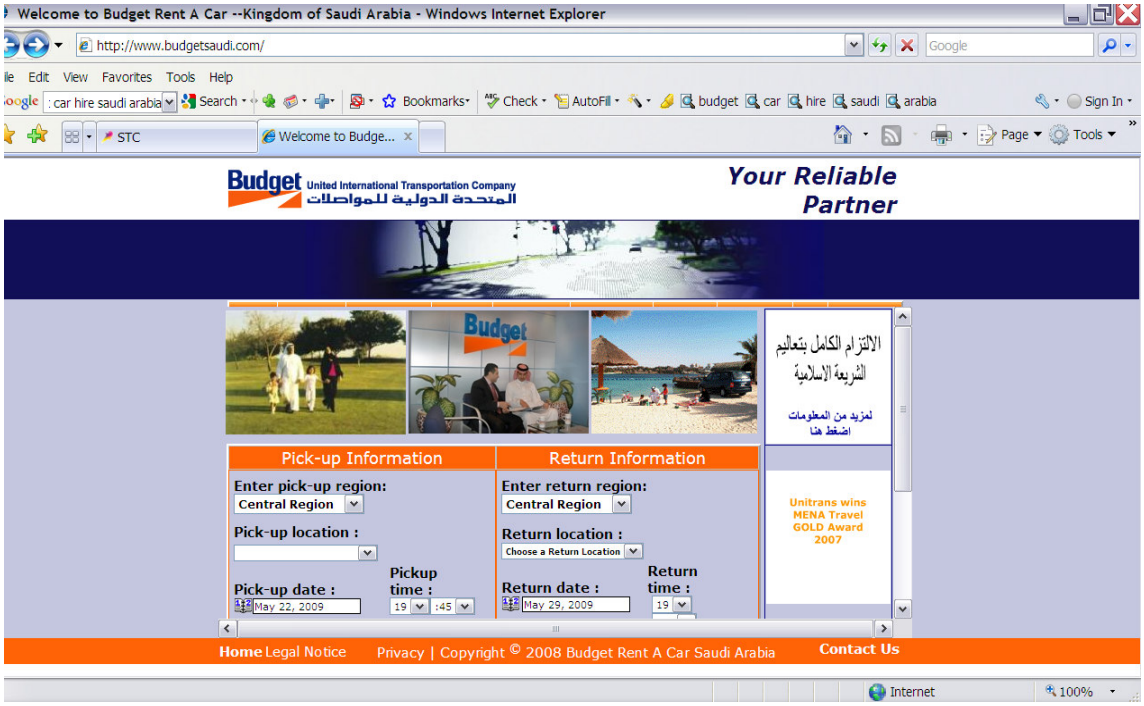
Unitrans Budget (www.budgetsaudi.com) is the sole Saudi franchisee of Budget International, one of the largest car rental companies in the world, with more than 3200 rental offices and a well-established brand that operates throughout the world. Unitrans Budget has been operating since 1978 and is the largest car rental company in the Middle East, South East Asia, and Africa. Its complete transportation solutions rely on a fleet of more than 14,500 vehicles, accessed through 80 rental offices in Saudi Arabia, which employ approximately 1000 people. The company head office is in Jeddah, with regional offices in Riyadh and Dammam, and branches in Jubail, Qassim, Buraidah, Yanbu, Makkah, Medinah Munawarah, Abha, Taif, Rabigh, and Tabuk.

Unitrans Budget operates with the largest and the most modern fleet of luxury, 4x4, full size, intermediate, compact, and economy cars. The fleet hosts vehicles of many different makes, such as Mercedes, BMW, Ford, GM, Mercury, Volvo, Nissan, Toyota, Honda, and Mazda, making it the most diverse fleet in Saudi Arabia.

Services provided by Budget include short-term rentals, long-term rentals, car sales, chauffeurs, crop rates, Hajj and Umrah services, lodging and driving, premier limousine services, cross-border services, and so on. In addition, Budget Express, the company's loyalty program, offers members quicker processing times, preferential rates, priority reservation, and tailor-made customer programs.

The Budget Saudi Arabia website provides customers with information about the cars, car types, prices, locations, details, specifications, and promotions. Customers can book and pay for cars though the website. The company is working to enhance its online services to provide better support and, thus, satisfy its online customers.

FIGURE 8.30: BUDGET CAR HIRE SAUDI ARABIA WEBSITE, 15 MAY 2009



The interview took place at the company headquarters in Jeddah, Saudi Arabia. The interview was with the marketing manager.

8.3. INTERVIEW AND CASE ANALYSIS

The interviews and case study analysis complement the quantitative analysis and findings by providing more dynamic details. The qualitative analysis in this section analyzes the responses that were accumulated through exploratory discussions, interviews, documentary data, and personal experience. The emphasis is on the main concepts of the research model that relate to the continuance of online shopping in Saudi Arabia. The idea for the interview questionnaires was adapted from Al-Ajlan (2006), though the questions were re-written to reflect the requirement of the research investigations, which cover wide range of the variables derived from the literature review, see Appendix I. Van Looy, Dierdonck, and Gemmell, (2003) have argued that "the most powerful data collection method is the personal interview," because it provides the researcher with an opportunity to observe the workflow and gain access to company documentation.

8.3.1. Main interview questions

Questions 1–3

The first three questions covered the company headquarters' location, investment in e-commerce, and the primary channels the company uses to reach customers. Three companies located their headquarters in the Saudi capital city, Riyadh: Communications and Information Technology Commission, Saudi Telecommunication, and Jarir Bookstore. Saudi Arabian Airlines and Saudi Budget car hire both were based on the second largest city, Jeddah, which is also the gate to the holy city of Makkah.

TABLE 8.82: QUESTION 1 - LOCATION OF INTERVIEWED COMPANY HEADQUARTERS

HQ	Frequency
Jeddah	2
Riyadh	3

In response to the question about how much their organization spent on implementing e-business projects, the interviewees provided various amounts, but all agreed that a huge investment had been considered for the implementation. Three companies spent more than $100 million, which confirms the importance of e-commerce, including e-shopping, to their corporate strategy.

TABLE 8.83: QUESTION 2 - SPENDING ON E-BUSINESS IMPLEMENTATION

	Frequency
Under $10 million	1
$10 million – $100 million	1
Over $100 million	3

The third question pertained to the current channels used by the company to communicate with customers about its products or services. Depending on the types of products or services, all respondents claimed they tried to use all available channels to meet their customers' expectations. Most companies used direct contacts, text messages, and e-mails. Only three companies had call centres for inbound and outbound calls. However, all companies agreed that using the Internet and branch locations or an office were essential for communicating with customers. Using the Internet as a strategic channel reflects the perceived importance of online shopping. All interviewees agreed that their companies were not fully satisfied with

the current status of their online retailing and were considering further enhancements, now or in near future.

TABLE 8.84: QUESTION 3 - PRIMARY CHANNELS FOR REACHING CUSTOMERS

	Frequency
Direct contact	4
Mobile phone (SMS)	4
Internet	5
Call centre	3
E-mail	4
Branch location (office)	5

Question 4

The question, "why did your organization adopt e-business (online shopping)?" probes the organization's vision of the reasons for its involvement in online retailing. Most respondents agreed about the importance of e-shopping, and claimed they had a clear vision of the business as an e-retailer. However, one respondent admitted that "the first existence of the company website was to be online like other competitors. Since then no major investment was made".

All respondents also agreed that e-shopping solutions would help them improve customer retention and satisfaction, improve their responsiveness to customers; provide better customer services; and increase marketing and selling opportunities. Their companies' ability to compete in the modern business world depends on expertise in satisfying customers. The interviewees also recognized the importance of building successful relationship with customers and believed that they should outperform their competitors. Four respondents agreed that e-shopping would help them increase their efficiency through automated processes and offer a deeper understanding of customers through behaviour tracking software. Furthermore, most agreed that e-shopping could help their company identify the most profitable customers, support new business strategies, and obtain information to share with business partners.

TABLE 8.85: QUESTION 4 - WHY ADOPT THE E-BUSINESS SYSTEM

	Frequency
Improving customer retention and customer satisfaction	5
Identifying the most	3

profitable customers	
Supporting new business strategies	3
Improving responsiveness to customers	5
provide better customer service	5
Increased marketing and selling, opportunities	5
Identifying different customers	3
Increased efficiency through automation	4
Deeper understanding of customers	4
Obtaining information that can be shared with business partners	3

Question 5–6

It is important to determine if e-shopping has changed the companies' business processes. Thus, the next question queried, "Has the implementation of the e-business changed the business process in the organization?" Three of the companies realised an effect of implementing online shopping on the process of how they conduct business. Because the concept is still new to the Saudi market, two companies indicated only minor improvements so far, whereas the other suggested a redesign in its business approach. Another firm could not comment on the effects, because it was still in its initiation phase. The subsequent question asked about the responsibility for the e-business project in the company. The responses to this question varied widely, which implies there is no agreement about who is in the best responsible position or department for e-business. The variations reflect differences in the names of department, as well as varied responsibilities for each department. However, all the interviewees agreed that the e-shopping implementation has been expensive and demanded the full commitment of top management, who could provide a clear vision of what to expect from the implementation. Three companies stated that the e-business was the responsibility of, and had support from, their Chief Executive Officer (CEO), whilst two cited the Chief Information Officer (CIO). Two companies also gained support from e-business software providers and outside consultants. Therefore, all interviewees agreed that strong leadership, commitment, and top management support is essential to e-commerce success. Support from consultants or e-commerce solution providers, when needed, also can have a significant impact on the success of the e-commerce activities.

These findings support the research argument regarding the importance of e-shopping as a channel for doing business in Saudi Arabia. Companies that obtain top management support and believe in Internet shopping can attract and retain their customers and ensure continuance intentions toward e-shopping.

TABLE 8.86: QUESTION 5 - CHANGES IN BUSINESS PROCESSES DUE TO IMPLEMENTATION

	Frequency
Yes	3
No	1
Not implemented	1
If Yes, what was the degree of change?	
Minor improvement	2
Redesign	1
Radical	0

TABLE 8.87: QUESTION 6 - PRIMARY RESPONSIBILITY FOR E-BUSINESS PROJECT MANAGEMENT

	Frequency
Chief Executive Officer (CEO)	3
Chief Information Officer (CIO)	2
E-business software provider	1
Consultants	1

Question 7

The interviewees were asked about their views on the benefits expected from implementing online shopping. Most respondents acknowledged the importance of several factors as benefits of their e-shopping project, and all of them agreed that online shopping should reduce operational costs and, perhaps, increase customer loyalty in the long run. Each company is at a different phase of e-shopping implementation, yet they unanimously claimed that the new business process would help them customise their products or services, increase productivity, deliver services on time, gain a deeper understanding of customer needs, build customer trust, and increase customer satisfaction. Trust (sometimes referred to as security) remained a key obstacle that stopped customers from shopping online and delayed, or even prevented, companies from implementing e-commerce. The respondents strongly agreed that Internet security applications are crucial and cannot be ignored. Furthermore, depending on

the factors and their e-business implementation process phase, some interviewees acknowledged the benefits of improving relationships with customers, customer responsiveness, and revenue and profits.

The findings show that interviewees representing their companies perceived the power of e-shopping, based on the expected or realised benefits (See Table 8.88). This perception links the view of the interviewees to the research model, which focuses on continuance intentions toward e-shopping and, thereby, increases the value of this research contribution to real businesses.

TABLE 8.88: QUESTION 7 - BENEFITS RESULTING FROM E-BUSINESS PROJECT IMPLEMENTATION

	Expected	Realised
Reduced operating cost	5	0
Customised product and services	4	1
Increased productivity	4	1
Delivering service to customer on time	4	1
Improving relationship with customer	3	2
Improving customer responsiveness	2	3
Improving quality of information	4	1
Increased revenue and profits	4	1
Increased efficiency through automation	4	1
Deeper understanding of customers	4	1
Improve on-time delivery performance	4	1
Build customer trust	4	1
Increase customer satisfaction	4	1
Increase customer loyalty	5	0

Question 8

The interviewees assessed the importance of several factors for the success of their company's e-shopping project implementation, i.e., "what was the contribution of the following factors to the success of your e-business (online shopping) project implementation?" Most mentioned strong executive-level commitment, strategy (developing customer-centric business strategies); understanding customer needs, understanding the customer by collecting more data, and information about the customer behaviour online. They also acknowledged that segmentation and targeting, customer trust, and customer satisfaction played moderate to major roles in the success of the project. It is difficult to determine the contribution of customer loyalty to the success of e-business, especially if the

company only just introduced its site, or soon will. Therefore, most interviewees considered customer loyalty a moderate influence on success. Only one company with a mature site that is able to deliver services, promotions, and loyalty programs to customers indicated a critical role for customer loyalty. The interviewees emphasized that in order to ensure the success of this expensive project they needed strong involvement and commitment, in addition to a strategic link to the reason for the project.

TABLE 8.89: QUESTION 8 - CONTRIBUTORS TO THE SUCCESS OF AN E-BUSINESS PROJECT

	Not at all	Minor	Moderate	Major	Critical	Not applicable
Strategy (developing customer-centric business strategies)				3	2	
Strong executive level commitment				3	2	
Segmentation and targeting		1	2	1	1	
Understanding customer needs			1	4		
Data and information			1	2	2	
Customer trust		1	2	2		
Customer satisfaction			2	3		
Customer loyalty			3		1	1

Question 9

Interviewees revealed the importance of some e-shopping market factors, identified in the literature review. Specifically, they were asked, “How important are the following factors when developing your organizational e-business project implementation?”

The interviewees agreed with the suggested market factors identified through the literature review. Security, service/delivery, ease of use, usefulness, and site quality play the most important roles for developing the e-shopping website. It is evident from the responses that enjoyments, price, presenting product or service quality, payment methods, language, strong brands, satisfaction, trust, and loyalty incentives constitute the second key level of importance factors.

The responses varied, indicating some confusion about the similarities of some of the factors. For example, some interviewees noted their confusion about the similarity between security and trust; they considered a secured site a trusted site. In addition, quality, site quality, and strong brands might seem very similar. Site quality should include the quality of the information displayed, quality of the product images, colours, and navigation through the site.

Finally, all agreed on the importance of ease of use for all e-shopping solutions and developing programs.

TABLE 8.90: QUESTION 9 - IMPORTANT FACTORS FOR DEVELOPING E-BUSINESS PROJECT IMPLEMENTATION

	Not at all	Minor	Moderate	Major	Critical	Not applicable
Security					5	
Price	1			3	1	
Service/delivery				2	3	
Quality				3	2	
Payment methods				3	2	
Language				3	2	
Ease of use					5	
Usefulness					5	
Presenting strong brand				4	1	
Site quality				2	3	
Trust				3	2	
Satisfaction				3	2	
Loyalty incentives				3	2	
Enjoyment			1	4		

The interviewees were then asked to comment, in general, on the company's level of satisfaction and perception of customer satisfaction with their e-business or e-shopping projects. Specifically, "what is the overall level of satisfaction your organization has of the e-business project?" and "what is the overall level of your customer satisfaction of your e-business (e-shopping) project?"

The responses again varied. Only one company stated that its level of satisfaction, both within the organization and its perception of customer satisfaction, reached the 90% level. It provides all of its services through the online channel, as an extra and strategic channel, in addition to all the other approaches it continues to use. The other companies instead indicated organizational satisfaction of 50–60%. One company stated that organization and customer satisfaction were not applicable because its project remained under evaluation. The level of perceived customer satisfaction with the e-business project ranged from 25% to 70% across the three remaining companies.

8.4. COMPANY DOCUMENTATION ANALYSIS

To enrich this section, the research includes available documentary data from the Communications and Information Technology Commission, which conducts surveys in the Saudi market, and documents obtained from Saudi Arabian Airlines, which expressed great willingness to co-operate and participate in this research.

Saudi Arabian Airlines conducted customer satisfaction surveys pertaining to its electronic services in 2003 and 2007. The results demonstrate that these Internet users wish to take advantage of the online electronic services provided by the airline. The participants included airline customers and members of its frequent flyer program (Alfursan).

The 2003 survey aimed to measure their satisfaction with the current services and their anticipation of future services. Among the available documents and survey questionnaires that relate to this research project, one survey question asked customers to rank the factors that influenced their choice when they selected airlines. The Frequent Flyer Program (FFP) was ranked fifth in terms of importance when selecting an airline carrier. The top four factors were safety reputation, price, seat comfort, and convenient schedule. This finding mirrored the 2001 and 2002 surveys. When safety, price, schedule, and seat comfort ratings are equal, FFP provides a competitive advantage, in support of Bhattacherjee (2001a), who states that loyalty incentives did not have any significant effect on continuance intention. That is, loyalty incentive programs, such as frequent flyer miles, cash back, and loyalty points programs, cannot be continuously effective customer retention strategies, though loyalty programs can be effective if consumers find the company's other services useful (Bhattacherjee, 2001a). Therefore, this finding is important for companies that want to maximize the effect of their loyalty incentives and retain customers. Companies dealing with B2C e-commerce need not depend on loyalty programs to satisfy and retain their customers; instead, they should exercise a thoughtful mix of factors.

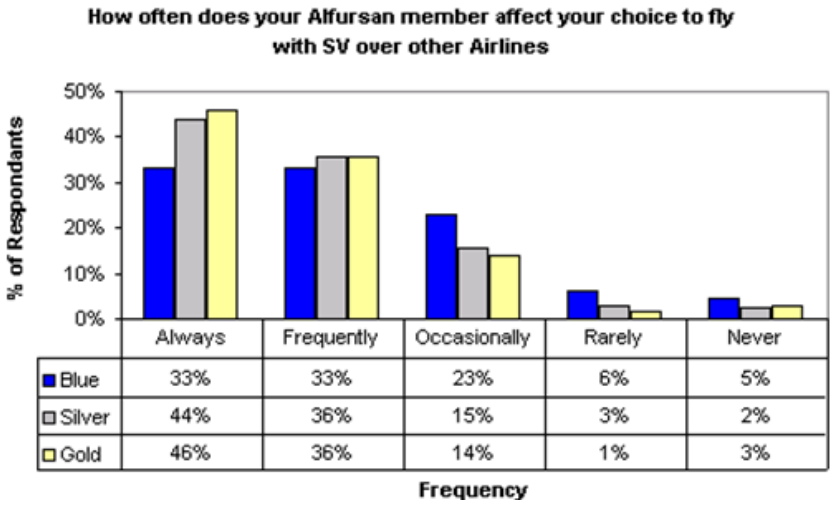
TABLE 8.91: SAUDI AIRLINES' 2003 SURVEY

SURVEY 2003 TOTAL RESULTS	Rank 03	Score 03	Rank 02	Rank 01
SAFETY REPUTATION	1	14,753	1	1
AIRFARE (PRICE)	2	20,178	2	3
SEAT COMFORT	3	25,934	3	4
CONVENIENT SCHEDULE	4	28,641	4	2
FFP	5	34,332	5	5
IN FLIGHT SERVICE	6	37,139	6	7
COMPANY TRAVEL POLICY	7	41,825	7	6

Source: FFP Department, Saudi Airlines, 2003

Furthermore, Saudi Arabian Airlines asked its customers, "How often does your FFP membership (Alfursan) affect your choice to fly with Saudi Airlines over other airlines?" One in three surveyed customers stated that the FFP provided Saudi Airlines with a competitive advantage over other carriers, though only after other factors reached satisfactory levels and were useful to customers.

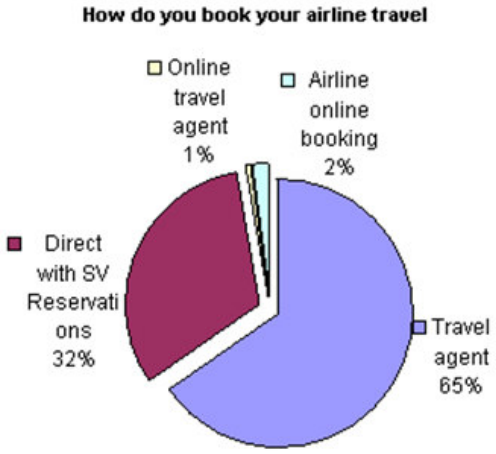
FIGURE 8.31: INFLUENCE OF FFP MEMBERSHIP



Source: FFP Department, Saudi Airlines, 2003

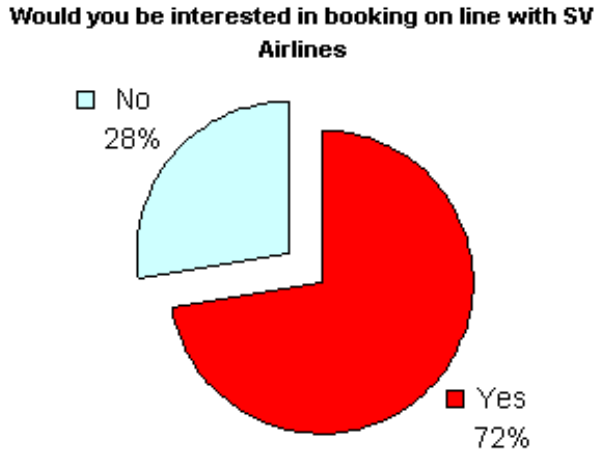
When the airlines asked customers, "how do you book your airline travel?", only 2% responded that they did so online, 1% booked online through a travel agent, 32% booked directly through Saudi Airlines reservations, and 65% used travel agents. When asked if they would be interested in online reservation with Saudi Airlines, 72% of these customers said yes; those who would not be interested on booking online explained their reasons as follows: 40% did not trust the Internet for shopping, 14% found it too expensive, 18% did not use the Internet, and 28% had other reasons. Most of those who expressed a lack of trust in the Internet were Saudi Arabian nationals.

FIGURE 8.32: RESERVATION METHODS



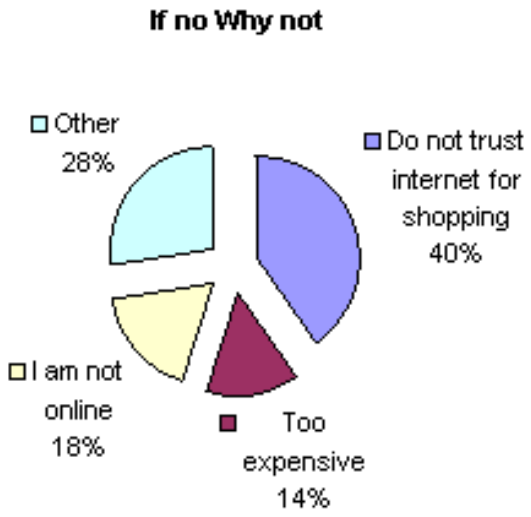
Source: FFP Department, Saudi Airlines, 2003

FIGURE 8.33: ONLINE RESERVATION



Source: FFP Department, Saudi Airlines, 2003

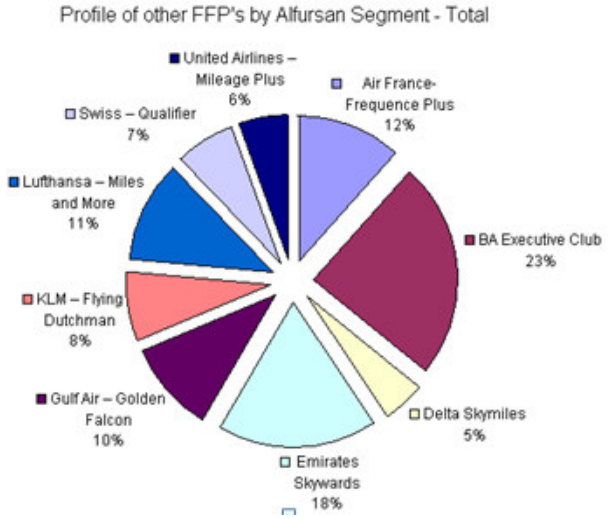
FIGURE 8.34: REASONS FOR NOT USING ONLINE RESERVATION



Source: FFP Department, Saudi Airlines, 2003

The documentation from Saudi Arabian Airlines reveals another question related to this research. This asked customers to rate the airlines' services, including reservations, ticketing, check-in and in-flight entertainment. For retention, customers should at least rate these services excellent. The documentation shows that 30–40% of passengers would be tempted to defect to other rival airlines if those competitors enhanced their services, including online shopping. This lack of loyalty is also clear in the responses when customers were asked if they were members of another FFP; 39% were members of other airlines' loyalty programs. British Airways represented the highest threat and major competitor, such that 23% of Saudi Arabian Airlines customers also have membership in its program and have been exposed to its services. The results are shown in Figure 8.34. In addition, one-third of the surveyed customers indicated that their alternative FFP provided better services than Saudi Airlines.

FIGURE 8.35: ALTERNATIVE FFP PROFILES



Source: FFP Department, Saudi Airlines, 2003

Moving to the 2007 Saudi Arabian Airlines survey, which measured customer satisfaction with its electronic services, the comparative analysis showed better satisfaction and usage of the e-services of Saudi Airlines in the latter survey.

Saudi Airlines asked customers to state their purpose for using the company website. They found that 33% used www.saudiairlines.com for reservation and confirmation procedures, but ticket purchases were only 9% of the total. More than one-third of the questionnaire respondents used the Internet to find flight schedules - 16.5% to access flight schedules, 19.8% to find the flight-time (departure and arrival), and 12% to access special offers and tourism programs.

FIGURE 8.36: PURPOSE OF USING THE WEBSITE

Purpose	%
Reservation/reconfirm	33.7
Tickets purchase	09.5
Access to flight schedules	16.5
To know the flight time of departure and arrival	19.8
Access to special offers and tourism programs	12.1
Other	8.4

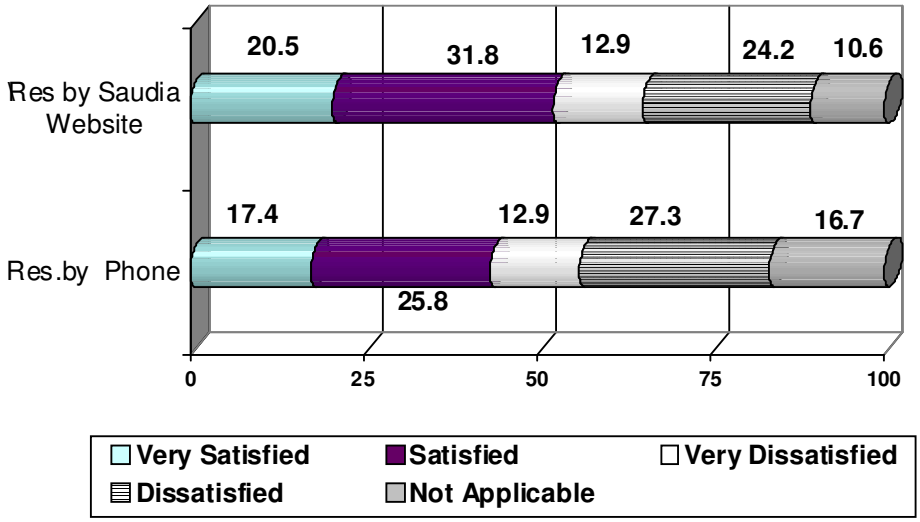
Notes: 143 total responses.

Source: Economic Research and Forecasting, Saudi Airlines, 2007

Satisfaction with the reservation was higher through www.saudiairlines.com than by phone (52.3% versus 42.3%). Moreover, 25% of the questionnaire respondents were dissatisfied with reservation access online, whereas 27% expressed dissatisfaction with the phone channel. Furthermore, 38% said the online ticketing prices were suitable, but 29% found them not suitable. More than half of the users of the self-ticketing machines were satisfied,

and 46% said electronic ticket purchases were accepted by all credit cards. However, 9.8% were not satisfied.

FIGURE 8.37: SATISFACTION WITH RESERVATION METHODS



Source: Economic Research and Forecasting, Saudi Airlines, 2007

Since the airline introduced an Internet reservation service in 2004, the number of users increased dramatically, especially as it continued to enhance its online reservation system. The documents revealed a big increase in the percentage of online reservations between 2005 and 2006, for both domestic and international travel. The percentage change in reservations on the website per passenger (single passenger) was 68.91% in the domestic sector and 72.1% in the international sector. Customers had been seeking this service, so as soon as the airline introduced it, they began using it frequently. The percentage change in reservation for 2006 to 2007 was smaller, at 18.21% for the domestic sector and 49.22% for the international sector. In addition, the percentage change in online reservation according to Passenger Name Record (PNR) (more than one passenger in one reservation) for 2005–2006 was 71.8% in the domestic sector and 74.32% in the international sector, whereas the same numbers for 2006–2007 were 17.12% and 49.2%, respectively.

FIGURE 8.38: ONLINE RESERVATION STATISTICS

Statistics per Passenger (Per Year)

	Online Reservation			
Year	**Domestic**	**% Change/ year**	**International**	**% Change/ year**
2005	645,846		186,157	
2006	1,090,930	68.91%	320,374	72.1%
2007	1,289,613	18.21%	478,049	49.22%

Source: Internet Booking Department, Saudi Airlines, 2008

Statistics per Passenger Name Record (PNR) (Per Year)

	Booking			
Year	**Domestic**	**% Change/ year**	**International**	**% Change/ year**
2005	347,531		97,998	
2006	596,900	71.8%	170,833	74.32%
2007	699,020	17.12%	254,857	49.2%

Source: Internet Booking Department, Saudi Airlines, 2008

The survey also asked customers about their satisfaction with tourism offers, cargo offers, and FFP offers. 33% of the participants expressed satisfaction with tourism offers, but the same percentage reported dissatisfaction. For cargo, however, satisfaction ratings were 35.4% and 30.8% for the cargo reservation procedures on www.saudiairlines.com, the availability of cargo services and special offers.

For the ease of applying for membership and the ease of access to services and reward offers on www.saudiairlines.com, the FFP offer satisfaction rate reached 50% and 30%, respectively.

8.5. INTERNET USAGE IN SAUDI ARABIA

Internet service officially became available in Saudi Arabia in 1997. Since then, the Internet has become an integral part of the Saudi society and economy. Because the theoretical framework of this research discusses the dominant factors regarding continuance intentions toward e-shopping in Saudi Arabia, it is necessary to analyse documents and research obtained through the interview with the General Manager of the Communications and Information Technology Commission. The CIST has conducted comprehensive research, including 7570 interviews in various sectors in Saudi Arabia, spanning individuals, business,

education, government, and health care to investigate the factors related to Internet usage. It concentrated on PC penetration, PC usage, reason for using PCs, Internet usage, obstacles to using the PC and Internet, and e-commerce awareness and usage. Because this research focuses on end users, only the individual sections of the documents provided during the interview are considered for further analysis.

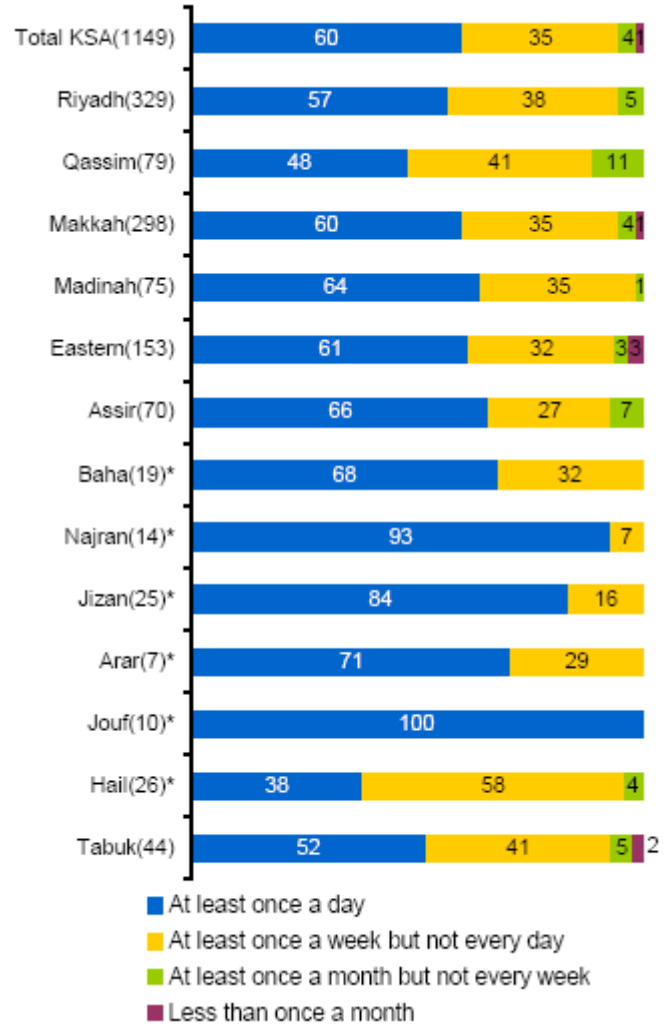
The sample consisted of 54% men and 46% women, and 79% of the sample was Saudi nationals. About 60% of the participants were younger than 35 years - remember that the Saudi population is a young population. Computer ownership in Saudi Arabia is considerably higher among the younger age group; about 73% of the 15 – 25 year old group owns a personal computing devices. The East, West, and Centre regions exhibited the highest PC ownership compared with other regions; 93% of the online survey participants for this thesis came from these regions.

FIGURE 8.39: SAMPLE COMPOSITION BY AGE GROUPS

Age group	% of Total Sample
15 - 24 years	29%
25 - 34 years	29%
35 - 44 years	21%
45 - 54 years	11%
55 - 60 years	10%

Source: www.cdsi.gov.sa, Population and Housing Characteristics in the Kingdom of Saudi Arabia Demographic Survey, 2007

FIGURE 8.40: FREQUENCY OF USAGE BY PROVINCES



Source: Internet Usage in the Kingdom of Saudi Arabia, CITC 2008

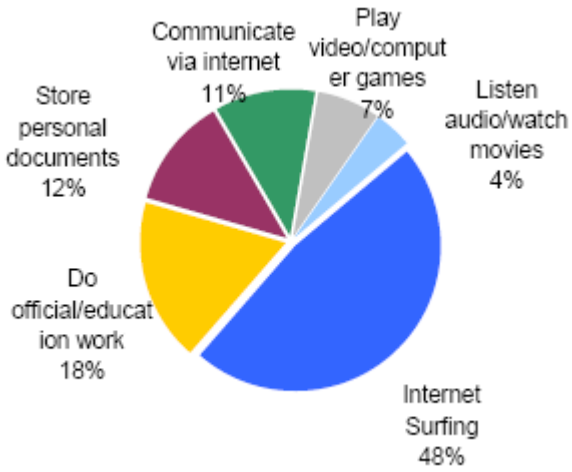
Persons aged 15–34 years old were the main daily users of computers. A higher percentage of the users who used computers at least once a day came from this young generation. The frequency of usage diminishes with age. Approximately 60% of computer users said that the main reason they used computers was to surf the Internet. In addition, participants used the computers to store personal documents and to carry out official or education-related work.

8.5.1. Main Reason for Using Computers and Internet

Because Internet surfing is the main reason for which respondents use their computers, almost all of them used the Internet at least once a week. Browsing (41%) and communication (30%), such as e-mails, chatting, and participating in blogs and forums, emerge as the two main reasons for using the Internet. Half the participants also mentioned

gaining information about goods, services, health, and government authorities, as well as downloading games and movies, banking, education-related searches, and entertainment.

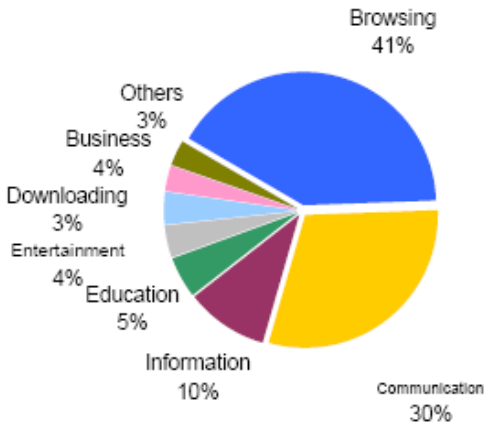
FIGURE 8.41: COMPUTER USE



Source: Internet Usage in the Kingdom of Saudi Arabia, CITC 2008

The reasons for using the Internet are almost the same for men and women. However, relatively more men than women are browsers, and a marginally higher proportion of women claim to use the Internet to gather information related to beauty, to compare products or services, or for education-related activities.

FIGURE 8.42: USE OF INTERNET



Source: Internet Usage in the Kingdom of Saudi Arabia, CITC 2008

The findings shed light on some interesting trends regarding the reasons for Internet usage across age groups. Younger consumers' key interests, besides browsing, are chatting, e-

mailing, and participating in blogs. Older people do more browsing and carry out business-related activities and banking, as well as to derive information about health services.

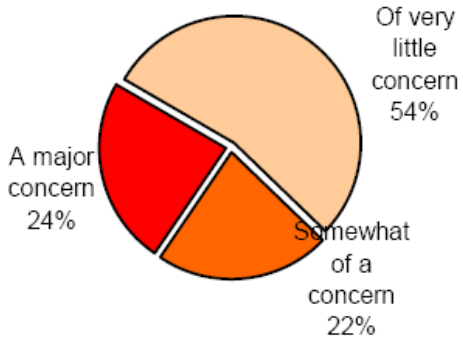
About one-fifth of the Internet users in Saudi Arabia visit English-language sites, whilst more than half mostly visit sites in Arabic. There is no significant difference in language preferences between younger and older people or men and women.

8.5.2. Internet Satisfaction and Filtering

Satisfaction levels with Internet connections are moderate, with close to two-thirds of the respondents overtly mentioning that they were satisfied, and 27% were extremely satisfied. Furthermore, women tend to be more satisfied with Internet services - 34% are extremely satisfied, whereas only 22% of men are extremely satisfied.

About 54% of the respondents find information filtering a little of concern when they surf the Internet. However, only 24% considered it a major concern. It is more of an issue among women (45%) than among men (36%).

FIGURE 8.43: FILTERING CONCERNS



Source: Internet Usage in the Kingdom of Saudi Arabia, CITC 2008

8.5.3. Awareness of e-Commerce

Almost half (43%) of the participants claimed that they had heard of e-commerce; most of whom are younger. However, participants who claimed that they understand the term e-commerce or e-shopping indicated uncertainty over modes of payment. For example, 28% believed that e-commerce meant the display of items for sale on a Website that could be ordered and then paid for on delivery with cash, whereas 26% knew that the items could be bought online using a regular credit card, and 21% mentioned that e-commerce involved

displaying items for sale that could be bought by personally visiting a shop. Finally, 16% thought that the items could be bought online but only by using an Internet credit card.

Awareness of the e-commerce concept among the participants increased to 56% when they were prompted with the definition of e-commerce: "E-commerce is a concept that helps you buy and sell goods and services on the Internet." This definition created vigorous discussion with the interviewees, who also read the definition used for the purpose of this thesis ("In the context of this questionnaire, e-shopping, electronic shopping, online shopping, and Internet shopping are considered the same. All these activities can include the activity of searching, buying, and selling, products and services through the Internet").

The STC interviewees claimed that the company and its customers were 90% satisfied with all of its online services, enabling customers to have full control of their products, landline, mobile, broadband, loyalty points, and so on. Saudi Airlines also provides full online services for its customers (e.g., flight schedule, flight status, flight reservation, ticket purchasing, car hire, hotel reservation, control of FFP).

8.5.4. Usage of e-Commerce

According to the e-commerce definition used by the CIST, 83% of respondents said they had never visited an e-commerce website. People who visited an e-commerce or e-shopping site (17% of the participants) did not do so more than three times out of every ten connections online. Airlines tickets and hotel reservations were the most often purchased products and services, representing 6% of the total. This behaviour with regard to e-commerce usage is uniform across provinces, gender, and age in Saudi.

This finding is not encouraging for the use of e-commerce in Saudi. Furthermore, 47% of the participants said they remained very concerned when shopping online due to security reasons, and 43% believed there was not enough product variety on the Internet. In addition, 55% were concerned about after-sales service when they bought online, whilst 59% believed that "shopping online is something for the next generation." However, 40% of participants expressed enjoyment in online shopping, calling it fun and noting the time they saved, and 31% found online shopping very convenient. Furthermore, 34% said online shopping was easy for comparing prices and options before buying, and 76% found the Internet much simpler for gaining access to information. Others mentioned the difficulty of assessing goods, the expense of buying through the Internet, the complexity of this method, and the lack of quality.

Unlike e-commerce, approximately 49% of the respondents were aware of e-learning and fairly confident about this concept. E-Learning was very well accepted by most people, across Saudi Arabia. In particular, 74% believed that the Internet makes information access easier and more convenient, as well as providing the most up-to-date information. Furthermore, 70% considered e-learning via the Internet a medium of the modern generation.

However, about 45% felt that the Internet was dangerous for children, and 25% mentioned that the Internet may provide access to immoral content. These concerns were more common among older people.

8.6. SUMMARY

This chapter has presented a qualitative analysis of complementary research, structured around interviews and documentary analysis. Most of the interviewees agree that e-commerce is a powerful concept for reaching customers and serving them better. The findings show that companies link e-shopping to the opportunity to retain and satisfy customers, to generate more profits, to identify new customers, to offer better responses and services, and so on. The interviewed companies realised the benefits of implementing e-commerce solutions for themselves and their customers. However, to ensure the success of e-commerce, top management involvement is essential.

In addition to the structured interviews, the other analysed documents provide a better understanding of e-shopping in Saudi Arabia. The analyzed documents from Saudi Airlines show greater potential for e-commerce services: 72% of the surveyed customers said they would be interested in online reservation, and 52.3% of its customers who participated in the airline survey were satisfied with the airline online reservation.

Other documents from the Communications and Information Technology Commission showed a link between the PC penetration in Saudi Arabia and Internet usage. The level of PC penetration in Saudi Arabia is good; about two-thirds of the population claims to own a computer of some type. Their main objective in using the Internet is to surf and communicate, or perform educational or office-related work. Youngsters are relatively more frequent users, using the Internet more, mostly for browsing, e-mailing, and chatting.

Approximately 54% of the people in Saudi Arabia have an Internet connection. The main reason for not having an Internet connection is a lack of awareness of its benefits. The

majority of the users browse, chat, or e-mail, though young users also are interested in participating in forums and blogs, and older respondents conduct banking activities and gather information.

A significant proportion of people (40%) are concerned about information filtering, especially the youngsters. They believed such filtering caused them to lack some crucial information, and they wanted full freedom to surf. E-commerce, as a concept, was not very clear to these respondents, though nearly half of them claimed to be aware of it. Perhaps because they think of it as something for the next generation, not even one-fifth of the respondents had ever visited or used any e-commerce sites. Of the present users, most of whom have never bought anything online, safety considerations and a lack of necessity stopped them from purchasing. Many also cite their concerns about the after-sales service if they buy online. The definition they use differs from the e-shopping definition applied in this thesis though.

The views about e-learning are much more positive. Most people believe the Internet makes information access easier, more convenient, and more up-to-date. Furthermore, participants considered e-learning through the Internet as the medium of today's generation.

The following chapter, therefore, addresses the data findings and discussion, with the aim of gaining a better understanding of the research model.

CHAPTER 9: DISCUSSION AND CONCLUSION

9.1. INTRODUCTION

In today's businesses, e-commerce is characterised by very high competition (Belanger *et al*., 2002). It is an essential strategy for practitioners and academics alike to understand what makes customers loyal and have the intention to revisit and continue doing business. Current online shoppers are becoming more sophisticated, more demanding for value, and more experienced at shopping online. Current literature demonstrates the growing stream of research, examining the factors that influence e-shopping attitude, intention to use, intention to purchase, online satisfaction, and online continuance intention. However, much of this research examines the factors that influence e-shopping intention in western and non-western countries, with little or non-existent studies for Saudi Arabia in particular. Despite the proliferation of research concerning online shopping, to the best of the researcher's knowledge, no single research has attempted to examine the continuance intention of online shopping in context of the unique young population, to be found in Saudi Arabia.

The aim and purpose of this study is to address this gap and provide a validated conceptual model that integrates different factors, clarifying the theoretical problems of continuance e-shopping intentions and conducting invariance analysis among different groups to measure behavioural differences in Saudi Arabia.

This chapter provides an overview of the discussion of the research findings of the quantitative data presented in Chapter 6 and Chapter 7, supported with a case study from Chapter 8. Additionally, this chapter provides the research conclusions, recommendations, research limitation, future research, and managerial implications. To achieve the overall objective, a research framework was developed. The discussion and conclusion in this chapter is supported by the research literature review and in accordance with the research hypotheses.

Table 9.92 provides a summary of the research hypotheses and findings. Figure 9.44 provides the revised final research model. The online field survey validates the hypothesized model, and the model findings confirm that Perceived Enjoyment, Perceived Usefulness, and Subjective Norms are the main determinants of continuance intentions in Saudi Arabia, accounting for 61% of continuance e-shopping intentions. As shown in Figure 9.44, this model illustrates the research findings, which identify a model of continuance online

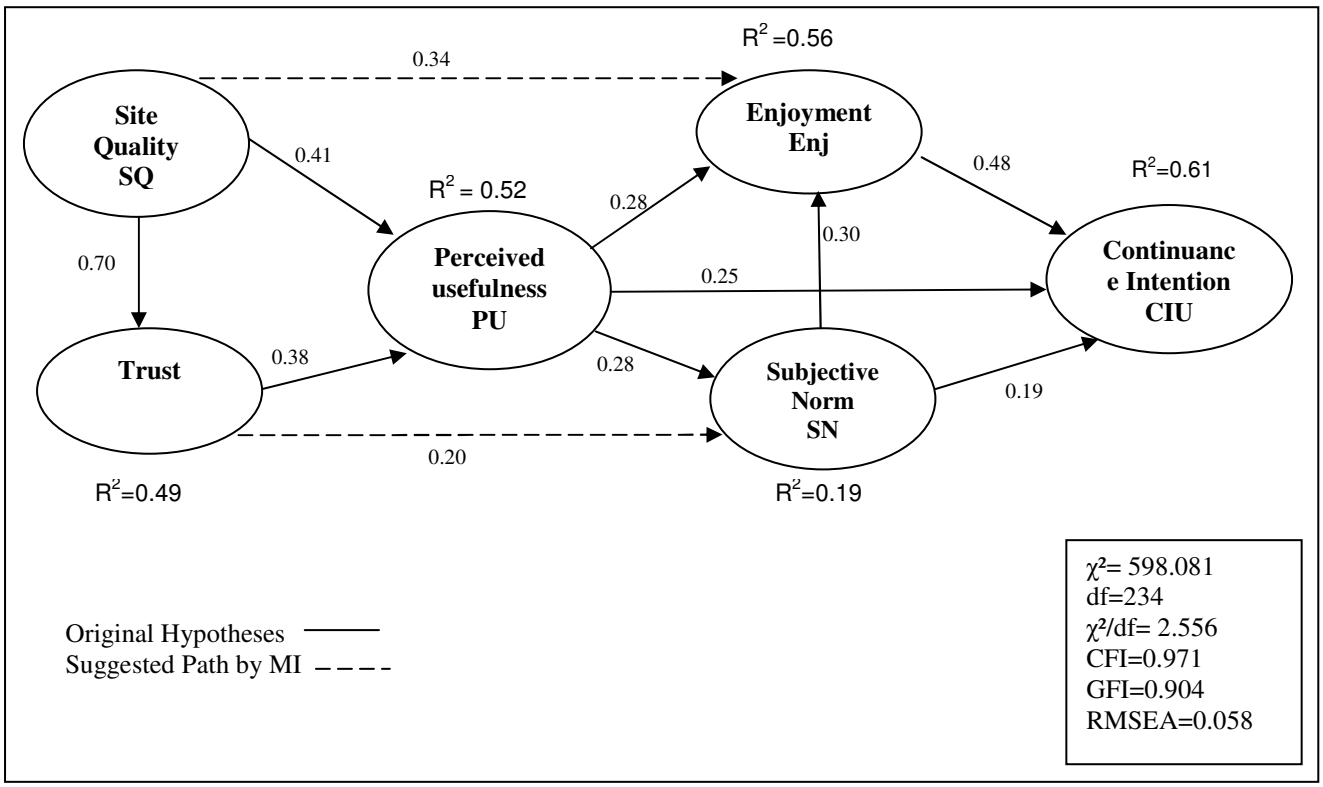
shopping intention that is valid for online shopping in Saudi Arabia. The author also speculates that such a model may well be applicable to online shopping in other of countries, and perhaps also generally applicable to continuance intention of other services industries. However, it is for future research to explore this potential generalization.

TABLE 9.92: SUMMARY OF THE FINDINGS

Factor	**Hypothesis**				**Standardized Regression Weights *(B)***	**Standard Error S.E.**	**Critical Ratio C.R.**	**P Value**	**Hypotheses Findings**
Site Quality	H1a	PU	<---	SQ	0.407	0.053	7.475	***	Supported
	H1b	Trust	<---	SQ	0.702	0.042	15.856	***	Supported
	H1c	Enj	<---	SQ	0.343	0.043	6.699	***	Supported
Trust	H2a	PU	<---	Trust	0.379	0.056	6.938	***	Supported
	H2b	SN	<---	Trust	0.201	0.063	3.215	.001	Supported
Perceived Usefulness	H3a	SN	<---	PU	0.279	0.062	4.395	***	Supported
	H3b	Enj	<---	PU	0.285	0.045	5.591	***	Supported
	H3c	CIU	<---	PU	0.245	0.050	5.693	***	Supported
Subjective Norm	H4a	Enj	<---	SN	0.304	0.037	7.388	***	Supported
	H4b	CIU	<---	SN	0.191	0.046	4.979	. ***	Supported
Enjoyment	H5	CIU	<---	Enj	0.476	0.067	9.402	***	Supported

*** $p < 0.001$.

FIGURE 9.44: SUMMARY OF FINAL REVISED RESEARCH MODEL



9.2. DISCUSSION OF FINDINGS IN RELATION TO RESEARCH QUESTION

Despite these impressive online purchasing growth rates in the previous decade, compelling evidence indicates that many consumers, searching different online retail sites, abandon their purchases, which make the e-commerce market is still small. Likewise, how to persuade customer repurchase remains a concern for e-commerce vendors (Johnson and Hult, 2008). It is stated that only a small minority of website visitors (about 1%) proceeds to make purchases (Gupta and Kim, 2007). Retaining customers is a financial imperative for e-shopping business (e-vendors), especially as attracting new customers is considerably more expensive than in the case of comparable traditional bricks-and-mortar stores (Reichheld and Schefter, 2000). Given the inconsistent nature of customer behaviour, the growth in global web-stores, the increasing product and service availability and fairly low switching costs, consumers, without a compelling reason to choose one retailer over another, will experiment or rotate purchases among multiple firms (Bhattacherjee, 2001b; Crego and Schiffrin, 1995). Raising the number of reliable costumers by as slight as 5% can raise profitability by 30-85%, depending upon the business (Reicheld and Schefter, 2000). All these promote to believe that it is more important than ever to identify the main drivers of online customers' continuance shopping intention. Thus, what, then, makes customers return to an e-vendor? The author of this research attempts to provide a validated conceptual model that integrates different factors and clarifies the theoretical problems of continuance e-shopping intentions. Furthermore, the developed research model is expected to answer the research questions: "What factors drive consumers' continuance intentions toward e-shopping?", which also include: Which forces drive customer continuance e-shopping intentions in Saudi Arabia?; Do they differ from the drivers in developed countries?; That is, do well-established theories from developed (mostly Western) countries also apply in less developed (often non-Western) cultures; in the case of this research is Saudi Arabia?; What impact do enjoyment, usefulness, and subjective norms have on continuance intention in Saudi Arabia?; Are gender, education, age, experience, spending, and regions of Saudi Arabia associated with any behaviour differences among online shoppers?. Additionally, the developed research model is expected to provide a better explanation of behavioural differences of continuance e-shopping intentions. Moreover, the model

contributes to an understanding of the factors that encourage consumers to increase their e-shopping continuance intention. The online field survey validates the hypothesized model, and the model findings confirm that Perceived Enjoyment, Perceived Usefulness, and Subjective Norms are the main determinants in Saudi Arabia, explaining 61% of continuance e-shopping intentions. However, Enjoyment is more influential (see Table 9.92; SRW = 0. 476, CR = 9.402), followed by Perceived Usefulness (SRW = 0.245, CR = 5.693), and then Subjective Norms (SRW = 0.191, CR= 4.979). These findings are consistent with previous research (e.g., Bhattacherjee, 2001a; Childers *et al*., 2001; Davis *et al*. 1989; George, 2002; Shih and Fang, 2004; Taylor and Todd, 1995; Teo *et al*., 1999; Venkatesh *et al*., 2003). Enjoyment, Perceived Usefulness, and Subjective Norms have positive influences (direct or indirect) on consumers' continuance e-shopping intentions. Furthermore, the findings reveal the important role of the perception of e-shopping quality in e-shopping continuance intention, which is in agreement with previous research (Ahn *et al*., 2003)

9.3. GENERAL DISCUSSION OF RESEARCH FINDINGS

Globalization continues to drive the rapid growth of international trade, global corporations, and non-local consumption alternatives (Alden *et al*., 2006; Holt *et al*., 2004), and advances of the Internet and e-commerce have diminished trade boundaries. E-Commerce and e-shopping create opportunities for businesses to reach to consumers globally and directly, and in turn, business and social science research now focuses specifically on cross-national and cross-cultural Internet marketing (Griffith *et al*., 2006). The Internet has changed how businesses and customers customize, distribute, and consume products. Its low cost gives both businesses and consumers a new and powerful channel for information and communication. According to the latest Nielsen Global Online Survey on Internet shopping habits (Nielsen.com, 2008); more than 85% of the world's online population has used the Internet to make a purchase - increasing the market for online shopping by 40% in the past two years.

Childers *et al*., (2001) went on to describe the term 'enjoyment' to embody the hedonic aspects, while usefulness denoted the utilitarian ones. This research found that online shoppers in Saudi Arabia do, indeed, perceive utilitarian value and hedonic value to be important in their future intentions. The research model provides some other interesting results. Unlike findings from developed countries that show perceived usefulness and

satisfaction to be the dominant predictor of intention or continuance intention (Agarwal and Prasad, 1999; Davis, 1989; Dishaw and Strong, 1999; Gefen and Keil, 1998; Igbaria *et al*., 1996; Moon and Kim, 2001; Taylor and Todd, 1995; Venkatesh, 2000; Venkatesh and Davis, 2000; Premkumar and Bhattacherjee, 2008), the results of this study indicate that perceived Enjoyment is the strongest predictor that motivates individuals to continuance intention to use e-shopping. Perceived Usefulness and Subjective Norm (social pressure) are shown to be the next factors, which influence continuance intention usage. In addition, Trust and Site Quality have strong indirect influence on continuance intention for e-shopping usage. The dominance of Enjoyment over Perceived Usefulness in predicting continuance intention to use e-shopping in the context of Saudi Arabia could be due to the fact that thousands of websites provide similar services in terms of usefulness and benefits. It appears that consumers turn to online vendors primarily for hedonic reasons. Therefore, attracting and retaining users by providing an enjoyable and playful e-shopping site has become very important.

Second, since its introduction to the public in 1999, e-commerce is in its introductory stage in Saudi Arabia. E-Shoppers are becoming more engaged in the enjoyment of e-shopping. Third, Saudi Arabia has a population of 25 million, highly skewed in terms of age distribution, with 60% under the age of 30 (Middle East Statistics, 2007). This age profile is relevant to our findings, as in countries that are further advanced in Internet shopping; much of the growth has been driven by young people. For example, in the UK, teenagers spend on average £3 billion a year (Datamonitor, cited by Spero and Stone, 2004). Clearly, young people's behaviour is of special importance to Saudi trade. Taking that into consideration, the Internet is one of the main environments for young people to play, work, learn and communicate (Alreck and Settle, 2002; Spero and Stone, 2004), which suggests that enjoyment is the strongest predictor in this research finding. Notwithstanding that the results indicate that more males were influenced by utilitarian considerations (see Table 7.46), the female and male respondents were both influenced by hedonic aspects (Table 7.46). Finally, with particular relevance to the female e-shoppers, this is in line with previous research findings that women tend to accept technology based on their hedonic experiences and the opinions of others (Teo *et al*., 1999; Venkatesh *et al*., 2000).

Research indicates that consumers in all shopping media shop for both utilitarian and hedonic outcomes (Childers *et al*., 2001). Consistent with previous research, the results of this study demonstrate the hedonic and utilitarian roles in continuance online shopping. The enjoyment and usefulness constructs are, respectively, strong hedonic and utilitarian influential

indicators to usage intention (Davis *et al*., 1992; Van der Heijden, 2004) and revisit intention (Lin, Wu and Tsai, 2005; Donovan and Rossiter 1982). Additionally, the results are similar to Childers *et al*.'s (2001) findings that enjoyment can predict attitude towards e-shopping, just as much as usefulness can. With regard to e-shopping, the hedonic enjoyment constructs in the research model may reflect the pleasure that users obtain from shopping online, which reinforces continuance intentions.

The findings of this study and those conducted in North America can be viewed in the light of national culture. Hofstede's studies have shown that North American countries are characterized by low collectivism and low uncertainty avoidance. In other words, individuals in this region are highly self-reliant (Hofstede, 1984) and thus have little concern for status and formality; they often bypass their superiors to perform their tasks (Adler, 1995). In addition, these countries are dominated by individuals with "doing-oriented cultures" (Maznevski and DiStefano, 1995). Individuals from doing-oriented cultures typically stress accomplishments, work hard to achieve goals, and maximize work effort. Therefore, individuals in developed countries will be influenced to use technology as a tool for efficient and effective work practices as well a tool required for self-advancement.

In contrast, the Arab World culture, including Saudi Arabia, is dominated by high collectivism and high uncertainty avoidance, i.e., an individual's beliefs depend on the social norms of the group (Kluckhorn and Strodtbeck, 1961) as well as expecting managers to set the standards to be followed. Individuals in this region are also being-oriented, meaning that they work only as much as needed to be able to live, and minimize work (Adler, 1995). Individuals follow their managers' directives and use technology regardless of accrued benefits. Additionally, other studies suggest that individuals place more trust in people similar to themselves and assess trustworthiness based on second-hand information and on stereotypes (McKnigh *et al*., 1998; Morgan and Hunt, 1994; Zucker, 1986). In a similar vein, recent studies in the marketing literature have also confirmed the importance and dynamics of social pressure on consumer behaviour. For instance, Takada and Jain (1991) have found that the diffusion of consumer goods in South Korea and Taiwan is directly influenced by social value.

There is a distinction between intrinsic and extrinsic behavioural motivation. The motivation to use a technology might arise because of derived intrinsic rewards (enjoyment and fun), perceived benefits (usefulness) or extrinsic pressure (social pressure) (Deci, 1975). Intrinsic

and extrinsic behavioural motivation could be applied to the individualistic and collectivist cultures in many ways. For example, while emphasis on intrinsic motivation (enjoyment, fun, and usefulness) is typical of individualistic cultures, emphasis on extrinsic pressure (social pressure) is more typical of collectivist cultures such as Saudi Arabia. Moreover, Ajzen (1985) uses the term "subjective norms" to refer to the person's perception of the social pressures that put on him or her to perform the behaviour in question. Depending on the culture, social pressure can affect the individual behaviour in varying degrees in different societies.

Researchers such as Hofstede (1994) and Adler (1995) maintain that the individualism-collectivism dimension is an important means of understanding the motives of human action and behaviour (Ali, 1988). This perspective refers to the cultural dispositions to understand people's needs to either satisfy personal aspirations or attend to group needs. In highly collectivistic cultures such as the Arab World, an individual's actions are typically influenced by the expectations of people around him/her, especially the group he/she identifies with. Thus, individuals from a collectivistic culture may use online shopping not because of their potential usefulness or the enjoyment to be derived but because of the perceived social pressure from their family and friends. In addition, they may wish to be perceived as being technologically sophisticated by those whom they consider important to their future well-being. Therefore, the research finding of subjective norm (social pressure) towards continuance intention is consistent with Gelb and Johnson (1995), who conclude that positive or negative social pressure, such as word-of-mouth, is more effective than advertising in persuading customers to increase or reduce their intention or action.

The use of online shopping may also be motivated by intrinsic psychological rewards. Perceived enjoyment and fun represent an intrinsic motivation for the use of online shopping. It represents a type of intellectual playfulness and is defined as an individual characteristic that describes an individual's tendency to interact spontaneously, inventively, and imaginatively with the computer. Empirical research indicates that the general characteristics of enjoyment and fun relate positively to creativity and an exploratory type of behaviour during interaction with computers (Webster, 1992). It also shows that individuals who experience pleasure and joy from using the computer and perceive any activity involving use of online shopping as inherently enjoyable, apart from any anticipated improvement in performance, are likely to use it more extensively than others (Davis, 1992; Malone, 1981; Webster, 1989). Davis *et al*. (1989) found that while perceived usefulness emerged as the

major determinant of computer acceptance in the workplace, enjoyment and fun had a significant effect beyond it.

A cultural dimension that was not related to Hofstede's dimensions of culture, but has enormous management implications is the abstractive versus associative character in cultures (Kedia and Bhagat, 1991). This dimension examines patterns of thinking and perception that affects various aspects of employee behaviour. In abstractive cultures, which are found in regions such as North America and Europe, people think and behave in a linear fashion using a rational cause-and-effect paradigm to create perceptions. In associative cultures, which are typically found among Africans, Asians and Arabs, including Saudi Arabia, perceptions and behaviour are often diffuse, i.e., they utilise associations among events that may not have a logical basis (Micheal, 1997). Previous studies involving subjects from abstractive cultures have shown that perceived usefulness is positively related with system usage (Robey, 1979; Thompson *et al.*, 1991). These could also justify the findings in the research model including enjoyment as the dominant predictor of continuance intention along with subjective norm.

Site Quality and Trust are strong antecedents of Perceived Usefulness (Site Quality SRW = 0.407, CR = 7.475; Trust SRW = 0.379, CR = 6.938). Both Site Quality (0.529) and Trust (0.247) have large indirect effects on Continuance Intentions (see Table 7.31). These findings match the collectivist culture of Saudi Arabia, where people tend to trust only members of their in-group (Yamagishi and Yamagishi 1994).

Site Quality has a direct effect on Trust (SRW = 0.702, CR = 15.856). Trust and Site Quality do not have direct effects on Continuance Intentions toward the online retailer. Rather, significant indirect effects from Trust (0.247) and Site Quality (0.529) move through Perceived Usefulness, Subjective Norms, and Enjoyment. This model refers to post-purchase behaviour after a first-hand experience in online shopping. It appears that consumer initial trust and usefulness expectations can be confirmed, leading to increased usefulness that puts more pressure on social contacts to use and enjoy the site.

Web practitioners are also concerned with quality factors that appear to have an impact on user acceptance. That is because web quality factors are under the control of the company and are ways of influencing user beliefs and behavioural intention. Site Quality, which in this research represents engineering-oriented performance characteristics (interface and visual design, functionality, response time, easy to use), and availability and clarity of communication, interaction and navigation mechanisms with customer service (accepting

consumer complaints and timely resolution of them with responsiveness, assurance, and follow up services), which enhance the formation of consumer trust (McKnight *et al*., 2002a). Consumers trust a vendor's competence, integrity, and benevolence when they perceive a vendor's website to be of high quality (McKnight *et al*., 2002a).

Studies have shown that information quality has a positive impact on perceived ease of use and usefulness of a website. The research confirms Lederer *et al*.'s (2000) finding that information quality had a significant relationship with perceived usefulness. Building trust with consumers is an essential mission for e-retailers because purchasing decisions represent trust-related behaviours (Jarvenpaa *et al*. 2000; McKnight *et al*. 2002b; Urban *et al*. 2000). Additionally, trustworthiness in the e-retailer is an essential element in the decision to place trust with that person (Halliday 2004).

In the e-shopping context, trust implies a belief that the vendor will provide what has been promised (Ganesan, 1994). As a result, perceived usefulness should occur only for an e-vendor that can be trusted (Festinger, 1975).

The modification indices (MI) in Table 7.30 suggest two significant relations. The first suggested relation by modification indices (MI) is Site Quality which has positive direct effect on Enjoyment (SRW = 0.343, CR = 6.699), as shown in Table 7.31. This finding is in line with Chung and Tan (2004), who suggested that website characteristics, such as quality, were the antecedents of perceived playfulness and that they had a dominant role in influencing a user's feeling of playfulness. Chakraborty *et al*., (2002) indicated that perceived website quality is a multi-dimensional latent construct that includes dimensions of playfulness, usefulness, user friendliness, informativeness, technology, organization, and navigability. Additionally, high quality e-shopping sites may result in the perception that the consumer's e-shopping experience is fun and enjoyable. Consumers are likely to experience greater enjoyment and have more fun completing a given task at an e-store that establishes high quality in terms of information-related as well as marketing-related attributes (Ha and Stoel, 2009). Furthermore, all other conditions being equal, e-store features that appeal to hedonic motivations, such as personalization and experiential/atmospheric quality dimensions, will support greater enjoyment and fun for the consumer (Childers *et al*., 2001). Koufaris (2002) showed that the use of value-added search mechanisms could make the shopping experience more fulfilling and enjoyable. His findings are also consistent with the research conclusion that the more enriched and satisfying shopping information could be

interesting and helpful. High levels of information quality on the website (various, complete, detailed, accurate, timely, relevant, and reliable) are also likely to provide users with convenience, enhanced enjoyment, and better purchase decisions. Furthermore, the findings confirm Tractinsky *et al*.'s (2000) ideas that people will associate visual attractiveness of a website with the positive beliefs that are common in TAM research, i.e., usefulness, enjoyment, and ease-of-use.

The second suggested relation by MI, as illustrated in Table 7.30, is the positive direct effect of Trust on Subjective Norm (SRW = 0.201, CR = 3.215), see Table 7.31. Saudi Arabia is gateway to the two holy mosques and considered a conservative religious country. Previous researches reported that religion enhances trust among community members (e.g., Boudon, 1987; Collins, 2004; Shield, 2002; Steadman and Palmer, 1995; Weber, 1958). Additionally, according to Hofstede (1980), collectivist cultures, such as Saudi Arabia, tend to trust each other more than trusting someone who is not part of the circle. Their actions are typically influenced by the expectations of trusted people around them, such as family, friends, or the larger circle of the community.

Unlike Karahanna *et al* (1999) who suggested that as consumers gain e-shopping experience, cognitive considerations based on first-hand experience gain prominence and social normative considerations lose significance, the research findings indicate that the effect of Trust for consumers with high experience on Subjective Norm (ERW = 0.275) is higher than for consumers with less e-shopping experience (ERW = 0.208), see Table 7.78. However, the regression weight of Subjective Norm on Continuance Intention is less on consumers with higher e-shopping experience (ERW = 0.227) than consumers with less experience (ERW = 0.245), see Table 7.78. Similarly, the total effect of Subjective Norm on Continuance Intention is higher with consumers who have less e-shopping experience (0.416) than consumers with higher e-shopping experience (0.379), see Table 7.78.

9.4. DIFFERENCES BETWEEN SHOPPERS

As typical "innovators" (Donthu and Garcia, 1999), previous researches indicated that online shoppers tended to be more educated (Li *et al.*, 1999), younger than average and more likely to be male (Korgaonkar and Wolin, 1999). This research is unique in the sense that it is the first attempt, within the researcher's knowledge, to conduct invariance analysis among different groups in the context of e-shopping in Saudi Arabia. The research provides valuable

insights and is considered key contribution to understanding the continuance behavioural intention differences in online shopping by looking at eighteen invariance analyses which include: gender differences, experience and inexperience differences, online spending differences, age differences, education differences, and geographical regions differences.

When comparing cultures or groups, research participants may not recognise the same meaning and understanding of survey items. Scholars thus have emphasized the importance of minimizing possible research biases in cross-national, cross-cultural, and group analysis researches derived from the data collection (Lai and Li, 2005; Yi *et al*., 2008). To do this, we applied back-translation (Brislin, 1986), as well as assessing the measurement invariance (equivalence) across the groups to consider the constructs' factorial invariance (Cheung *et al*. 1999; Lai and Li, 2005).

The invariance analysis indicates whether any differences occur between the compared groups. The factorial analysis reveals if the compared group, e.g. men and women, conceptualize the model constructs in the same way and with the same meaning (Hair *et al*., 2006). If we find a group effect on the measurement invariance of the construct and the score of the group analysis is significant, the construct measurement differs for the two groups, and they cannot be compared directly.

Hence, the invariance analysis of the coefficient regression paths was conducted to determine if the two compared groups have the same relationship with same variables in the research model (structural weights).

9.4.1. Gender Differences

As has been previously demonstrated in 7.7.1, the differences in the sample's behaviour in the context of continuance online shopping in Saudi Arabia resulted from the difference in the coefficients of Site Quality → Perceived Usefulness with change in chi-square = 5.123 and p value = 0.024, and from the difference in the coefficients of Perceived Usefulness → Continuance Intention to use with change in chi-square = 6.797 and p value = 0.009.

Moreover, the findings of the latent mean analysis suggest that gender was found to have latent mean non-invariance for the research constructs. This difference between male and female, in the context on continuance Internet shopping, resulted from the differences of the latent mean of Trust. The standardized latent mean of Trust is less among the male sample than it is among female sample.

Additionally, the direct and indirect effects reveal that the greatest total influences of direct and indirect (mediated) effects on Continuance Intentions come from Site Quality for the male (0.635) and Enjoyment for the female (0.752) samples. The next greatest influences come from Enjoyment (0.574) for men; and Site Quality (0.621) for women. Additionally, Perceived Usefulness has more influences for males (0.549) on Continuance Intention than females (0.399). Therefore, Site Quality, Trust, Perceived Usefulness, and Subjective Norm all play significant roles for Continuance Intentions regarding online shopping in Saudi Arabia for both men and women.

The differences in gender demonstrate that men and women have significant differences in their reactions to the site quality and visual stimuli that, in turn, affect their recognition of the product value and benefit, thus affecting their continuance intention. Furthermore, men are more influenced by evaluations of the utilitarian usefulness of technology, whereas women tend to accept technology based on their hedonic experiences and the opinions of others (Teo *et al*., 1999; Venkatesh *et al*., 2000; Venkatesh and Morris, 2000). Furthermore, the findings support previous research, which shows that males tend to engage in processing of available information (Meyers-Levy, 1989; Meyers-Levy and Maheswaran, 1991; Meyers-Levy and Sternthal, 1991). The use of this selective processing strategy implies that men focus on highly available cues. Additionally, men are significantly more "quick shoppers" when compared to women (Hansen and Jensen, 2008). On the other hand, women tend to try to understand all available signs revealed from the site quality (Simon and Peppas, 2005), though information overload may prevent women from understanding the intended value and benefit from the e-retailer. Thus, extending these finding to online shopping continuance intention, websites that fail to provide sufficient information for women might lead to poor understanding of the product value or usefulness resulting less favourable intention toward the websites. Finally, site quality, e.g. Internet design, is male dominated and mostly designed with an associated mindset, which may explain why men are more affected by site quality in this research than women (Rommes *et al*., 1999). Thus, the outcomes of this study suggest the need to explore new ways to enhance to attract more female consumers.

More recent surveys, such as the Pew Internet conducted in 2002 and Sky News conducted in 2002, indicated that women are more dominant than men when it comes to e-commerce, (cited in Cha 2009). According to comScore focusing on expenditures online, women accounted for 58% of online shopping, whereas men were responsible for 42% between April 2004 and March 2005 (Maguire 2006). In this research, women are the most dominant in

terms of online purchasing in all categories. In terms of fashion, 17.7% of women have purchased clothing, accessories or shoes, thus confirming previous studies. Statistics reveal that clothing is one of very few categories with more women than men purchasing online (Statistics Denmark, 2007). Previous research finds evidence that women are more involved in fashion and clothing than men (O'Cass, 2004).

9.4.2. Experience and Inexperience e-Shoppers Differences

As has been previously demonstrated in 7.7.6, the result reveals that all research constructs are less favourable among the inexperienced online shoppers than they are among the experience online shoppers, even though constructs in the two groups sample are invariant (perceived equally).

The findings of the direct and indirect effects provide more valuable insights than the greatest total influences of direct and indirect (mediated) effects on Continuance Intentions coming from Enjoyment for the low online frequency (0.651) and high online frequency (0.756) samples. The next greatest influences come from Site Quality for low online frequency (0.590) and for high online frequency (0.552) sample. Additionally, Perceived Usefulness has the most direct influences for low online frequency sample (0.254) on Continuance Intention, and Subjective Norm acts as the most direct influence for high online frequency sample (0.227). Therefore, Site Quality, Trust, Perceived Usefulness, Enjoyment and Subjective Norm all play significant direct and indirect roles for Continuance Intentions regarding online shopping in Saudi Arabia for both low and high e-shopping frequency.

The findings indicate that Enjoyment remains an important predictor of Continuance Intentions for e-shopping, as many past studies have shown. In terms of the significant standardized beta coefficients, Subjective Norm is 0.245 for inexperienced shoppers and 0.227 for experienced shoppers; Perceived Usefulness is 0.254 for inexperienced shoppers and 0.202 for experienced shoppers; and Enjoyment is 0.651 for inexperienced shoppers and 0.756 for experienced shoppers. These indicate that both utilitarian value and hedonic value are relevant for both frequent (experienced) and infrequent (inexperienced) online shoppers, whilst hedonic value appears to play a significant role for frequent (experienced) online shoppers. Rogers (1995) stated that people are more likely to adopt an innovation they are comfortable with and that is compatible with other technologies they already use. Also, people who have not purchased online tend to continue to buy goods or services offline (Cha, 2009). Thus, the findings could be interpreted as experienced online shoppers are going to

continue shopping and purchasing online. Additionally, the latent mean indicates that frequent (experienced) online shoppers have more favourable evaluations of the research constructs than infrequent (inexperienced) shoppers. Such findings might hold a number of implications for online retailers. It might be that the more experience Internet shopper gains, the more trust and confidence he/she is going to gain, though, experienced shoppers look for enjoyment. Taylor and Todd (1995) stated that experience users place less weight on PU because they employ the knowledge gained from their prior experiences. Furthermore, Yu *et al*. (2005) found that subjective norm, PU, and enjoyment to have positive influence in intention for both experience and inexperience users. That is subjective norm, PU, and enjoyment are common factors amongst the two groups. What this suggests is that while all are important, Enjoyment is a stronger direct predictor than PU and Subjective Norm, at least for experienced repeat consumers of online shopping.

9.4.3. Online Spending Differences

As has been previously demonstrated in 7.7.5, the source of non-invariance of structural weights in the context of continuance online shopping resulted from the difference in the coefficients of Site Quality → Trust with change in chi-square = 4.259 and p value = 0.039, and Site Quality → Perceived Usefulness with change in chi-square = 9.279 and p value = 0.002. Additionally, there are differences in the coefficients of Trust → Perceived Usefulness with change in chi-square = 5.619 and p value = 0.018.

The results demonstrate that 78.8% of the respondents have visited 1 - 5 websites in a given month; 75% of them spend 60 minutes for online shopping activities per week; 11.9% of them used the Internet daily for shopping activities; 46.2% of them used it monthly; 30.3% used it two to three times a year; and 11.2% used it once a year. Thus, it could be argued that the more time spent doing online shopping activities, the more experience they gain and the expectation to spend on purchasing becomes more. As a result, the coefficient of non-invariance could be interpreted as inexperience consumers might spend more time evaluating the e-retailers' website quality to build the proper trust, and then develop criteria for the value or benefit from the product, than consumers with more knowledge and experience (Bettman and Park, 1980). The low online spenders (inexperienced shoppers) might need to spend some time to develop the required knowledge. Furthermore, according to additional results not part of this research, see Appendix K, there is even spending differences in the path of Site Quality to Perceived Usefulness among females themselves in the Saudi market, which marketers need to pay attention to it when appealing to females shoppers.

The findings of the latent mean analysis suggest that the group analysis of low and high online spenders' samples had latent mean invariance for the research constructs.

The direct and indirect effects reveal that the greatest total influences on Continuance Intentions come from Enjoyment for both the low online spending sample (0.700) and for the high online spending sample (0.705). The next greatest influences come from Site Quality (0.618) for both low and high online spenders. Additionally, Subjective Norm acts as the third highest direct influences, after Enjoyment and Site Quality, with the low online spender (0.248) greater on Continuance Intention than high online spender (0.185). Based on this result, Trust, Perceived Usefulness, Enjoyment and Subjective Norm all play significant direct and indirect roles for Continuance Intentions regarding online shopping in Saudi Arabia for both low and high online spenders.

The findings indicate that enjoyment remains an important predictor of continuance intentions among the e-shopping in Saudi Arabia. In terms of the significant standardized beta coefficients on Continuance Intentions, Subjective Norm is 0.248 for low spender shoppers and 0.185 for high spender shoppers; PU is 0.229 for low spender shoppers and 0.221 for high spender shoppers; and Enjoyment is 0.700 for low spender shoppers and 0.705 for high spender shoppers. What this suggests is that while all are important, Enjoyment is a stronger direct predictor than PU and Subjective Norm, for both low and high consumers of online shopping.

9.4.4. Educational Level Differences

As has been previously demonstrated in 7.7.4., again, the findings indicate that Enjoyment remains an important predictor of Continuance Intentions among the education level in terms of e-shopping in Saudi Arabia. In terms of the significant standardized beta coefficients on Continuance Intentions, Subjective Norm (0.270); PU is (0.204); and Enjoyment is (0.636) for shoppers holding less than bachelor degree, and Subjective Norm (0.198); PU (0.226); and Enjoyment (0.735) for bachelor and higher. What this suggests is that while all are important, Enjoyment is a stronger direct predictor than PU and Subjective Norm, for both shoppers with less than bachelor degree and bachelor degree and higher consumers of online shopping.

The non-invariance coefficient (regression paths) invariance analysis findings suggest that the less educated group are affected more with Site Quality and Trust in e-shopping because the less educated group assumed to be young with less online shopping experience. This is

consistent with previous research that indicates building trust with consumers is an essential mission for purchasing decisions (Jarvenpaa *et al*., 2000; McKnight *et al*., 2002b; Urban *et al*., 2000). It is also in line with McKnight *et al*. (2002a) , who state that site quality and good interface design enhance the formation of consumer trust, and consumers trust the vendor's competence, integrity, and benevolence when they perceives the vendor's website to be of high quality (McKnight *et al*., 2002a).

On the other hand, the findings could be interpreted such that online shoppers tend to be more educated (Li *et al*, 1999), with high income (Dennis *et al*., 2009), who rely on cognitive cues when making buying decision; while less educated and less fortunate individuals rely on their perceptions of website quality and on satisfaction cues. Thus, it is assumed that individuals who are also highly educated have the knowledge and experience of online shopping. This makes them involved in social communities and e-friendship, sharing their experiences (Foucault *et al*., 2005), which leads to promoting the enjoyment.

9.4.5. Age Differences

As has been previously demonstrated in 7.7.3., due to a higher-than-average percentage of young consumers, 35 years old and younger, (73.4%) participated in this research; it is considered important to conduct age invariance analysis. Online customers commonly are younger and more highly educated than conventional customers, making a young consumer more representative of the online customer population (OECD, 1998; Al-Diri, Hobbs, and Qahwaji, 2006). Additionally, Users who range in age from their teens through their 30s are particularly attractive targets for sellers of goods and services; they also are more likely to purchase products or services online than are older consumers (Akhter, 2003; He and Mykytyn, 2007).

The two compared age groups, (younger than 35, and 35 and older), were invariant in respect to structural weights. The researcher went one step further to find if there is difference in the coefficient paths. The differences of the sample's behaviour in the context of continuance online shopping resulted from the different in the coefficients of Subjective Norm → Enjoyment with change in chi-square = 5.609 and p value = 0.018. The findings could be interpreted as online shoppers tended to be more educated (Li *et al*., 1999), with higher income levels (Dennis *et al*., 2009), and assumed to be older with better jobs. Likewise, older individuals tend to shop online more compared to lower income consumers. As stated by Taylor and Todd (1995) and Yu *et al*. (2005), experience users (in this case older group)

place less weight on PU. That is perhaps, because older group tend to be more experienced or knowledgeable about websites allowing information exchange, interaction, sharing reviews, rating of travel, holidays, accommodations, and cult brands between consumers to meet their needs. On the other hand, Bush *et al*. (2005) refer to the power of social influence, particularly within young female age groups and the significance of role models in consumer behaviour within the sports market. Additionally, youth populations are motivated by status and peer pressure, and making the Internet is one of the main environments for them to play, work, learn and communicate (Alreck and Settle 2002; Spero and Stone 2004), thereby, increasing enjoyment.

The latent mean findings provide valuable insights and understanding for practitioners and researchers alike on how young and old consumers perceive the research constructs. The result of the latent mean analysis suggests that age was found to have latent mean non-invariance for the research constructs. This difference between younger than 35, and 35 and older, in the context on continuance internet shopping in Saudi Arabia, resulted from the differences of the latent mean of Trust, Enjoyment, and Continuance Intention to use. The standardized latent mean of Trust, Enjoyment, and Continuance Intention to use in the younger than 35 samples is higher among the younger sample than it is among the older sample. The latent mean findings reveal that younger consumers have higher intention to continue. Akhter (2003) suggests that younger people are more likely than older consumers to purchase products or services using the Internet. Also, these contributions are in line with previous research that the Internet is one of the main environments for young people to play, work, learn, communicate, and share experiences (Alreck and Settle, 2002; Spero and Stone, 2004). Additionally, previous research demonstrated that consumers who experience pleasure and joy from using e-shopping and perceive any activity involving use of online shopping as inherently enjoyable, are likely to use it more extensively than others (Davis, 1992; Malone, 1981; Webster, 1989). Therefore, managers should work to increase the level of Trust, Enjoyment, and Continuance Intention among older consumers.

The direct and indirect effects reveal that the greatest total influences on Continuance Intentions come from Enjoyment for the 35 years and older (0.749) and for younger than 35 years (0.705) samples. The next greatest influences come from Site Quality (0.624) for the 35 years and older and (0.620) for younger than 35 years samples. Additionally, Subjective Norm has the second most direct influences for younger than 35 years (0.215) on Continuance Intention over the 35 years and older samples (0.212). Therefore, Site Quality,

Trust, Perceived Usefulness, Enjoyment, and Subjective Norm all play significant direct and indirect roles for Continuance Intentions regarding online shopping for both compared age group, younger than 35, and 35 years and older.

Again, the findings indicate that Enjoyment remains an important predictor of continuance intentions among the age groups for e-shopping in Saudi Arabia. The significant standardized beta coefficients on Continuance Intentions, Subjective Norm (0.211); PU is (0.215); and Enjoyment is (0.741) for shoppers aged less than 35 years old; and Subjective Norm (0.263); PU (0.212); and Enjoyment (0.749) for shoppers aged 35 years and older. What this suggests is that while all are important, Enjoyment is a stronger direct predictor than PU and Subjective Norm, for both young and old shoppers using online shopping.

9.4.6. Regional Differences

Saudi Arabia is ranked as the 14th largest country in the world, covering more than 2 million square kilometres (Nations Online, 2008). In addition, its population is young and growing - 60% of the total population of 24,069,943 is younger than 30 years (The Middle East Statistics, 2007), with a population growth rate of approximately 2–3%. Thus, the researcher attempted to determine whether the cross-national and cross-cultural factors among regions have any effect on e-shopping continuance intention. The regional invariance analysis focused on the three most populated regions, where most participants come from, West (40.2%), East (26.2%), and Centre (26.4%).

As has been previously demonstrated in 7.7.2, again, the findings indicate that Enjoyment remains an important predictor of Continuance Intentions among the most populated regions in terms of e-shopping in Saudi Arabia. In terms of the significant standardized beta coefficients on Continuance Intentions in the West Region, Subjective Norm (0.219); PU is (0.230); and Enjoyment is (0.651); in the East Region, Subjective Norm (0.167); PU is (0.273); and Enjoyment is (0.741); and in the Centre Region, Subjective Norm (0.220); PU is (0.291); and Enjoyment is (0.669) for online shoppers. What this suggests is that while all are important, Enjoyment is a stronger direct predictor than PU and Subjective Norm, for consumers of online shopping in all regions. The findings of indicate regions are non-invariant in e-shopping context in Saudi Arabia. In additional result not related to this study, see Appendix J, the author found regional differences in continuance intention among women. Based on the author's knowledge, no previous research has studied the differences between different regions in one country. The author has no obvious justification for these

differences. However, when we look at Saudi Arabia we notice that information technology is concentrated in the three most advanced areas of the country. These three areas happen to be also the major cities; Riyadh, the capital of Central region; Jeddah on the West Coast; and Dammam on the East Coast. Riyadh is by far most the largest and most important IT incubator in the country, mainly because it is the capital and most of the government agencies that sponsor research and development (R&D) are located there. Riyadh is also regarded as the business centre of the country and, therefore, many of the businesses are located there. Another importance is Economic Balance Program, which acts as a host for several important joint ventures, many of which are with large global firms operating in the IT field. Dammam, in the Eastern region, was once considered the major IT centre in the country because of the presence of King Fahad University of Petroleum and Minerals (KFUPM) and Aramco, the largest Oil Company in the world. Both of these organizations have been considered to be pioneers in the use of IT in Saudi Arabia, and they fostered most of the early R&D efforts in the country. Jeddah has the least IT concentration among the three. However, one of the earth satellite hub stations are located in Jeddah at King Fahad Satellite City, which link up with the Intelsat Satellite System, allowing subscribers to dial over 200 countries directly. This is a major access point, identifying Jeddah as the communication hub of the country, which in turn led to the concentration of IT organizations in the area (Saudi Telecom. Website, 2009).

However, as a citizen of Saudi Arabia, the author believes that the populations in the Central regions are mostly conservative and religious people, whereas people on the Western and Eastern coasts tend to be more liberal and open to other cultures and religions. This may indicate that people in the Central region could be more utilitarian in their approach to using the Internet for shopping, whilst, on the other hand, the Western and Eastern people are more open to use the Internet for utilitarian and hedonic approaches. However, these regions' non-invariance introduces a series of interesting questions that are beyond the scope of this thesis but important for future investigation and research.

9.5. RELEVANT FINDINGS OF THE QUALITATIVE ILLUSTRATIVE CASE STUDIES

As discussed in chapter 5, section 4.1, 4.6 and chapter 8, Sale *et al*. (2002) argue that the result of the combination of the different methods would have different strengths; and would produce more than what each method could offer in isolation. Morgan (1998) indicated the

mixing of qualitative and quantitative can be carried out on the part of generating knowledge, which can be done without violating basic paradigmatic assumptions. The qualitative data was mainly obtained from different sources such as company documents, semi-structured interviews, direct observation, and/or archived records. Each of these sources carried equal importance and weight (Merriam, 1998; Yin 2003). However, as emphasised by Yin (2003) that research methods should be considered complementary, and therefore, a good qualitative data rely on as many sources as possible to generate knowledge and better understanding of online shopping continuance intention in Saudi Arabia.

The qualitative result from the semi-structured interview and the documentation analysis of the selected Saudi companies (the director of the Internet Division in the Communications and Information Technology Commission, Saudi Arabian Airlines; STC; Saudi Budget car hire; and Jarir Bookstore) enriched the research by revealing phenomena related to continuance Internet shopping in Saudi Arabia from a perspective other than that of the customers; and provided a relative understanding of the big picture of the research. Moreover, the interviewees clarified how the Saudi companies see themselves in the current state of e-commerce and online shopping and advances in e-commerce after Saudi Arabia joined the World Trade Organization (WTO).

The qualitative findings show that interviewees representing their companies perceived the power of e-commerce and online shopping, based on the expected or realised benefits to their company (See Table 8.88). This perception links the view of the interviewees to the research model, which focuses on continuance intentions toward online shopping and, thereby, increases the value of this research contribution to real businesses. Additionally, the findings support the argument that companies are aware that online shopping not only helps customers find products or services quickly and conveniently, but also provides technology that benefits the company's efforts to enter other markets, understand customers better, and share gathered information with partners to promote, modify, and distribute products and services.

Both Saudi Arabian Airlines and STC exemplify the online shopping definition used in this thesis in section 4.2. The Saudi banks also offer excellent services to their customers. However, even though the interviewees agreed that e-shopping, electronic shopping, online shopping, and Internet shopping were the same, a few remained confused. One significant observation about understanding e-commerce is that more awareness is needed among both companies and consumers.

The interviewees agreed with the suggested market factors identified through the literature review. Security, service/delivery, ease of use, usefulness, and site quality play the most important roles for developing the online shopping website. It is evident from the responses that enjoyments, price, presenting product or service quality, payment methods, language, strong brands, satisfaction, trust, and loyalty incentives constitute the second key level of importance factors. These findings further support the argument about the need to develop a research model to understand the factors that affect continuance intentions toward online shopping in Saudi Arabia. The findings show a strong link across beliefs about online shopping among the interviewed companies, the documents analyzed, and both current and potential customers.

All of the interviewed companies in this research agree on investing and using the Internet as a channel to communicate with customers, in additional to using branch offices. All interviewees agreed that their companies are not fully satisfied with the current status of their online retailing and are considering further enhancement, either now or in near future. For example, Jarir Bookstore indicated that it exists online just to keep up with others. They ensure, however, that their website displays current products, information and prices. It would be highly advisable for Jarir bookstore and other Saudi retailers to respond and meet market needs to increase sales and retain existing customers. However, using the Internet as a strategic channel reflects the importance companies perceive place on online shopping to Saudi companies. According to Kimber (2001), shopper loyalty in-store and online are linked. For example, the supermarket Tesco's customers who use both on- and offline shopping channels spend 20% more on average than customers who use only the traditional store (cited in Dennis *et al*., 2009). Also, consumers who shop across multiple channels provide higher revenues, higher share of wallet, have higher past customer value, and have a higher likelihood of being active than other customers.

Furthermore, after analysing companies' documentations, 47% of the participants said they remained very concerned when shopping online due to security reasons, and 43% believed there was not enough product variety on the Internet. In addition, 55% were concerned about after-sales service when they bought online, whilst 59% believed that "shopping online is something for the next generation." However, 40% of participants expressed enjoyment in online shopping, calling it fun and noting the time they saved, and 31% found online shopping very convenient. Furthermore, 34% said online shopping was easy for comparing prices and options before buying, and 76% found the Internet much simpler for gaining

access to information. Others mentioned the difficulty of assessing goods, the expense of buying through the Internet, the complexity of this method, and the lack of quality.

The respondents strongly agreed that Internet security applications are crucial and cannot be ignored. Therefore, adopting security for the website should help increase customer trust. The Internet reservation manager at Saudi Arabian Airlines noted that "security is very important factor for our customers, and because of that we implement strong security standards to restrict access to customers' information and secure e-ticket purchasing". As indicated in section 8.4, those who would not be interested on booking flight online explained their reasons as follows: 40% did not trust the Internet for shopping, 14% found it too expensive, 18% did not use the Internet, and 28% had other reasons. Most of those who expressed a lack of trust in the Internet were Saudi Arabian nationals. Similarly, the thesis survey findings indicate that 42.1% of participants have trust toward international e-retailers compared to 11.6% for local e-retailers. This is a big concern for local Saudi e-retailers who should focus on increasing the level of consumers' trust of online shopping.

According to the interviewee from Saudi Arabian Airlines, the company is not satisfied with these figures, especially considering the vast number of passengers carried each year. To address those customers who would not book travel online because they did not trust the Internet for shopping, the company has signed a huge contract to improve its e-services. According to the interviewee, Saudi Airlines "can make big reductions in its operational cost by the expected saving from the new e-services, including flight reservation." Saudi Arabian Airlines also needs to emphasise trust to increase the number of customers who will reserve online by purchasing e-tickets online. An unpublished study by the Centre for Customer Driven Quality highlights the potential savings, as noted in previous chapters (Feinberg, *et al*. 2002). That is, paper tickets cost $10 per ticket to process; e-tickets cost $1. Therefore, most companies should rely on e-business and e-customer relationship management to lower their costs and serve their customers more effectively and efficiently.

Saudi Airlines offered its online services in 2004, but this was only for booking a seat. Based on the information gathered during the interview, less than two million online bookings were made in 2007 for both domestic and international flights. Full online e-ticket purchasing was introduced in 2008. Now, there are three airlines operating in Saudi Arabia, one national carrier and two low cost airlines, which are providing booking and buying tickets online.

At this stage, interviewees find it difficult to determine the contribution of customer loyalty

to the success of e-business or online shopping solution, especially if the company only just introduced its site, or soon will. Therefore, most interviewees considered customer loyalty a moderate influence on success. However, analysing the provided documentation illustrated that 39% of the survived airlines customers were members of other airlines' loyalty programs. British Airways represented the highest threat and major competitor, such that 23% of Saudi Arabian Airlines customers also have membership in its program and have been exposed to its services. As a result, as indicated in section 4.4, building a specific desire or intention to continue an online shopping relationship with a service or product provider is critical because acquiring new customers may cost as much as five times more than retaining existing ones (Bhattacherjee 2001b; Crego and Schiffrin 1995; Petrissans 1999).

The four telecommunications companies operating in Saudi Arabia were offering their products and services online. Today, they strive to attract and retain their customers by providing other entertainment such as games, sponsoring sport events and football clubs, and offering customised packages to young customers, both male, and female. For example, in an effort to attract, retain and be engaged with Saudi consumers' worldwide, especially young members of the population who are fully linked with sports, Saudi Telecoms (STC) has signed a five-year agreement with six of the top Saudi football teams and two leading European teams, Manchester United Football Club and Real Madrid Football Club. As sponsor, STC will have a presence inside the stadiums, and will be featured on the clubs' website. Furthermore, under the terms of the agreement, each year 70 Saudi students will have the opportunity to go for a period of training at the Manchester United and Real Madrid Academies. As part of the agreement, all STC's business units will have full use of the Manchester United and Real Madrid logos in marketing campaigns as well as usage of the clubs' logo, players' photographs, club news, and music in STC retail centres, its website, and sent via text to their subscribed customers (AMEInfo.com, 2009).

The research results and e-commerce growth potential indicate that retailers in Saudi Arabia need to reconsider their current marketing strategy and take more steps to respond to the needs and attitudes of their target users. First, retailers need to create online retailing stores as new channels for growing numbers of customers. Then, they need to adjust their online storefronts as well as the various channels through which their products and services are delivered. Unfortunately, the Saudi consumers in this research have expressed several concerns over the current online shopping situation, which have acted as a barrier and dissuaded Internet users in Saudi Arabia from using the online shopping.

During the company interviews, all interviewees realised the external pressures initiated by competitors that already had adopted (or were in the process of adopting) e-commerce, as well as from customers who had experienced other services. Most of these managers said that customer pressure would lead to either greater implementation or an enhanced e-commerce project. The Director General of Jarir Bookstore noted that "we existed online because of the market, and follow with competitors. Now, to keep our relationship with our customers, we need again to follow the market and enhance our online business." However, the Saudi Airlines Internet booking manager stated that "the pressure we get from customer is the input that makes the market to follow." He added, "Customers do not want only one channel, they want flexibility in reservation, buying, managing their account, etc. through more than one channel."

The participants of the online research survey and interviewees consider that the fact that Saudi Arabia is behind in the area of IT can be attributed to several factors. These may include computer illiteracy, lack of government incentives to attract businesses (free-trade zones and subsidies), absence of adequate infrastructure to support the e-commerce industry, poor enforcement of e-commerce laws, intellectual property and copyright laws, and lack of resources. Therefore, the research sample profile indicates these concerns as the main reasons preventing the full adoption of e-commerce. Finally, the interviewees emphasized that in order to ensure the success of this expensive project they needed strong involvement and commitment, in addition to a strategic link to the reason for the project. The connection between company commitment and strategy to the other factors contributes to the success of the online shopping project.

9.6. CONCLUSION AND CONTRIBUTIONS

Whilst the TAM model, as expanded by Davis et al., (1992) and Gefen et al (2003), and ECT (Oliver, 1980; Bhattacherjee, 2001) have been used widely in research in the industrialized world, it is not so common in the Arabic nations and Saudi Arabia as part of the developing countries. To the best of the author's knowledge, this study is the first attempt to investigate the online shopping continuance intention in Saudi Arabia. In fact, such research is virtually non-existent, especially in the e-shopping context. Therefore, this study adds to the understudied area of online shopping continuance intention in the western and in non-western countries in general; and the Arab World in particular, and Saudi Arabia specifically, by examining the effects of usefulness, enjoyment, and subjective norms on continuance

intention. Consumers will form intentions to continue online shopping if they find it to be useful and enjoyable. This study addresses this knowledge gap for a unique culture.

To the same extent, the research contribution is potentially valuable, as the TAM stops at intention and does not investigate continuance intentions or behaviour. Moreover, the cross-cultural and the intensive group behavioural differences aspects to our contribution are also relevant, as both models have been used widely in research in the industrialized world. Such differences between shoppers (invariance analysis) introduce series of interesting questions that are beyond the scope of this thesis but important for future investigation and research. The shortage of research in the Arabic countries and as well as the intensive invariance analysis conducted in this thesis would generate a debate and stimulate research in the Arab world context in general and in Saudi Arabia in particular, specially that Saudi Arabia has been ranked 5th in 2009 and 4th in 2010 in the Kearney Global Retail Development Index for retail attractiveness (Kearney GRDI, 2010).

As shown in Figure 9.44, the proposed model considered TAM and ECT, with the inclusion of other variables associated with online shopping. Empirical testing of the proposed model found the model to be strongly supported, with all paths are significant in the hypothesised directions. The result suggests that enjoyment, subjective norms, and perceived usefulness are the main determinants of online shopping continuance intention. One interesting findings of this research is that, among the three determinants of online shopping continuance intention, the influence of enjoyment is the strongest predictor; it was even stronger than usefulness and subjective norms. As indicated by the results of this research, the importance of subjective norms contradicts with Davis et al. (1989) claimed that subjective norms are not significant in explaining behavioural intentions, which can be assumed to be related to cultural factors. Additionally, another key conclusion from this study is the importance of both the direct and indirect effects of behavioural differences in Saudi Arabia, which should be take into consideration when developing any website and marketing strategy for e-retailing. The author also speculates that such a model may well be generally applicable to online shopping in other countries, and perhaps also generally applicable to continuance intention in other service industries. However, it is for future research to explore this potential generalization.

From a theoretical standpoint, these results contribute to existing literature in several ways. First, we enhance e-shopping literature by providing insights into the factors that seem to affect online shopping continuance intentions in Saudi Arabia. The author also posits that

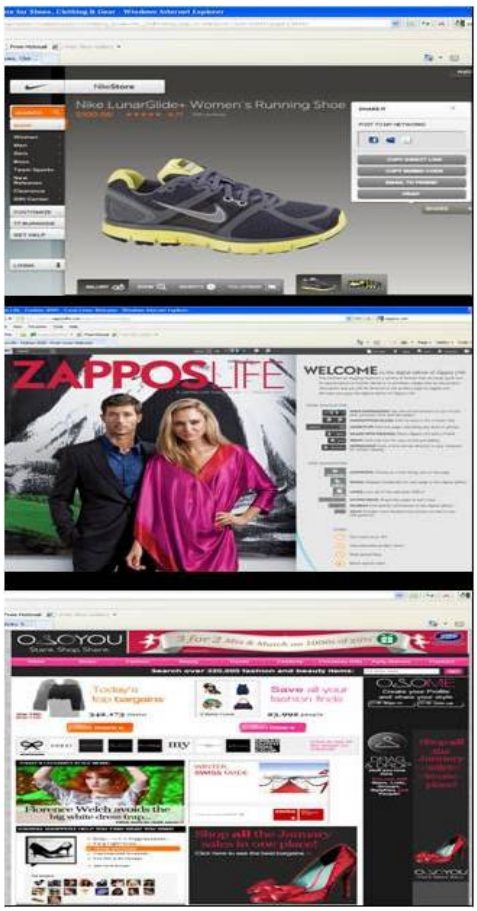
enjoyment, subjective norms, and perceived usefulness have direct and indirect effects on continuance intention. Notwithstanding that TAM omits subjective norms, primarily because Davis claimed that they are not significant in explaining behavioural intentions (Davis et al., 1989), our research finding of subjective norm (social pressure) towards continuance intention is consistent with Gelb and Johnson (1995), who conclude that positive or negative social pressure, such as word-of-mouth, is more effective than advertising in persuading customers to increase or reduce their intention or action. As indicated by the results of this research, the importance of subjective norms can be assumed to be related to cultural factors leading to the interesting question of to what extent the TAM and ECT may be valid in more collective societies than developed countries.

A key conclusion from this study is the importance of both the direct and indirect effects differences in Saudi Arabia, which should be taken into consideration when developing marketing strategy for e-retailing. The research findings imply that usefulness, enjoyment, and subjective norms are not the only contributor to online shopping continuance intention, but it is trust and site quality that lead to a higher level of customers' continuance intention. Additionally, the greater positive indirect effects of Site Quality on Perceived Usefulness, Subjective Norms, and Enjoyment, and that of Trust on Enjoyment and Subjective Norms suggest that online retailers should increase the positive perceptions of site quality and trust to make their e-shopping environment more useful and enjoyable. Unlike the relationship in traditional business settings with customers, the role of site quality and trust is important because the primary interface with an e-vendor is a website, through the use of information technology (IT). For instance, if new customers are more likely to judge a website by its appeal conveying its quality and trustworthiness rather than its usability, then companies need to pay attention to increasing the appeal of their sites. Furthermore, e-retailers should endorse their trustworthiness by marketing their robust security measures, privacy policy statements, seals of approval and including statements such as "secure servers" can increase confidence among current and potential customers (McKnight et al., 2000; Palmer et al., 2000; Gehrke and Turban, 1999). Offering guarantees, warranties or adding a Frequently Asked Questions (FAQ) section to the website services should lower users' uncertainty perceptions.

Today, the use of the technology, such as online shopping, is determined not only by subjective norms but also by the user's need for relationships with others and social communities (Schau and Gilly, 2003). According to Wilska (2003, p. 459), the role of

technology would impact the whole of consumers' lifestyles, including work and consumption. To have a significant effect on e-shopping continuance intentions, any e-shopping environment should encourage a shopping experience that is useful and enjoyable. Customers' involvement in the product design process is perceived to be more enjoyable, but sending a useful offer or product is perceived as a useful way of sharing life with friends and relatives. For example, Nike online shoppers (www.nike.com) can customize shoes, colours, styles, and even selecting a name or message. Another example involves e-retailers that provide online customer services through modern communication tools, such as real time chat or Twitter as well as differentiation through customer service and the effective (and free) handling of returns (see Zappos, www.zappos.com, for a leading edge example). Similarly, communication on useful offers or products, as is done with social networking sites such as Osoyou (www.osoyou.com), is likely to be perceived as a useful way of sharing life with friends and relatives. See Figure 9.45 for images taken from the websites of the above examples.

FIGURE 9.45: NIKE, OSOYOU, AND ZAPPOS WEBSITES, 22 DECEMBER 2009



Second, the results support previous research that perceived usefulness reflects the utilitarian aspects of online shopping, whereas perceived enjoyment reflects its hedonic aspects. In our study, enjoyment has the strongest direct effect on e-shopping continuance intentions. In our study, enjoyment has the strongest effect on e-shopping continuance intentions, which confirms that enjoyment in an online shopping environment is important and has a direct effect. Some consumers may primarily shop online for utilitarian or functional purpose, such as improved multidimensional examination of a product, while other consumers may shop online for hedonic purposes, such as enhancing the shopping enjoyment experience by creating a virtual model of the product. Also, if an individual ‘‘feels good’’ about an online activity, and it is intrinsically motivating, the individual is more likely to engage in it. Individuals using online shopping and experiencing enjoyment and playfulness are more absorbed and interested in the interaction. Such interaction shapes the individual intention to visit online shopping again later (Lin et al., 2005). Conversely, website with low enjoyment level may lead to lower intention to return and less likelihood that consumers will make that e-retailer part of their online shopping routine (Jayawardhena and Wright, 2009).

Nevertheless, the result demonstrates that combining the direct and indirect effects indicates that perceived usefulness had an equal strong total effect on e-shopping continuance intentions similar to enjoyment, in support of previous findings that usefulness has strong links to intentions. The benefits of using an e-shopping website can be classified as current e-shopping activities, such as the usefulness of using the technology itself in shopping, searching, and visualizing the products, or the benefits relating to future activities, such as getting the items that have been ordered. When e-shoppers view a retailer’s website as trustworthy, it makes the website more beneficial as customers are willing to pay a premium price for just that added special relationship with an e-shopping site that they trust and perceive as useful and beneficial (Reichheld and Schefter, 2000). Usefulness is an important criterion for consumers when they select online stores and it can increase their satisfaction. However, consumers may continue using an e-commerce service they consider useful, even if they are dissatisfied with it (Bhattacherjee, 2001a).

This study also contributes to a better understanding of the impact of the behavioural differences of continuance intention in the context of Saudi Arabia. This should be taken into consideration when developing any website and marketing strategy. An invariance analysis was conducted to examine the differences between the different groups for online shopping to determine if the compared groups conceptualize the research model’s constructs for

continuance online shopping in the same way. The findings provide valuable new insights into the differences in the continuance e-shopping intention among gender, education, age, geographical location, experienced and inexperienced e-shoppers, and low and high online spenders. The findings revealed that there are gender differences among male and female groups.

Additionally, when comparing the three main regions, West, Centre, and East, the findings demonstrate that there are differences between the consumers among the three regions. According to another result not part of this research, see Appendix J, the author finds that there are even regional differences among females themselves in the Saudi market in the path of Perceived Usefulness to Enjoyment in the Eastern vs. Western region, as well as in Eastern and Central region. Furthermore, the findings reveal further differences between younger and older generations, as well as among consumers with less than bachelor degree and consumers who have bachelor degree and higher degree.

The findings of this research contribute to a better understanding when comparing the low and high online spending among e-consumers. Even though there are no indicated differences between experienced and inexperienced e-shoppers, the results indicate important findings in regard to the latent mean for marketing managers and researchers. Latent means make it possible to explore whether the quantifiable meanings of the scales are similar across cultures or the compared groups, which involves scalar invariance when comparing the mean between two populations. The latent mean, therefore, can be interpreted as the difference between the latent mean construct means in one group relative to the other (Hair *et al*., 2006).

The research findings imply that, although obtaining shopping and gratification value are important purchase goal and are vital to experienced repeat customers' continuance intentions, site quality and trust still play extremely influential role in continuance intention in the less experienced online shoppers. Specifically, site quality and trust are essential for creating customer loyalty and managing customer continuance online shopping intention. The differences between the experienced and inexperienced online shopping sample, in the context of continuance online shopping intention, resulted from the differences of the latent mean of PU, Trust, Enjoyment, Site Quality, Subjective Norm, and continuance intention to use. Thus, these constructs are less favourable among the inexperienced online shopping sample than it is among the experienced online shopping sample.

Therefore, it is important to fully understand these comparison differences. For example, e-retailers should emphasise the usefulness (utilitarian values) of their websites in their marketing strategy when communicating with men, whilst emphasising their enjoyment (hedonic values) when designing their marketing mix for women. e-Retailers targeting Saudi customers should not use the same web design and/or marketing mix to stimulate usefulness and enjoyment perceptions among consumers in the compared groups and regions.

Third, this study is unique in its methodological approach. Within Saudi Arabia, few prior studies have used SEM as their methodological approach, and even fewer applied invariance analysis to verify behavioural differences. This approach allows the author to examine and compare details of different groups that were not otherwise possible. The research-gathered data that made it possible to analyse group invariance, and gain a better understanding of the effect of behavioural differences in continuance intention among gender, geographical regions (West, Centre, and East), experienced and inexperienced e-shoppers, age, education, and high and low online spenders. To conclude, despite the three structural weights (gender, education, and online spending) and three latent means (gender, age, and experience online shopping) were non-invariant, this study conducted sixteen invariance analyses which confirms that the research model and the findings of this research are free from gender, geographical regions (West, Centre, and East), experienced and inexperienced e-shoppers, age, education, and high and low online spenders biases, in the continuance intention of online shopping context. However, with such a big research sample, and even though the structural weight shows invariance among few group analysis, the author realised the need to minimize the possibility of research biases in cross-national, cross-cultural, and group analysis among constructs relationship (path) that may arise from the data strength and weakness when applied to every constructs' path. Therefore, to look for significant path differences, the author decided to test each factorial path separately while the rest of the paths are freely estimated across the compared groups, to look for any non-invariance path. It could be seen in the age and region invariance analysis, see section 7.7.2; and 7.7.3, that non-invariance were found in the individual paths, even though there were not so over whole. Therefore, the author's approach in this case of testing the individual path has demonstrated a more rigorous test for non-invariance than that normally employed (e.g. Byron, 2001), as detailed in Section 5.8.4. Finally, to date, few research studies in the context of Saudi Arabia have validated their constructs with invariance analysis. This study addresses this knowledge

gap in the online shopping context for the unique culture of Saudi Arabia, and is the first attempt to do so.

9.6.1. Research Model Generalizability

The research model in this study confirms that online shopping involves hedonic as well as utilitarian value. Additionally, subjective norms and social influence play an important role in Saudi Arabia. As expected based on current IS literature, perceived usefulness (utilitarian) and perceived enjoyment (hedonic) value are influential indicators of intention and revisit intention (Davis et al., 1992; Van der Heijden, 2004; Lin, Wu and Tsai, 2005; Donovan and Rossiter 1982). As mentioned earlier, Shim *et al*. (2001) consider subjective norms only marginally significant for e-shopping intentions, whereas Foucault et al. (2005) confirm a significant link between talking about e-shopping with friends and intention to e-shop. However, TAM omits subjective norms, primarily because Davis claimed that they are not significant in explaining behavioural intentions (Davis et al., 1989). The similarity and distinction in the findings between this research and literatures could be attributed to cultures, which suggest that information technology and management practices should be modified for different cultural contexts.

The Arab World culture, including Saudi Arabia, is dominated by high collectivism, i.e., an individual's beliefs depend on the social norms of the group (Kluckhorn and Strodtbeck, 1961) as well as expecting managers to set the standards to be followed. Additionally, other studies suggest that individuals place more trust in people similar to themselves and assess trustworthiness based on second-hand information and on stereotypes (McKnigh et al., 1998; Morgan and Hunt, 1994; Zucker, 1986). In a similar vein, recent studies in the marketing literature have also confirmed the importance and dynamics of social pressure on consumer behaviour. For instance, Takada and Jain (1991) have found that the diffusion of consumer goods in South Korea and Taiwan is directly influenced by social value.

However, contrary to findings based in North America and in this research, Anandarajan (2002) noted that individuals in Nigeria are more affected by normative and social values on usage, whereas usefulness and enjoyment had no effect on usage, even though Nigeria is classified as collectivist culture by Hofstede (1984).

Prior research indicates that consumers in all shopping channels shop for both utilitarian and hedonic outcomes (Childers et al., 2001), which is also consistent with previous research that

social influence plays an important role in collectivist cultures (Foucault et al. 2005; Anandarajan, 2002). The author of this research suggests that the research model and the results of this study could be generalized into other contexts in general, Arab countries in particular, and Gulf Cooperation Council countries (GCC) in specific. This is because Arab countries are classified by Hofstede (1984) as collectivist culture. The generalization of the research model to the Gulf Cooperation Council countries (Bahrain, Kuwait, Oman, Qatar, and the United Arab Emirates) is more likely to be applicable because of having parallels with Saudi Arabia in sharing similar values, tribes, relatively young population, and rapid economic growth rates (Nations Online, 2008).

Additionally, the growth of disposable family income in and distribution of the spending within families in GCC countries are similar. Shopping is done by good value of the economic potential available, on the experience of each person, on the social scale of the individual and on the peer groups and sub-groups that individual mixed in, specially that most of the GCC countries have been ranked in the top 30 in the 2010 Kearney Global Retail Development Index for retail attractiveness (Kearney GRDI, 2010)..

The methodology used in this research is useful in indicating the potential generalizability of the study findings' across different cultures and contexts. This research is theory oriented and is concerned with assessing the correspondence between relationships discernible across cases and a broad theoretically based interpretation of social phenomenon. According to Ragin (1987) and Creswell (2003), investigators who use such approach focus their interest on testing hypothesis and propositions derived from theory to determine whether the predictive generalization of the theory hold. This is achieved by conducting a comprehensive analysis that includes Exploratory Factor Analysis (EFA), Structural Equation Modelling (SEM) and invariance analysis for the data collected for the purpose of examining research model generalizability.

However, the author in this thesis suggests that the external validity (generalizability) of TAM and ECT in other cultures is questionable, see section 9.7. The author recommends that the research model should be further tested in other cultural contexts to show the potential generalizability, particularly cultures that may have similarities with Saudi Arabia.

9.7. RESEARCH LIMITATIONS AND FURTHER RESEARCH

Typical of most field surveys, this study suffers some limitations. First, the novelty associated with using an online survey in the Saudi Arabian market indicates that the empirical data may be biased. Second, the online survey was posted with permission on Saudi universities' online forums. The survey may suffer a non-response bias, but there is no systematic way to determine the response rate in an online survey. Thus, notwithstanding that the survey attracted a large sample of participants and covers all main geographical regions in Saudi Arabia, it still may suffer from the biases that are inherent to such studies.

The adoption of online shopping and online intention or revisit intention might also be influenced by the product or service itself (Klein, 2003). Since this study has not focused specifically on any particular products or e-retailers, it is not known to what extent our research results may be extended to specific products or services. Without referring to the nature of the product, participants in this research have used their Internet and e-shopping preferences to answer the questionnaires. Certain products or services on a website may be relatively simple, low-touch products that require relatively less trust, have some unique features (e.g., web-based, graphics-rich, interactive interface), purpose (e.g., learning new concepts), or more complex high-touch products for which trust issues are expected to be more dominant. Therefore, future research needs to assess the generalizability of the model for the purchase of relatively simple low-touch products or for more complex high-touch products, including applicability to other related online industries, such as financial services and airlines industries.

Furthermore, Girard, Korgaonka, and Silverblatt (2003) find that online shopping preferences depend on product types. Men are more likely to shop online for books, computers, and other "utilitarian experience" goods (e.g., cell phones, televisions), whereas women instead shop online for hedonic experience goods, such as perfume and clothing. Our study focuses on consumers who had experience and had previously purchased from an e-vendor's website, without any preferences of any particular industry or product or service categories. The relative importance of the research results may be at variance with inexperienced consumers or with experienced consumers who have never purchased from a site other than his/her preferred one. Thus, the generalizability of results to potential consumers of an e-vendor that have never visited and e-shopped on the e-vendor's website and/or have never purchased from the e-vendor is not immediately obvious and, therefore, warrants further investigation.

Also, additional research is required into whether the results can be generalised to non-customers or to disaffected customers.

This research attempts to adopt the extended TAM and extended ECT as a theoretical basis from consumer behaviour literature to propose a model of e-shopping continuance intentions. Even though this research found that consumers perceive utilitarian and hedonic value to be important in their online shopping future intentions, additional research should address the online shopping continuance intentions context that incorporates product type and website purpose. For example, some online shoppers might expect that certain types of products are simply more experiential and thus more likely to invoke hedonic value; others might not.

Users in our study had different experiences and concerns when shopping online. Based on research demographic findings and other related issues, participants raised a concern about whether they trust local or international e-retailers when shopping online. The findings indicate that 42.1% of participants trust international e-retailers compared to 11.6% for local retailers. This is a big concern for local Saudi e-retailers who should focus on increasing the level of consumers' trust of online shopping. Online shoppers in Saudi Arabia also have issues and concerns over online security, quality, payment methods, and language barriers. Though not discussed in this research, the type of e-retailer (local or international), the mode of payment, online security, and language barriers may constrain the research model constructs on continuance e-shopping intention. Since prior research in the context of e-shopping in Saudi Arabia has not distinguished between these constraints, such distinction may be another way of extending the current research.

Most of the respondents in this research responded in terms of what he/she purchased online: books (58.1%), music (43.9%), travel reservation and e-ticketing (66.1%), hotel booking (50%), fashion (29%), and sports equipment (18.4%). Future research should examine which products or services are marketed and purchased most successfully via the Internet for Saudi consumers. For example, some researchers have argued that the current state of Internet technologies prevent the delivery of the sensory aspects of shopping, such as taste, smell, and touch (Stewart and Zhao, 2000). Researchers should also examine ways to either overcome such difficulties with existing technology or enable the Internet to actually provide such sensory experiences. This is particularly relevant for products such as clothes, fabrics, perfumes cosmetics, sports equipment, and fresh foods.

Hofstede (1984) argues in several contexts that the popular theories are culture bound. The theoretical basis of this study is the extended technology acceptance model (TAM), which is derived from the theory of reasoned action (TRA) model, and the extended expectation confirmation theory (ECT). Both extended TAM and ECT have adapted other constructs, such as usefulness, enjoyment, and trust, to measure continuance intention (Agarwal and Prasad, 1999; Davis, 1989; Dishaw and Strong, 1999; Gefen and Keil, 1998; Igbaria *et al*., 1996; Moon and Kim, 2001; Taylor and Todd, 1995; Venkatesh, 2000; Venkatesh and Davis, 2000; Premkumar and Bhattacherjee, 2008; Lin, Wu and Tsai, 2005). However, TAM omits subjective norms, primarily because Davis claimed that they are not significant in explaining behavioural intentions (Davis *et al*., 1989). As indicated by the results of this research, the importance of subjective norms can be assumed to be related to cultural factors leading to the interesting question of to what extent the TAM and ECT may be valid in more collective societies than developed countries. In line with the current interest in cross-cultural research, this thesis suggests that the external validity (generalizability) of TAM and ECT in other cultures is questionable. The author recommends that the research model should be tested in other cultures to show the potential generalization of the research model, particularly those that may have parallels with Saudi Arabia, such as the Gulf Regions.

The results of this research have far reaching implications for developed countries as well. Globalization of the Internet, e-commerce, and joining the World Trade Organization have significantly increased the understanding of the local culture of Saudi Arabia. Thus, researchers, international and/or Saudi companies' who are developing e-shopping site and targeting customers in Saudi Arabia, should invest in more research to understand the local culture, if, unfavourable results are to be avoided.

Even though this study can be considered to be the first attempt to address the knowledge gap in the online shopping context for the unique culture of Saudi Arabia, as far as the author is aware, through its comprehensive group invariance analysis, it has opened the door for researchers to conduct more intensive research to deeply understand the effect of behavioural differences in continuance intention among gender, geographical regions, experience and inexperience, age, education, and high and low online spenders. Additionally, the continuance intention antecedents reveal the direct and indirect effects. The impact of additional factors, such as satisfaction, loyalty incentives, and interactivity should be considered in future research investigations.

9.7.1. The Significance of Usefulness and Satisfaction on Continuance Intention

In prior TAM research, attitude is an effect-based variable that has exhibited inconsistent results on its effect on intention (Karahanna *et al*., 1999). Many studies simplify TAM by dropping attitude and studying just the effect of perceived usefulness and ease of use on intention to use (Venkatesh and Davis, 2000; Venkatesh *et al*., 2003; Gefen and Straub, 2000; Lederer *et al*., 2000; Teo *et al*., 1999; Premkumar and Bhattacherjee, 2008). Dropping attitude from the original TAM model is entirely consistent with most TAM-based research. Attitude, in fact, is not part of Davis' (1989) own, more concise, version of TAM (Gefen, 2003).

In a recent study by Premkumar and Bhattacherjee (2008), an interesting finding was made. Just as perceived usefulness is the strongest predictor of intention in TAM, it continues to be a stronger predictor of continuance intention than satisfaction when TAM combined with ECT (whereas satisfaction was dominant in the original ECT) (Premkumar and Bhattacherjee, 2008). Satisfaction, another affect-based variable, has exhibited inconsistent results in its effect on continuance intention in the presence of TAM variables. An explanation of the inconsistency of satisfaction would be that satisfaction is typically defined as a transaction-oriented effect based on first-hand experience with the product/service, and therefore may be more appropriate for short-term usage decisions (Premkumar and Bhattacherjee, 2008). Satisfaction may, therefore, be more important for impulsive purchases where there are competing products and the user's first experience has to be satisfying in order for he/she to continue buying or using the service. While most e-shopping or purchasing of products online typically involves considerable time and effort for the user in comparing and contrasting, newer web-based application services, such as e-Bay versus Amazon auctions, may be more akin to impulsive purchases. In such circumstances, satisfaction with transaction experiences may be critical for retaining user loyalty and continuance intention to use that service.

The common construct on these researches is the dominant influence of perceived usefulness on intention or continuance intention, which has led Bhattacherjee (2001) to include usefulness in his revised ECT. The findings of this research indicate the relative dominance of enjoyment and usefulness in explaining their role as critical drivers in continuance decisions, particularly in hedonic and utilitarian value. Since satisfaction was omitted in the initial testing in this research, more research is required to explain which factor is leading and

has the most dominant effect on measuring continuance intention, satisfaction or usefulness, in collectivist cultures, such as the Arabic World in general and Saudi Arabia in particular. This is particularly the case with those countries that may have parallels with Saudi Arabia, such as the Gulf Regions before any definitive conclusions can be derived.

9.8. MANAGERIAL IMPLICATIONS

This study provides managers with useful and important information about planning their websites and marketing strategies. Limayem *et al*. (2000) argued that providing and managing accurate information with clear and brief text attached to the appropriate images is essential, and comprises the primary role of web designers and marketers. Website quality will build positive first impression, which increase trust. This is especially true when an activity involves social uncertainty and risk when involving online activities (Fukuyama, 1995; Luhmann, 1979). Social uncertainty and risk with an e-vendor are typically high because the behaviour of an e-retailer cannot be guaranteed or monitored (Reichheld and Schefter, 2000). The quality of the website and trust could act as reducers of risk and social uncertainty among online customers (e.g., Gefen, 2000; Jarvenpaa *et al*., 1999; Jarvenpaa *et al*., 2000), and increase familiarity and affiliations with respectable companies (e.g., Stewart, 1999; Gefen, 2000). As a result, direct contributions build consumer trust.

Moreover, nowadays, computer applications, such as online shopping, are ubiquitous in all aspects of our life, and are no longer fads or image enhancers but utilitarian tools without which businesses may come to a halt. Therefore, e-shoppers are increasingly going to demand usefulness, particularly in the long run, for customers to be successfully retained. Thus, managers and site developers should focus on quality, informative content, and trust, which reflect an increase in usefulness, and lead to increased enjoyment of the e-shopping process. The Nielsen.com report on online shoppers (2008) indicated that around 60% of online shoppers tend to stick to the shopping sites they are familiar with, and would buy mostly from the same site. This shows the importance of capturing the tens of millions of new online shoppers as they make their first purchases on the Internet. If shopping sites can capture them early, and create a positive shopping experience, they will be more likely to capture their loyalty and their money. For example, companies can increase familiarity through advertising; through articles in the popular press; through linkages with well known websites; and through providing incentives to use the e-vendor's website. Applying this to the interviewed companies, Saudi Airlines and Saudi Telecom can provide incentives to use their

website services, such as additional frequent flyer miles for Saudi Airlines customers when booking travel reservations and purchasing e-tickets online. Otherwise, customers might move to competitors, and customers who never return reduce the firm's customer base and revenues, requiring substantial expenditures to attract them back again.

System developers and marketing managers must be aware of e-shoppers' requirements while developing the e-retailer website, and provide ongoing adaptive system maintenance to continually match e-business features to the evolving needs of the market and consumers. In contrast to the challenges traditional retailers might face such as stock management issues, the daily face-to-face interaction with customers, and the queues in front of the cashier, e-retailers have to deal with the constant security threats, the challenges of delivering on time, the need to always look ahead for the latest innovations and technological trends, and get the right 'atmosphere' for their digitally connected customers (Bourlakis *et al*., 2009). Additionally, the business solutions should be underpinned by a creative, innovative and open-minded senior management that encourages experimentation with new technologies and will not hesitate to use them in order to gain competitive advantages (Bourlakis *et al*., 2009). However, implementing e-business technology solutions and dealing with such e- challenges are expensive and require additional management costs (Wagner, 2007). During the research interviews, the interviewed companies in Saudi Arabia demonstrated their concerns about the high cost of e-business or e-commerce solutions. Thus, managers must know which technology is most effective to achieve their goals. Furthermore, to enhance user enjoyment, improve the value and features of the product or service, and socially involve as a means of ensuring their continued use and loyalty, practitioners should consider various implementation strategies, such as user involvement in the design process, virtual model, interactivity, and user education to ensure that users build realistic expectations of the product or service, confirm their initial expectations, improve the value and benefit, and are satisfied with their e-shopping journey.

Based on the current research findings, understanding the utilitarian and/or hedonic roles on online shopping would enable marketing managers to increase their online shopping and purchasing by providing more effective product information, better online product evaluation, reduce perceived risk and increase trust, achieve a more engaging e-shopping experience, and enhance consumers' enjoyment of the e-shopping journey or process. For example, interactive activities such as looking at products or an inside look at an airplane in a 360˚ view and trying-on clothing or selecting your travel seat using virtual model technology can

provide enjoyment in addition to facilitating product evaluation. Additionally, as illustrated in Table 2.4, the sophisticated technologies used in online shopping can provide e-retailers with many techniques that will increase the online shopping usefulness and enjoyment resulting to the continuity of loyal online shopping. An example of such technique is Amazon technique, 'users who bought this item were interested in this item as well', probably being the most famous example by looking at customer group profiles. Thus, given the current research findings, e-retailers should ensure that they are providing sufficient hedonic value to online shoppers before attempting to focus on other aspects of their website development.

To build sustainable e-shopping relationships, managers cannot ignore either direct (perceived usefulness, enjoyment, subjective norms) or indirect (site quality, trust, perceived usefulness, subjective norms) influences on continuance intentions. For example, in the e-shopping context, trust is considered a social antecedent, whilst site quality and perceived usefulness are considered technological antecedents. These two distinct sets of antecedents are intertwined in this case. As the supported research hypotheses indicate, site quality is associated with increased trust, and increased trust is, in turn, associated with increased perceived usefulness above and beyond the increase in perceived usefulness caused by site quality. These suggest to e-vendors that managers who invest in increased consumer trust may achieve increased customer continuance intention from their website directly, or indirectly, through perceived usefulness.

Moreover, the results reveal the significant effects of subjective norms on enjoyment and continuance intention, and suggest that recommendations from other people still play a major role in an individual's e-commerce intention behaviour, despite Davis's (1989) claim to the contrary. The reduced possibility of personal advice from people surrounding consumers when shopping online might make it difficult for consumers to make their decision, which subsequently might prevent them from continuing shopping online. To the same extent, the strength of relationship ties increases when consumers interact and share their experience with other consumers or e-retailers. Marketers now have to balance traditional media, online media, and content that is generated by experts, bloggers and consumers themselves. An astonishing 70% of Americans now say they consult product reviews or consumer ratings before they make their buying decisions and 62% say they spend at least 30 minutes online every week to help them decide what and whether to buy (Penn, Schoen and Berland Associates, Inc., 2009). Furthermore, women may be less likely to shop online because the environment does not offer emotional involvement or social interaction. Social interaction

during online shopping for women tends to enable female shoppers to interact with their friends. Therefore, managers should endorse personal advice and facilitate positive word of mouth advice, through social networks such as Blogger, Delicious, Facebook, Google Bookmarks, MySpace, Twitter, and many more, to enhance the perceptions of family, friends, potential customers, and customers' perceptions about their websites' usefulness, enjoyment, and trustworthiness. For example, Facebook's shopping application allows users to rate and discuss with their friends products they want to purchase. Therefore, users of social networks can obtain their online friends' opinions about the products they want to buy.

The research emphasises the importance of taking the result of the group invariance analysis and the direct and indirect decomposition of effects into account when investigating consumers' continuance intention to shop and purchase online in Saudi Arabia when developing any website and marketing strategy. E-Retailers in Saudi Arabia should emphasise the usefulness (utilitarian values) of their websites in their marketing strategy when communicating with men, whilst emphasising their enjoyment (hedonic values) when designing their marketing mix for women. E-Retailers targeting Saudi customers should not use the same web design and/or marketing mix to stimulate usefulness and enjoyment perceptions among male and female consumers. For example, understanding the differences between male and female consumers can help managers shift consumers from single visits to ongoing, trusted, useful, and enjoyable relationships, which should produce more stable, long-run business for online firms.

Furthermore, since enjoyment has the strongest influence among females in Saudi Arabia, managers should consider ways to induce positive feeling of enjoyment, fun, and leisure experience when conducting e-shopping. Consumers compare a range of product or service benefits to be obtained when buying a product versus the perceived costs of that product to deduce overall obtained perceived usefulness or benefits. In the long run, consumers might look again to the perceived benefits of continuing a business relationship with an e-vendor versus the perceived benefits and the switching cost to another e-vendor. Therefore, managers should remain competitive and continuously work to enhance the perceived usefulness and benefits of the product or services to discourage switching to other competitors.

9.9. IMPLICATIONS FOR POLICY MAKER OF E-SHOPPING IN SAUDI ARABIA

The development of online shopping makes many retailers consider adopting or launching their products or services over the Internet. These considerations are due to a number of different factors that include the need to increase competitiveness, and to improve service for their current and potential customers. Today, the market around the world is dynamic due to increasing competitive power, often coming from multinational corporations. Similarly, organisations are able to take advantage of significant improvements in logistics and information availability, which help create opportunities from global sourcing. Furthermore, increasing information availability gives the perception that the commercial world is becoming smaller and more accessible. The investment in IT plays an important role in productivity if the technology has been accepted and then used (Venkatesh, 1999).

Despite global advancements in e-retailing and marketing communication and in addition to the many steps taken by the Saudi Government to improve IT and e-commerce environment, few retailers throughout Saudi Arabia have an online presence. Those that do generally only display company information or products and prices. Online banking is the only predominant e-business in Saudi Arabia (Guru *et al*., 2003). Internet banking was introduced in Saudi Arabia in 2001, and by 2006 all 16 banks operating in the country were offering Internet services. The Saudi population has accepted not only the banking system, but also the modern electronic revolution in banking (Abdul-Muhmin, 1998).

Despite the e-commerce spending growth, according to a report by Madar Research (2004), the purchasing of products and services via the Internet is still practised by only limited numbers of Internet users in Gulf Co-operation Council (GCC) countries. However, the growth in the number of online customers, the number of online transactions and the value of purchases made, particularly in 2004, is creating a culture of B2C e-commerce in the region. For example, in 2009 alone, five million electronic purchase transactions took place in Saudi Arabia (Okaz newspaper, 2009). Furthermore, it is mentioned that the number of visitors since the launching of the new e-Mall in 6th May, 2010 were 80000 visitors from 77 countries in the world, and the purchasing process in the market have reached 50 electronic shopping carts for more than 120 products provided by the participating stores, which shows the increasing demand on products and growing the culture of E-commerce (Okaz newspaper, 2009).

As internet usage has increased due to its efficiencies of new technological developments and the greater provision of online commerce, the increased interchange of personal consumer information will enable marketers to gain greater expertise in the evaluation of consumer purchase behaviours. However, breaches in privacy and security will likely hold back online retailing in long run, due either to consumer distrust or legislative permission. In the long run, having continuance usage is the goal of policy makers and businesses. It is known that acquiring new customers, penetrating them and initiating transactions may cost up to five times as much maintaining existing ones (Bhattacherjee, 2001b; Crego and Schiffrin, 1995; Petrissans, 1999). Raising the number of reliable customers by as little as 5% can raise profitability by 30-85%, depending upon the business (Reicheld and Schefter, 2000).

The research findings indicate that the increased Internet experience alone does not appear to diminish online security and privacy concerns. It is evident that protected and responsible handling of consumer information will be a strategic tool for promoting online transactions and two-way communications with potential customers. The lack of trust in Saudi online retailers is a big concern. Only 11.6% of Saudi consumers trust local retailers with online shopping, compared to 42.1% for international e-retailers. This lack of trust can be considered as a critical obstacle that could prevent the success of online transactions because many consumers still do not trust the vendor when shopping online.

Saudi Arabia, as part of the developing world, has invested in information and telecommunication technologies to the maximum extent possible, considering its financial means and level of development. The Saudi government has approved a huge budget of $2.7 billion since 2007 to complete all e-transaction projects by 2010 and thus exhibit its full commitment to e-commerce (Okaz Newspaper, 2007). In general, the Saudi Arabian government needs to focus more on two parallel strategies: using IT to develop basic services, such as e-government, e-commerce, education, health, and government institutions; and developing modern industries in the fields of computer hardware and software with assistance from local and foreign investors. The Saudi Arabian government also should make great effort to meet the demands of its local markets to match international e-business trends, including the development and application of IT to national planning, and new initiatives that progress toward an information-based society.

To develop the e-commerce industry and establish a legal framework that will provide a competitive edge, the Saudi government established the Saudi Communications and

Information Technology Commission (CITC) on June 27, 2001, and adopted several telecommunications legislations and regulations. The responsibilities of the Saudi Communications Commission should emphasise and enforce regulating the telecommunication sector; securing the provision of advanced communication services; creating a favourable environment for fair competition; protecting public interests; securing the confidentiality and security of communications; ensuring that the sector adapts to new technologies and developments; and securing the right to access to public network at affordable prices.

Additionally, with these developments, the security of information remains a critical issue, so the Saudi Arabian Council of Ministers put forward Decision 163 on March 4, 1997, that authorizes a security information committee, supervised by the Ministry of Interior, with membership by several agencies. The main responsibility of the committee is to increase trust among Internet users by managing the security of information transmitted online. In response, the committee has issued regulations governing the use of the Internet in the country (Ministry of Communications and Information Technology, Saudi Arabia, 2003).

In recognition of the important role of e-commerce for the Saudi economy and to attract foreign investors and compete in the international arena, a royal directive issued on February 14, 1999, established the Standing Committee of e-Commerce. This committee is responsible for identifying infrastructure requirements for e-commerce in Saudi Arabia; promoting awareness of e-commerce, with its unique benefits and possible positive outcomes; instituting the legal and legislative frameworks necessary for electronic transactions and related contracts; improving the postal delivery of parcels; identifying the addresses of government agencies, trading companies, and individuals; enabling national companies and factories to market and sell their products within and outside Saudi Arabia through the Internet; and increasing confidence in the efficiency and safety of electronic transactions. The aim of the committee is to enable Saudis to access the Internet easily and conveniently, in accordance with the greater frequency and time spent online, which should encourage positive behaviour in relation to e-commerce (Lohse *et al*., 2000).

However, since its establishment, the strategic aim has not been realized by retailers or consumers in Saudi Arabia. The research findings and analysis of documentary evidence indicate that 67.8% expressed the desire for government support to improve the mailing system, implementing policy and procedures for e-shopping in Saudi Arabia and encouraging

lower costs for Internet services, which therefore will provide access and availability at a reasonable cost in order to create a readiness for citizens, residents, and businesses to use the Internet more.. In addition, 80.3% of the participants said they remained very concerned when shopping online due to security reasons, and 43% believed there was not enough product variety on the Internet. Also, 54.7% feel e-shopping in Saudi Arabia will be ideal in the near future; 55% were concerned about after-sales service when they bought online, whilst 59% believed that "shopping online is something for the next generation". Others mentioned the difficulty of assessing goods, the expense of buying through the Internet, the complexity of this method, and the lack of quality.

Additionally, consumers have raised other concerns when shopping online. These include payment methods (66.2%), language barriers, such as no Arabic language (46.3%), quality of products or services (69.7%), consumers believe online prices are still high (60.7%), and delivery of service or products (61.6%) (e.g. the national mailing system in Saudi Arabia has no door-to-door delivery). Moreover, only 17.2% of the Saudi consumers feel that e-shopping in Saudi Arabia is well developed. Another 85.2% feels e-shopping in the Saudi market needs improvement and still does not meeting citizens' expectations, as they demand more efficient and effective services. Government information filtering is another issue when shopping or surfing the Internet. About 54% of the respondents find government information filtering a little of concern when they surf the Internet but 24% considered it to be a major concern.

Nevertheless, 40% of participants expressed enjoyment in online shopping, calling it fun and noting the time they saved, and 31% found online shopping very convenient. Furthermore, 34% said online shopping was easy for comparing prices and options before buying, and 76% found the Internet much simpler for gaining access to information.

In this regard and to activate the e-commerce role, the Saudi government and the e-commerce associations should involve the private sector in the process of developing e-commerce in Saudi Arabia. An advisory team of businesspeople should be selected to include experienced persons interested in e-commerce, who will interact with potential e-commerce investors, help guarantee the environment needed to initiate e-commerce transactions, and provide incentives for investing in e-commerce technologies.

Since security, privacy and trust are big concern for the Saudi consumers, the future research by policy makers in this area should include investigations into what factors affect consumer perceptions of their privacy and security with online firms. The research findings suggest that

individual perceptions' of online risk and security should continue to be a primary consideration in Saudi Arabia. However, e-retailers should endorse their trustworthiness by marketing their robust security measures, privacy policy statements, and seals of approval that can increase confidence among current and potential customers (McKnight et al., 2000; Palmer et al., 2000; Gehrke and Turban, 1999). Consumers are likely to believe that a site maintains a higher privacy standard when that site participates in an Internet seal of approval program.

The participation in the seal approval programs should have favourable effects on consumer perceptions toward online trust, security and privacy. Also, it is anticipated that such favourable effects will not continue if participation by licensees is inconsistent and seal of approval program sponsors do not regulate licensees as promised.

If Internet seal of approval programs are to continue, there appear to be several issues that the Saudi government and e-commerce associations in Saudi Arabia must take into consideration for such security programs are to be successful in (1) maintaining a certain level of performance with respect to online retailer privacy policies and (2) acting as valid indicators of such performance levels to online consumers. That is, the Saudi government and e-commerce associations must have sufficient resources to cover both initial approval costs and ongoing monitoring cost of seal approval programs. Obviously, these costs can be reflected in periodic registration fees. However, the potential for such fees to escalate to unreasonably high levels could eliminate the participation of smaller companies, thus reducing the validity of the seal approval programs as an indicator of privacy policy performance standards.

Another concern is that if seal programs are having difficulty in governing their relatively small numbers of online licensee firm in Saudi Arabia, it seems unlikely that such programs could accommodate the type of substantial growth common to e-commerce. If such seal programs were to fail to remain effective as their member base grows, it would appear likely that government intervention would be necessary as expressed by 67.8% of the survey participants.

Saudi Arabia has been ranked 5th in 2009 and 4th in 2010 in the Kearney Global Retail Development Index for retail attractiveness (Kearney GRDI, 2010). The Saudi government support has had the greatest impact in promoting the growth of the e-commerce sector, especially after the Saudi Arabian Monetary Agency has adopted and integrated payment solutions to the SADAD system "payment system", which reflects the keenness of Saudi

Arabia to create a special system of financial transactions in a secure electronic environment through the Internet, telephone or ATM systems.

The research findings indicate that the most popular online purchases in Saudi Arabia are books (58.1%), fashion (clothing/accessories/shoes) (29%), videos / DVDs / games (43.9%), airline tickets (66.1%), hotel bookings (50%), and sports equipment (18.4%). Credit cards are by far the most common method of payment for online purchases in Saudi Arabia (69.9%), next comes cash on delivery (27.5%), and finally cheque payments (2.6%).

Furthermore, Internet users in Saudi Arabia used the Internet to make online travel booking, hotel room reservations, and buy books, making them the most popular categories of purchase via the Internet. The increase in popularity of online shopping search (92.5%), banking (68.2%), and online purchasing (81.8%) make it apparent that Saudi consumers are open to e-commerce use (Anon, 2003), despite the notion that they are apprehensive of making large purchases online (Madar Research, 2004).

The research findings are consistent with the world's most popular online purchases. Globally, the most popular and purchased items over the Internet are books (41% purchased in the past three months), clothing/accessories/shoes (36%), videos / DVDs / Games (24%), airline tickets (24%) and electronic equipment (23%) (Nielsen.com, 2008). Credit cards are by far the most common method of payment for online purchases: 60% of global online consumers used their credit card for a recent online purchase, while one in four online consumers chose PayPal. Of those paying with a credit card, more than half (53%) used Visa (Nielsen.com, 2008). As a result, the overall findings indicate the potential for significant growth for online retailers. It is important for businesses and firms exist online and attract new users to their website and create a positive experience for them.

The e-commerce associations should generate more training and awareness of e-commerce among retailers and consumers in Saudi Arabia. Almost half (43%) of the participants claimed that they had heard of e-commerce; most of whom are younger. However, participants who claimed that they understand the term e-commerce or e-shopping indicated uncertainty over modes of payment. For example, 28% believed that e-commerce meant the display of items for sale on a Website that could be ordered and then paid for on delivery with cash, whereas 26% knew that the items could be bought online using a regular credit card, and 21% mentioned that e-commerce involved displaying items for sale that could be bought by personally visiting a shop. Finally, 16% thought that the items could be bought

online but only by using an Internet credit card, a credit card introduced by banks in Saudi Arabia to be used exclusively for online purchasing.

The government of Saudi Arabia should attempt greater effort to build the required environment for technology acceptance by aiming for a better understanding of e-commerce. Programs with the Ministry of Education, the Ministry of Higher Education, and the General Organization for Technical Education and Vocational Training work to increase such understanding among businesses and citizens. These ministries work closely together to improve educational facilities and provide training in IT-related activities in Saudi schools and universities in order to meet both regional and international standards. The main aims are to build knowledge and acceptance of IT and to provide younger generations with the skills they can use to exploit and benefit from IT and the Internet, thereby moving the country forward as a leader in building an information-based society in the region.

The research results and e-commerce growth potential indicate that e-commerce associations in Saudi Arabia need to reconsider their current marketing strategy and take more steps to respond to the needs and attitudes of their target users. First, they need to create online retailing stores as new channels for growing numbers of customers. Second, they need to amend their online storefronts as well as the various channels through which their products and services are delivered. Unfortunately, the Saudi consumers in this research have expressed several concerns over the current online shopping situation, which have acted as a barrier and dissuaded Internet users in Saudi Arabia from using the online shopping.

The participants of the online research survey and interviewees consider that the fact that Saudi Arabia is behind in the area of IT can be attributed to several factors. These may include computer illiteracy, lack of government incentives to attract businesses (e.g. free-trade zones and subsidies), absence of adequate infrastructure to support the e-commerce industry, poor enforcement of e-commerce laws, intellectual property and copyright laws, and lack of resources. Therefore, the research sample profile indicates these concerns as the main reasons preventing the full adoption of e-commerce.

Finally, the invariance analysis and latent mean have introduced wealth of information to policy makers and e-commerce associations in Saudi Arabia to look, evaluate, and compare behaviour differences in term of gender, age, education, experience, spending, and regions among consumers across the country.

9.10. THE ROLE OF E-COMMERCE AND ONLINE SHOPPING FOR WOMEN

The revolution in information and communication technology (ICT) and e-commerce applications (online shopping) has broadened the work of members of the community particularly that carried out by women, at administrative, social and economic levels. Therefore, information and communication technology and online shopping offer many opportunities for jobs, investment, and a new way of shopping for women in Islamic societies, such as Saudi Arabia. However, its importance to Muslim women may outweigh the importance level for women living in non-Muslim societies for a number of reasons. Despite the fact that women comprise 70% of the participants in this research, women in Islamic countries are facing several social and cultural obstacles preventing them from engaging in work. One of the most important effects of the information revolution for women is the potential for the development of small business projects in various fields, such as arts, handicrafts, online gifts shop, and food products or other domestic business activities. Also, women can utilize e-commerce for product development and marketing. In addition, the possibility exists for women to be employed in IT sectors without having to work in offices, as well as exploring online shopping from home. Working over the Internet and online shopping allow women to avoid falling into the forbidden areas of Islam, such as going out and mixing with men in the workplace, which is still the case in a few conservative cities in Saudi Arabia. However, for Saudi Arabia societies, as well as countries with similar culture and religions, to allow women to utilise this technology, several stages of development should be introduced to facilitate computer literacy and information technology, and then increase the level of education and training programs among women to fully exploit the principles of the Internet and online shopping.

9.11. SUMMARY

This chapter examines and discusses the research findings. The results indicate that utilitarian (usefulness), social pressure (subjective norm), and hedonic (enjoyment) factors are important to consumers when shopping or purchasing online. The results reveal that enjoyment is the strongest predictor of continuance intention. The next section covered some group invariance analyses, and highlighting their effects on the research model, moving on to summarize the main research the main key contributions and conclusions that address the research gap by providing better explanation of behavioural differences of continuance e-

shopping intentions in Saudi Arabia, and a better understanding of the factors that encourage consumers to increase their e-shopping continuance intention. This chapter, also, provided many valuable ideas for academics for future research, as well as some of the research limitations. To gain the value of the research findings, the author linked the findings of the research to many valuable managerial implications. Finally, this chapter concluded with common benefits and obstacles that have been found from the interviews, participants' profiles, and current e-shopping status in Saudi Arabia. To conclude, it is important to emphasize that the participants in this study were shoppers who had shopped or purchased online. In reality, many online shoppers might shop online (information search) but do not purchase. One likely reason for this situation may be that many Internet retailers simply have not found a way to create superior value and enjoyment for shoppers that visit their websites. Obviously, the potential is great, and to realize this potential, it is necessary for Internet retailers to determine the core value sought by e-customers and to deliver extremely core value well.

9.12. PHD RESEARCH EXPERIENCE

I really enjoyed my PhD research experience at Brunel University. It is a 'dream come true'. It was a wonderful opportunity to engage myself in a subject, about which I was passionate during my previous study, work experience in the Airlines industry, and through my part-time academic teaching. Although writing a PhD thesis could be one of the greatest challenges any student might face, the researcher has gained many benefits from this research experience:

- The researcher was able to meet a range of professional people, professors, and lecturers from different parts of the world.
- The researcher had the opportunity to enjoy publishing successfully many papers in different journals and has presented research papers in various national and international conferences.
- The researcher gained a valuable experience learning why, what, where, and how to conduct a research.
- The PhD process provided reliable problem solving experience.

- This research journey is not the end; rather it is the start for more research that may contribute to the discipline and to benefit my country, Saudi Arabia.
- The final good lesson during the PhD journey is patience.

9.13. CLOSING REMARKS

To conclude, most e-commerce research has focused on understanding the initial purchasing intention, purchase intention, and willingness to transact or transaction intention. However, research on online repurchase, e-loyalty or continuance intention is still scant. Furthermore, based on the author's knowledge, no prior research neither on online purchasing intention nor online continuance intention has been conducted in the context of Saudi Arabia. Thus, this research has added to the limited literature on online repurchase intention or continuance intention by testing the proposed model in a context in which it has never previously been tested. This study has developed a model of e-shopping continuance intentions that incorporates the revised technology acceptance model and expectation confirmation theory, as a theoretical basis, to measure continuance online shopping intentions. The author finds that enjoyment, perceived usefulness, and subjective norms determine online shopping continuance intentions in Saudi Arabia. This research thus moves beyond consideration of online shopping intentions and includes factors that may affect online shopping continuance. The model explains 61% of the variance in intentions to continue shopping online. Online strategies cannot ignore either direct or indirect differences in continuance intentions among shoppers in Saudi Arabia. With the high percentages of participants from the three main populated regions, the research model can be generalized across the country with reasonable confidence. The research contributes to the literature on Internet shopping and continuance intentions to e-shop in Saudi Arabia.

Few prior studies in Saudi Arabia use SEM as their methodological approach, and even fewer have applied invariance analysis to verify behavioural differences based on gender, regional, education, e-shopping experience, and e-shopping spending with a sample obtained from Saudi Arabia. This study addresses these various knowledge gaps.

The finding of this thesis is useful to both research scholars and practitioners. This thesis provides managers with useful and important information they can use to plan their websites and marketing strategies. For e-retailers, the findings help them to know which web site attributes influence consumers' beliefs about e-shopping, and then improve their e-shopping

sites. Also, a more thorough understanding of the impact of latent mean of consumer beliefs about e-shopping on continuance intention help e-retailers learn more about how to entice e-shoppers to shop online more, and entice non-online shoppers to start online shopping. Furthermore, the findings help e-commerce scholars and practitioners understand why customers in the Saudi Arabian context might want to continue e-shopping, thus suggesting improvements to website quality and informative content, which determine usefulness and enjoyment perceptions, enhancing customers' e-shopping experience, and encouraging both purchase and repurchase. Additionally, this research serves as a basis for understanding e-shopping acceptance, usage, and continuance intentions across the less-studied context of the Gulf Region.

Finally, the significant effect of subjective norm on enjoyment and continuance intention suggests that recommendations from other people still play a major role in an individual's e-commerce behaviour intention. Therefore, managers should endorse and facilitate positive word-of-mouth, using social networks such as Blogger, Delicious, Facebook, Google Bookmarks, MySpace, Twitter, and many more, to enhance the perceptions of family, friends, potential customers, and customers of their websites' usefulness, enjoyment and trustworthiness.

REFERENCES

Abdul-Muhmin, A.G. (1998) 'Demographic differences in usage and attitudes toward the Saudi Arabian EFTPoS system', *International Journal of Bank Marketing*, 16 (3) pp. 117-128.

Adams D. A., Nelson P. R., and Todd P. A. (1992) 'Perceived usefulness, ease of use and usage of information technology: a replication', *MIS Quarterly*, 16 (2) pp. 227-47.

Adler, N.J. (1995) **International dimensions of organizational behaviour**. Cincinnati: South-Western Publishing.

Agarwal, R. and Prasad, J. (1999) 'Are individual differences germane to the acceptance of new information technologies?', *Decision Sciences*, 30 (2) pp. 61-391.

Agence France-Presse (1998) 'Saudi Arabia ready to cruise the information superhighway', July 15.

Ahn T, Ryu S,and Han I. (2003) 'The impact of the online and offline features on the user acceptance of internet shopping malls', Electronic Commerce Research and Applications, 3(4) pp. 405–20.

Ahn T., Ryu, S. and Han, I. (2004) 'The impact of the online and offline features on the user acceptance of internet shopping malls', *Electronic Commerce Research and Applications*, 3 (4) pp.405-420.

Ahn T., Ryu, S. and Han, I. (2007) 'The impact of Web quality and playfulness on user acceptance of online retailing', *Information and Management*, 44 (3) pp.263-275.

Ajzen I, and Fishbein M. (1980) **Understanding Attitudes and Predicting Social Behavior**. Englewood Cliffs, NJ: Prentice-Hall.

Ajzen I. (1985) 'From intentions to actions: A theory of planned behavior.' In: Kuhl J. and Beckmann J. (ed) **Action control: From cognition to behaviour**. New York: Springer, pp. 11–39.

Ajzen I. (1991) 'The Theory of Planned Behavior', *Organizational Behavior and Human Decision Processes*, 50 (2) pp.179-211.

Ajzen I. and Fishbein, M. (1975) **Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research**, Reading, MA: Addison-Wesley pp 45.

Akhter S. H. (2003) 'Digital Divide and Purchase Intention: Why Demographic Psychology Matters', *Journal of Economic Psychology*, 24 (3) 321-327.

Al Riyadh, (2006) 'Challenge bad the future of e-com in Saudi Arabia', Saudi Arabia. [Online] Available at: http://www.alriyadh.com/2006/08/27/article182047.html; issue 13943, year 43, 27\8\2006, [Accessed on 4 April 2007].

Al-Ajlan, M. B. (2006) **CRM implementation an empirical study of best practice and a proposed model of implementation**. *TQM*, PhD Thesis, Bradford University.

Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Saywer, A. and Wood, S. (1997) 'Interactive Home Shopping: Consumer, Retailer, and Manufacturers Incentives to Participate in Electronic Marketplaces', *Journal of Marketing*, 61(3): 38-53.

Alden, D. L., Jan-Benedict E. M. Steenkamp, and Batra, R. (2006) 'Consumer attitudes toward marketing globalization: antecedent, consequent and structural factors,' *International of Research in Marketing*, 23 (3) pp. 227-39.

Al-Diri, K., Hobbs, D., and Qahwaji, R., (2006) 'Effects of Social Presence and Cultural Representation on Websites for Promoting Trust In B2C E-Commerce - A Saudi Arabian Study'. In Proceedings of the **IADIS International Conference e-Commerce,** Barcelona, Spain.

Ali, A., (1988) 'A cross-national perspective of managerial work value systems'. *Advances in International Comparative Management* 3 pp. 151–169.

Al-Jazira Daily (1998) 'The regulations on ISPs forbid them from establishing any linkage to the Internet except via the KACST', *Al-Jazira Daily*, May 6.

Al-Jazira newspaper (1998) May 6, 1998, as reported in FBIS, May 12, 1998.

Alreck, P., and Settle, R.A. (2002) 'Gender effects on Internet, Catalog and Store Shopping', *Journal of Database Marketing*, 9 (2) pp.150-162.

Alsajjan, B. and Dennis, C. (2009) 'Internet banking acceptance model: cross-market examination', *Journal of Business Research*, forthcoming.

Alwatan Newspaper (2006) 'Saudi Arabian Airlines sign a contract to supply the airlines with e-ticketing system', issue 2012, date Monday, 3, April, 2006. Available at: http://www.alwatan.com.sa/daily/2006-04-03/economy/economy08.htm

AMEinfo.com, (2009) 'Saudi Telecom Company signs partnership agreement', Avaialable at: http://www.ameinfo.com/215875.html [Accessed Nov 2009].

Amoroso D.L. and Hunsinger, S. (2009) 'Analysis of the Factors that Influence Online Purchasing' *Journal of Information Systems Applied Research.* 2 (1) http://jisar.org/2/1/ May 18, 2009.

Anandarajan, M., Igbaria, M., Anakwe, U.P. (2002) 'IT acceptance in a less-developed country: a motivational factor perspective', *International Journal of Information Man-agement*, 22(1), pp. 47-65

Anderson, E. W. and Sullivan, M. W. (1993) 'The Antecedents and Consequences of Customer Satisfaction for Firms', *Marketing Science*, 12 (2), pp. 125-143.

Anderson, E. W., Fornell, C., and Lehmann, D. (1994) 'Customer Satisfaction, Market Share, and Profitability: Findings from Sweden', *Journal of Marketing*, 72, pp. 53-66.

Anderson, J. C., and Gerbing, D. W. (1988) 'Structural equation modeling in practice: A review and recommended two-step approach', Psychological Bulletin 103, pp. 411–423

Ang, L. and Buttle, F. A. (2002) 'ROI on CRM: a customer-journey approach' IMP-conference, Perth, Australia, *Industrial Marketing & Purchasing*.

Anon (2001) 'Saudi Telecom cuts Internet charges' http://saudiembassy.net/2001News/News/TraDetail.asp?cIndex=3072 edn. Royal Embassy of Saudi Arabia in Washington D.C.

Anon (2003) 'Development of e-Commerce Sectors in the Arabic Regions', paper presented at the Western Asia Preparatory Conference for the World Summit on the Information Society (WSIS), Beirut, 4-6 February 2003.

Arab Advisors Group (2007) 'A Survey of Internet Use and Online Advertising Consumption and Effectiveness in Saudi Arabia and the UAE' [report].

Arab Advisors Group (2008) 'A Survey of Internet Use and Online Advertising Consumption and Effectiveness in Saudi Arabia' [report].

Arab News (2003) 'Internet Regulations Tightened' Raid Qusti, Riyadh Bureau Chief , *Arab News Sunday*, 6, July, 2003.

Arab News Newspaper (2007) 'Airlines Initiate E-Ticketing Process to Meet Deadline', Saudi Arabia, Available at: http://www.arabnews.com/?page=9&section=0&article=96844&d=30&m=5&y=2007 , [Accessed on 10 July 2007].

Arab News Newspaper (2007) 'Saudia to Issue E-Boarding Pass by Mid-August', date Wednesday, 24, May. Available at: http://www.arabnews.com/?page=1&section=0&article=96567&d=24&m=5&y=2007 [Accessed on 10 July 2007].

Arbuckle, J.L. (2003) **Amos 5.0 User's Guide**, Marketing Department, SPSS Inc., SmallWaters Corp., Chicago, IL.

Atchariyachanvanich, K, Okada, H, Sonehara, N, (2007) 'What keeps online customers repurchasing through the internet?', *ACM SIGecom Exchanges*, 6(2) pp.47-57.

Atkinson, M. A. and Kydd, C. (1997) 'Individual Characteristics Associated with World Wide Web Use: An Empirical Study of Playfulness and Motivation', *The Database for Advances in Information Systems*, 28 (2) pp. 53-62.

Ba, S., Whinston, A. B., and Zhang, H. (1999) 'Building Trust in the Electronic Market using an Economic Incentive Mechanism,' The 1999 International Conference on Information Systems, Charlotte, NC.

Babbie, E., (2004) **The Practice of Social Research, 10th edition**. Wadsworth Pub. Co Belmont Calif.

Babin, B. J., Darden, W. R., and Griffen, M., (1994) 'Work and/or fun: measuring hedonic and utilitarian shopping value', *Journal of Consumer Research*, 49 (2) pp. 91-99.

Babin, B.J, Attaway, J.S. (2000) 'Atmospheric affect as a tool for creating value and gaining share of customer', *Journal of Business Research*, 49(2), pp.91-109.

Babin, B.J. and Babin, L. (2001) 'Seeking something different? A model of schema typicality, consumer affect, purchase intentions and perceived shopping value', *Journal of Business Research*, 54 (4) pp. 89-96.

Bacon, D. R.., Sauer, P. L., and Young, M. (1995) 'Composite reliability in structural equations modeling.' *Educational and Psychological Measurement*, 55 pp.394–406.

Bagozzi, R. Davis, F. and Warshaw, P. (1992) 'Development and test of a theory of technological learning and usage', *Human Relations*, 45 pp. 659-686.

Bagozzi, R. P., (1982), "A Field Investigation of Causal Relationships Among Cognitions, Affect, Intentions, and Behaviour", *Journal of Marketing Research*. 19, pp. 562-584.

Bagozzi, R. P., and Fornell, C., (1982) **Theoretical Concepts, Measurements and Meaning. In A Second Generation of Multivariate Analysis**, ed. C. Fornell. New York: Praeger.

Bagozzi, R., (1994), **Principles of Marketing Research**, Massachusetts: Blackwell Publishers Inc.

Bagozzi, R.and Yi, Y., (1988) 'On the evaluation of structural equation models', *Journal of the Academy of Marketing Science*, 16 pp. 74-94.

Bannister, D., J. and Mair, M.M. (1968) **The Evaluation of Personal Constructs**. Academic Press, Inc., New York

Bargagliotti, L. (1983) 'Qualitative modes of inquiry', *Western Journal of Nursing Research*, 10 pp.138-149.

Barnes, S. J. and Vidgen, R. (2000) 'Information and Interaction quality: Evaluating Internet Bookshop Web sites with SERVQUAL', In Proceedings of the **13th International E-Commerce Conference,** BLED.

Bart, Y., Shankar, V., Sultan, F. and Urban, G.L. (2005) 'Are the drivers and role of online trust the same for all web sites and consumers? A large-scale exploratory empirical study', *Journal of Marketing*, 69 (4) pp.133-52.

Bartunek, J. M., Bobko, P., Venkatraman, N. (1993) 'Toward Innovation and Diversity in Management Research Methods', *The Academy of Management Journal*, Vol. 36(6), pp. 1362-1373

Bauer, H. H, Falk, T., and Hammerschmidt, M. (2006) 'e-TransQual: a transaction process-based approach for capturing service quality in online shopping', *Journal of Business Research*, 59(7), pp. 866–75.

Bearden, W. O. and Teel, J. E., (1983) 'Selected Determinants of Consumer Satisfaction and Complaint Reports', *Journal of Marketing Research*, 20, pp. 21-28.

Beatty, S.E.., Mayer, M., Coleman, J.E.., Reynolds, K.E., and Lee, J. (1996) 'Customer-Sales Associate Retail Relationships' Journal of Retailing 72 (3) pp 223-247.

Beerli, A., Martin, J.D., and Quintana, A., (2004), 'A Model of Consumer Loyalty in the Retail Banking Market', *The Journal of European Marketing,* **38**(1), pp. 253-275.

Belanger, F., Hiller, J.S. and Smith, W.J. (2002) 'Trustworthiness in electronic commerce: the role of privacy, security, and site attributes', *The Journal of Strategic Information Systems*, 11 (3/4) pp. 245-70.

Bell, J. (2005) **Doing your research project: A guide to first-time researchers in education and social science** (4th ed.), Open University Press, Buckingham.

Bellman, S., Lohse, G.L., and Johnson, E.J. (1999) 'Predictors of online buying behavior'. *Communications of the ACM*, 42(12) pp.32-38.

Bemmaor, A., (1995) 'Predicting behavior from intention-to-buy measures: the parametric case', *Journal of Marketing Research,* 32, pp. 176–191

Bentler, P. M. (1990) Comparative fit indexes in structural models. *Psychological Bulletin*, 107, pp. 238-246.

Bentler, P.M. and Bonett D.G. (1980) 'Significance tests and goodness of fit in the analysis of covariance structures', *Psychological Bulletin,* 88 (3) pp.588-606.

Bentler, P.M., (1989) **EQS Structural Equations Program Manual**, BMDP Statistical Software, Los Angeles.

Berry, L.L. (1969) 'The components of department store image: a theoretical and empirical analysis', *Journal of Retailing*, 45(1), pp. 3-20

Bettman, J.R. and Whan Park, C. (1980) 'Effects of Prior Knowledge and Experience and Phase of the Choice Process on Consumer Decision Processes: A Protocol Analysis' *Journal of Consumer Research*, 7, pp. 234–48.

Beynon-Davies, P., (2007) 'eBusiness Maturity and Regional Development' *International Journal of Business Science and Applied Management*, 2(1), 9-20

Bhatnagar, A., Misra, S. and Rao, H.R. (2000). 'On risk, convenience, and Internet shopping behavior: Why some consumers are online shoppers while others are not' *Communications of the ACM*, 43(11), 98-105.

Bhattacharya, R. and Devinney, T.M., (1998) 'A formal model of trust based on outcomes', *Academy of Management Review*, 23(3), pp. 459–474

Bhattacherjee, A. (2000). 'Acceptance of e-commerce services: The case of electronic brokerages'. *IEEE Transactions on Systems, Man and Cybernetics, Part A*, 30(4) pp.411-420.

Bhattacherjee, A. (2001a) 'Understanding Information Systems Continuance: An Expectation-Confirmation Model', *MIS Quarterly*, 25(3) pp.351-370.

Bhattacherjee, A. (2001b) 'An empirical analysis of the antecedents of electronic commerce service continuance', *Decision Support Systems*, 32(2) pp.201-214.

Bhattacherjee, A. (2002) 'Individual Trust in Online Firms: Scale Development and Initial Test' *Journal of Management Information Systems,* 19 (1) pp 213-243.

Bickman L., Rog D. J. (1998) **Handbook of Applied Social Research Methods**. Sage: Thousand Oaks

Blankenship, A. B., Breen, G. E. and Dutka, A. F. (1999) **State of the Art Marketing Research**, (2nd ed) Linconwood: NTC Business.

Blattberg, R.C., Deighton, J. (1991) 'Interactive marketing: exploring the age of addressability', *Sloan Management Review*, 31(1) pp. 5-14.

Bless, C. and Higson-Smith, C. (1995), **Fundamentals of Social Research Methods: An African Perspective**, (2nd) Kenwyn, South Africa: Juta.

Bobbitt, L.M. and Dabholkar, RA. (2001). 'Integrating attitudinal theories to understand and predict use of technologybased self-service: The Internet as an illustration' *International Journal of Service Industry Management*, 12(5) pp.423-450.

Bolton, M. (2004). 'Customer centric business processing' *International Journal of Productivity and Performance Management,* 53(1) pp. 44-51.

Booz Allen Hamilton, (2007), 'The ICT e-volution, brining information to communications' Available at: http://www.booz.com/media/file/The_ICT_Evolution_Bringing_Information_To_Communications_FINAL.pdf [Accessed Nov 2009].

Bose, R. (2002) 'Customer relationship management: key components for IT success.' *Industrial Management and Data Systems* 102(2) pp. 89–97.

Boudon, R. (1987) 'The individualistic tradition in sociology'. In *The Micro-Macro Link*, J. Alexander, B. Geisen, R. Munch, N. Smelser, eds., pp. 45-70. Berkeley, CA: University of California Press.

Bourlakis, M., Papagiannidis, S. and Li, F. (2009) 'Retail spatial evolution: paving the way from traditional to metaverse retailing' *Electronic Commerce Research*, 9 (1) pp.135-148.

Bourque, L.B., Fielder, E.P. (1995) **How to Conduct Self-Administered and Mail Surveys**, Thousand Oaks, CA: Sage.

Bowen, J. T. and Chen, S-L. (2001) 'The relationship between customer loyalty and customer satisfaction' *International Journal of Contemporary Hospitality Management,* **13**(5).

Bowernman, B. L. and O'Connel, R. T. (1990) **Linear statistical models: an applied approach** (2nd edition). Belmont, CA: Duxbury.

Bradshaw, D. and Brash, C. (2001) 'Managing customer relationships in the e-business world: how to personalise computer relationships for increased profitability' *International Journal of Retail and Data Systems*, 29(12) pp: 520-530

Brannen, J. (1992) **Mixing Methods: Qualitative and Quanti-tative Research**. Avebury, Aldershot, Brookfield, USA.

Brashear, T. G., Kashyap, V., Musante, M. D, Donthu, N. (2009). 'A Profile of the Internet Shopper: Evidence from Six Countries', *Journal of Marketing Theory and Practice*, 17 (3) pp. 267 - 282

Brislin R., (1986) The Wording and Translation of Research Instruments, in: **Field Methods in Cross-Cultural Research**, Beverly Hills: W. Lonner and J. Berry, eds, Sage.

Brown, I. and Buys, M., (2005) 'A cross-cultural investigation into customer satisfaction with internet banking security', *Proceedings of the 2005 annual research conference of the South African institute of computer scientists and information technologists on IT research in developing countries*, pp. 200-207.

Brown, J.S., and Duguid, P. (2001) 'Knowledge and organization: a social-practice perspective', *Organization Science,* 12 (2) pp.198-213.

Bruner, G.C., and Kumar, A. (2005) 'Explaining consumer acceptance of handheld Internet devices', *Journal of Business Research,* 58 (5) pp.553-558.

Bryman, A. (1992) **Quality and Quantity in Social Research**, London: Routledge

Bryman, A. (2004) **Social Research Methods**, (2nd) Oxford: Oxford University Press.

Brynjolfsson, E., and Smith, M. (2000) 'Frictionless Commerce? A Comparison of Internet and Conventional Retailers' *Management Science* 46 (4) pp 563-585.

Bull, C. (2003) 'Strategic issues in customer relationship management (CRM) implementation.' *Business Process Management Journal,* 9 (5) pp. 592-602.

Bulmer, M. (1988) **The Chicago school of sociology: Institutionalization, Diversity and the Rise of Sociological Research**, Chicago University Press

Burke, R. R. (1996) 'Virtual shopping breakthrough in marketing research' *Harvard Business Review*, 74 (2) pp.120-131.

Burke, R. R. (1997) 'Do you see what I see? The future of virtual shopping' *Journal of the Academy of Science*, 25 (4) pp.352-60.

Burstein, B., Bank, L. and Jarvik, L. (1980) 'Sex differences in cognitive functioning: evidence, determinants, implications' *Human Development*, 23 pp. 289–313.

Burton-Jones and Hubona, G.S. (2006) 'The mediation of external variables in the technology acceptance model', Information & Management, 43 (6), pp. 706–717

Bush, V.D., Bush A.J., Clark, P. and Bush, R.P. (2005) 'Girl power and word-of-mouth behavior in the flourishing sports market' *Journal of Consumer Marketing*. 22 (5), pp. 257-264.

Business Wire (1999) 'Online Investing Market Grows by 37% in 1998; online Investors Expect Impact to be felt by Full Service and Discount Firms', Available at: http://www.businesswire.com/webbox/bw.021199/1100662.html, [Accessed Feb. 2009].

Butler, P. and Peppard, J. (1998) 'Consumer purchasing on the Internet: Process and Prospects', *European Management Journal*, 16 (5) pp.600-610.

Byrne, B. M. (2001), **Structure Equation Modelling with AMOS: Basic Concepts, Applications and Programming**, Mahwah, N.J. and London: Lawrence Erlbaum Associations.

Byrne, B. M., Shavelson, R. J., and Muthén, B. (1989). 'Testing for the equivalence of factor covariance and mean structures: The issue of partial measurement invariance.' *Psychological Bulletin*, 105 pp.456-466.

Byrne, B., (1995) **SEM with AMOS: Basic concepts, applications, and programming**, Routledge.

Campbell, A. and Pisterman S. (1996) 'A Fitting Approach to Interactive Service Design, the Importance of Emotional Needs, *Design Management Journal*, 7 (4), pp.10-14

Cao X., and Mokhtarian P. L. (2005) 'The intended and actual adoption of online purchasing: a brief review of recent literature', Institute of Transportation Studies (ITS), Department of Civil and Environmental Engineering, University of California, Davis, Available at: http://www.its.ucdavis.edu/publications/2005/UCD-ITS-RR-05-26.pdf

Carl, J., (1995) 'Online service users: loyal as alley cats?' *Web Week*, 1 (7)

Carlson, J.R. and Zmud, R.W. (1999), 'Channel expansion theory and the experiential nature of media richness perceptions', *Academy of Management Journal*, 42 (2) pp.153-70.

Cathy S. Lin, S. Wu and Tsai, R.J. (2005), 'Integrating perceived playfulness into expectation-confirmation model for web portal context' *Information & Management*, 42 (5) pp. 683–693.

Cha, J, (2009). 'Shopping on Social Networking Web Sites: Attitudes toward Real versus Virtual Items', *Journal of Interactive Advertising*, 10 (1) pp.77-93.

Chakraborty, G., Lala, V., and Warren, D., (2002) 'An empirical investigation of antecedents of B2B websites' effectiveness', *Journal of Interactive Marketing,* 16(4), pp. 51–72.

Chang, M. K, Cheung W, and Lai V. S. (2005).'Literature derived reference models for the adoption of online shopping' *Information & Management*, 42 pp.543-559.

Chau, P.Y.K., Au, G. and Tam, K.Y. (2000) 'Impact of information presentation modes on online shopping: An empirical evaluation of a broadband interactive shopping service.' *Journal of Organizational Computing and Electronic Commerce*, 10(1) pp.1-22.

Chen Q, Wells WD. (1999) 'Attitude toward the site', *Journal of Advertising Research*, 39(5), pp. 27–37.

Chen, C. A, (2009). 'Information-oriented Online Shopping Behavior in Electronic Commerce Environment', *Journal of Software*, 4 (4) pp.307-314.

Chen, L D. and Sukpanich, N. (1998) 'Assessing consumers' involvement in Internet purchasing'. In Proceedings of the **4th Americas Conference on Information Systems (AMCIS)**, Baltimore, Maryland.

Chen, L. D., and Tan, J. (2004) 'Technology adaptation in e-commerce: key determinants of virtual stores acceptance', *European Management Journal*, 22 (1) pp. 74-86.

Chen, L., Gillenson, M., and Sherrell, D. (2002) 'Enticing online consumers: An extended technology acceptance perspective', *Information & Management*, 39(8) pp.705-719.

Chen, S. J. and Chang, T. Z. (2003) 'A descriptive model of online shopping process: some empirical results'. *International Journal of Service Industry Management*, 14 (5) pp.556–569

Chen, Y-C., Shang, R-A. and Kao, C-Y. (2009) 'The effects of information overload on consumers' subjective state towards buying decision in the internet shopping environment' *Electronic Commerce Research and Applications* 8 pp.48–58.

Cheung, C. M. K., Chan G. W. W. and Limayem, M. (2005) 'A Critical Review of Online Consumer Behavior: Empirical Research', *Journal of Electronic Commerce in Organizations*, 3 (4) pp. 1-19.

Cheung, G. W. and Rensvold, R. B. (1999) 'Testing factorial invariance across groups: a reconceptualization and proposed new method', *Journal of Management* 25 (1) pp. 1–27.

Cheung, G. W. and Rensvold, R. B. (2000) 'Assessing extreme and acquiescence response sets in cross-cultural research using structural equation modeling', *Journal of Cross-Cultural Psychology*, 31 (2) pp.187–212.

Cheung, G.W., Christy M. K., and Lee M. K. O. (2005) 'Consumer satisfaction with internet shopping: a research framework and propositions for future research', In Proceedings of the **7th International Conference on Electronic Commerce**, Xi'an, China

Chiasson, M.W. and Lovato C.Y. (2001) 'Factors Influencing the Formation of a User's Perceptions and Use of a DSS Software Innovation' *Database for Advances in Information Systems*, 32 (3) pp.16-35.

Childers, T., Carr, C., Peck, J. and Carson, S. (2001) 'Hedonic and utilitarian motivations for online retail shopping behavior', *Journal of Retailing*, 77 (4) pp. 511-535.

Chiou, J.-S. (2004) 'The antecedents of consumers loyalty toward Internet Service Providers', *Information and Management*, 41, pp. 685-695.

Chiu, C. M., Chang C.C., Cheng, H. L. and Fang, Y. H. (2009) 'Determinants of customer repurchase intention in online shopping' *Online Information Review*, 33(4) pp.761-784.

Chiu, C.M., Lin, H.Y., Sun, S.Y. and Hsu, M.H. (2009) 'Understanding customers' loyalty intentions towards online shopping: an integration of technology acceptance model and fairness theory', *Behaviour & Information Technology*, 28 (4) pp.347-360

Cho, J. (2004) 'Likelihood to abort an online transaction: Influences from cognitive evaluations, attitudes, and behavioral variables' *Information & Management*, 41 (7) pp.827-838.

Chrchill, G. A. Jr. (1979) 'A Paradigm for Developing Better Measures of Marketing Constructs', *Journal of Marketing Research*, 16 Feb. pp.64-73.

Chung, I. K., and Lee, M. M. (2003) 'A study of influencing factors for repurchase intention in Internet shopping malls', In Proceeding of the **International Parallel and Distributed Processing Symposium**, Nice, France, 243a.

Chung, J., and F.B. Tan (2004) 'Antecedents of playfulness: an exploratory study on user acceptance of general information-searching websites', *Information & Management,* 41 pp. 869–881.

Churchill, G. A, and Suprenant, C. (1982) 'An investigation into the determinants of consumer satisfaction', *Journal of Marketing Research*, 19, pp. 491–504.

Churchill, G. A. (1999) **Marketing Research: Methodological Foundations.** Chicago: Dryden.

Clark, T., (1990) 'International marketing and national character: a review and proposal for an integrative theory', *Journal of Marketing,* 54(4), pp. 66-79.

Coles, S. and Gokey, T. (2002) 'Customer Retention is Not Enough' *Journal of Consumer Marketing*, 22 *(*2/3) pp.1-7.

Collins, R. (2004) **Interaction Ritual Chains**. Princeton: Princeton University Press.

Collis, J. and Hussey, R. (2003) **Business research: A practical guide for undergraduate and postgraduate students.** New York: Palgrave Macmillan.

Cook, K.S., Emerson, R.M. (1978) 'Power, equity, and commitment in exchange networks', *American Sociological Review*, 43 pp.721-38.

Cooper D. R., and Schindler. P. S. (2003) **Business research methods, eighth edition**, McGraw-Hill Higher Education, ISBN 0-07-249870-6.

Coppel, J. (2000) 'E-commerce: impacts and policy challenges', *OECD Economics Department Working Papers*, No. 252, OECD Publishing. Doi: 10.1787\801315684632

Couger, J.D., (1986) 'Effect of Cultural Differences on Motivation of Analysts and Programmers: Singapore vs. the United States', *MIS Quarterly,* 10(2), pp. 189-196.

Coyle, J.R., and Thorson, E. (2001) 'The effects of progressive levels of interactivity and vividness in web mariceting sites', *Journal of Advertising*, 41(3), 65-77

Crego, E. T. and Schiffrin, P. D. (1995) **Customer-Centered Reengineering: Remapping for Total Customer Value**. Burr Ridge, IL: Irwin.

Creswell, W. J. (2003) **Research Design, Qualitative, Quantitative and Mixed Methods Approaches**. London: Sage.

Crosby, L. A. (2002). 'Exploding some myths about customer relationship management', *Managing Service Quality,* 12 (5) pp. 271-277.

Crosby, L. A. and Johnson, S. L. (2005), 'Growing up', *Marketing Management,* 14, (2), pp. 12-13.

Curry, J. and Curry A. (2000). **The customer marketing method: how to implement and profit from customer relationship management.** New York, London: Free Press.

Cyr, D., Head, M. and Ivanov, A. (2006) 'Design aesthetics leading to m-loyalty in mobile commerce', *Information and Management*, 43 (8) pp. 950-63.

Czepiel, J.A. (1990) 'Service Encounters and Service Relationships: Implications for Research' *Journal of Business Research* 20 (1) pp. 13-21.

Czepiel, John A. and Robert Gilmore (1987) 'Exploring the Concept of Loyalty in The Services Marketing Challenge: Integrating for Competitive Advantage, J. A. Czepiel, C. A. Congram, and J. Shanahan, eds. Chicago, IL: AMA, 91-94

Dabholkar, P. A., Shepard, C. D. and Thorpe, D. I. (2000) 'A Comprehensive Framework for Service Quality: an investigation of critical conceptual and measurement issues through a longitudinal study', *Journal of Retailing*, 76 (2) pp. 139-173.

Daft, R. and Lengel, R. (1986) 'Organizational information requirements, media richness, and structural design', *Management Science*, 32 (5), pp. 554–571.

Dahlén, M. and Lange, F. (2002) 'Real consumers in the virtual store', *Scandinavian Journal of Management*, 18 (3) pp.341-63

Dane, F. C. (1990) **Research methods**. Pacific Cole, CA, USA: Brooks/Cole.

Darden, William R. and Reynolds, Fred D., (1971) 'Shopping Orientations and Product Usage Rates', *Journal of Marketing Research,* **8**, pp. 505–508

Davis, F. D., (1989) 'Perceived Usefulness, Perceived Ease of Use and User Acceptance of Information Technology*', MIS Quarterly*, 13 (3) pp. 319-340.

Davis, F. D., Bagozzi, R. P. and Warshaw, P. R. (1992) 'Extrinsic and Intrinsic Motivation to Use Computers in the Workplace' *Journal of Applied Social Psychology*, 22 pp. 1111-1132.

Davis, F. D., Bagozzi, R. P., and Warshaw, P. R., (1989) 'User Acceptance of Computer Technology: A Comparison of Two Theoretical Models', *Management Science*, 35 (8) pp. 982-1003.

Davis, F.D., (1986) 'A technology acceptance model for empirically testing new end-user information systems: theory and results'. *Ph.D. Thesis, Sloan School of Management, Massachusetts institute of Technology*.

Davis, F.D., (1993) 'User acceptance of information technology: system characteristics, user perceptions and behavioural impacts', *International Journal of Man-Machine Studies,* **38**, pp. 475-487.

Day, G. (1994). 'The capabilities of market-driven organizations', *Journal of Marketing,* **58**(4) pp. 37-52.

de Rada, V. D. (1998) 'A single consumer or different types of consumer: an analysis of social types according to their consumer habits', *British Food Journal*, 100 (7) pp.326–336.

Deci, E.L. (1975) **Intrinsic Motivation**, Plenum Press, New York.

Degeratu, A., Rangaswamy, A. and Wu, J. (2000) 'Consumer choice behavior in online and traditional supermarkets: the effects of brand name, price, and other search attributes', *International Journal of Research in Marketing*, 17 (1) pp.55-78.

DeLone, W.H. and McLean, E.R., (1992) 'Information systems success: The quest for the dependent variable', *Information Systems Research,* 3 (1) pp. 60–95.

Dennis, C., Merrilees, B., Jayawardhena, C. and Wright, L. (2009) 'e-Consumer Behaviour' *European Journal of Marketing*, 43 (9/10) pp. 1121-1139.

Denzin, N. K. (1978) **The Research Act**, (2nd ed) New York: McGraw Hill.

Denzin, N. K. and Lincoln, Y. S. (2000) **The Handbook of Qualitative Research**, (2nd ed) Thousand Okas, Calif and London: Sage Publications.

Diniz E. (1998) 'Web Banking in USA' *Journal of Internet Banking and Finance*, 3 (2) pp. 1-7.

Dion, K., Berscheid E. and Walster E. (1972) 'What Is Beautiful Is Good' *Journal of Personality and Social Psychology*, 24 (3) pp. 285-290

Directors Publication Ltd. (1999). **Customer relationship management how directors can build business through improved customer relations.** London: Published for the Institute of Directors and Oracle Corporation UK Ltd by Director Publications.

Dishaw, M. T., and Strong, D. M. (1999) 'Extending the technology acceptance model with task-technology fit constructs', *Information and Management*, 36 (1) pp. 9-21.

Doney, M.P. and Cannon, J.P., (1997) 'An examination of the nature of trust in buyer–seller relationships', *Journal of Marketing*, 61, pp. 35–51.

Donovan, R.J. and Rossiter, J.R. (1982) 'Store atmosphere: an environmental psychology approach', *Journal of Retailing*, 58, pp. 34-57.

Donthu, N. (2001) 'Does your web site measure up?', *Marketing Management*, 10(4), 29-32

Donthu, N. and Garcia, A. (1999) 'The internet shopper', *Journal of Advertising Research*, 39 (3) pp. 52-8.

Douglas, S.P., Morrin, M.A. and Craig, C.S. (1994) 'Cross-national consumer research traditions' In Laurent, G., Lilien, G. and Bras B. (Eds.), **Research traditions in marketing**. Boston: Kluwer.

Drasgow, F. and Kanfer, R. (1985) 'Equivalence of psychological measurement in heterogeneous population' *Journal of Applied Psychology*, 70 (4) pp.662–680.

Duffin, D. (1997) 'Winning customer ownership - the Jaeger service excellence storey', *Managing Service Quality* **7**(2).

Eagly, A. H., Ashmore R. D., Makhijani M. G. and Longo L. C. (1991) 'What Is Beautiful Is Good, but…: A Metaanalytic Review of Research on the Physical Attractiveness Stereotype', *Psychological Bulletin*, 110(1) pp. 109-128

East, R., (1997), **Consumer behaviour: advances and applications in marketing**. Prentice Hall.

Easterby-Smith, M., Thorpe, R., and Lowe, A. (1991) **Management Research an Introduction**, London: Sage.

Eastin, M.S. (2002) 'Diffusion of e-commerce: an analysis of the adoption of four e-commerce activities', *Telematics and Informatics*, 19: 251-67

Economist Intelligence Unit (2000) 'Doing E-Business In Saudi Arabia' Available at: http://www.ebusinessforum.com/index.asp?layout=debi_country_home&country_id=SA&title=Doing%20ebusiness%20in%20Saudi%20Arabia [Accessed on 26 March 2007].

Eid, R., Trueman, M. and Ahmed, A. M. (2002) 'A cross-industry review of B2B critical success factors', *Internet research: Electronic Networking Applications and Policy*, 12 (2) pp. 110-123.

Eighmey, H. and McCord, L. (1998) 'Adding value in the information age: uses and gratifications of sites on the world-wide-web', *Journal of Business Research*, 41 pp. 187-94.

Ein-Dor, P., Segev, E. and Orgad, M. (1992) 'The Effect of National Culture on IS: Implications for International Information Systems', *Journal of Global Information Management*, 1 pp. 33-44.

Einwiller, S., Geissler, U., Will, M., (2000) '**Engendering trust in Internet businesses using elements of corporate branding**', In: H.M. Chung (Ed.), Proceedings of the 2000 Americas Conference on Information Systems (AMCIS), Long Beach, CA, pp. 733–739.

Eroglu, S.A., Machleit, K.A. and Davis, L.M. (2001) 'Atmospheric qualities of online retailing - a conceptual model and implications', *Journal of Business Research*, 54 (2), pp. 177-84.

Fazio, R. H. and Zanna, M. P., Berkowitz, L. (ed.) (1981) 'Direct Experience and Attitude Behavior Consistency in Advances in Experimental Social Psychology', New York: *Academic Press*. 6, pp. 161-202.

FBIS (1998) Quoted in Okaz newspaper, Available at: www.okaz.com.sa, February 24, 1998, reported in FBIS, February 27, 1998.

Featherman, M. S. and P. A. Pavlou (2003) 'Predicting E-Services Adoption: A Perceived Risk Facets Perspective', *International Journal of Human-Computer Studies*, 59 pp. 451-474

Feinberg, R. A., Kadam, R., Hokama, L., Kim, I. (2002) 'The state of electronic customer relationship management in retailing' *International Journal of Retail and Data Systems.* 30 (10) pp. 470-481.

Ferrary, M., (2002) 'Trust and social capital in the regulation of lending activities', *Journal of Socio-Economics*, 23(5), pp. 1–27.

Festinger, L. A. (1975) **A Theory of Cognitive Dissonance**, Evanston, IL: Row and Peterson.

Field, A. (2005) **Discovering Statistics Using SPSS**. London: Sage Publications Ltd.

Field, A. P. (2000) **Discovering Statistics Using SPSS for Windows: Advanced Techniques for the Beginner**. London: Sage Publications.

Fishbein, M. and Ajzen, I., (1975), **Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research**, Addison-Wesley Pub. Co

Fitzgerald, B. and Howcroft, D. (1998) 'Towards Dissolution of the IS Research Debate: From Polarisation to Polarity', *Journal of Information Technology*, 13(4) 313-326.

Flavián, C., Guinalíu, M. and Gurrea, R. (2006) 'The role played by perceived usability, satisfaction, and consumer trust on website loyalty', *Information and Management*, 43 (1) pp.1-14.

Flick, U. (1992) 'Triangulation revisited: strategy of validation or alternative?' *Journal for the Theory of Social Behaviour*, 22 (2) 175–197.

Fornell, C. and Larcker, D. F. (1981) 'Evaluating Structural Equations with Unobservable Variables and Measurement Error', *Journal of Marketing Research,* (18) pp. 39-50.

Fornell, C., and Bookstein, F., (1982), 'Two Structural Equation Models: LISREL and PLS Applied to Consumer Exit-Voice Theory', *Journal of Marketing Research*. 19, pp. 440-452.

Fornell, C., and Westbrook, R. A., (1984) 'The Vicious Circle of Consumer Complaints', *Journal of Marketing*, 56, pp. 6.21.

Forsythe, S.M. and Bailey, A. (1996) 'Shopping enjoyment, perceived time poverty and time spent shopping', *Clothing and Textiles Research Journal*, 14 (3) pp. 185-191.

Foucault, B.E., Laroche, S.M., Yang, Z., McDougall, G. H. G. and Bergeron, J. (2005) 'Internet versus bricks and mortar retailers: an investigation into intangibility and its consequences', *Journal of Retailing*, 81 (4) pp. 251-267.

Foxall, G. R. (2003) 'The behaviour analysis of consumer choice: an introduction to the special issue', *Journal of Economic Psychology*, 24 (5) pp.581-588.

Foxall, G., and Pallister, J. (1998) 'Measuring Purchase Decision Involvement for Financial Services: Comparison of the Zaichkowsky and Mittal scales', *International Journal of Bank Marketing*, 16(5), pp. 180-194

Frankfort-Nachmias, C. and Nachmias, D. (1996) **Research methods in the social sciences,** St. Martin Press, New York.

Fukuyama, F. (1995) **Trust: The Social Virtues and the Creation of Prosperity**, New York: The Free Press.

Fung, R.K.K. and Lee, M.K.O. (1999) 'EC-trust (trust in electronic commerce): exploring the antecedent factors' In Haseman, W.D. and Nazareth, D.L. (Eds.), In Proceedings of the **5th Americas Conference on Information Systems**, August 13–15, pp. 517–519.

Gabarro, J. J. (1978) The development of trust, influence, and expectations. A. G. Athos and J. J. Gabarro, eds. Interpersonal Behavior: Communication and Understanding in Relationships. Prentice-Hall, Englewood Cliffs, NJ

Galbreath, J. and Rogers, T. (1999) 'Customer relationship leadership: a leadership and motivation model for the twenty-first century business', *The TQM Magazine,* 11(3) pp. 161-171.

Galliers, R. D. and Land, F. F., (1987) 'Choosing appropriate information systems research methodologies', *Communications of the ACM* , 30(11) pp.900–902.

Ganesan, S. (1994) 'Determinants for Long-Term Orientation in Buyer-Seller Relationships', *Journal of Marketing,* 58, pp. 1-19.

Gefen D, (2004) 'What makes an ERP implementation relationship worthwhile: Linking trust mechanisms and ERP usefulness', *Journal of Management Information Systems*, 21(1) pp.263–88.

Gefen, D. (2000) 'E-Commerce: The Role of Familiarity and Trust' *Omega* 28 (6), pp. 725-737

Gefen, D. (2002) 'Reflections on the Dimensions of Trust and Trustworthiness among Online Consumers', *ACM SIGMIS Database,* 33 (3) pp 38 - 53.

Gefen, D. and Devine, P. (2001) 'Customer loyalty to an online store: The meaning of online service quality' In Proceedings of the **22nd International Conference of Information Systems (ICIS)**. New Orleans, Louisiana: pp. 613-618.

Gefen, D. and Keil, M. (1998) 'The impact of developer responsiveness on perceptions of usefulness and ease of use: An extension of the technology acceptance model', *The DATA BASE for advances in information Systems*, 29 (2) pp. 35-49.

Gefen, D. and Straub, D. W. (1997) 'The relative importance of perceived and adoption of email: an extension to the technology acceptance model', *MIS Quarterly*, 21 (4) pp. 389-400.

Gefen, D., and Straub, D. W. (2000) 'The Relative Importance of Perceived Ease-of-Use in IS Adoption: A Study of E-Commerce Adoption', *Journal of the Association for Information Systems*, 1 (8) pp.1-30.

Gefen, D., Karahanna, E. and Straub, D.W. (2003) 'Trust and TAM in online shopping: An integrated model', *MIS Quarterly* 27(1), pp. 51-90.

Gefen, D, Karahanna, E. and Straub, D. W. (2003a) 'Inexperience and experience with online stores: the importance of TAM and trust', *IEEE Transactions on Engineering Management*, 50(3), pp. 307–321.

Gelb, B. and Johnson, M. (1995) 'Word-of-mouth communication: causes and consequences', *Journal of Health Care Marketing*, 15 (3) pp. 54-8.

George, H. F. (2002) 'Influences on the Internet to make purchases', *Internet Research*, 12 (2) pp. 165-80.

Geyskens, I., Steenkamp, J-B.E.M. and Kumar, N., (1997) 'Generalizations about trust in marketing channel relationships using meta-analysis', *International Journal of Research in Marketing*, 15, pp. 223–248.

Ghose, S., Dou, W. (1998) 'Interactive functions and their impacts on the appeal of Internet presence sites', *Journal of Advertising Research*, 38(2), pp. 29-43

Gill, J. and Butler, R., (1996) 'Cycles of trust and distrust in joint-ventures', *European Management Journal*, 14 (1), pp. 81–89.

Gill, J. and Johnson, P (2002) **Research methods for managers**. London: Sage

Gillies, C., Rigby D. (2002) 'The story behind successful customer relations management', *European Business Journal.* London 14 (2) pp.73-77.

Girard, Tulay, Korgaonkar, P. and Silverblatt, R. (2003) 'Relationship of Type of Product, Shopping Orientations, and Demographics with Preference for Shopping on the Internet', *Journal of Business and Psychology*, 18 (1) pp.101-120.

Goldsmith, R.E. and Bridges, E. (2000) 'Etailing vs retailing: Using attitudes to predict online buying behavior', *Quarterly Journal of Electronic Commerce*, 1(3) PP. 245-253.

Granovetter, M.S., (1985) 'Economic action and social structure', *American Journal of Sociology*, 91, pp. 481–510

Grant, L. (1998) 'Your customers are telling the truth.' *Fortune-European Edition***.** pp. 164-6.

Grant, R. A. (1989) 'Building and testing causal models of an information technology's impact' In Proceedings of the **10th International Conference on Information Systems**. Boston, MA: pp. 173–184.

Gray, P. and J. Byun (2001) **Customer Relationship Management**. Irvine, CA, Centre for Research on Information Technology and Organisation, University of California.

Grewal, D., Munger, J. L., Iyer, G. R., and Levy, M. (2003) 'The influence of Internet-retailing factors on price expectations', *Psychology & Marketing*, 20(6), pp. 477–493.

Griffin, J. (1995) **Customer Loyalty**. San Francisco, CA, Jossey-Bass.

Griffin, J., (1996), 'The Internet's expanding role in building customer loyalty', *Direct Marketing,* **59**(7), pp. 50-53.

Griffith, D. A., Matthew B. M, and Harvey, M. G. (2006) 'An Investigation of National Culture's Influence on Relationship and Knowledge Resources in Interorganizational Relationships between Japan and the United States', *Journal of International Marketing*, 14 (3) pp. 1-32.

Griffith, T.L. (1999) 'Technology features as triggers for sensemaking', *Academy of Management Revie*w, 24 (3) pp.472-88.

Grönroos, C. (1997) 'From marketing mix to relationship marketing. Towards a paradigm shift in marketing', *Management Decision*, 35 (4) pp.322-339.

Grönroos, C. (2001) 'The perceived service quality concept – a mistake?', *Managing Service Quality*, 11 (3) pp.150-2.

Guba, E.G. and Lincoln, Y.S. (1994) **Competing paradigms in qualitative research**, in, Denzin, N. K., and Lincoln, Y. (eds) Handbook of Qualitative Research. Thousand Oaks, CA: Sage, pp. 105-117

Gummesson, E. (2000) **Qualitative methods in management research**. Sage Publications, Inc.

Gupta, S., and Kim, H. W. (2007) 'The moderating effect of transaction experience on the decision calculus in on-line repurchase', *International Journal of Electronic Commerce*, 12(1), pp. 127–158.

Gurau, C. (2003). 'Tailoring e-service quality through CRM', *Managing Service Quality* 13 (6) pp. 520-531.

Guru, B.K., Shanmugam, B., Alam, N. and Perera, C.J. (2003) 'An Evaluation Of IB Sites In Islamic Countries'. Available at: http://www.arraydev.com/commerce/JIBC/0311-01.htm#_ftnref2.

Güth, W., (2001) 'Do banks crowd in business ethics? An indirect evolutionary analysis', *International Review of Economics and Finance*, 10 1, pp. 1–17.

Ha, S. and Stoel, L. (2009) 'Consumer e-shopping acceptance: Antecedents in a technology acceptance model', *Journal of Business Research,* 62 pp. 565–571.

Hair J., Black W., Babin B., Anderson R. and Tatham R. (2006) **Multivariate Data Analysis**, (6th) Pearson Education.

Haley, G. T. (2002) 'e-commerce in China: Changing Business as We Know It', *Industrial Marketing Management*, 31 (2) pp. 119-124.

Hamermesh, D. and A. M. Parker (2005) 'Beauty in the Classroom: Professors' Pulchritude and Putative Pedagogical Productivity', *Economics of Education Review*, 24 (4) pp. 369-376

Hammerasley, M., (1987). 'Some notes on the terms' validity' and 'reliability'' *British Educational Research Journal,* 13 (1) pp.73-81.

Hampton-Sosa, W., Koufaris, M. (2005) 'The effect of web site perceptions on initial trust in the owner company', *International Journal of Electronic Commerce*, 10(1), pp. 55-81.

Hansen, T. and Jensen, J. M. (2009) 'Shopping orientation and online clothing purchases: the role of gender and purchase situation', *European Journal of Marketing*, 43 (9/10) pp. 1154-1170

Harris LC, Goode MMH. (2004) 'The four levels of loyalty and the pivotal role of trust: a study of online service dynamics', *Journal of Retailing*, 80(2) pp. 139–58.

Hart, C. W., and Johnson, M. D. (1999) 'Growing the Trust Relationship', *Marketing Management*, 8(1), pp. 8-19.

Harvard Business School, P. (2002) **Harvard business review on customer relationship management**. Boston: Harvard Business School Press.

He, F. and Mykytyn, P.P. (2007) 'Decision Factors for the Adoption of an Online Payment System by Customers', *International Journal of E-Business Research*, 3 (4) pp.1-32.

Henard, D.H. and Szymanski, D.M., (2001), 'Why some new products are more successful than others', *Journal of Marketing Research,* **38**(3), pp. 362-375.

Henderson, R. and Divett M. J. (2003) 'Perceived usefulness, ease of use and electronic supermarket use', *International Journal of Human-Computer Studies*, 59, pp.383-395.

Hendrickson, A. R., Massey, P. D. and Cronan, T. P. (1993) 'On the test-retest reliability of perceived usefulness and perceived ease of use scales', *MIS Quarterly*, 17 (2) pp. 227-230.

Henning, E., Van Rensburg, W. and Smit, B. (2004) 'Theoretical frameworks' In: Henning E, Van Rensburg W and Smit B (2004) **Finding your way in qualitative research**. Pretoria: Van Schaik Publishers.

Henry, J.W. and Stone, R.W. (1994) 'A structural equation model of end-user satisfaction with a computer-based medical information system', *Information Resources Management Journal*, 7 (3) pp. 21-33.

Hetherington, K. (1992) 'Stonehenge and its festival: spaces of consumption' in Shields, R. (Ed.), **Lifestyle Shopping**, Routledge, London, pp. 83-98.

Hildebrand, C. (1999) 'One to a customer- Customer Relationship Management', *CIO Magazine*, 12.

Hirschman, E.C. and Holbrook, M.B. (1982) 'Hedonic consumption: emerging concept, methods and propositions', *Journal of Marketing*, 46 (3) pp. 92-101.

Hirschman, E.C. and Holbrook, M.B. (1982), 'Hedonic consumption: emerging concepts, methods and propositions', *Journal of Marketing*, 46, pp. 92-101.

Ho, T., Raman, K. and Watson, R., (1989) 'Group decision support systems: the cultural factor', *Proceedings of the tenth international conference on Information Systems*, pp. 119-129.

Hoecklin, L.A., (1995) **Managing Cultural Differences: Strategies for Competitive Advantage**, Addison-Wesley.

Hoelter, J. W. (1983) 'The Analysis of Covariance Stractures: Goodness-of-Fit Indices', *Sociological Methods and Research*, 11, pp 324-344.

Hoffman, D.L. and Novak, T.P., 1996. Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations. *Journal of Marketing,* **60**(3), pp. 50-68.

Hoffman, D.L., Novak, T.P. and Perlta, M. (1999) 'Building consumer trust online', Association for Computing Machinery, *Communications of the ACM*, 42(4) pp.80-85

Hofstede, G. (1980) **Culture's Consequences**, Sage, Beverly Hills.

Hofstede, G. (1984) **Culture's Consequences: International Differences in Work-Related Values**. Newbury Park, CA: Sage.

Hofstede, G. (1994) 'Management scientists are human', *Management Science,* **40** pp. 4–13.

Hofstede, G. (2007) 'Geert Hofstede™ Cultural Dimensions: Geert Hofstede Analysis', Saudi Arabia. Available at: http://www.geert hofstede.com/hofstede_arab_world.shtml [Accessed on 11 May 2007]

Hofstede, G. and Bond, M.H. (1988) 'The Confucius Connection: From Cultural Roots to Economic Growth', *Organizational Dynamics*, 16 (4) pp.4-21.

Holbrook, M. B. (1986) 'Aims, concepts, and methods for the presentation of individual differences in aesthetic responses to design features', *Journal of Consumer Research*, 13 pp. 337–347.

Holmes-Smith, P. (2000) **Introduction to Structural Equation Modelling Using AMOS 4.0 and LISREL 8.30**, Canberra: School Research, Evaluation and Measurement Services,

Holt, D. B., Quelch J. A., and Taylor E. L. (2004) 'How Global Brands Compete,' *Harvard Business Review*, 82 (9) pp. 68-75.

Hong, S.-J., Thong, J. Y. L., and Tam, K. Y. (2006). 'Understanding continued information technology usage behavior: A comparison of three models in the context of mobile internet', *Decision Support Systems*, 42(3) 1819–1834.

Hosmer, L. T. (1995) 'Trust: the Connecting Link Between Organizational Theory and Philosophical Ethics', *Academy of Management Review,* 20 (2) pp. 379-403.

Hoyle, R. H. (1995) **Structure Equation Modeling: Concepts, Issues, and Applications**, Thousand Oaks, Calif and London; Sage Publications.

Huang, L., Lu, M., and Wong, B. K. (2003) 'The Impact of Power Distance on email Acceptance: Evidence from the PRC', *Journal of Computer Information System*, 44(1), pp. 93-101.

Hulland, J., Chow, Y. H. and Lam, S. (1996) 'Use of Causal Model in Marketing Research: A review', *International Journal of Research in Marketing*, 19 (4) pp. 464-485.

Husted, B.W., (1998) 'The ethical limits of trust in business relations', *Business Ethics Quarterly*, 8 (2), pp. 233–248

Hutcheson, G. and Sofroniou, N. (1999) **The Multivariate Social Scientist: Introductory Statistics Using Generalized Linear Models**. Sage Publications.

Igbaria, M., Livari, J., and Maragahh, H. (1995) 'Why do individuals use computer technology? A finish case study', *Information and Management*, 29 pp. 227-38.

Igbaria, M., Parasuraman, S. and Baroudi, J. J. (1996), 'A motivational model of microcomputer usage', *Journal of Management Information Systems*, 13 (1) pp. 127-143.

Igbaria, M., Schiffman, S. J., and Wieckowski, T. J., (1994) 'The respective roles of perceived usefulness and perceived fun in the acceptance of microcomputer technology', *Behaviour and Information Technology*, 13 (6) pp. 349-61.

Inkpen, A.C. and Currall, S.C., (1998) 'The nature, antecedents, and consequences of joint venture trust', *Journal of International Management*, 4 (1), pp. 1–20.

Internet World State (2009) 'Internet Usage in the Middle East' [Online] March 31, 2009. Available at: http://www.internetworldstats.com/stats5.htm [Accessed on 1 May 2009].

Irani, Z, Ezingeard, J.-N, Grieve, R.J. and Race, P. (1999) 'A case study strategy as part of an information system research methodology: a critique', *The International Journal of* Computer Applications in Technology, 12(2) pp.190-198.

Jacoby, J. and Chestnut, W., (1978) **Brand Loyalty–Measurement and Management,** *Wiley*.

Jacoby, J. and Kyner, D.B., (1973), 'Brand Loyalty vs. Repeat Purchasing Behavior', *Journal of Marketing Research,* **10**(1), pp. 1-9.

Jahng J., Jain, H., and Ramamurthy,. K. (2007) 'Effects of interaction richness on consumer attitudes and behavioral intentions in e-commerce: some experimental results', *European Journal of Information Systems*, 16, pp. 254–269.

Janda S, Trocchia PJ, Gwinner KP. (2002) 'Consumer perceptions of Internet retail service quality'*, International Journal of Service Industry Management*, 13(5) pp. 412–33.

Jarvenpaa SL, Todd PA. (1997) 'Consumer reactions to electronic shopping on the World Wide Web', *International Journal of Electronic Commerce***,** 1(2) pp. 59–88

Jarvenpaa, S. L., and Todd, P. A., (1997) 'The psychological origins of perceived usefulness and perceived ease of use', *Information and management*, 35 pp. 237-50.

Jarvenpaa, S.L. and Todd, P.A. (1996) 'Consumer reactions to electronic shopping on the World Wide Web', *International Journal of Electronic Commerce,* 1 (2), pp. 59–88.

Jarvenpaa, S.L., Tractinsky, N. and Vitale, M. (2000) 'Consumer trust in an Internet store', *Information Technology & Management*, 7 (1-2) pp. 45-71.

Jarvenpaa, S.L., Tractinsky, N., Saarinen, L. and Vitale, M. (1999) 'Consumer Trust in an Internet Store: A Cross-Cultural Validation', *Journal of Computer Mediated Communications,* 5 (2) pp. 1-35.

Jasimuddin, S. M. (2001) 'Saudi Arabian Banks on the Web', *Journal of Internet Banking and Commerce*, 6 (1) pp. 1-7.

Jayawardhena, C. (2004) 'The hierarchical influence of personal values on e-shopping attitude and behaviour', *Internet Research: Electronic Networking Applications and Policy*, 14 (2) pp. 127-42.

Jayawardhena, C. and Wright, L. T. (2009) 'An empirical investigation into e-shopping excitement: antecedents and effects', *European Journal of Marketing*, 43 (9/10) pp. 1171-1187.

Jobber, D. (2001) **Principles and Practice of Marketing**. London: McGraw-Hill.

Jolliffe, I., 2002. **Principal Component Analysis**. Springer.

Johnson, C., and Hult, P. (2008) 'Web buyers and their expectations grow up – experienced web buyers are becoming the new ainstream', Forrest Research [WWW document] http://www.forrester.com/Research/PDF/0,5110,45462,00.pdf [accessed April 2010].

Jones, M. Y., Stanaland, A. J. and Gelb, B. D. (1998) 'Beefcake and cheesecake: insights for advertisers', *Journal of Advertising*, 27 (2), pp. 33–51.

Joines J. L., Scherer, C. W., and Scheufele, D. A. (2003) 'Exploring motivations for consumer web use and their implications for e-commerce', *Journal Consumer Marketing*, 20(2) pp. 90–108.

Jöreskog, K.G. and Sörbom, D. (2001) **LISREL 8: User's Reference Guide**, Lincolnwood: Scientific Software International.

Kaiser, H.F. (1974) 'An index of factorial simplicity', *Psychometrika*, 39 (1), pp. 31-36.

Kearney's Global Retail Development Index '2010 Global Retail Development Index™' Available at: http://www.atkearney.com/index.php/Publications/global-retail-development-index.html [Accessed on Aug 7, 2010].

Kang, Y. S. Hong, S. and Lee, H. (2009) 'Exploring continued online service usage behavior: The roles of self-image congruity and regret', *Computers in Human Behavior*, 25(1) pp.111-122

Karahanna, E., Straub, D. W. and Chervany, N. L. (1999) 'Information Technology Adoption Across Time: A Cross- Sectional Comparison of Pre-Adoption and Post-Adoption Beliefs', *MIS Quarterly*, 23(2) pp.183-213.

Kedia, B.L. and Bhagat, R.S. (1991) 'Cultural constraints on transfer of technology across nations: Implications for research in international and comparative', *Management Academy of Management Review,* 13 (4) pp. 559–571.

Keen, C., Ruyter, K.D., Wetzels, M., and Feinberg, R. (2000) 'An empirical analysis of consumer preferences regarding alternative service delivery modes in emerging

electronic service markets', *Quarterly Journal of Electronic Commerce*, 1(1) pp.31-47.

Keen, P., Ballance, G., Chan, S. and Schrump, S., (1999) **Electronic commerce relationships: trust by design**, Prentice Hall PTR Upper Saddle River, NJ, USA.

Keeney, R. L. (1999) 'The value of internet commerce to the customer', *Management Science*, 45(4) pp.533-542.

Kelley, H.H. and Thibaut, J.W. (1978) **Interpersonal Relations - A Theory of Interdependence**, Wiley, New York, NY.

Khalifa, M. and Liu, V. (2001) 'Satisfaction with Internet-based services: A longitudinal study' In Proceedings of the **22nd International Conference of Information Systems (ICIS 2001)**, New Orleans, Louisiana, (pp. 601-606).

Khalifa, M. and M. Limayem (2003) 'Drivers of Internet Shopping', *Communications of the ACM*, 46 (12) pp. 233-239.

Kim Y-K. (2002) 'Consumer value: an application to mall and Internet shopping', *International Journal of Retail and Distribution Management*, 30(11/12) pp.595–604

Kim, D.J., Ferrin, D.L. and Rao, H.R. (2003) 'A study of the effect of consumer trust on consumer expectations and satisfaction: the Korean experience', In Proceedings of the **5th International Conference on Electronic Commerce**, pp. 310-315.

Kim, J. and Forsythe, S (2009) 'Adoption of Sensory Enabling Technology for Online Apparel Shopping', *European Journal of Marketing*, 43(9/10) pp.1101-1120.

Kim, S. S. and Malhotra, N. K. (2005) 'A longitudinal model of continued IS use: An integrative view of four mechanisms underlying post-adoption phenomena', *Management* Science, 51(5) pp.741–755.

Kim, S. S., Malhotra, N. K. and Narasimhan, S. (2005) 'Two competing perspectives on automatic use: A theoretical and empirical comparison', *Information Systems Research*, 16(4) pp.418–432.

Kim, S.Y. and Lim, Y.J. (2001) 'Consumers' perceived importance of and satisfaction with Internet shopping', *ElectronicMarkets*, 77(3) pp.148-154.

Kimber, C. (2001), **Researching Online Buying's Offline Impact**, London: CACI,

Klein, L. R., (2003) 'Creating virtual product experiences: the role of telepresence', *Journal of Interactive Marketing*, 17 (1) pp. 41-55.

Kline, R. B. (2005) **Principles and practice of structural equation modeling**. New York: Guilford Press.

Klopping, I.M. and McKinney, E. (2004) 'Extending the technology acceptance model and the task-technology fit model to consumer e-commerce', *Information Technology, Learning, and Performance Journal,* 22 pp. 35–48.

Kluckhohn, C., (1951) 'The study of culture', *The Policy Sciences,* pp. 86–101.

Kluckhorn, F. and Strodtbeck, F. L. (1961) 'Variations in value orientations' In R. Peterson (Ed.), Evanston, IL.

Koppius, O., Speelman, W., Stulp, O., Verhoef, B. and Van Heck, E. (2005) 'Why are customers coming back to buy their airline tickets online? Theoretical explanations and empirical evidence', In Proceedings of the **7th International Conference on Electronic Commerce**, pp. 319-326.

Korgaonkar, P.K. and Wolin, L.D. (1999) 'A multivariate analysis of web usage', *Journal of Advertising Research*, 39 (2) pp. 53-68.

Kotler, P. (1997) **Marketing management analysis, planning, implementation and control**. Englewood Cliffs (N.J.): Prentice-Hall.

Koufaris, M. (2002) 'Applying the technology acceptance model and flow theory to online consumer behavior', *Information Systems Research,* 13 (2) pp. 205–223.

Koufaris, M., Kambil, A. and Labarbera, P.A. (2001)' Consumer behavior in Web-based commerce: An empirical study', *International Journal of Electronic Commerce*, 6(2) pp.115-138.

Koufaris, M., and Hampton-Sosa., W. (2004) 'The development of initial trust in an online company by new customers', *Information and Management*, 41(3), pp. 377–397.

Kracklauer, A., Passenheim, O., Seifert D. (2001) 'Mutual customer approach: how industry and trade are executing collaborative customer relationship management', *International Journal of Retail and Data Systems,* 29 (12).

Kräuter, G. S. and Kaluscha E. A. (2003). 'Empirical research in on-line trust: a review and critical assessment', *International Journal of Human-Computer Studies,* 58 (6) pp.783-812.

Kristensen, K., Martensen, A. and Gronholdt, L. (1999) 'Measuring the Impact of Buying Behaviour on Customer Satisfaction', *Total Quality Management,* 10 (4/5) pp 602-614.

Krueger, M. (2000). 'Fulfillment: The gateway to customer loyalty', *Manufacturing Systems, Wheaton,* 18 (9) pp.32.

Kumar, K. and Bjorn-Andersen, N., (1990) 'A cross-cultural comparison of IS designer values', *Communications of the ACM*, 33(5), pp. 528-538.

Kumar, N., Scheer, L. K. and Steenkamp J.-B. E. M. (1995) 'The Effects of Perceived Interdependence on Dealer Attitudes', *Journal of Marketing Research,* 17 pp. 348-356.

Kwon, B., Kim, C, & Lee, E. (2002) 'Impact of website information design factors on consumer ratings of web-based auction sites', *Behaviour & Information Technology*, 21(6), 387-402

Lai, V. and Li, H. (2005) 'Technology acceptance model for internet banking: an invariance analysis', *Information & Management*, 42 pp.373-386

Lang, B. and Colgate, M. (2003) 'Relationship quality, online banking and the information technology gap', *International Journal of Bank Marketing*, 21 (1) pp.29-37.

Lederer, A.L., D.J. Maupin D.J, Sena M.P. and Zhuang Y. (2000) 'The technology acceptance model and the World Wide Web', *Decision Support Systems,* 29 (3), pp. 269–282.

Lee, D., Park, J. and Ahn, J. (2001) 'On the Explanation of Factors Affecting E-Commerce Adoption', In Proceedings of the **22nd International Conference on Information Systems**, Storey, V., Sarker, S. and DeGross, J. (eds.), New Orleans, Louisiana: pp. 109-120.

Lee, J., Kim, J. and Moon, J. Y. (2000) 'What makes Internet users visit cyber stores again? Key design factors for customer loyalty', In Proceedings of the **Conference on Human Factors in Computing Systems**, The Hague, Netherlands, pp. 305-312.

Lee, M. K. O. and Turban, E. (2001) 'A trust model for consumer Internet shopping', *International Journal of Electronic Commerce*, 6(1) pp.75–91.

Lee, P.M. (2002) 'Behavioral model of online purchasers in e-commerce environment', *Electronic Commerce Research*, 2 (1-2), 75-85.

Levinthal, D.A. and Fichman, M. (1988) 'Dynamics of interorganizational attachments: auditor-client relationships', *Administrative Science Quarterly*, 33 pp.345-69.

Lewicki, R.J. and Bunker, B., (1995) 'Trust in relationships: a model of trust development and decline', In: Bunker, B. and Rubin, J., Editors, 1995. Conflict, Cooperation and Justice, Jossey-Bass, San Francisco, pp. 133–173.

Li, H., Kuo, C. and Russell, M.G. (1999) 'The impact of perceived channel utilities, shopping orientations, and demographics on the consumer's online buying behavior', *Journal of Computer-Mediated Communications*, 5 (2).

Li, N. and Zhang, P. (2005) 'Toward E-Commerce Websites Evaluation and Use: An Affective Perspective' Post-ICIS'05 JAIS Theory Development Workshop, Las Vegas, NV: December 14, 2005

Liang, T.P. and Lai, H.J. (2002) 'Effect of store design on consumer purchases: An empirical study of on-line bookstores' *Information & Management*, 39(6) pp.431-444.

Liao, C., Chen, J.-L., and Yen, D. C. (2007) 'Theory of planning behavior (TPB) and customer satisfaction in the continued use of e-service. An integrated model', *Computers in Human Behavior*, 23(6) pp. 2804–2822.

Liao, Z. and Cheung, M.T. (2001). 'Internet-based e-shopping and consumer attitudes: an empirical study', *Information & Management*, 38 (5) pp.299-306.

Liao, Z. and M. T. Cheung (2002) 'Internet-Based E-Banking and Consumer Attitudes: An Empirical Study', *Information & Management*, 39 (4) pp. 283-295.

Lilien, G.L., Philip, K. and Sridhar, M.K. (1992) **Marketing models.** New Jersey: Prentice Hall

Lim, L., Raman, K. and Wei, K., (1990) 'Does GDSS promote more democratic decision-making?-The Singaporeexperiment', *System Sciences, 1990., Proceedings of the Twenty-Third Annual Hawaii International Conference.*

Limayem, M. and Khalifa, M. (2000) 'Business-to-consumer electronic commerce: A longitudinal study', In Proceedings of the **5th IEEE Symposium on Computers and Communications**, pp. 286-290.

Limayem, M., Hirt, S. G. and Cheung, C. M. K. (2007) 'How habit limits the predictive power of intention: The case of information systems continuance', *MIS Quarterly*, 31(4) pp.705–737.

Limayem, M., Khalifa, M. and Frini, A. (2000) 'What makes consumers buy from the Internet? A longitudinal study of online shopping', *IEEE Transactions on Systems, Man & Cybernetics, Part A (Systems & Humans),* 30(4) pp. 421-432.

Lin, C. S., Wu, S. and Tsai, R. J. (2005) 'Integrating perceived playfulness into expectation–confirmation model for web portal context', *Information and Management*, 42 (5) pp. 683–693.

Lin, J.C.-C. and Lu, H. (2000) 'Towards an understanding of the behavioral intention to use a Web site', *International Journal of Information Management*, 20 (3) pp. 197-208.

Lindgaard, G., Fernandes, G.J., Dudek, C. and Brownet, J. (2006) 'Attention Web Designers: You Have 50 Milliseconds to Make a Good First Impression!', *Behaviour and Information Technology*, 25 (2) pp. 151-126.

Lindquist, J.D. (1974) 'Meaning of image: a survey of empirical and hypothetical evidence', Journal of Retailing, 50(4), pp. 29-38

Liska, Allen E. (1984) 'A Critical Examination of the Causal Structure of the Fishbein/Ajzen Attitude-Behavior Model', S*ocial Psychology Quarterly*, 47(1) pp.61-74

Liu, Xiao and Kwok Kee Wei (2003) 'An empirical study of product differences in consumers' e-commerce adoption behavior', *Electronic Commerce Research and Applications*, 2 (3) pp.229-239.

Lohse, G., Bellman, S. and Johnson, E. (2000) 'Consumer Buying Behavior on the Internet: Findings from Panel Data', *Journal of Interactive Marketing*, 14 (1) pp.15-29.

Lohse, G.L. and Spiller, P., (1998) 'Electronic shopping', *Communications of the ACM,* **41**(7), pp. 81-87.

Lu, H-P. and Su, P.Y. (2009) 'Factors affecting purchase intention on mobile shopping web Sites' available at www.emeraldinsight.com/1066-2243.htm, Department of Information Management, National Taiwan University of Science and Technology, Taipei, Taiwan, ROC.

Luarn, P. and Lin H.H., (2003), 'A consumer loyalty model for e-service context', *Journal of Electronic Commerce Reseach,* **4**(4), pp. 156-167.

Lucchini, R. (1996) Theory, Method, and Triangulation in the Study of Street Children. *Childhood: A Global Journal of Child Research,* **3** (2) pp.167-170

Luhmann, N. (1979) **Trust and Power.** Chichester, England: John Wiley & Sons.

Luo, Y., (2002) 'Building trust in cross-cultural collaborations: toward a contingency perspective', *Journal of Management*, 28 (5), pp. 669–694

Lynch, P. D., Kent, R.J., and Srinivasan, S.S. (2001) 'The global internet shopper: evidence from shopping tasks in twelve countries' *Journal of Advertising Research*, 41(4), 15-23.

Ma, Q. and Liu, L. (2004) 'The technology acceptance model: A meta-analysis of empirical findings', *Journal of Organizational and End User Computing,* 16 (1) pp. 59–72.

MacNaughton, G., Rolfe S.A. and Siraj-Blatchford, I. (2007) **Doing Early Childhood Research: International perspectives on theory and practice.** Australia: Allen & Unwin.

Madar Research Group (2004) 'B2C e-Commerce in Gulf Cooperation Council States. Available at: http://www.madarresearch.com/archive/archive_toc.aspx?id=14 [Accessed on 26 November 2009].

Maguire, J. (2006) 'Men, Women, and E-Commerce', Ecommerce Guide, Available at: http://www.ecommerce-guide.com/solutions/building/article.php/3577891 [Accessed on 16 Dec 2009].

Malhotra, N. K. (2004) **Marketing Research: an Applied Orientation**, (4th) London: Prentice Hall International.

Malone, T.W. (1981) 'Toward a theory of intrinsically motivating instruction', *Cognitive Science,* 4 pp. 333–369.

Mark, R. (1996) **Research Made Simple: a Handbook for Social Workers**, Thousand Oaks, Calif and London: Sage Publications.

Markus, L. and Soh, C. (2002) 'Structural influences on global e-commerce activity' *Journal of Global Information Management*, 10(1) pp.5-12.

Marsh, H. W. and Hocevar, D. (1985) 'Application of confirmatory factor analysis to the study of self-concept: Fust- and higher-order factor models and their invariance across groups', *Psychological Bulletin*, 97 pp. 562-582.

Marshall, C. and Rossman, G.B., (1999) **Designing Qualitative Research**. Thousand Oaks, Calif and London: Sage Publications.

Mathieson, K., (1991) 'Predicting User Intentions: Comparing the Technology Acceptance Model with the Theory of Planned Behavior', *Information Systems Research,* **2**(3), pp. 173-191.

Mathieson, K., Peacock, E., and Chin, W. (2001) 'Extending the technology acceptance model: the influence of perceived user resources', *Adoption, diffusion, and infusion of IT,* **32**(3), pp. 86-112.

Mathwick, C. (2002), 'Understanding the online consumer: a typology of online relational norms and behaviour', *Journal of Interactive Marketing*, 16 (1) pp. 40-55.

Mathwick, C., Malhotra, N.K. and Rigdon, E. (2002) 'The effect of dynamic retail experiences on experiential perceptions of value: an internet and catalogue comparison', *Journal of Retailing*, 78 (1) pp.51-60.

Mayer, R.J., Davis, J.H. and Schoorman, F.D. (1995) 'An integrative model of organizational trust' *Academy of Management Review*, 20 pp.709–734.

Maznevski, M. L. and DiStefano, J. J. (1995) 'Measuring culture in international management: The cultural perspective questionnaire' Working paper, University of Virginia, Charlottesville.

McClintock, C.C., Brannon, D. and Maynard-Moody, S. (1979) 'Applying the logic of sample surveys to qualitative case studies: The case cluster method', *Administrative Science Quarterly,* 24 (4) pp.612-629.

McCoy, S., Galletta, D. and King, W., (2005) 'Integrating national culture into IS research: The need for current individual-level measures', *Communications of the AIS,* 15(12), pp. 211–224.

McCoy, S., Galletta, D. and King, W., (2007), 'Applying TAM across cultures: the need for caution', *European Journal of Information Systems,* 16, pp. 81-90.

McDaniel, C.D. and Gates, R. (2002) **Marketing research: The impact of the internet**. South-Western

McDaniel, S.W., Burnett, J.J. (1990) 'Consumer religiosity and retail store evaluative criteria', *Journal of the Academy of Marketing Science*, 18(2), pp. 101-12.

McFarland, D. J. and Hamilton, D. (2006) 'Adding Contextual Specifi city to the Technology Acceptance Model', *Computers in Human Behavior*, 22(3) pp. 427–447

McKnight, D. H., Cummings, L. L. and Chervany, N. L. (1998), 'Initial Trust Formation in New Organizational Relationships' *Academy of Management Review*, 23 (3) pp. 472-490.

Mcknight, D.H. and Chervany, N.L., (2002) 'What Trust means in e- commerce consumer relationships: an interdisciplinary conceptual typology', *International Journal of Electronic Commerce,* **6**(2), pp. 35-59

McKnight, D.H., Choudhury, V. and Kacmar, C. (2002a) 'The impact of initial consumer trust on intentions to transact with a web site: a trust building model', *Journal of Strategic Information Systems*, 11 (3-4) pp. 297-323.

McKnight, D.H., Choudhury, V. and Kacmar, C. (2002b) 'Developing and validating trust measures for e-commerce: An integrative typology'*, Information Systems Research*, 13 (3) pp.334-359.

McMillan, S., Hwang, J., and Lee, G. (2003) 'Effects of structural and perceptual factors on attitudes toward the website', *Journal of Advertising Research*, 43(4), pp. 400-409

Melone, N. P. (1990) 'A Theoretical Assessment of the User-Satisfaction Construct in Information Systems Research', *Management Science*, 36 (1).

Meltzer, M. (1999) 'Customer Profitability: Information Just Isn't Enough', CRM Forum. Available at: http://www.crm-forum.com/crm_forum_white_papers/cpie/ppr.htm, [Accessed Feb. 2009].

Menard, S. (1995) **Applied logistic regression analysis.** Sage university paper series on quantitative applications in the social science, No 106. Thousand Oaks, CA: Sage Publications.

Menon, S. and Kahn, B. (2002) 'Cross-category effects of induced arousal and pleasure on the internet shopping experience' *Journal of Retailing*, 78 pp.31-40.

Merriam, S. B. (1998) **Qualitative Research and Case Study Applications in Education**, San Francisco, CA: Jossey-Bass Publishers.

Mertens, M. D. (1998) **Research Methods in Education and Psychology, Intergrating Diversity with Quantitative and Qualitative Approaches**. Thousand Oaks, CA: Sage Publications.

Meyers-Levy, J. (1989) 'Gender differences in information processing: a selectivity interpretation' in: P. Cafferata and A. M. Tybout (Eds), **Cognitive and Affective Responses to Advertising**, pp. 229–260 (Lexington, MA: Lexington).

Meyers-Levy, J. and Maheswaran, D. (1991) 'Exploring differences in males' and females' processing strategy', *Journal of Consumer Research*, 18 pp. 63–70.

Meyers-Levy, J. and Sternthal, B. (1991) Gender differences in the use of message cues and judgments, 28 pp. 84-96

Meyerson, D., Weick, K.E. and Kramer, R.M. (1996) 'Swift trust and temporary groups', In: Kramer, R.M., Tyler, T.R. (Eds.), **Trust in Organizations: Frontiers of Theory and Research,** Thousand Oaks, CA, Sage Publications, pp. 166–195.

Micheal, J. (1997) 'A conceptual framework for aligning managerial behaviors with cultural work values' *International Journal of Commerce and Management,* 7 (3-4) pp. 81–101.

Middle East Internet Usage and Population Statistics, (2007). Available at: http://www.Internet worldstats.com/stats5.htm#me [Accessed on 26 March 2007].

Miles, M. B. and Huberman, A. M. (1994) **Qualitative data analysis: an expanded sourcebook**. Thousand Okas, Calif.; London, Saga.

Mishra, A.K., Kramer, R. and Tyler, T., (1996) 'Organizational Responses to Crisis: The Centrality of Trust', *Trust in Organizations: Frontiers of Theory and Research*.

Monsuwe, T. P., Dellaert, B. G. C. and de Ruyter, K. R. (2004) 'What drives consumers to shop online? A literature review', *International Journal of Service Industry Management*, 15 (1) pp. 102-21.

Moon, J. W. and Kim, Y. G. (2001) 'Extending the TAM for a world-wide-web context', *Information and Management*, 38 (4) pp. 217-230.

Morgan, D. (1998) 'Practical Strategies for Combining Qualitative and Quantitative Methods: Application to Health Research', *Qualitative Health Research*, 8(3) pp. 362-376.

Morgan, R. M. and Hunt, S. D. (1994) 'The Commitment-Trust Theory of Relationship Marketing' *Journal of Marketing*, 58 (3) pp. 20-38.

Morris, M. G. and V. Venkatesh (2000) 'Age Differences in Technology Adoption Decisions: Implications for a Changing Work Force,' *Personnel Psychology*, 53(2) pp.375-403.

Morris, M., Venkatesh, V. and Ackerman, P. (2005) Gender and Age Differences in Employee Decisions about New Technology: An Extension to the Theory of Planned Behavior. *IEEE Transactions on Engineering Management*, 52 (1) pp. 69 84.

Mukund, A. (2003) **The Customer Relationship Management Champion**. Hyderabad, ICFAI Centre for Management Research.

Muller, S. (2002) **Post-Socialist Organisational Transformation. A Retro-Perspective of a Unique Decade of Change: A Regional Study in East Germany**, PhD Thesis, Brunel University

Myers, M.D. and Avison, D. (2002) 'An introduction to qualitative research in information systems' In: **Qualitative Research in Information Systems: A Reader**, Myers, M.D. and Avison, D. (eds.), pp. 3–12. Sage, London, UK.

Myers, R. (1990) **Classical and modern regression with applications** (2nd ed). Boston, MA: Duxbury.

Nachmias, C. and Nachmias, D. (2000) **Research in Methods in the Social Sciences**, (6th) New York: Worth Publishers.

Nations Online (2008) 'Countries of the World by Area' [online] Available at: http://www.nationsonline.org/oneworld/countries_by_area.htm [Accessed on 1 March 2009].

Neuman, W. L. (2000) **Social Research Methods: Qualitative and Quantitative Approaches**, (4th) Boston Mass and London: Allyn and Bacon.

Newell, F. (2003) **Why CRM doesn't work how to win by letting customers manage the relationship**. London: Kogan Page.

Nielsen.com, (2008), 'Consumers Have Shopped Online - Up 40% in Two Years', Available at: http://www.marketingcharts.com/direct/875mm-consumers-have-shopped-online-up-40-in-two-years-3225/ [Accessed Nov 2009].

Norris, M. J. and Inc, S. (2000) **SPSS 10.0 Guide to Data Analysis**, Upper Saddle River, N.J.: Prentice Hall.

Nunnally, J.C. (1978) **Theory,** New York: McGraw-Hill.

Nunnally, J.C. and Bernstein, I.H. (1994) **Psychometric Theory**, McGraw-Hill, New York

O'Cass and T. Fenech, (2003) 'Web retailing adoption: Exploring the nature of internet users Web retailing behaviour', *Journal of Retailing and Consumer Services,* 10 pp.81–94

O'Cass, A. (2004) 'Fashion clothing consumption: antecedents and consequences of fashion clothing involvement', *European Journal of Marketing*, 38 (7) pp. 869-82.

O'Keefe, R., O'Connor, G. and Kung, H. J. (1998) 'Early adopters of the Web as a retail medium: small company winners and losers', *European Journal of Marketing*, 32 (7/8) pp. 629-643.

Okaz Newspaper, Saudi Arabia. 'New e-commerce projects.' Available at: http://www.okaz.com.sa/okaz/osf/20070114/con2007011478622.htm [Accessed on Jan 14, 2007].

Okaz Newspaper, Saudi Arabia. 'First e-mall in Saudi Arabia.' Available at: http://www.okaz.com.sa/new/Issues/20100506/Con20100506348653.htm [Accessed on Aug 7, 2010].

Oliver, R. L. (1980) 'A Cognitive Model for the Antecedents and Consequences of Satisfaction', Journal *of Marketing Research*, 17 pp. 460-469.

Oliver, R. L. (1981) 'Measurement and Evaluation of Satisfaction Processes in Retail Settings', *Journal of Retailing*, 57 (3) pp. 25-48.

Oliver, R. L. (1993) 'Cognitive, Affective, and Attribute Bases of the Satisfaction Response', *Journal of Consumer Research*, CRM Forum, 20 pp. 418-430.

Oliver, R. L. (1996) **Satisfaction: A Behavioral Perspective on the Consumer**. McGraw-Hill, New York.

Oliver, R. L. (1999) 'Whence consumer loyalty?', *Journal of Marketing*, 63, pp. 33-44.

Oliver, R. L. and Linda, G. (1981) 'Effect of Satisfaction and Its Antecedents on Consumer Preference and Intention' in Advances in Consumer Research (8), K. B. Monroe (ed.), Association for Consumer Research, Ann Arbor, MI: pp. 88-93.

Olshavsky, Richard. (1985) 'Perceived Quality in Consumer Decision-Making: An Integrated Theoretical Perspective', pp. 267-296 in J. Jacoby and J. Olson (ells.), Perceived Quality. Lexington, MA: Lexington Books.

Olsson, U.H., Foss, T. and Breivik, E. (2004) 'Two equivalent discrepancy functions for maximum likelihood estimation: Do their test statistics follow a non -central chi square distribution under model misspecification?' *Sociological Methods & Research*, 32 pp.453—500.

Olsson, U.H., Foss, T., Troye, S.V. and Howell, R.D. (2000) 'The performance of ML, GLS, and WLS estimation in structural equation modeling under conditions of mis-specification and nonnormality', *Structural Equation Modeling, 7*, 557–595.

Orlikowski, W. and Baroudi, J. (1991) 'Studying information technology in organizations: Research approaches and assumptions', *Information Systems Research*, 2(1) pp.1–28

Otnes, C. and McGrath, M. (2001) 'Perceptions and Realities of Male Shopping Behavior,' *Journal of Retailing*, 77 (1) pp.111-137.

Ott, J.S. (1989) **The organizational culture perspective**. Pacific Grove, CA: Brooks/Cole.

Qureshi, I., Fang, Y., Ramsey, E., McCole, P., Ibbotson, P. and Compeau, D. (2009) Understanding online customer repurchasing intention and the mediating role of trust–an empirical investigation in two developed countries, *European Journal of Information Systems*, 18, pp. 205-222.

Palmer, J. W., Bailey, J. P. and Faraj, S. (2000), 'The Role of Intermediaries in the Development of Trust in the WWW: The Use and Prominence of Trusted Third Parties and Privacy Statements', *Journal of Computer-Mediated Communication*, 51 (3). Available at: http://www.ascusc.org/jcmc/vol51issue31 palmer.html

Parahoo, K. (1997) **Nursing Research: Principles, Process and Issues**, Basingstoke: Macmillan.

Park, C. and Jun, J.K. (2003) 'A cross-cultural comparison of Internet buying behaviour: Effects of Internet usage, perceived risks, and innovativeness', *International Marketing Review*, 20 (5) pp. 534-553.

Parsons AG. (2002) 'Non-functional motives for online shoppers: why we click', *Journal of Consumer Marketing*, 19(5) pp. 380–92.

Parsons, A. G. (2003) 'Assessing the effectiveness of shopping mall promotions: customer analysis', *International Journal of Retail and Distribution Management*, 31(2), pp. 74-79.

Patterson, P. G., Johnson, L. W. and Spreng, R. A. (1997) 'Modeling the Determinants of Customer Satisfaction for Business-to-Business Professional Services', *Journal of the Academy of Marketing Science*, 25(1) pp. 4-17

Patton, M. Q. (1987) **How to use Qualitative Methods in Evaluation**, (2nd) Newbury Park, Calif and London: Sage Publications.

Patton, M.Q. (2002) **Qualitative Research and Evaluation Methods**. Newbury Park, Calif and London: Sage.

Pavlou, P. A. and Chai L. (2002) 'What drives electronic commerce across cultures? A cross-cultural empirical investigation of the theory of planned behavior' *Journal of Electronic Commerce Research*, 3(4) pp.240-253.

Pavlou, P.A. (2003) 'Consumer acceptance of electronic commerce: integrating trust and risk with the technology acceptance model', *International Journal Electron Commerce*, 7(3) pp.101–34.

Pavlou, P.A. and Fygenson, M. (2006) 'Understanding and predicting electronic commerce adoption: an extension of the theory of planned behavior', *MIS Quarterly*, 30 (1) pp. 115-43.

Pavlou, R.A. (2001). 'Integrating trust in electronic commerce with the technology acceptance model: Model development and validation' In Proceedings of the **7th Americas Conference on Information Systems (AMCIS 2001),** Boston, M A, (816-822).

Penn, Schoen & Berland Associates, Inc (2009) 'Is Online Shopping Affected by a Recession?' available at http://ezinearticles.com/?Is-Online-Shopping-Affected-by-a-Recession?&id=2684936. [Accessed on 26 November 2009].

Penn, Schoen & Berland Associates, Inc (2009) 'New Info Shoppers' Available at: http://www.psbresearch.com/ [Accessed on 26 November 2009].

Persson, P. (2004). Customer Relationship Management: How a CRM system can be used in the sales process. Department of Business Administration and Social Science. Stockholm, Lulea University of Technology, Master's thesis. Available at http://epubl.luth.se/1402-1617/2004/124/LTU-EX-04124-SE.pdf

Peter, J. and Olson, J., (2005), **Customer behaviour and marketing strategy**, New York: Irwin

Peterson, R. A., Balasubramanian, S, and Bronnenberg, B. J. (1997) 'Exploring the implications of the Internet for consumer marketing', *Journal of the Academy of Marketing Science*, 25 (4) pp. 329-46

Petrissans, A. (1999) 'Customer Relationship Management: The changing economics of customer relationship', *IDC and Gap Gemini*, white paper.

Petska, K. (2002) **Computer Industry Almanac**, 8th edn Buffalo Grove, IL: Computer Industry Almanac, Inc.

Phau, I. and Poon, S.M. (2000) 'Factors influencing the types of products and services purchased over the Internet', *Internet Research: Electronic Networking Applications and Policy*, 10(2), 102-113.

Pinsonneault, A. and Kraemer, K. L. (1993) 'Survey research methodology in management information systems: An assessment', *Journal of Management Information System*, 10 (2) pp. 75-106.

Png, I.P., Tan, B.C.Y. and Wee, K. (2001) 'Dimensions of National Culture and Corporate Adoption of IT Infrastructure' *IEEE Transactions on Engineering Management*, 48 pp. 36-45.

Porter C. S, Donthu, N. (2006) 'Using the Technology Acceptance Model to explain how attitudes determine Internet usage: The role of perceived access barriers and demographics', *Journal of Business Research*, 59(9) pp. 999-1007.

Premkumar G., Ramamurthy, K. and Crum M. R. (1997) 'Determinants of EDI Adoption in the Transportation Industry', *European Journal of Information Systems*, 6 (2) pp. 107-21.

Premkumar, G. and Bhattacherjee, A. (2008) 'Explaining information technology usage: A test of competing models', *Omega*, 36 (1) pp. 64-75.

Quinn, F. (1996) 'Becoming a customer-driven organisation: three key questions.' *Managing Service Quality,* 6(6) pp. 6-11.

Quinones, M.A., Ford, J.K. and Teachout, M.S. (1995) 'The relationship between work experience and job performance: A conceptual and meta-analytic review', *Personnel Psychology*, 48 (4) pp.887-910.

Ragin, C. C. (1987) **The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies**. London: University of Califonia Press.

Ragin, C. C. (2000) **Fuzzy-Set Social Science**. Chicago: Chicago University Press.

Raijas, A.and Tuunainen, V.K. (2001) 'Critical factors in electronic grocery shopping', *International Review of Retail, Distribution and Consumer Research*, 77(3) pp.255-265.

Rainie L, Horrigan J. A. (2005) 'decade of adoption: How the internet has woven itself into American life', Pew internet & american life project, available at: http://www.pewinternet.org/Reports/2005/How-the-internet--has-woven-itself-into-American-life.aspx [accessed April 2010].

Raman, K. and Wei, K., (1992) 'The GDSS Research Project', *Computer Augmented Teamwork: A Guided Tour*, pp. 210-220.

Raman, P. (1999). **Way to Create Loyalty**. Kuala Lumpur: New Straits Times.

Ramaswami, S.N., Strader, T.J. and Brett, K. (2000) 'Determinants of on-line channel use for purchasing financial products', *International Journal of Electronic Commerce*, 5(2) pp.95-118.

Ratnasingham, P. (1998a) 'The Importance of Trust in Electronic Commerce,' *Internet Research: Electronic Networking Applications and Policy.* 8 (4) pp 313-321.

Reached, F. F. and Teal T. (2001) **The loyalty effect the hidden force behind growth, profits, and lasting value**. Boston, Mass: Harvard Business School.

Reda, S. (2000) 'Customer relationship management', *Stores Magazine,* pp. 6-33.

Reichers, A.E. and Scheidner, B. (1990) Climate and culture: An evolution of constructs, In B. Schneider (Ed.), Organizational climate and culture (pp. 5–39). San Francisco, CA: Jossey-Bass.

Reicheld, F. F. and Schefter, P. (2000) 'E-Loyalty: Your Secret Weapon on the Web', *Harvard Business Review*, 78 (4) pp. 105-113.

Reichheld, F.F. (1993) 'Loyalty-based management', *Harvard business review*, 71(2), pp. 64-73.

Remenyi, D., Williams, B., Money, A. and Swartz, E. (1998) **Doing research in business and management: an introduction to process and method**. Sage Publications Ltd.

Rempel, J. K., J. G. Holmes, M. P. Zanna. (1985) 'Trust in close relationships', *Journal of personality and social psychology*, 49(1) pp. 95–112

Rensvold, R.B. and Cheung, G.W. (1998) 'Testing measurement models for factorial invariance: a systematic approach', *Educational and Psychological Measurement*, 58 (6) pp.1017–1034.

Ricard, L., Préfontaine, L.and Sioufi, M. (2001) 'New technologies and their impact on French consumer behaviour: an investigation in the banking sector', *International Journal of Bank Marketing*, 19 (7) pp.299-311.

Richardson J. (2005) 'Design and conduct a survey', *Complementary Therapies in Medicine*, 13 pp. 47–53

Riege, A.M. (2003) 'Validity and reliability tests in case study research: a literature review with'hands-on' applications for each research phase', *Qualitative Market Research: An International Journal,* 6 (2) pp.75-86.

Rigby, D. K., Reichheld, F. F., and Schefter P. (2002) 'Avoid the four perils of CRM', *Harvard Business Review,* 80 (2) pp.101-109.

Ring, P. S., A. H. Van de Ven. (1994) 'Developmental processes of cooperative interorganizational relationships', *Academy of management review*, 19(1) pp. 90-118

Ritchie, J. and Lewis, J. (2003) **Qualitative Research Practice: A Guide for Social Science Students and Researches**, London: Sage Publications.

Riyadh Exhibitions Co. Ltd (1997) The 6th International Information Technology Exhibition for Saudi Arabia Available at: www.recexpo.com, [Accessed on 19 March 2007].

Robey, D. (1979) 'User attitudes and management information systems use', *Academy of Management Journal,* 22 pp. 527–538

Robson, C. (1993) **Real world research; a resource for social scientists and practitioner researchers.** Oxford: Blackwell.

Rogers, E. M. (1995) **Diffusion of Innovations** (4th ed.), New York: Free Press.

Roger, S., and Victor, J. (2006) **Data collection and analysis**, SAGE Pulications, London.

Rose, G., and Straub, D. W. (1998) 'Predicting General IT Use: Applying TAM to the Arabic World', *Journal of Global Information Management,* 6 (3) pp. 39-46.

Rosenthal, R. and DePaulo, B. M. (1979) 'Sex differences in accommodation in nonverbal communication' In R. Rosenthal (Ed.), Skill in Nonverbal Communication: Individual Differences, Cambridge, MA: Oelgeschlager, Gunn and Hain Publishers, Inc. pp. 68–103

Rotter, J. B. (1967) 'A new scale for the measurement of interpersonal trust', *Journal of Personality*, 35, pp. 651-665

Rotter, J. B. (1971) 'Generalized expectancies for inter-personal trust', *American Psychologist*, 26, pp. 443-452.

Rousseau, D.M., Sitkin, S.B., Burt, R.S. and Camerer, C. (1998) 'Not so different after all: A cross-discipline view of trust', *Academy of Management Review,* **23**(3), pp. 393-404

Russell, J. A. (2003) 'Core Affect and the Psychological Construction of Emotion' *Psychological Review,* 110 (1) pp. 145-172

Rust, R.T. and Oliver, R.L., (2000), 'Should We Delight the Customer?' *Journal of the Academy of Marketing Science,* **28**(1), pp. 86-94.

Ruyter, K.D., Wetzels, M. and Kleijnen, M. (2001) 'Customer adoption of e-service: An experimental study', *International Journal of Service Industry Management,* 72(2) 184-207.Sale, J., Lohfeld, L., and Brazil, K. (2002) 'Revisiting the Quantitative-Qualitative Debate: Implications for Mixed-Methods Research', *Quality and Quantity*, 36(1) pp. 43-53.

Salisbury, W.D., Pearson, R.A., Pearson, A.W. and Miller, D.W. (2000) 'Perceived security and world wide web purchase intention', *Industrial Management & Data Systems*, 101 (4) pp.165-76

Sarantakos, S. (2005) **Social Research**, 3rd edition, Melbourne Australia; MacMillan, pp.115

Saudi Aramco World 'The Search Began In 1933' Available at: http://www.saudiaramcoworld.com/issue/196302/the.search.began.in.1933.htm [Accessed on Mar 14, 2010].

Saudi Telecommunication, STC, (2009), 'Infrastructure and Capabilities, STC has implemented a large core and access fixed network covering the entire kingdom of Saudi Arabia', Saudi Arabia: Available at: http://www.alriyadh.com/2006/08/27/article182047.html http://www.stc.com.sa/cws/portal/en/business/bus-wholesale/stc-lnd-whlslr-news_and_acti/stc-lnd-whlslr-infcap, [Accessed on 24 December 2009].

Saunders, M., Lewis, P. and Thornhil, A. (1997) **Research Methods for Business Students**. London: Pitman Publishing.

Saunders, M., Thornhill, A. and Lewis, P. (2009) **Research methods for business students**. London: Financial Times/Prentice Hall

Schoenbachler, D.D. and Gordon, G.L. (2002) 'Multi-channel shopping: Understanding what drives channel choice', *Journal of Consumer Marketing*, 79 (1) pp.42-53.

Schwab, D.P. (1980) 'Construct validity in organizational behavior' In: Staw, B.M., Cummings, L.L. (Eds.), **Research in organizational behavior**. Greenwish, CN: JAI Press, 2 pp. 3-43.

Shankar, V., Urban, G.L. and Sultan, F., (2002) 'Online trust: a stakeholder perspective, concepts, implications, and future directions', *Journal of Strategic Information Systems*, 11(3-4), pp. 325–344

Shergill G. S. and Chen, Z., (2005) 'Web-based shopping: Consumers' attitudes towards online shopping in New Zealand', *Journal of Electronic Commerce Research*, 6(2), pp.78-92.

Sheppared, B., Hartwick, J., and Warshaw, P. (1988) 'The theory of reasoned action: A Meta analysis of past research with recommendations for modification and future research', *Journal of Consumer Research*, 15(3), pp. 325-343.

Sheth, J.N.and Parvatiyar, A. (1995) 'Relationship marketing in consumer markets: antecedents and consequences', *Journal of the Academy of Marketing Science*, 23 (4) pp.255-69.

Shield, R. (2002) **Diamond Stories.** Ithaca, NY: Cornell University Press.

Shih, Y. Y. and Fang, K. (2004) 'The use of decomposed theory of planned behaviour to study internet Banking in Taiwan', *Internet Reseach*, 14 (3) pp. 213-223.

Shim S., Eastlick M. A., Lotz S. L. and Warrington, P. (2001) 'An online prepurchase intentions model: the role of intention to search', *Journal of Retailing*, 77 pp.397-416.

Shop.org and Boston Consulting Group (2000) 'State of Online Retailing 3.0', Washington, D. C.: National Retail Federation. Available at:http://www.shop.org.

Shop.org, (2001) 'Shop.org Press Room', Washington, D. C.: National Retail Federation. [Available at: http://.shop.org].

Shun, C. and Yunjie, X. (2006) 'Effects of outcome, process and shopping enjoyment on online consumer behaviour', *Electronic Commerce Research and Applications,* 5 (4) pp.272–281.

Simon, S.J. and Peppas, S.C (2005) 'Attitudes towards product website design: a study of the effects of gender', *Journal of Marketing Communications*, 11 (2) pp. 129-144.

Sirdeshmukh, D., Singh, J. and Sabol, B., (2002), 'Consumer Trust, Value, and Loyalty in Relational Exchanges'. *Journal of Marketing,* **66**(1), pp. 15-37.

Snoj B., Korda A.P. and Mumel D., (2004), 'The relationships among perceived quality, perceived risk and perceived product value', *Journal of Product and Brand Management,* **13**(3), pp. 156-167.

So, M. W. C., Wong, T. N., and Sculli, S. D. (2005). 'Factors affecting intentions to purchase via the internet', *Industrial Management & Data Systems*, 105 (9) pp.1225-1244

Sohn, C. (1999) 'The properties of Internetbased markets and customers' behavior' In Proceedings of the **5th Americas Conference on Information Systems (AMCIS 1999),** Milwaukee, Wisconsin.

Sohn, S. Y. and Lee, J. S. (2006) 'Cost of ownership model for a CRM system', *Science of Computer Programming,* 60(1) pp.68.

Song, J. and Zahedi, P.M. (2001) 'Web design in e-commerce: A theory and empirical analysis' In Proceedings of the **22nd International Conference of Information Systems (ICIS 2001),** New Orleans, Louisiana, pp. 205-220.

Spector, P.E., Cooper, C.L. and Sparks, K., (2001) 'An International Study of the Psychometric Properties of the Hofstede Values Survey Module 1994: A Comparison of Individual and Country/Province Level Results', *An International Review,* 50(2), pp. 269-281.

Spero, I. and Stone, M. (2004) 'Agents of change: How young consumers are changing the world of marketing', *Qualitative Market Research: An International Journal*, 7 (2) pp.153-159.

Spreng, R. A., MacKenzie, S. B. and Olshavsky, R. W. (1996) 'A Reexamination of the Determinants of Consumer Satisfaction', *Journal of Marketing,* 60 pp. 15-32.

Srinivasan, S., Anderson, R. and Ponnavolu (2002) 'Customer loyalty in e-commerce: an exploration of its antecedents and consequences', *Journal of Retailing*, 78(1), pp. 41-50.

Stafford, T.F., Turan, A. and Raisinghani, M.S. (2004) 'International and cross-cultural influences on online shopping behaviour', *Journal of Global Information Management*, 7(2) pp. 70-87, 2004

Starkey, M. and N. Woodcock (2002) 'CRM systems: Necessary, but not sufficient. REAP the benefits of customer management', *The Journal of Database Marketing,* 9 (3) pp. 267-275.

Statistics Denmark (2007) Available at: www.dst.dk/Statistik/Nyt/Emneopdelt/nytsingle.aspx?countid¼12005 [Accessed on 2 February 2008].

Steadman, L.B.and Palmer, C.T. (1995) 'Religion as an identifiable traditional behavior subject to natural selection', *Journal of Social and Evolutionary Systems,* 18 pp.149-164.

Steenkamp, J., and Baumgartner, H., (1998) 'Assessing Measurement Invariance in Cross-Cultural Research', Journal of Consumer Research, 25, pp. 78-79.

Stefanou, C. J., Sarmaniotis, C., Stafyla, A. (2003) 'CRM and customer-centric knowledge management: an empirical research', *Business Process Management Journal,* 9 (5) pp. 617-634.

Sterne, J. (1996) **Customer Service on the Internet: Building Relationships, Increasing Loyalty, and Staying Competitive**. New York, NY: John Wiley and Sons.

Stewart, D. W, and Zhao, Q. (2000) 'Internet marketing, business models, and public policy', *J Public Policy Mark*, 19 (2) pp. 287–96.

Stewart, K. J. (1999) 'Transference as a means of building trust in World Wide Web sites' P. De and J. I. DeGross, eds. In Proceedings of the **20th International Conference on Information Systems**, December, Charlotte, NC. pp. 459–464.

Storbacka, K., Strandvik, T., Grönroos, C. (1994) 'Managing Customer Relationships for Profit: The Dynamics of Relationship Quality', *International Journal of Service Industry Management,* 5 (5) pp. 21-38.

Straub, D. W, Gefen, D, Boudreau, M. C. (2005) 'Quantitative Research' .In **Research in Information Systems: A Handbook for Research Supervisors and Their Students**. Avison, D. and Pries-Heje, J. (Ed.), Amsterdam: Elsevier.

Straub, D. W. and Watson, R. T. (2001) 'Research commentary: transformational issues in researching IS and net-enabled organizations', *Information Systems Research*, 12 (4) pp.337-345.

Straub, D. W., Keil, M., and Brennan, W. (1997) 'Testing the Technology Acceptance Model Across Cultures: A Three Country Study', *Information & Management,* 33 pp. 1-11.

Straub, D., Boudreau, M. and .Gefen, D. (2004) 'Validation guidelines for IS positivist research', *Communications of the Association for Information Systems,* 13 pp.380-427.

Straub, D.W. (1989) 'Validating instruments in MIS research', *MIS Quarterly* 13 (2) pp.147-169.

Straughn, R. and Albers-Miller, N. (2001) 'An International investigation of Cultural and Demographic Effects of Domestic Retail Loyalty', *International Marketing Review*, 18 (5) pp. 521-541.

Strauss, A. and J. Corbin (1990) **Basics of Qualitative Research**. Sage, Newbury Park.

Subramanian, G. H. (1994) 'A replication of perceived usefulness and perceived ease of use measurement', *Decision Sciences*, 25 (5/6) pp. 863-874.

Succi, M. J. and Walter, Z. D. (1999) 'Theory of user acceptance of information technologies: an examination of health care professionals', In Proceedings of the **32nd Hawaii International Conference on System Sciences (HICSS),** pp. 1-7.

Suh, B. and I. Han (2003) 'The Impact of Customer Trust and Perception of Security Control on the Acceptance of Electronic Commerce', *International Journal of Electronic Commerce*, 7 (3) pp.135-161

Suh B, Han I. (2002) 'Effect of trust on customer acceptance of Internet banking', *Electronic Commerce Research and Appllications*, 1(3/4) pp. 247–63.

Sultan F, Mooraj HA. (2001) 'Designing a trust-based E-business strategy', *Marketing Management*, 10(4) pp. 40–5.

Swan, J. E. and Trawick, I. F. (1981) 'Disconfirmation of Expectations and Satisfaction with a Retail Service', *Journal of Retailing,* 57 pp. 49-67.

Swan, J.E., Bowers, M.R. and Richardson, L.D., (1999) 'Customer trust in the salesperson: an integrative review and meta-analysis of the empirical literature', *Journal of Business Research*, 44, pp. 93-107

Synodinos, N. E. (2001) 'Understanding Japanese consumers: some important underlying factors'*, Japanese Psychological Research*, 43(4) pp. 235-248.

Syodinos, N. E. (2001) 'Understanding Japanese consumers: some important underlying factors', *Japanese Psychological Research,* 43 (4) pp.235-248.

Szajna, Bernadette (1996) 'Empirical evaluation of the revised technology acceptance model', *Management Science*, 42(1) pp. 85–92.

T.F. Stafford, Turan, A. and Raisinghani, M.S. (2004) 'International and Cross-Cultural Influences on Online Shopping Behavior', *Journal of Global Information Technology Management*, 7 (2) pp.70.

Tabachnick, B. and Fidell, L. (2007) **Using Multivariate Statistics** (5th ed.). Boston: Allyn and Bacon.

Takada, H. and Jain, D. (1991) 'Cross-national analysis of diffusion of consumer durable goods in Pacific Rim countries', *Journal of Marketing,* **55** pp. 48–54.

Tan, Y-H., and Thoen, W., (2001) 'Toward a generic model of Trust for electronic commerce' *International Journal of Electronic Commerce,* **5**(2) pp. 61-74.

Taylor, S., and Todd, P. A. (1995) 'Understanding Information Technology Usage: A Test of Competing Models', *Information Systems Research*, 6 (2) pp. 144-176.

Taylor, S., and Todd, P. A. (1995) 'assessing IT usage: the role of prior experience', *MIS Quarter*, 19(4), pp. 561-570.

Teo T. (2001) 'Demographic and motivation variables associated with Internet usage activities', *Internet Research*, 11(2) pp. 125–37.

Teo, T. S. H. and Tan, M. (2000) 'Factors influencing the adaption of internet banking', *Journal of the Association for Information Systems*, 1 (5) pp. 1-42.

Teo, T. S. H., Lim, V. K. G. and Lai, R. Y. C. (1999) 'Intrinsic and extrinsic motivation in Internet usage', *Omega*, 27 (1) pp. 25-37.

The Communications and Information Technology Commission, 2009, 'Internet Usage in the Kingdom of Saudi Arabia' [report] Available at: http://www.citc.gov.sa/NR/rdonlyres/7C7FF07E-9AF6-46C9-9D16-EFECDD5400A0/0/Internet_Usage_Study_in_KSABusiness_EstablishmentEN.pdf, [Accessed on 6 August 2009].

The Economist Intelligence Unit (2007) 'Saudi Arabia risk: Infrastructure risk' March 23, 2007, Available at: http://voipservices.tmcnet.com/news/2007/03/23/107993.htm [Accessed on 29 March 2007].

The Mosaic Group (1998) 'The Global Diffusion of the Internet Project: An Initial Inductive Study', The MOSAIC Group, Fairfax, VA, http://mosaic.unomaha.edu/GDI1998/GDI1998.html (Accessed on 2 October 2, 2007), pp. 216.

Thompson, R.L., Higgins, C.A. and Howell, J.M. (1991) 'Personal computing: Toward a conceptual model of utilization', *MIS Quarterly,* 15 pp. 125–143.

Thong, J. Y. L., Hong, S.-J., and Tam, K. Y. (2006) 'The effects of post-adoption beliefs on the expectation–confirmation model for information technology continuance', *International Journal of Human-Computer Studies*, 64 (9) pp.799–810.

Tigert, D.J. (1983) 'Pushing the hot buttons for a successful retailing strategy', in Darden, W.R., Lusch, R.F. (Eds), Patronage Behavior and Retail Management, North-Holland, New York, NY, pp.89-113

Tigre, P. B. and Dedrick, J. (2004) 'E-commerce in Brazil: local adaptation of a global technology', *Electronic Markets*, 14 (1) pp.36-47.

Tomkins, C., (2001) 'Interdependencies, trust and information in relationships, alliances and networks', *Accounting, Organizations and Society*, 26, pp. 161–191.

Totty, M. (2001) 'Information, please: How three companies are using the web to find out more about their customer-or to let their customers know more about them', *Wall Street Journal*, p. R6.

Tractinsky, N. (2004) 'Toward the Study of Aesthetics in Information Technology' In Proceedings of **25th International Conference on Information Systems**, Washington D.C., USA, Dec. 13-16, 2004.

Tractinsky, N., Katz A.S.and Ikar, D. (2000) 'What is beautiful is usable', *Interacting with Computers,* 13 (2) pp. 127–145.

Triandis, H.C. (1980) 'Values, attitudes, and interpersonal behavior', in Howe, H.E. and Page, M.M. (Eds), Nebraska Symposium on Motivation, Lincoln, NE: University of Nebraska Press.

Triandis, H.C. (1989) 'Cross-Cultural Studies of Individualism and Collectivism,' In J. Berman (ed), Nebraska Symposium on Motivation, Lincoln, NE: University of Nebraska Press, pp. 41-133.

Trochim, W.M.K. and Donnelly, J.P. (2001) **Research methods knowledge base**. Atomic Dog Publ.

Tse, D. K. and Wilton, P. C. (1988) 'Models of Consumer Satisfaction: An Extension', *Journal of Marketing Research*, 25 pp. 204-212

Tull, D.S. and Hawkins, D.I. (1984) **Marketing Research: Measurement and Method**, 3rd ed. New York: Macmillan Publishing Co. Inc.,

Urban, G.L., Sultan, F. and Qualls, W.J. (2000) 'Placing trust at the center of your Internet strategy', *Sloan Management Review,* 42 (1) pp. 39.

Van Amstel, P., Van der Eijk, P., Haasdijk, E. and Kuilman, D. (2000) 'An interchange format for cross-media personalized publishing', *Computer Networks*, 33 (1-6) pp.179-195.

Van de Vijver, F.J.R. and Harsveld, M. (1994) 'The incomplete equivalence of the paper-and- pencil and computerized versions of the general aptitude test battery', *Journal of Applied Psychology*, 79 pp.852-859

Van der Heijden, H. (2003) 'Factors Influencing the Usage of Websites - the Case of a Generic Portal in the Netherlands', *Information & Management*, 40 (6) pp.541-549

Van der Heijden, H. (2004) 'User acceptance of hedonic information systems', *MIS Quarter*, 28 (4) pp. 695-703.

Van der Heijden, H., Verhagen, T. and Creemers, M. (2003) 'Understanding online purchase intentions: contributions from technology and trust perspectives', *European Journal of Information Systems*, 12 (1) pp. 41-8.

Van der Heijden, V.D. (2000) 'E-TAM: a revision of the technology acceptance model to explain web site revisits', *Research Memorandum*, Vrije Universiteit, Amsterdam, 29.

Van der Heijden, H., and Verhagen, T (2004) 'Online store image: conceptual foundations and empirical measurement', *Information and Management*, 41(5), pp. 609–617.

Van Looy, B., Van Dierdonck, R., and Gemmel, P. (2003) **Services Management: An Integrated Approach**, Pitman, Boston, MA

Van Slyke, C., Comunale, C. and Belanger, F. (2002) 'Gender Differences in Perceptions of Web Based Shopping', *Communications of ACM*, 45(7) pp. 82-86.

Vellido, A., Lisboa, P.J.G. and Meehan, K. (2000) 'Quantitative characterization and prediction of on-line purchasing behavior: A latent variable approach', *International Journal of Electronic Commerce*, 4 (4) pp. 83-104.

Venkatesh, V. (1999) 'Creation of favorable user perceptions: exploring the role of intrinsic motivation' *MIS Quarterly*, 23 (2) pp. 239-260.

Venkatesh, V. (2000) 'Determinants of Perceived Ease of Use: Integrating Control, Intrinsic Motivation, and Emotion into the Technology Acceptance Model', *Information Systems Research*, 11 (4) pp. 342-365.

Venkatesh, V. and Davis, F. (2000) 'A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies', *Management Science*, 46 (2) pp. 186-204.

Venkatesh, V. and Morris, M. G. (2000) 'Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior', *MIS Quarterly*, 24 pp.115–139.

Venkatesh, V., Morris, M. and Ackerman, P. (2000) 'A Longitudinal Field Investigation of Gender Differences in Individual Technology Adoption Decision Making Processes', *Organizational Behavior and Human Decision Processes*, 83 (1) pp.33-60.

Venkatesh, V., Morris, M. G., Davis, G. B. and Davis, F. D. (2003) 'User Acceptance of Information Technology: Toward a Unified View', *MIS Quarterly*, 27 (3) pp.425-478

Venkatesh, V., Speier, C. and Morris, M.G. (2002) 'User Acceptance Enablers in Individual Decision Making About Technology: Toward an Integrated Model', *Decision Sciences*, 33 (2) pp. 297.

Verhoef, P. C. and Langerak, F. (2001) 'Possible determinants of consumers' adoption of electronic grocery shopping in the Netherlands', *Journal of Retailing and Consumer Services*, 8 (5) pp. 275-285.

Vijayasarathy LR, Jones JM. (2000) 'Print and Internet catalog shopping: assessing attitudes and intentions', *Journal of Internet Research*, 10(3) pp. 191–202

Vijayasarathy, L. R. (2002) 'Product characteristics and internet shopping intentions', *Internet Research: Electronic Networking and Policy*, 12 (5) pp.411-426.

Vijayasarathy, L.R. (2004) 'Predicting consumer intentions to use online shopping: the case for an augmented technology acceptance model', *Information and Management,* 41 (6) pp.747–762.

Wa, C.T.T., Hom, H. and Kolwoon, H.K., (2003), **An Integrated Online Customer Loyalty Model**. Hong Kong Polytechnic University

Wagner, M. (2007) 'Picture this: dynamic product imagery shrinks the gap between the online and offline shopping experiences' Available at: http://www.internetretailer.com/article.asp?id=21900 [Accessed Nov 2009].

Walsham, G. (1995) 'Interpretive case studies in IS research: nature and method' *European Journal of Information Systems*, 4 pp.74–81

Ward, M.R. and Lee, M.J. (2000) 'Internet shopping, consumer search and product branding' *Journal of Product and Brand Management*, 9 (1) pp.6-20.

Weber, M. (1958) From Max Weber: **Essays in Sociology**, H. Gerth and C. Wright (eds.) New York: Oxford University Press

Webster, J. (1989) 'Playfulness and computers at work' Unpublished Ph.D. dissertation, New York: New York University.

Webster, J. (1992) 'Microcomputer playfulness: Development of a measure of workplace implications', *MIS Quarterly,* 16 (2) pp.201–226.

Whitcomb, L. L., Erdener, C. B. AND Li, C. (1998) 'Business Ethical Values in China and the U.S.' *Journal of Business Ethics,* 17 (8) pp.839-852.

Wicks, A.C., Berman, S.L. and Jones, T.M., (1999) 'The structure of optimal trust: moral and strategic implications', *Academy of Management Review*, 24(1), pp. 99–116

Wicks, A.C., Berman, S.L. and Jones, T.M., (1999) 'The structure of optimal trust: moral and strategic implications', *Academy of Management Review*, 24 (1), pp. 99–116.

Williamson, A. W. (2006) 'Colleage Students Embrace the Web', eMarketing.com, Avaialble at: http://www.imediaconnection.com/content/8237.asp, [Accessed April 2010].

Williamson, O.E., (1993) 'Calculativeness, trust and economic organization', *Journal of Law and Economics*, 30, pp. 131–145

Wirtz, B. W., and Lihotzky, N. (2003) 'Customer retention management in the B2C electronic business', Long Range Planning 36, pp. 517–532. Wright, B. D., and Masters, G. N. (1982) Rating Scale Analysis. Mesa Press, Chicago.

World Internet Users and Population Stats. (2007) Available at: http://www.Internet worldstats.com/stats.htm, [Accessed on 4 April 2007].

World Internet Users and Population Stats. (2009) Available at: http://www.Internet worldstats.com/stats.htm, [Accessed on 7 April 2010].

Wolfinbarger M, Gilly MC. (2003) 'e-TailQ: dimesionalizing, measuring and predicting etail quality', *Journal of Retailing*, 79(3) pp.183–98.

Yamagishi, T. and Yamagishi, M. (1994) 'Trust and commitment in the United States and Japan', *Motivation and Emotion*, 18 pp.129-166.

Yang, Z. and R. T. Peterson. (2004) 'Customer perceived value, satisfaction, and loyalty: The role of switching costs', *Psychology & Marketing,* 21 (10) pp.799.

Yi He, Merz, M.A. and Alden, D.L. (2008) 'Diffusion of Measurement Invariance Assessment in Cross-National Empirical Marketing Research: Perspectives from the Literature and a Survey of Researchers' *Journal of International Marketing,* 16 (2) pp. 64 – 83.

Yi Y. (1990) 'A critical review of consumer satisfaction', In: Zeithmal VA., editor. Review of marketing, vol. 4. Chicago, IL: American Marketing Association, p. 68–123

Yi, M. Y. and Hwang, Y. (2003) 'Predicting the Use of Web-Based Information Systems: Self-Efficacy, Enjoyment, Learning Goal Orientation, and the Technology Acceptance Model', *International Journal of Human-Computer Studies*, 59 (4) pp.431-449

Yin, R.K. (2003) **Applications of case study research** (Vol. 34). Newbury Park, CA: EUA, Sage Publications Inc.

Yin, R.K. (2008) Case study research: Design and methods. Sage Publications, Inc.

Yoon, S. J., (2002) 'The antecedents and consequences of trust in onlinepurchase decisions', *Journal of Interactive Marketing*, 16(2), pp. 47–63.

Young, M. and Stepankek, M. (2003) 'CRM Strategies: Loyalty Programs That Are Working', *Journal of Marketing Research*, 28 pp. 84–96.

Yousef, T. (2004) 'Trends in online marketing in the Middle East', *Gulf Marketing Review Magazine.*

Yu, J., Ha, I., Choi, M., Rho, J. (2005). 'Extending the TAM for a t-commerce', *Information & Management*, 42 (7) pp. 965-976.

Zeithaml, V.A., (1988) 'Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence', *Journal of Marketing*, 52, pp. 2–22.

Zikmund, W. G. (2003) **Business research methods.** Mason: Thomson South-Western.

Zeithaml VA, Parasuraman A, Malhotra A. (2000) 'A conceptual framework for understanding e-service quality: implications for future research and managerial practice', Working Paper No.00–115. Cambridge, MA: Marketing Science Institute; 2000.

Zucker, L. G. (1986) 'Production of Trust: Institutional Sources of Economic Structure, 1840-1920,' in **Research in Organizational Behavior**, Staw B. M. and Cummings L. L. (eds.), Greenwich, CT: JAI Press, 8 pp.53-111.

APPENDIXES

APPENDIX A: MOST COMMON THEORIES IN ONLINE SHOPPING

Theory	**References**
Theory of Reasoned Action	• Heijden, H.v.d., Verhagen, T., & Creemers, M. (2001). Predicting online purchase behavior: Replications and tests of competing models. In Proceedings of the 34th Annual Hawaii International Conference on System Sciences, Maui, Hawaii, Los Alamitos, CA: IEEE Computer Society. • Jarvenpaa, S.L. & Todd, P.A. (1996). Consumer reactions to electronic shopping on the World Wide Web. International Journal of Electronic Commerce, 1(2), 59-88. • Jarvenpaa, S.L., Tractinsky, N., & Vitale, M, (2000). Consumer trust in an Internet store. Information Technology & Management, 7(1-2), 45-71. • Jones, J.M. & Vijayasarathy, L.R. (1998). Internet consumer catalog shopping: Findings from an exploratory study and directions for future research. Internet Research: Electronic Networking Applications and Policy, 8(4), 322-330. • Keen, C., Ruyter, K.D., Wetzels, M., & Feinberg, R. (2000). An empirical analysis of consumer preferences regarding alternative service delivery modes in emerging electronic service markets. Quarterly Journal of Electronic Commerce, 1(1), 31-47. • Kimelfeld, YM. & Watt, J.H. (2001). The pragmatic value of on-line transactional advertising: A predictor of purchase intention. Journal of Marketing Communications, 7(3), 137-157. • Limayem, M., Khalifa, M., & Frini, A. (2000). What makes consumers buy from Internet? A longitudinal study of online shopping. IEEE Transactions on Systems, Man & Cybernetics, Part A (Systems & Humans), 30(4), 421-432. • Shim, S., Eastlick, M.A., Lotz, S.L., & Warrington, P. (2001). An online prepurchase intentions model: The role of intention to search. Journal of Retailing, 77(3), 397-416. • Vijayasarathy, L.R. & Jones, J.M. (2000a). Intentions to shop using Internet catalogues: Exploring the effects of product

	types, shopping orientations, and attitudes towards computers. Electronic Markets, 10(1), 29-38. • Vijayasarathy, L.R. & Jones, J.M. (200Ob). Print and Internet catalog shopping: Assessing attitudes and intentions. Internet Research: Electronic Networking Applications and Policy, 10(3), 191-202.
Theory of Planned Behaviour	• Bhattacherjee, A. (2000). Acceptance of e-commerce services: The case of electronic brokerages. IEEE Transactions on Systems, Man and Cybernetics, Part A, 30(4), 411-420. • Bhattacherjee, A. (2001a). An empirical analysis of the antecedents of electronic commerce service continuance. Decision Support Systems, 32(2), 201-214. • Bhattacherjee, A. (2001b). Understanding information systems continuance: An expectation confirmation model. MIS Quarterly, 25(3), 351-370. • Csikszentmihalyi, M. (1975). Beyond boredom and anxiety. San Francisco: Jossey-Bass. • Jarvenpaa, S.L. & Todd, P.A. (1996). Consumer reactions to electronic shopping on the World Wide Web. International Journal of Electronic Commerce, 1(2), 59-88. • Keen, C., Ruyter, K.D., Wetzels, M., & Feinberg, R. (2000). An empirical analysis of consumer preferences regarding alternative service delivery modes in emerging electronic service markets. Quarterly Journal of Electronic Commerce, 1(1), 31-47. • Limayem, M. & Khalifa, M. (2000). Business-to-consumer electronic commerce: A longitudinal study. In Proceedings of the Fifth IEEE Symposium on Computers and Communications, (pp. 286290). • Limayem, M., Khalifa, M., & Frini, A. (2000). What makes consumers buy from Internet? A longitudinal study of online shopping. IEEE Transactions on Systems, Man & Cybernetics, Part A (Systems & Humans), 30(4), 421-432. • Pavlou, RA. (2001). Integrating trust in electronic commerce with the technology acceptance model: Model development and validation. In Proceedings of the Seventh Americas Conference on Information Systems (AMCIS 2001), Boston, M A, (816-822). • Shim, S., Eastlick, M.A., Lotz, S.L., & Warrington, P. (2001). An online prepurchase intentions model: The role of

	intention to search. Journal of Retailing, 77(3), 397-416. • Song, J. & Zahedi, P.M. (2001). Web design in e-commerce: A theory and empirical analysis. In Proceedings of the 22nd International Conference of Information Systems (ICIS 2001), New Orleans, Louisiana, (pp. 205-220).
Theory of Technology Acceptance Model	• Bhattacherjee, A. (2000). Acceptance of e-commerce services: The case of electronic brokerages. IEEE Transactions on Systems, Man and Cybernetics, Part A, 30(4), 411-420. • Bhattacherjee, A. (2001a). An empirical analysis of the antecedents of electronic commerce service continuance. Decision Support Systems, 32(2), 201-214. • Bhattacherjee, A. (2001b). Understanding information systems continuance: An expectation confirmation model. MIS Quarterly, 25(3), 351-370. • Chau, P.Y.K., Au, G., & Tam, K.Y. (2000). Impact of information presentation modes on online shopping: An empirical evaluation of a broadband interactive shopping service. Journal of Organizational Computing and Electronic Commerce, 10(1), 1-22. • Childers, T.L., Carr, C.L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. Journal of Retailing, 77(4), 511-535. • Heijden, H.v.d., Verhagen, T., & Creemers, M. (2001). Predicting online purchase behavior: Replications and tests of competing models. In Proceedings of the 34th Annual Hawaii International Conference on System Sciences, Maui, Hawaii, Los Alamitos, CA: IEEE Computer Society. • Keen, C., Ruyter, K.D., Wetzels, M., & Feinberg, R. (2000). An empirical analysis of consumer preferences regarding alternative service delivery modes in emerging electronic service markets. Quarterly Journal of Electronic Commerce, 1(1), 31-47. • Lee, J., Kim, J., & Moon, J. Y. (2000). What makes Internet users visit cyber stores again? Key design factors for customer loyalty. In Proceedings of the Conference on Human Factors in Computing Systems, The Hague, Netherlands, (pp. 305-312).

APPENDIX A: MOST COMMON THEORIES IN ONLINE SHOPPING

	• Limayem, M. & Khalifa, M. (2000). Business-to-consumer electronic commerce: A longitudinal study. In Proceedings of the Fifth IEEE Symposium on Computers and Communications, (pp. 286290). • Lin, J.C.-C. & Lu, H. (2000). Towards an understanding of the behavioral intention to use a Web site. International Journal of Information Management, 20(3), 197-208. • Parthasarathy, M. & Bhattacherjee, A. (1998). Understanding post-adoption behavior in the behavior in the context of online services. Information Systems Research, 9(4), 362-379. • Pavlou, RA. (2001). Integrating trust in electronic commerce with the technology acceptance model: Model development and validation. In Proceedings of the Seventh Americas Conference on Information Systems (AMCIS 2001), Boston, M A, (816-822). • Chiu, C. M, Chang C.C, Cheng, H. L., Fang, Y. H., (2009). 'Determinants of customer repurchase intention in online shopping' Online Information Review, 33(4): 761-784 • Yu, Jieun, Ha, Imsook, Choi, Munkee, Rho, Jaejeung (2005). 'Extending the TAM for a t-commerce' Information & Management, 42(7): 965-976 • van der Heijden, H. (2003) "Factors Influencing the Usage of Websites - the Case of a Generic Portal in the Netherlands", Information & Management, (40)6, pp. 541-549 • Ahn, T., *et al*., (2007). 'The impact of Web quality and playfulness on user acceptance of online retailing', *Information and Management*, 44(3): 263-275. • Kim, J. and Forsythe, S (2009), "Adoption of Sensory Enabling Technology for Online Apparel Shopping", European Journal of Marketing, 43(9/10): 1101-1120.
Expectation Confirmation Theory	• Bhattacherjee, A. (2001a). An empirical analysis of the antecedents of electronic commerce service continuance. Decision Support Systems, 32(2), 201-214. • Bhattacherjee, A. (2001b). Understanding information systems continuance: An expectation confirmation model. MIS Quarterly, 25(3), 351-370.

APPENDIX A: MOST COMMON THEORIES IN ONLINE SHOPPING

	• Khalifa, M. & Liu, V. (2001). Satisfaction with Internet-based services: A longitudinal study. In Proceedings of the 22nd International Conference of Information Systems (ICIS 2001), New Orleans, Louisiana, (pp. 601-606). • Thong, J. Y. L., Hong, S.-J., & Tam, K. Y. (2006). 'The effects of post-adoption beliefs on the expectation–confirmation model for information technology continuance', *International Journal of Human-Computer Studies*, 64(9), 799–810 • Lin, C. S., Wu, S., & Tsai, R. J. (2005). 'Integrating perceived playfulness into expectation–confirmation model for web portal context', Information and Management, 42(5), 683–693. • Kang, Young Sik, Hong, Soongeun, and Lee, Heeseok (2009). 'Exploring continued online service usage behavior: The roles of self-image congruity and regret', Computers in Human Behavior, 25(1): 111-122 • Hong, S.-J., Thong, J. Y. L., & Tam, K. Y. (2006). 'Understanding continued information technology usage behavior: A comparison of three models in the context of mobile internet', *Decision Support Systems*, 42(3), 1819–1834. • Liao, C., Chen, J.-L., & Yen, D. C. (2007). 'Theory of planning behavior (TPB) and customer satisfaction in the continued use of e-service. An integrated model', *Computers in Human* Behavior, 23(6), 2804–2822 • Limayem, M., Hirt, S. G., & Cheung, C. M. K. (2007). 'How habit limits the predictive power of intention: The case of information systems continuance', MIS Quarterly, 31(4), 705–737.
Innovation Diffusion Theory	• Bhattacherjee, A. (2001a). An empirical analysis of the antecedents of electronic commerce service continuance. Decision Support Systems, 32(2), 201-214. • Bhattacherjee, A. (2001b). Understanding information systems continuance: An expectation confirmation model. MIS Quarterly, 25(3), 351-370. • Goldsmith, R.E. (2000). How innovativeness differentiates online buyers. Quarterly Journal of Electronic Commerce, 1(4), 323-333. • Parthasarathy, M. & Bhattacherjee, A. (1998). Understanding post-adoption behavior in the behavior in the context of online services. Information Systems Research, 9(4), 362-379. • Senecal, S. (2000). Stopping variables in online buying processes: An innovation diffusion approach. In Proceedings of the

	Sixth Americas Conference on Information Systems (AMCIS 2000), Long Beach, California, (pp. 1380-1385). • Siu, N.Y.M. & Cheng, M.M.-S. (2001). A study of the expected adoption of online shopping: The case of Hong Kong. Journal of International Consumer Marketing, 75(3), 87-106.

APPENDIX B: OVERVIEW OF PREVIOUS RESEARCH ON E-SHOPPING INTENTIONS AND ADOPTION

Reference	**Sample (survey type, year)**	**Method (Theory)**	**Dependant Variables**	**Significant Explanatory Variables (-: insignificant; +: significant; 1: not tested)**
Ahn *et al*. (2004)	932 Internet users in Korea (Internet, 2003)	SEM (TAM)	e-Shopping intention	Attitude toward using e-shopping (+) Perceived usefulness (+) Perceived ease of use (+, indirect) System quality (+, indirect) Information quality (+, indirect) Service quality (+, indirect) Product quality and delivery service (+, indirect)
Belanger *et al*. (2002)	140 students in a US south-eastern university (paper)	Regression (none)	e-Shopping intention	Importance of privacy and security features(-) Site quality (+)
Bellman *et al*. (1999)	10,180 Internet users of Wharton Virtual Test Market (Internet)	Logistic regression and regression (none)	e-Shopping adoption and annual online spending	Looking at product information (+, +) Months online (+, -) Number of daily e-mails (+, +) Working online at work every week (+, -) Reading news online at home every week (+, -) Total household working hours (+, -) Clicking on banners (+, -) Agreeing Internet improves productivity (+, +) Ordering from catalogues using the Internet (-, +) Using Internet at office regularly for work (-, +) Ordering from catalogues (-, +) Like being first to use new technologies (-, +) Number of years online (-, +) Hours per week online (-, +) Not ordering by mail (-, +)
Chen *et al*. (2002)	253 email users in the US (Internet)	SEM (TAM and IDT)	e-Shopping usage	Behavioural intentions to use e-shopping (+) Attitude toward using e-shopping (+, indirect) Compatibility (+, indirect)

APPENDIX B: OVERVIEW OF PREVIOUS RESEARCH ON E-SHOPPING INTENTIONS AND ADOPTION

				Perceived usefulness (+, indirect) Perceived ease of use (+, indirect)
Chen and Tan (2004)	253 e-mail users in the US (Internet)	SEM (TAM and IDT)	e-Shopping intention	Attitude toward using e-shopping (+) Perceived usefulness (+) Perceived trust (+, indirect) Compatibility (+, indirect) Perceived ease of use (+) Perceived service quality (+, indirect) Product offerings (+, indirect) Usability of storefront (+, indirect)
Childers *et al*. (2001)	Study 1: 274 students in a large US Midwestern university (paper) Study 2: 266 computer users in the US (paper)	SEM (TAM)	Attitude toward e-shopping	Perceived usefulness (+,+) Perceived ease of use (+,+) Enjoyment (+,+) Navigation (+, indirect, +, indirect) Convenience (+, indirect, +, indirect) Substitutability of personal examination (+, indirect, +, indirect)
Cho (2004)	294 Internet users in the US (paper)	SEM (TRA)	Aborting an online transaction	Lack of physical examination (+) Purchasing experiences from Internet (-) Frequency of purchasing from catalogues (-) Concerns over delivery and return (+) Attitude toward e-shopping (-) Product offerings (-, indirect) Control in information research (-, indirect) Attitude toward catalogue retailing(-, indirect) Effort saving (-, indirect) Time spent on Internet per visit (-, indirect)
Choi and Geistfield (2004)	Study 1: 386 students in Korea university (paper) Study 2: 369 students in a US Midwestern university (paper)	SEM (TPB)	e-Shopping intention	Perceived risk (-,-) Perceived self-efficacy (+,+) Subjective norm (+,+) Individualism- collectivism (+ indirect, + indirect)
Corbitt *et al*. (2003)	80 students in New Zealand (Internet)	Correlation analysis (none)	e-Shopping usage	Trust (+) Web experience (+)

APPENDIX B: OVERVIEW OF PREVIOUS RESEARCH ON E-SHOPPING INTENTIONS AND ADOPTION

Donthu and Gracia	790 Internet users in a US large city (telephone)	t-test and chi-square test (none)	e-Shopping adoption	Age (+) Income (+) Importance of convenience (+) Innovativeness (+) Risk aversion (-) Impulsiveness (+) Variety-seeking propensity (+) Attitude toward direct marketing (+) Attitude toward advertising (+)
Faucault and Scheufele (2002)	156 students in a large US northeastern university (paper)	Chi-square test (social influence theory, social leaning theory, use and gratifications theory)	Textbook online purchasing adoption, frequency of previous online textbook purchase, and likelihood for future online textbook purchase	Adoption: Men (+) Frequency and likelihood: Frequent previous online purchase (+,+) Sufficient time to purchase textbook online allowed by professor (+, 1) Professor's suggestions (+, 1) Ability to name online textbook retailers (+, +) Perception that customer service is better online (+, +) Frequent online textbook purchase by friends (1, +) Frequent discussion of online textbook purchasing (1, -) Perception that e-shopping is less hassled (1, +)
Gefen (2000)	217 students in the mid-Atlantic region, USA (paper)	SEM (none)	Intended purchase and intended inquiry	Trust (+, +) Familiarity (+, +) Disposition to trust (+ indirect, + indirect)
Gefen and Straub (2000)	202 students in the mid-Atlantic region, USA	Regression (TAM)	Intended purchase and intended inquiry	Perceived usefulness (+, +) Perceived ease of use (+ indirect, + indirect)
Gefen and Straub (2004)	Study 1: 226 students in the mid-Atlantic region, USA Study 2: 171 other students	SEM (none)	e-Shopping intention	Integrity (+, +) Predictability (+, +) Familiarity (+, +) Trusting disposition (+ indirect, + indirect) Social presence (1, +)
Goldsmith (2002)	107 students in a large	SEM (none)	Future likelihood of	Current online buying (+)

APPENDIX B: OVERVIEW OF PREVIOUS RESEARCH ON E-SHOPPING INTENTIONS AND ADOPTION

	US southeastern university (paper)		buying online	Internet innovativeness (+) Internet involvement (+) Global innovativeness (+, indirect)
Goldsmith and Goldsmith (2002)	566 students in a large US southern university (paper, 2000)	MANOVA (none)	e-Shopping adoption	Composite e-shopping frequency (+) Fun (+) Safe (+) Quick (+) Confident (+) Internet knowledge (+) Internet innovativeness (+)
Garzioli and Jarvenpaa (2000)	80 students at a major US university (Internet)	Logistic and linear regression (Social exchange theory)	Actual online purchase and willingness to buy	Attitude toward e-store (+, +) Attitude toward web (0, +) Trust (+ indirect, + indirect) Risk (- indirect, -indirect) Risk by high trust (+ indirect, + indirect) Attitude toward web safety (+, +) Assurance mechanism (+ indirect, + indirect) Deception (- indirect, -indirect) Assurance by high deception (+ indirect, + indirect) Trust-building mechanism (+ indirect, + indirect)
Hansen *et al.* (2004)	Study 1: 1,222 Danish Internet users Study 2: 1,038 Swedish Internet users (Internet, 2002)	SEM (TRA and TPB)	e-Shopping intentions	Subjective norms (+, +) Attitudes (+, +) Perceived behavioural control (0, +)
Huang (2000)	115 Internet users in Taiwan (paper)	SEM (none)	Desire to shop online	Desire to explore (+) Complexity (-, indirect) Novelty (+, indirect)
Jarvenpaa *et al.* (2000)	184 students in Australia	SEM (none)	Willingness to buy online	Attitude (+) Perceived risk (-) Trust in store (+, indirect) Perceived reputation (+, indirect) Perceived size (+, indirect)
Kaufman-	257 Internet users	MANOVA (none)	Web non-shopper	Non-store (catalogue and TV) browsing (+)

APPENDIX B: OVERVIEW OF PREVIOUS RESEARCH ON E-SHOPPING INTENTIONS AND ADOPTION

Scarborough and Lindquist (2002)			E-browser E-shopper	Non-store (catalogue and TV) shopping (+) Non-store convenience (+)
Kim *et al*. (2000)	306 Internet users (from GIT GVU Center, 1998)	SEM (none)	e-Shopping behaviour	Income (+) Time-orientated lifestyle (+) Net-orientated lifestyle(+)
Koufaris (2002)	280 online customers (Internet)	Logistic and linear regression (TAM and flow theory)	Unplanned purchase and intention to return	Shopping enjoyment (-, +) Perceived usefulness (-, +) Involvement (-, + indirect) Challenges (-, + indirect) Skills (-, + indirect) Value-added information (-, + indirect)
Koyuncu and Bhattacharya (2004)	1,842 Internet users in the US (from GIT GVU Center, 1998)	Binomial logistic and multinomial logistic models (none)	e-Shopping adoption and e-shopping frequency	Income (+, +) Education (+, +) Male (+, +) Experience (+, +) Quickness (+, +) Better price (+, +) Paying risk (-, -) Longer delivery (-, -)
Li *et al*. (1999)	999 email users (Internet)	ANOVA, chi-square test, and regression (channel theory)	e-Shopping frequency	Male (+) Income (+) Education (+) Convenience (+) Experience (-) Channel knowledge (+) Communication (+) Distribution (+) Accessibility (+)
Liang and Huang (1998)	86 Internet users in Taiwan (paper)	SEM (TCT)	Acceptance of e-shopping for experienced and inexperienced shoppers	Transaction cost (-, -) Uncertainty (-, - indirect) Asset specificity (-, +)
Liang and Lai	30 students in Taiwan	ANOVA (none)	Online purchase, revisit	Better store design (+, +, +)

(2002)	(paper)		and purchase again	
Liao and Cheung (2001)	312 Internet users in Singapore	Regression (none)	Willingness to e-shop	Perceived risk on transaction security (-) Education and IT training (+) Price (-) Perceived relative life content of e-shopping (-) Perceived quality of e-vendors (+) Level of Internet usage (+)
Lim (2003)	16 individuals in Queensland, Australia (interview, 2001)	Focus group (theory of perceived risk)	Decision to purchase online	Perceived technology risk (-) Perceived vendor risk (-) Perceived product risk (-) Perceived consumer risk (0)
Limayem *et al*. (2000)	705 email users from four Internet based directories (Internet)	SEM (TPB)	e-Shopping frequency	Intention to use e-shopping (+) Behavioural control (+) Subjective norm (+, indirect) Personal innovativeness (+, indirect) Attitude toward e-shopping (+, indirect) Perceived consequences (+, indirect)
Liu and Wei (2003)	212 students in a large US Midwestern university (Internet)	SEM (none)	e-Shopping intention	Trust (+) Privacy (+, indirect)
Liu and Wei (2003)	308 university students	SEM (TAM)	e-Shopping intention	Perceived usefulness (+) Perceived risk (-)
Lunn and Suman (2002)	1,173 Internet users in the US (interview, 2001)	Regression and discriminant analysis (none)	e-Shopping frequency and e-shopping amount	Previous purchase by mail and phone (+, +) Navigate consequences of shopping Internet (-, -) Internet access experience (+, +) Privacy/security concerns (-, -) Income (+, +) High-speed Internet (+, +) Availability of good and services (+, -) Male (+, +) Internet prices lower (+, -) More likely buy brand products on Internet (+, -)
Mathwick *et al*. (2001)	302 catalogue and 213 Internet customers of a direct retailer of	SEM (experimental value)	Separate models of Internet shopping preference and intent, and	Customer Return On Investment (+) (economic value and efficiency)

APPENDIX B: OVERVIEW OF PREVIOUS RESEARCH ON E-SHOPPING INTENTIONS AND ADOPTION

	women's apparel and housewares		catalogue shopping and intent (with respect to the vendor in question)	
McKnight *et al*. (2002)	1,403 students in three large US universities (paper)	SEM (none)	Intention to purchase from site (service)	Perceived web risk (-) Trust beliefs in web vendor (+) Willingness to depend on web vendor (+) Perceived vendor reputation (+, indirect) Perceived site quality (+, indirect) Structural assurance of the web (-, indirect)
Miyazaki and Fernandez (2001)	160 Internet users in a large US city (paper)	Regression and t test (none)	e-Shopping frequency	Web usage rate (+) Perceived risk (-) Perceived security concerns (-) Adoption of mail-order shopping (+)
O'Cass and Fenech (2003)	392 email users in Australia (Internet)	SEM (TAM)	e-Shopping adoption	Attitude toward web retail (+) Opinion leadership and impulsiveness (+, indirect) Web experience (+, indirect) Perceived usefulness (+, indirect) Perceived ease of use (+, indirect)
Phau and Poon (2000)	183 email users (Internet)	Discriminant analysis (none)	e-Shopping intention for 20 productive and service categories	Products and services having low outlay (+) Having intangible value (+) Having high differentiation (+)
Raijas (2002)	91 online purchasers and 155 store purchasers in Helsinki Finland (paper and interview, 1999)	Descriptive (none)	e-Shopping adoption	Avoidance of product picking and delivery (+) Time saving (+) Easiness to order (+) Trying something new (+) Products are difficult to find (-) Higher price (-) Product quality cannot be verified (-) Little product information (-)
Ranganathan and Ganapathy (2002)	213 online purchasers in Illinois, USA	Discrimination analysis (none)	e-Shopping intention	Information content (+) Web design (+) Security (-) Privacy (-)
Shang *et al*. (2005)	478 email users and 650 students in three	SEM and logistic regression (TAM)	e-Shopping intensity and adoption	Perceived ease of use (+, +) Fashion involvement (+, +)

APPENDIX B: OVERVIEW OF PREVIOUS RESEARCH ON E-SHOPPING INTENTIONS AND ADOPTION

	universities in Taiwan (Internet and paper)			Cognitive absorption (+ indirect, +) Income (1, +) Frequency of using Internet (1, +) Online experience (1, +)
Shih (2004)	212 employees in Taiwan (paper)	Regression (TAM)	Acceptance of online physical products, online digital products, and online services	Attitude (+, +, +) User satisfaction (0, +, +) Perceived information quality (+, +, 0) Perceived system quality (0, +, 0) Perceived service quality (-, -, 0) Access costs (0,0,-)
Shim *et al*. (2001)	684 computer users in 15 US metropolitan areas	SEM (TPB)	e-Shopping intention	Intention to use web for information search (+) Attitude (+) Internet purchase experience (+) Perceived behavioural control (+, indirect)
Sim and Koi (2002)	175 individuals in Singapore (paper)	t-test and chi-square test (none)	e-Shopping adoption	Time consciousness (+) Positive attitude toward Internet (+) Risk taking (+) Price consciousness (+) Household income (+) Credit card owner (+)
Srinivasan *et al*. (2002)	1,211 online consumers (Internet)	Seemingly unrelated regression (none)	Search, word of mouth promotion, and willingness to pay more	e-loyalty (-, +, +) Through e-loyalty: Customization ability (-, +, +) Contact interactivity (-, +, +) Cultivation (providing information and incentives) (-, +, +) Customer care (-, +, +) Community (opinion and information exchange) (-, +, +) Choice (product and category variety) (-, +, +) Character (building reputation) (-, +, +)
Swaminathan *et al*. (1999)	428 Internet users (from GIT, GVU Center, 1998)	Regression (theory of exchange)	e-Shopping frequency and amount	Vendor characteristics (+, -) Security of transaction (-, -) Concern for privacy (-, -) Privacy laws (-, +) Social interaction (+, +)

APPENDIX B: OVERVIEW OF PREVIOUS RESEARCH ON E-SHOPPING INTENTIONS AND ADOPTION

				Convenience (+, +)
Teo and Yeong (2003)	1,133 Internet and e-mail users in Singapore (Internet)	SEM (none)	Willingness to buy online	Overall deal evaluation (+) Perceived benefits of search (+, indirect) Perceived risk (-, indirect)
Teo and Yu (2005)	1,171 Internet and email users in Singapore (Internet)	SEM (TCT)	Willingness to buy online	Transaction cost (-) Performance uncertainty (-, indirect) Behavioural uncertainty (-, indirect) Environmental uncertainty (-, indirect) Dependability (+, indirect) Online buying frequency (+, indirect)
Van den Poel and Buchkinx (2005)	1,382 observations (unknown number of Internet users)(recorded by system, 2001-2002)	Binary logit model (none)	e-Shopping adoption during the next visit	Number of days since last visit (+) Squared number of days since last visit (-) The average time per click in the session is lower than the average (-) Number of personal pages viewed during the last visit (-) Total number of products viewed (-) Male (+) Trust (+) Total number of purchases ever made at the site (+) Number of days between the visit and the last purchase(-)
Van den Poel and Leunis (1999)	93 email users in Belgium (Internet)	ANOVA and t test (none)	Likelihood of e-shopping	Heavy Internet users (+) Price reduction (+) Well-known brand (+) Money-back guarantee (+)
Van der Heijden and Verhagen (2004)	312 students in Vrije Universiteit, Netherlands	Regression (none)	e-Shopping intention	Attitude toward online purchasing (+) Online store usefulness (+, indirect) Enjoyment (+, indirect) Familiarity and settlement (+, indirect) Performance (+, indirect)
Van der Heijden *et al*. (2002)	228 students in a Dutch academic institution	SEM (TAM)	e-Shopping intention	Attitude toward online purchasing (+) Trust in online store (+, indirect) Perceived risk (-, indirect) Perceived ease of use (+, indirect)
Van Slyke *et al*.	511 individuals	Regression (none)	e-Shopping intention	Male (+)

APPENDIX B: OVERVIEW OF PREVIOUS RESEARCH ON E-SHOPPING INTENTIONS AND ADOPTION

(2002)				Computer use (+) Email use (+) Prior web use (+) Access to credit card (+)
Verhoef and Langerack (2001)	415 individuals in a medium- sized Dutch town (paper)	SEM (TRA)	e-Shopping intention	Relative advantages (+) Compatibility (+) Complexity (+) Time pressure (+, indirect) Physical effort in store shopping (+, indirect)
Vijayasarathy (2002)	767 individuals in a US upper midwestern city (paper)	Chi-square test, ANCOVA, and MANCOVA (TRA)	e-Shopping Intention	Tangibility (+) Prior experience (+)
Yoon (2002)	122 students at a university in Seoul, Korea (paper)	Regression (none)	e-Shopping Intention	Web-site awareness (+) Web-site trust (+) Web-site satisfaction (+) Transaction security (+, indirect) Site properties (+, indirect) Navigation functionality (+, indirect) Personal variables (+, indirect)

Source: Adapted from (Cao and Mokhtarian, 2005)

Notes: TAM-Technology Acceptance Model; TRA-Theory of Reasoned Action; TPB-Theory of Planned Behaviour; TCT- Transaction Cost Theory; IDT-Innovation Diffusion Theory; None-No explicit theory used; SEM-Structural Equation Model (including partial least squares and path analysis).

APPENDIX C: COMPARISON AND ANALYSIS BETWEEN THREE MAJOR RESEARCH PARADIGMS

Questions for Analysing Paradigms		**Research Paradigms**		
		Positivism	**Interpretivism**	**Critical Theory**
Ontological Questions	Nature of Reality	▪ An objective, true reality exists which is governed by unchangeable natural cause-effect laws ▪ Consists of stable pre-existing patterns or order that can be discovered ▪ Reality is not time nor context bound ▪ Reality can be generalised	▪ The world is complex and dynamic and is constructed, interpreted and experienced by people in their interactions with each other and with wider social systems (i.e. fluid definitions of a situation created by human interaction/social construction of reality) ▪ Reality is subjective. People experience reality in different ways. Subjective reality is important (i.e. what people think, feel, see) ▪ Reality can only be imperfectly grasped ▪ The use of language defines a particular reality	▪ Governed by conflicting, underlying structures – social, political, cultural, economic, ethnic, gender
	Nature of Human beings	▪ Rational ▪ Shaped by external factors (same cause has the same effect on everyone), i.e. mechanical model / behaviourist approach. Under certain conditions people will probably engage in a specified behaviour	▪ Social beings who create meaning and who constantly make sense of their worlds ▪ People possess an internally experienced sense of reality	▪ People can design / reconstruct their own world through action and critical reflection

APPENDIX C: COMPARISON AND ANALYSIS BETWEEN THREE MAJOR RESEARCH PARADIGMS

Questions for Analysing Paradigms		Research Paradigms		
		Positivism	**Interpretivism**	**Critical Theory**
Epistemological Questions	Nature of Knowledge	▪ Knowledge can be described in a systematic way ▪ Knowledge consists of verified hypotheses that can be regarded as facts or laws ▪ Probabilistic – holds true for large groups of people or occurs in many situations ▪ Knowledge is accurate and certain	▪ Knowledge is based not only on observable phenomena, but also on subjective beliefs, values, reasons, and understandings ▪ Knowledge is constructed ▪ Knowledge is about the *way* in which people make meaning in their lives, not just *that* they make meaning, and *what* meaning they make.	▪ Knowledge is dispersed and distributed ▪ Knowledge is a source of power ▪ Knowledge is constituted by the lived experience and the social relations that structure these experiences ▪ Events are understood with social and economic contexts
	Role of Theory	**Theories are:** ▪ Normative ▪ Present 'models' ▪ General propositions explaining causal relationships between variables	**Theories:** ▪ Are revisable ▪ Approximate truth ▪ Are sensitive to context	**Theories:** ▪ Are constructed in the act of critique in a dialectical process of deconstructing and reconstructing the world
	Theory Building/Testing	▪ Postulate theories that can be tested in order to confirm or reject ▪ Prove theories from observable phenomena / behaviour ▪ Test theories in a controlled setting, empirically supporting or falsifying hypotheses through process of experimentation	▪ Theories are built / constructed from multiple realities – the researcher has to look at different things in order to understand a phenomenon ▪ Theory is shaped by social and cultural context	▪ Theories are built from deconstructing the world, from analysing power relationships

APPENDIX C: COMPARISON AND ANALYSIS BETWEEN THREE MAJOR RESEARCH PARADIGMS

	Role of Research	▪ Uncover reality, i.e. natural laws ▪ Scientifically explain / describe, predict and control phenomena	▪ Study mental, social, cultural phenomena – in an endeavour to understand why people behave in a certain way. ▪ Grasp the 'meaning' of phenomena ▪ Describe multiple realities	▪ Promoting critical consciousness ▪ Breaking down institutional structures and arrangements that produce oppressive ideologies and social inequalities ▪ Shift the balance of power so that it may be more equitably distributed ▪ Address social issues ▪ Political emancipation and increasing critical consciousness

Questions For Analysing Paradigms		**Research Paradigms**		
		Positivism	**Interpretivism**	**Critical Theory**
Epistemological Questions (cont)	Research Findings are True if:	▪ Can be observed and measured ▪ Can be replicated and are generalisable	▪ Research has been a communal process, informed by participants, and scrutinised and endorsed by others	▪ Can solve problems within a specific context ▪ Solutions may be applied in other contexts, but as hypotheses to be tested ▪ Unveil illusions
	Role of Common Sense	▪ None – only deductive reasoning	▪ Common sense reflects powerful everyday theories held by ordinary people ▪ Iterative and inductive reasoning used	▪ False beliefs that hide power and objective conditions
Questions for analysing paradigms		**Research Paradigms**		
		Positivism	**Interpretivism**	**Critical Theory**
Methodological Questions	Role of Researcher	▪ Objective, independent from the subject ▪ Investigator often controls the investigated	▪ Co-creator of meaning ▪ Brings own subjective experience to the research ▪ Tries to develop an understanding of the whole and a deep understanding of how each part	▪ Adopts role of facilitator – encouraging the participation and involvement of the 'subjects' who become partners in the research process

APPENDIX C: COMPARISON AND ANALYSIS BETWEEN THREE MAJOR RESEARCH PARADIGMS

			relates and is connected to the whole	
Questions for Analysing Paradigms		**Research Paradigms**		
		Positivism	**Interpretivism**	**Critical Theory**
Methodological Questions (cont.)	Role of Values	▪ Science is value-free ▪ Values have no place in research – must eliminate all bias	▪ Values are an integral part of social life – no values are wrong, only different	▪ Facts can never be isolated from values ▪ Values of the researcher influence the research
	Methods	▪ Empirical ▪ Structured and replicable observation ▪ Quantification / measurement ▪ Experimental – directly manipulate variables and observe	▪ Unstructured observation ▪ Open interviewing ▪ Discourse analysis ▪ Try to capture "insider" knowledge	▪ Participatory action research ▪ Dialogical methods – which encourage dialogue between researcher and researched
	Type of Studies	▪ Survey studies ▪ Verification of hypotheses ▪ Statistical analysis ▪ Quantitative descriptive studies	▪ Field research, conducted in natural settings in order to collect substantial situational information	

Source: Guba and Lincoln (1994)

APPENDIX D: QUESTIONNAIRE (MEASUREMENT INDICATORS)

Perceived Ease of Use *(Strongly disagree . . .Strongly agree)*
Adapted from (Van der Heijden *et al*, 2003)

1. Learning to use the website I use for my online shopping is easy.
2. It is easy to get the website I use for my online shopping to do what I want.
3. The interactions with the website I use for my online shopping are clear and understandable.
4. The website I use for my online shopping is easy to use.
5. The website I use for my online shopping is flexible to interact with.

Perceived usefulness *(Strongly disagree . . .Strongly agree)*
Adapted from (Gefen *et al*, 2003).

6. The website I use for my online shopping is useful for searching and purchasing.
7. The website I use for my online shopping improves my performance in searching and purchasing.
8. The website I use for my online shopping enables me to search and purchase faster.
9. The website I use for my online shopping enhances my effectiveness in searching and purchasing.
10. The website I use for my online shopping makes it easier to search for and purchase.
11. The website I use for my online shopping increases my productivity in searching and purchasing.

Trust *(Strongly disagree . . .Strongly agree)*
Adapted from (McKnight *et al*, 2002b).

Trusting Beliefs (Benevolence)

1. I believe that the website I use for my online shopping would act in my best interest.
2. If I required help, the website I use for my online shopping would do its best to help me.
3. The website I use for my online shopping is interested in my well-being, not just its own.

Integrity

1. The website I use for my online shopping is truthful in its dealings with me.
2. I would characterize the website I use for my online shopping as honest.
3. The website I use for my online shopping would keep its commitments.
4. The website I use for my online shopping is sincere and genuine.

Competence

1. The website I use for my online shopping is competent and effective in providing online business.
2. The website I use for my online shopping performs its role of giving shopping advice very well.
3. Overall, the website I use for my online shopping is a capable and proficient Internet shopping provider.
4. In general, the website I use for my online shopping is very knowledgeable about its service.

Trusting Intentions (Willingness to Depend)

1. When an important shopping issue or problem arises, I would feel comfortable depending on the information provided by the website I use for my online shopping.

2. I can always rely on the website I use for my online shopping in a tough shopping situation.
3. I feel that I could count on the website I use for my online shopping to help with a crucial shopping problem.
4. If I had a challenging shopping problem, I would want to use the website I use for my online shopping again.

Perceived enjoyment *(Strongly disagree . . .Strongly agree)*
Adapted from (Childers *et al* 2001).

1. Shopping online in this website would be fun for its own sake.
2. Shopping online in this website would make me feel good.
3. Shopping online in this website would be boring.
4. Shopping online in this website would involve me in the shopping process.
5. Shopping online in this website would be exciting.
6. Shopping online in this website would be enjoyable.
7. Shopping online in this website would be uncomfortable.
8. Shopping online in this website would be interesting.

Perceived Site Quality *(Strongly disagree . . .Strongly agree)*
Adapted from (McKnight *et al*, 2002b).

1. Overall, this website worked very well technically.
2. Visually, this website resembled other sites I think highly of.
3. This website was simple to navigate.
4. On this website, it was easy to find the information I wanted.
5. This website clearly showed how I can contact or communicate with online shopping customer service.

Subjective Norms *(Strongly disagree . . .Strongly agree)*
Adapted from (Shine and Fang, 2004).

1. Most people who are important to me would think that using the website to shop online is a wise idea.
2. Most people who are important to me would think that using the website to shop online is a good idea.
3. Most people who are important to me would think I should use the website to shop online.
4. My family who are important to me would think that using the website to shop online is a wise idea.
5. My family who are important to me would think that using the website to shop online is a good idea.
6. My family who are important to me would think I should use the website to shop online.

Continuance intention *(Strongly disagree . . .Strongly agree)*
Adapted from (Yang and Peterson, 2004).

1. I say positive things about the website I use for my online shopping to other people.
2. I would recommend the website I use for my online shopping to those who seek my advice about such matters.
3. I would encourage friends and relatives to use the website I use for my online shopping.

4. I would post positive messages about the website I use for my online shopping on some Internet message board.
5. I intend to continue to do business with the present web site.
6. I intend to do more business with the present web site.

Confirmation *(Strongly disagree . . .Strongly agree)*
Adapted from (Bhattacherjee, A., 2001a).

1. The website I use for my online shopping execution meets my expectations.
2. My website I use for my online shopping gives me all the information and tools needed to place and execute purchases.
3. My online shopping experience via the internet falls short of my expectations.
4. The website I use for my online shopping is generally good at handling questions or complaints before or after a purchase.
5. After-sales service that provided by the website I use for my online shopping meets my expectations.
6. I generally get the level of service I expect from the website I use for my online shopping.
7. The website I use for my online shopping provides me with customised one-on-one marketing, as I would expect.
8. Products and services recommended to me by the website I use for my online shopping meet my expectations.
9. The direct marketing activities of the website I use for my online shopping meet my expectations.

Satisfaction *(Strongly disagree . . .Strongly agree)*
Adapted from (Bhattacherjee, A., 2001a).

1. I am satisfied with my decision of using the website for my online shopping.
2. My choice to use the website for my online shopping was a wise one.
3. I am not happy with my earlier decision to use the website for my online shopping.
4. My experience with using the website for my online shopping was very unsatisfactory.
5. I think I did the right thing by deciding to use the website for my online shopping.
6. If I were to do it again, I would feel different about using the website for my online shopping.

Loyalty incentive *(Strongly disagree . . .Strongly agree)*
Adapted from (Bhattacherjee, A., 2001a).

1. The website I use for my online shopping offers incentives for its continued use, such as frequent flier miles or bonus points.
2. I am rewarded for my continued patronage of the website I use for my online shopping.
3. The website I use for my online shopping generally does not give me any loyalty incentives for my continued use of its services.

Perceived Vendor Reputation *(Strongly disagree . . .Strongly agree)*
Adapted from (McKnight *et al*, 2002b).

1. The website I use for my online shopping is well respected by the profession.
2. The website I use for my online shopping is reputable firm.

APPENDIX E: PILOT STUDY SURVEY QUESTIONNAIRES (ENGLISH AND ARABIC LANGUAGES)

Brunel UNIVERSITY WEST LONDON

Customer Continuance e-Shopping Intention In the developing countries - The case of Saudi Arabia

I am currently a PhD researcher at the Business School, Brunel University in West London, UK. As part of my academic research, I am investigating and understanding the factors that influence continuance online shopping in the Kingdom of Saudi Arabia. In this context, I would highly appreciate if you could kindly give a few minutes of your valuable time to complete this questionnaire. It should take you about 15 – 20 minutes to complete.

In the context of this questionnaire, e-shopping, electronic shopping, online shopping, and internet shopping are considered the same. All these activities can include the activity of searching, buying, and selling, products and services through the internet.

Your participation in this study is completely voluntary. There are no foreseeable risks associated with this project. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any point. It is very important for us to learn your opinions.

Your survey responses will be strictly confidential. If you have questions at any time about the survey or the procedures, you may contact me at my email address specified below.

Your contribution to this questionnaire would help us understand the factors that influence continuance online shopping

Thank you very much for your time and support.

Talal Al-maghrabi
PhD Researcher
Brunel Business School
Marketing Department
Brunel University
United Kingdom
Talal.Almaghrabi@brunel.ac.uk

Dr Charles Dennis FCIM
Senior Lecturer
Brunel Business School
Brunel University
Uxbridge, Middlesex, UB8 3PH, United Kingdom
Tel: +44 (0) 1895 265242
E-mail: Charles.Dennis@brunel.ac.uk

Please express your extent of agreement or disagreement with the following

	Strongly disagree	Dis-agree	Some what disagree	Neutral	Some what agree	Agree	Strongly agree
1. Learning to use the website I use for my online shopping is easy.							
2. It is easy to get the website I use for my online shopping to do what I want.							
3. The interactions with the website I use for my online shopping are clear and understandable.							
4. The website I use for my online shopping is easy to use.							
5. The website I use for my online shopping is flexible to interact with.							
6. The website I use for my online shopping is useful for searching and purchasing.							
7. The website I use for my online shopping improves my performance in searching and purchasing.							
8. The website I use for my online shopping enables me to search and purchase faster.							
9. The website I use for my online shopping enhances my effectiveness in searching and purchasing.							
10. The website I use for my online shopping makes it easier to search for and purchase.							
11. The website I use for my online shopping increases my productivity in searching and purchasing.							
12. I believe that the website I use for my online shopping would act in my best interest.							
13. If I required help, the website I use for my online shopping would do its best to help me.							
14. The website I use for my online shopping is interested in my well-being, not just its own.							
15. The website I use for my online shopping is truthful in its dealings with me.							
16. I would characterize the website I use for my online shopping as honest.							
17. The website I use for my online shopping would keep its commitments.							
18. The website I use for my online shopping is sincere and genuine.							
19. The website I use for my online shopping is competent and effective in providing online business.							
20. The website I use for my online shopping performs its role of giving shopping advice							

	Strongly disagree	Dis-agree	Some what disagree	Neutral	Some what agree	Agree	Strongly agree
very well.							
21. Overall, the website I use for my online shopping is a capable and proficient Internet shopping provider.							
22. In general, the website I use for my online shopping is very knowledgeable about its service.							
23. When an important shopping issue or problem arises, I would feel comfortable depending on the information provided by the website I use for my online shopping.							
24. I can always rely on the website I use for my online shopping in a tough shopping situation.							
25. I feel that I could count on the website I use for my online shopping to help with a crucial shopping problem.							
26. If I had a challenging shopping problem, I would want to use the website I use for my online shopping again.							
27. Overall, this website worked very well technically.							
28. Visually, this website resembled other sites I think highly of.							
29. This website was simple to navigate.							
30. On this website, it was easy to find the information I wanted.							
31. This website clearly showed how I can contact or communicate with online shopping customer service.							
32. The website I use for my online shopping is well respected by the profession.							
33. The website I use for my online shopping is reputable firm.							
34. The website I use for my online shopping execution meets my expectations.							
35. My website I use for my online shopping gives me all the information and tools needed to place and execute purchases.							
36. My online shopping experience via the internet falls short of my expectations.							
37. The website I use for my online shopping is generally good at handling questions or complaints before or after a purchase.							
38. After-sales service that provided by the website I use for my online shopping meets my expectations.							
39. I generally get the level of service I expect from the website I use for my online							

	Strongly disagree	Dis-agree	Some what disagree	Neutral	Some what agree	Agree	Strongly agree
shopping.							
40. The website I use for my online shopping provides me with customised one-on-one marketing, as I would expect.							
41. Products and services recommended to me by the website I use for my online shopping meet my expectations.							
42. The direct marketing activities of the website I use for my online shopping meet my expectations.							
43. I am satisfied with my decision of using the website for my online shopping.							
44. My choice to use the website for my online shopping was a wise one.							
45. I am not happy with my earlier decision to use the website for my online shopping.							
46. My experience with using the website for my online shopping was very unsatisfactory.							
47. I think I did the right thing by deciding to use the website for my online shopping.							
48. If I were to do it again, I would feel different about using the website for my online shopping.							
49. The website I use for my online shopping offers incentives for its continued use, such as frequent flier miles or bonus points.							
50. I am rewarded for my continued patronage of the website I use for my online shopping.							
51. The website I use for my online shopping generally does not give me any loyalty incentives for my continued use of its services.							
52. Shopping online in this website would be fun for its own sake.							
53. Shopping online in this website would make me feel good.							
54. Shopping online in this website would be boring.							
55. Shopping online in this website would involve me in the shopping process.							
56. Shopping online in this website would be exciting.							
57. Shopping online in this website would be enjoyable.							
58. Shopping online in this website would be uncomfortable.							
59. Shopping online in this website would be interesting.							
60. Most people who are important to me							

	Strongly disagree	Dis-agree	Some what disagree	Neutral	Some what agree	Agree	Strongly agree
would think that using the website to shop online is a wise idea.							
61. Most people who are important to me would think that using the website to shop online is a good idea.							
62. Most people who are important to me would think I should use the website to shop online.							
63. My family who are important to me would think that using the website to shop online is a wise idea.							
64. My family who are important to me would think that using the website to shop online is a good idea.							
65. My family who are important to me would think I should use the website to shop online.							
66. I want to continue using the website I use for my online shopping rather than discontinue its use.							
67. My intentions are to continue using the website I use for my online shopping rather than any alternative means.							
68. If I could, I would like to discontinue use of the website I use for my online shopping							
69. The website I use for my online shopping has fun, interactive features.							
70. The website I use for my online shopping contains entertaining audio clips.							
71. The website I use for my online shopping is designed in a fun and entertaining manner.							
72. The website I use for my online shopping makes good use of the video capability of the web.							
73. The website I use for my online shopping has attractive background and color scheme.							
74. I say positive things about the website I use for my online shopping to other people.							
75. I would recommend the website I use for my online shopping to those who seek my advice about such matters.							
76. I would encourage friends and relatives to use the website I use for my online shopping.							
77. I would post positive messages about the website I use for my online shopping on							

	Strongly disagree	Dis-agree	Some what disagree	Neutral	Some what agree	Agree	Strongly agree
some Internet message board.							
78. I intend to continue to do business with the present web site.							
79. I intend to do more business with the present web site.							
80. I use the internet for my shopping activities frequently.							

81. On average, how many different online shopping places do you visit in a given month (choose only one)?			
	A/ None		B/ 1-2
	C/ 3-5		D/6-20
	E/ Over 20		
82. In general, how much time do you spend doing online shopping activities per week (choose only one)?			
	A/ 0-5 minutes		B/ 6-15 minutes
	C/ 16-60 minutes		D/ Over 60 minutes
83. On average, how frequently do you use the internet for your shopping activities (choose only one)?			
	A/ Once a year		B/ Two or three times a year
	C/ Monthly		D/ Daily

Please ✓the suitable box in all questions

84. Where do you usually access the internet?	Never	Seldom	Sometimes	Mostly	Always
A. Home					
B. Office					
C. University/School					
D. Internet Café					
E. Other - specify:					

85. Gender			
	A\ Male		B\ Female
86. Age			
	A\ Less than 18		B\ Between 18-25 years
	C\ Between 26-35 years		D\ Between 36-45 years
	E\ Above 46 years		
87. What is your current Education level?			
	A\ Less than high school		B\ High school
	C\ Diploma		D\ Bachelor
	E\ Post-graduate		
88. What is your occupation?			
	A\ Government employee		B\ Private sector
	C\ Businessmen		D\ Student
	E\ Other - specify:		
89. Income level per month			
	A\ Less than £1,000		B\ Between £1,000 – £2,000
	C\ Between £2,001 – £4,000		D\ Between £4,001 – £7,000
	E\ Between £7,001 – £10,000		F\ More than £10,000
	G\ Dependent on others (e.g. husband, Parents)		

Please Tick as many as apply

90. Why do you use the Internet?			
	A\ Information searching (using search engines e.g. Google ...)		B\ Entertainment
	C\ Social e.g. Chat , e-mail		D\ Work related
	E\ Studies related		F\ Online purchasing
	G\ Online banking		H\ Other - specify:

91. How important the following issues when purchasing online	Completely unimportant'	Not important	Natural	Important	Very Important
A. Security					
B. Price					
C. Service/delivery					
D. Quality					
E. Payment Method					
F. Language barrier					
G. No concerns					
H. Other - specify:					

92. How much is your annual spending on online shopping?			
	A\ None		B\ Between £100 - £500
	C\ Between £501 - £1,000		D\ More than £1,000
93. Which companies do you trust more?			
	A\ Local companies		B\ International companies
	C\ I trust them both the same		
94. What is the most likely payment method, you use for online shopping			
	A\ Credit Card /Visa		B\ Cheque
	C\ Cash at delivery		D\ Other - specify:

95. When comparing e-shopping in Saudi Arabia with others, Do you think that E-shopping is	Strongly Disagree	Do not agree	Neutral	Agree	Strongly Agree
A. Well developed					
B. Need extra effort to improve					
C. Will be the Ideal way of shopping in the near future					
D. Will never be suitable for everyone					
E. In need for Government Support					
F. The improvement of e-commerce will depend on the internet growth					
G. I do not know					
H. Other - specify:					

On average, how much time per week do you	None	0–30 Min	30–60 Min	1–2 hours	2–4 hour	4–8 hours	8> hours

spend on each of the following Web activities?					s		
96. . . . . reading newspapers on the Web?							
97. . . . . reading and/or posting messages to news groups?							
98. . . . . accessing information on the Web about products and services you may buy?							
99. . . . . shopping (i.e., actually purchasing something) on the Web?							

Please ✓ ALL options those apply to you

100. If you have bought some things over the internet in the last six months, what did you buy? Please circle the number of all that apply.	
F. Books	
G. Music CD or DVD or videotapes	
H. Clothes	
I. Sports equipment	
J. Travel reservation and ticketing	
K. Hotel booking	
L. Other - specify:	

Please ✓ ONLY the option that apply to you

101. Which region of Saudi Arabia do you live in?	
A. East region	
B. West region	
C. Middle region	
D. North region	
E. South region	

بسم الله الرحمن الرحيم

دراسة لمعرفة العناصر المؤثرة في استمرارية التسوق الالكتروني عبر الانترنت

أنا باحث لنيل درجة الدكتوراة في جامعة برونيل بلندن - المملكة المتحدة. هذا الاستبيان الالكتروني يجرى كجزء من أطروحتي لشهادة الدكتوراة لفهم العناصر المؤثرة في استمرارية التسوق الالكتروني عبر الانترنت في المملكة العربية السعودية. أرجو منك الإجابة على الأسئلة بمصداقية، علما أنه لا يمكن التعّرف عليك من خلال المعلومات المقدمة. من المتوقع أن يستغرق الاستبيان منك ما بين (15) إلى (20) دقيقة لإكماله.

علما بان (التسوق الالكتروني، التسوق عبر الانترنت، الشراء الالكتروني، أو الشراء عبر الانترنت) يمكن تعريفه بأنه مجموعة من أنشطة وعمليات البحث عن المعلومات، بيعا وشراء والمقارنة بين الخدمات والمنتجات عبر الانترنت.

الرجاء الإجابة عن الأسئلة في الفراغ المتاح عبر الاستبيان الالكتروني. لا تستغرق وقتا طويلا في الإجابة على أي سؤال. عادة ما تكون أول أفكارك هي الأفضل! حتى ولو شعرت أن النقاط المغطاة لا تنطبق عليك أرجو عدم إهمالها. قد تبدو بعض الأسئلة مكررة، هذه الأسئلة تقيس بُعد سيكولوجي في تفكير الإنسان والذي لا يمكن أن يقاس بسؤال واحد أو سؤالين. أجوبتك في غاية الأهمية في بناء صورة دقيقة للقضايا المهمة المتعلقة بتحديد عوامل قبول واستمرارية التسوق عبر الإنترنت.

أرجو التكرم بإكمال الاستبيان لأهمية ذلك شاكراً لكم مساعدتي. في حالة وجود أي استفسارات لديكم أو تودون المزيد من المعلومات الرجاء التواصل معي عبر البريد: talal.almaghrabi@brunel.ac.uk
شاكراً تعاونكم سلفاً.

أخوكم/ طلال المغربي
باحث دكتوراة في التسويق والتجارة الالكترونية
كلية برونيل للأعمال
جامعة برونيل، لندن، المملكة المتحدة
Talal.Almaghrabi@brunel.ac.uk

الدكتور/ تشارلز دينيز
مشرف بحث الدكتوراة ومحاضر بالجامعة
كلية برونيل للأعمال
جامعة برونيل، لندن، المملكة المتحدة
تلفون +44 (0) 1895 265242
ايميل Charles.Dennis@brunel.ac.uk

الاستبانة التجريبية

ما مدى موافقتك أو عدم موافقتك على الآتي:

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
1. تعلم استخدام الموقع في تسوقي الالكتروني سهل بالنسبة لي							
2. من السهل جعل الموقع الذي استخدمه في التسوق الالكتروني أن يعمل ما أريد							
3. التفاعل مع الموقع الذي استخدمه في تسوقي الالكتروني واضح و مفهوم							
4. الموقع الذي استخدمه في تسوقي الالكتروني سهل الاستخدام بالنسبة لي							
5. الموقع الذي استخدمه في تسوقي الالكتروني مرن للتفاعل معه							
6. الموقع الذي استخدمه في تسوقي الالكتروني مفيد في البحث و الشراء							
7. الموقع الذي استخدمه في تسوقي الالكتروني طور من أدائي في البحث و الشراء							
8. الموقع الذي استخدمه في تسوقي عبر الانترنت يمكنني من البحث والشراء بطريقة أسرع							
9. الموقع الذي استخدمه في تسوقي الالكتروني يحسن من استفادتي من البحث و الشراء							
10. الموقع الذي استخدمه في تسوقي الالكتروني يجعل البحث و الشراء أكثر سهولة							
11. الموقع الذي استخدمه في تسوقي الالكتروني يزيد من إنتاجيتي في البحث والشراء							
12. اعتقد إن الموقع الذي استخدمة في تسوقي الالكتروني سوف يقوم بما هو الأفضل لمصلحتي							
13. عند الحاجة لمساعدة فان موقعي الذي استخدمه في التسوق الالكتروني يقوم بأفضل ما في وسعه لمساعدتي							
14. الموقع الذي استخدمه في تسوقي الالكتروني يهتم بي وليس فقط بمصالحه							
15. الموقع الذي استخدمه في تسوقي الالكتروني صادق في تعاملاته معي							
16. أستطيع أن اصف موقعي الذي استخدمه في تسوقي الالكتروني بأنه آمين							
17. الموقع الذي استخدمه في تسوقي الالكتروني يفي بالتزاماته							
18. الموقع الذي استخدمه في تسوقي الالكتروني صادق و أمين							
19. أستطيع أن اصف الموقع الذي استخدمه على الانترنت بأنه ماهر وفعال في توفير خدمات التسوق الالكتروني							
20. الموقع الذي استخدمه عبر الانترنت يؤدي دوره في تقديم الخدمات الالكترونية بطريقة جيدة جدا							
21. بشكل عام الموقع الذي استخدمه عبر الانترنت متمكن وبارع في توفير خدمات التسوق الالكتروني عبر الانترنت							
22. بشكل عام الموقع الذي استخدمه لديه معرفة بمعاملات التسوق الالكتروني و خدماته							

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
23. عندما تظهر مسالة أو مشكلة لها علاقة بالتسوق سأشعر بالارتياح في اعتمادي على المعلومات المقدمة من الموقع الذي استخدمه في تسوقي عبر لانترنت							
24. أستطيع أن اعتمد دائما على موقعي الذي استخدمه في التسوق الالكتروني في حالات التسوق المهمة							
25. اشعر أني أستطيع أن اعتمد على الموقع الذي استخدمه في تسوقي الالكتروني للمساعدة في العمليات التسوق الالكترونية المهمة							
26. إذا واجهت مرة أخرى صعوبة في تسوقي, فإني أرغب في استخدام موقعي الذي استخدمة في تسوقي عبر الإنترنت مرة أخرى							
27. بشكل عام، الموقع الالكتروني الذي أتسوق منه يعمل بشكل جيد تقنيا							
28. مظهر الموقع الذي أتسوق منه عبر الانترنت يضاهي المواقع الأخرى التي اعتقد بها بدرجة عالية							
29. الموقع الالكتروني الذي أتسوق منه سهل الوصول إليه							
30. أستطيع أن أجد المعلومات التي تلبي احتياجاتي بسهولة في الموقع الذي استخدمه في تسوقي الالكتروني							
31. عند التسوق الالكتروني الموقع يعطي بوضوح المعلومات التي أحتاجها للاتصال والتواصل مع مركز خدمة العملاء							
32. الموقع الذي أتسوق منه عبر الانترنت له الاحترام في مجاله							
33. الموقع الذي استخدمه في تسوقي الالكتروني عبر الانترنت له سمعه جيدة							
34. العمليات التسوقية التي يقدمها الموقع الذي استخدمة في تسوقي عبر الانترنت تطابق توقعاتي							
35. يوفر الموقع الذي استخدمه في تسوقي الالكتروني جميع المعلومات و الأدوات التي احتاجها لتنفيذ عملية التسوق و الشراء							
36. تجربتي في التسوق عبر الانترنت اقل من توقعاتي							
37. الموقع الذي استخدمه في تسوقي يكون جيدا في تعامله مع استفسارات و شكاوى العملاء قبل و بعد الشراء							
38. خدمات ما بعد البيع التي يقدمها الموقع الذي استخدمه في تسوقي الالكتروني تطابق توقعاتي							
39. احصل على مستوي الخدمة الذي أتوقعه من الموقع الذي استخدمه في تسوقي عبر الانترنت							
40. يقدم الموقع الذي استخدمه في تسوقي الالكتروني اهتمام خاص لكل عميل كما توقعت							
41. المنتجات و الخدمات التي يقدمها لي الموقع الذي استخدمه في تسوقي الالكتروني تطابق توقعاتي							
42. أنشطة التسوق المباشر التي يقدمها الموقع الذي استخدمه في تسوقي عبر الانترنت تطابق توقعاتي							

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
43. راضي عن قرار استخدام الانترنت للتسوق الالكتروني							
44. اختياري للتسوق في الموقع الذي استخدمه الكترونيا كان حكيما							
45. أنا غير سعيد بقراري السابق لاستخدام الموقع الذي استخدمه للتسوق عبر الانترنت							
46. تجربتي في استخدام الموقع الذي استخدمه للتسوق عبر الانترنت كانت غير مرضية							
47. اعتقد إنني اتخذت القرار الصحيح لاستخدام الموقع الذي استخدمه في التسوق عبر الانترنت							
48. لو رغبت في التسوق الالكتروني مرة أخرى سوف اشعر بطريقة مختلفة							
49. يقدم الموقع الذي استخدمه في التسوق الالكتروني الكثير من الحوافز لعملائه الذين يستمرون في استخدام خدماته مثل النقاط و الأميال وغيرها							
50. احصل على مكافآت على الاستمرار في استخدام الموقع الذي أتسوق منه عبر الانترنت							
51. الموقع الذي استخدمة في تسوقي عبر الانترنت عموما لا يقدم أي حوافز لعملائة المخلصين عند الاستمرار في استخدام خدماتة أو منتجاته							
52. التسوق عبر الانترنت ممتعا بحد ذاته							
53. التسوق الالكتروني من خلال الموقع الذي استخدمة يجعلني اشعر براحة							
54. التسوق عبر الانترنت من خلال الموقع الذي أستخدمه مملا							
55. التسوق الالكتروني من خلال الموقع الذي أستخدمه يشركني في العملية التسوقية							
56. التسوق عبر الانترنت من خلال الموقع الذي أستخدمه يكون مثير							
57. التسوق عبر الانترنت من خلال الموقع الذي استخدمه ممتعا							
58. التسوق عبر الانترنت من خلال الموقع الذي استخدمه يكون غير مريح							
59. التسوق عبر الانترنت من خلال الموقع الذي استخدمه مفيدا							
60. معظم الأشخاص المهمين بالنسبة لي يعتقدون أن التسوق عبر الانترنت فكرة حكيمة							
61. أكثر الزملاء المهمين بالنسبة لي يعتقدون أن استخدام التسوق الالكتروني عبر الانترنت فكرة جيدة							
62. الأشخاص المهمين بالنسبة لي يعتقدون انه يجب علي استخدام الإنترنت للتسوق							
63. أسرتي تعتقد بان التسوق الالكتروني عبر الانترنت فكرة حكيمة							
64. أسرتي تعتقد بان التسوق الالكتروني عبر الانترنت فكرة جيدة							
65. أسرتي تعتقد أنه يجب علي أن استخدم التسوق الالكتروني عبر الانترنت							
66. أود الاستمرار في استخدام الموقع الذي استخدمه للتسوق الالكتروني عبر الانترنت							

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
67. انوي الاستمرار في استخدام التسوق الالكتروني عبر الموقع الذي استخدمه في الانترنت بدلا من إيجاد بدائل أخرى							
68. إذا كنت قادرا، فاني ارغب عدم الاستمرار في استخدام الموقع الذي أتسوق منه عبر الانترنت							
69. الموقع الذي استخدمه في تسوقي عبر الانترنت يحتوي على خصائص المتعة والتفاعل							
70. الموقع الذي استخدمه في تسوقي عبر الانترنت يحتوي على مقاطع صوتيه ممتعة							
71. الموقع الذي استخدمه في تسوقي عبر الانترنت مصمم بطريقة ممتعة ومسلية							
72. الموقع الذي استخدمه في تسوقي عبر الانترنت يستخدم الفيديو بطريقة جيدة							
73. الموقع الذي استخدمه في تسوقي عبر الانترنت يحتوي على ألوان وخلفيات جذابة							
74. أتكلم بصورة ايجابية عن الموقع الذي استخدمه للتسوق عبر الانترنت							
75. انصح الذين يطلبون مني الاستشارة باستخدام الموقع الذي استخدمه للتسوق عبر الانترنت							
76. أشجع الأصدقاء والأقرباء لاستخدام الموقع الالكتروني الذي استخدمه في تسوقي عبر الانترنت							
77. أضع رسائل ايجابية عن الموقع الذي استخدمه لتسوقي الالكتروني في المواقع المختلفة							
78. انوي الاستمرار في التسوق عبر الموقع الحالي الذي استخدمه في تسوقي عبر الانترنت							
79. انوي زيادة عدد مرات التسوق عبر الموقع الحالي الذي استخدمه عبر الانترنت							
80. أنا استخدم الانترنت دائما في تسوقي							

81. في المتوسط، كم عدد المحلات و المواقع التي تزورها في الشهر عند التسوق الالكتروني (اختر جواب واحد فقط)

أ. لا شئ		ب. 1-2	
ت. 3-5		ث. 6-20	
ج. أكثر من 20			

82. في العادة ما هو الوقت الذي تقضية أسبوعيا في التسوق الالكتروني (اختر جواب واحد فقط)

	أ. اقل من5 دقائق		ب. 6-15 دقيقة
	ت. 16-60 دقيقة		ث. أكثر من 60 دقيقة

83. في المتوسط، كم مرة في السنة تستخدم الانترنت في الأنشطة التسويقية (اختر جواب واحد فقط)

	أ. مرة في السنة		ب. مرتين إلي ثلاثة في السنة
	ت. شهريا		ث. يوميا

ضع علامة صح عند الاختيارات المناسبة

84. أستخدم الانترنت في	**أبدا**	**نادرا**	**أحيانا**	**غالبا**	**دائما**
أ. المنزل					
ب. العمل					
ت. المدرسة- الجامعة-الكلية					
ث. مقهى الانترنت					
ج. في مكان آخر- فضلا حدد:					

85. الجنس			
	أ. ذكر		ب. أنثى
86. العمر			
	أ. اقل من 18 سنة		ب. من 18-25 سنة
	ت. من 26-35 سنة		ث. من 36-45 سنة
	ج. أكثر من 46 سنة		
87. المستوى التعليمي			
	أ. اقل من الثانوية العامة		ب. ثانوية عامة
	ت. دبلوم		ث. جامعي
	ج. دراسات عليا		ح. أخرى فضلا -حدد:
88. الوظيفة			
	أ. موظف حكومي		ب. موظف قطاع خاص
	ت. رجل/ امرأة أعمال		ث. طالب
	ج. أخرى- فضلا حدد:		
89. الدخل الشهري			
	أ. اقل من 4000 ريال		ب. 4000-6000 ريال
	ت. 6001-8000 ريال		ث. 8001-10000 ريال
	ج. 10001-15000 ريال		ح. أكثر من 15000 ريال
	خ. اعتمد على (الزوج _ العائلة)		
90. أستخدم الانترنت من اجل			
	أ. البحث عن المعلومات		ب. الترفيه
	ت. للاجتماعيات (الايميل- الشات)		ث. مهام خاصة بالعمل
	ج. مهام خاصة بالدراسة		ح. التسوق و الشراء بالانترنت
	خ. الأعمال البنكية		د. أخرى فضلا -حدد:

91. ما مدى أهمية العناصر التي تأخذها بالاعتبار عند التسوق بالانترنت	**غير هام تماماً**	**غير هام**	**محايد**	**هام**	**هام جداً**
أ. الأمن					
ب. الأسعار					
ت. الخدمات					
ث. الجودة					
ج. طرق الدفع					
ح. اللغة المتاحة					
خ. لا يوجد قلق					
د. أخرى –فضلا حدد:					

92. ما هو معدل الإنفاق السنوي على الشراء من الانترنت؟			
	أ. لا شئ		ب. من 100 ريال - 1000 ريال
	ت. من 1001 إلى 5000 ريال		ث. أكثر من 5001 ريال
93. أي الشركات تحوز على ثقتكم أكثر؟			
	أ. الشركات المحلية		ب. الشركات العالمية
	ت. الشركات المحلية و العالمية		
94. ما هي آلية الدفع الأكثر استخداما من قبلكم عند التسوق عبر الانترنت؟			
	أ. البطاقة الائتمانية		ب. الشيكات
	ت. الدفع نقدا عند التسليم		ث. أخرى-فضلا حدد:

95. **عندما تقارن التسوق الالكتروني في السعودية مع الدول الأخرى، هل تعتقد انه**	**لا أوافق بشدة**	**لا أوافق**	**محايد**	**أوافق**	**أوافق بشدة**
متطور جدا					

يحتاج إلى جهد إضافي للتحسن					
سوف يكون الطريقة المثلى قريبا					
لن يكون الطريقة المناسبة لكل فرد					
يحتاج لدعم حكومي للتقدم					
تطور التسوق الالكتروني يعتمد على نمو انتشار الانترنت					
لا اعرف					
أخرى –فضلا حدد:					

في المعدل، كم مرة في الأسبوع تستخدم الانترنت في الأنشطة التالية:	**أبدا**	**30-1 دقيقة**	**60-31 دقيقة**	**2-1 ساعة**	**4-2 ساعات**	**8-4 ساعات**	**أكثر من 8 ساعات**
96. ..... قراءة الجرائد والمجلات في الانترنت							
97. ..... قراءة وإرسال ايميل للأصدقاء والمجموعات							
98. ..... الحصول على معلومات من الانترنت لخدمات ومنتجات يمكن لي شرائها							
99. ..... تسوق (مثل شراء) بعض الخدمات أو المنتجات من الانترنت							

ضع علامة ✓ أمام جميع الإجابات المطابقة

100. إذا اشتريت بعض الأشياء من الانترنت خلال الستة الأشهر الماضية، ما هي تلك الأشياء	
A. كتب	
B. أشرطة سي دي- دي في دي و فديو	
C. ملابس	
D. مواد رياضية	
E. حجز رحلات السفر و التذاكر	
F. حجز الفنادق	
G. أخرى- فضلا حدد:	

ضع علامة ✓ أمام الإجابة المطابقة

101. في أي منطقة من المملكة العربية السعودية تسكن	
A. المنطقة الشرقية	
B. المنطقة الغربية	
C. المنطقة الوسطى	
D. المنطقة الشمالية	
E. المنطقة الجنوبية	

APPENDIX F: PILOT STUDY

A preliminary questionnaire for this pilot study was prepared for the following reasons:

- To detect any problems in the research design and instrumentation.
- To delete any irrelevant items in the questionnaire for the study.
- To test the applicability of the measurement scales.

The aim of this pilot study was to ensure that the items in the survey used for each construct were understandable to the respondents to ensure a high level of content validity (Churchill, 1979). I have asked most of the participants to identify the questions or items that were not clear to them, and I provided advice on modifying those items, especially as the survey was available in both Arabic and English languages.

After validating the pilot study, the final survey considered four important criteria in its design: speed, information, collection, costs and non-response rate (Tull and Hawkins, 1993).

Data collection for this pilot study took place between December 24, 2006 and January 24, 2007, in Saudi Arabia and London. A draft paper survey was made, which was then pre-tested by two people to test its clarity and layout. After the revision, an informal pre-test was given to 35 people. 22 valid surveys returned back (data were pooled from 22 people: 11 in Saudi Arabia and 11 in London), 6 returned incomplete but with good feedback, and 7 were not received.

Participants were asked to apply the questions to the websites that they used most frequently for their e-shopping when considering buying products, services, or searching for information. Likewise, participants were asked to examine the survey instrument, and comment on its format and length, as well as the wording of each individual item. This was to measure participants' thoughts and opinions about e-shopping. Ambiguous items would be considered for rewording in the final study based on participant feedback.

Classification and demographic data such as age, gender, Internet usage, purchase intention, income, on-line issues, and on-line spending were collected at the beginning of the session. This would be reversed on the final data collection to be at the end of the session in order to save time and allow participants to concentrate on the main constructs items.

The 22 people gave their opinions of the survey, and the way the questions were worded. This valuable feedback would be considered later when revising the final survey. The following observations summarize the feedback gained from the pilot or pre-test survey:

- The survey was slightly long.
- It is hard to have the commitment of people to participate.
- Layout, length, language and time are very important items when doing the survey.
- Only the English version was used in the pilot study, even in Saudi Arabia.
- Some questions were deemed less important, and others were not clear and caused confusion, such as the use of the phrases *wise to use* and *good to use*.
- Similarly worded questions might cause confusion because of the translation process if left, especially in the final survey where two versions will exist (Arabic and English).

The pilot study survey was collected from a sample of 22 in Saudi Arabia and UK. They represent online users who are undergraduates, postgraduates, and working professionals and experts. The UK samples represent some postgraduate Saudi students who are studying in the UK, as well as other non-Saudi students at Brunel University. 81.8% of the participants were

male and 18.2% were female. Most respondents were in their late 20s (n=18), 13.6% between age 18-25, 68.2% age 26-35, 13.6% age 36-45, and 4.5% aged 46 and above.

COUNTRY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Saudi	11	50.0	50.0	50.0
	UK	11	50.0	50.0	100.0
	Total	22	100.0	100.0	

GENDER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	18	81.8	81.8	81.8
	Female	4	18.2	18.2	100.0
	Total	22	100.0	100.0	

AGE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	3	13.6	13.6	13.6
	26-35	15	68.2	68.2	81.8
	36-45	3	13.6	13.6	95.5
	More than 46	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Their education levels were 31.8% undergraduate, and 68.2% postgraduate. 18.2% of them work in the public sector (government employee), 45.5% in the private sector, and 36.4% were students. Almost 41% has a range of income between £1,000-£2,000.

EDUCATION LEVEL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High school	2	9.1	9.1	9.1
	Diploma	1	4.5	4.5	13.6
	Bachelor	4	18.2	18.2	31.8
	Post-grad	15	68.2	68.2	100.0
	Total	22	100.0	100.0	

OCCUPATION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Gov Employee	4	18.2	18.2	18.2
	Private Sector	10	45.5	45.5	63.6
	Student	8	36.4	36.4	100.0

	Total	22	100.0	100.0

INCOME LEVEL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<SR4,000 (£1,000)	2	9.1	9.1	9.1
	SR4,000-SR6,000 (£1,000-2,000)	9	40.9	40.9	50.0
	SR6,001-SR8,000 (£2,001-4,000)	3	13.6	13.6	63.6
	SR8,001-SR10,000 (£4,001-7,000)	4	18.2	18.2	81.8
	SR10,001-SR15,000 (£7,001-10,000)	1	4.5	4.5	86.4
	>SR15,001 (>£10,000)	2	9.1	9.1	95.5
	Dependent on others	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Respondents had purchased online an average of 2.6 times during the last year. 50% of them spend or intend to spend £100-£500 per year. 59.1% of the respondents used the Internet to purchase airline tickets, 40.9% books, 22.7% CD-DVD and video tapes, and 22.7% purchased other items, such as banking, electronics, and road tax. When respondents were asked why they used the Internet, 86.4% used it for information searching, 54.5% for social networking (emails, etc), 68.2% for banking, 31.8% for entertainment, 72.7% for work related activities, and 59.1% used it for study related activities. In these questions, respondents could choose more than one option.

To measure the actual usage of the respondents I asked them, on average, how many different online shopping places they visit in a given month; 38.2% of them visit between one and five websites. When they were asked how much time they spend doing online shopping activities per week, about 61% of them spend 16-60 minutes for online shopping activities. 38% said they spend less than 16 minutes, and 22.7% spend more than an hour. When they were asked how frequently they use the Internet for shopping activities, 72.7% of them said used it monthly, 22.7% used it two to three times a year, and 4.5% used it once a year.

INTERNET IS USED FOR

Used for		Frequency	Percent
1	Info. search	19	86.4
2	Entertainment	7	31.8
3	Social	12	54.5
4	Work	16	72.7
5	Study	13	59.1
6	Banking	15	68.2

INTERNET SPENDING OR INTENTION TO SPEND

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	2	9.1	9.1	9.1
	SR100-1,000 (£100-500)	11	50.0	50.0	59.1
	SR1,001-5,000 (£501-1,000)	4	18.2	18.2	77.3
	>SR5,001 (£>1,001)	5	22.7	22.7	100.0
	Total	22	100.0	100.0	

ITEMS PURCHASED OR INTENDED TO PURCHASE ONLINE

Items purchased online	Frequency	Percent
Books	9	40.9
CD, DVD, Video	5	22.7
Cloths	17	22.7
Sport equip.	1	4.5
Travel and tickets	13	59.1
Hotel booking	11	50
Others	5	22.7

Validity in the social science research tries to measure intangibles, such as intention, behaviours, satisfaction, and trust. This problem makes it hard to know for certain whether we are measuring what we want to measure. The result is that social scientists have developed their own means of measuring such concepts.

Validity is the capacity of a test to tell what we already know (Bannister and Mair, 1968).

Different types of validity are used: Face Validity asks the participants if they feel that the questions represent the purpose of the study that has been described in the covering letter. All respondents agreed that the questions represented the introduced purpose of the study. The Content Validity assesses the constructs that were adopted from existing research that received content validity. Several faculty members from Brunel Business School, PhD students in Brunel and OM-Alqura University, in Saudi Arabia, and R&D department in Saudi Airlines have been asked to assess the questionnaire items to determine if it represents the study adequately. All of them have agreed that it does. Finally, Criterion Validity means that the construct assessment can predict or agree with constructs external to the assessed construct.

Ten constructs were measured in this study: Usefulness, Ease of use, Trust (Trust intention and trust willingness), Subjective Norm, Actual usage, Confirmation, Satisfaction, Enjoyment, Loyalty incentive, and Continuance intention to use. All constructs were measured using a multiple item, fully anchored, seven-point, Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree).
All initial scale items were taken from previously validated measures in IS use, or TAM and ECT literatures. Scale items were reworded to relate to the e-shopping continuance usage

context. Whenever possible, at least three items were included per construct for adequate reliability, as recommended by Nunnally (1978).
Reliability is the way of testing the stability of individual measurement items across replications from the same source of information (Straub, 1989).
Discriminant validity could not be assessed at this stage because a larger sample is required (Hair *et al*. 1998). Cronbach's α is used to examine the reliability of each construct. Convergent validity means the extent to which the measures for a variable act as if they are measuring the underlying theoretical construct because they share variance (Schwab, 1980). Internal consistency reliability is generally considered a necessary but not sufficient condition for convergent validity (Schwab, 1980).
Passing this test is a prerequisite for further analysis. The Cronbach's α values of all the scales were acceptable, with the lowest intended use being at 0.71 (Nunnally and Bernstein 1994). All other alpha coefficients were at least 7.3. SPSS 13 was used for this data analysis.

OVER ALL RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.896	0.920	13

SUMMARY ITEM STATISTICS

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	27.168	10.364	56.909	46.545	5.491	187.225	13
Item Variances	34.471	6.528	93.896	87.368	14.383	1011.543	13
Inter-Item Covariances	13.712	-.141	55.775	55.916	-396.431	126.354	13
Inter-Item Correlations	0.470	-.014	0.774	0.789	-54.650	0.036	13

The covariance matrix is calculated and used in the analysis.

SCALE STATISTICS

Mean	Variance	Std. Deviation	N of Items
353.18	2587.203	50.865	13

Each variable was assessed for its reliability. In the pilot study, the Cronbach's α was 0.896, which exceeded the recommended alpha of Kline's of >= 0.7. In a social science and as recommended by Bagozzi (Bagozzi, 1994), 0.7 is considered to be acceptable alpha. Bagozzi also considered 0.6 and 0.5 to be an acceptable alpha.

INDIVIDUAL CONSTRUCT ANALYSIS

For my research, it is recommended to maximize the overall Cronbach α by testing each construct and finding if any item could be deleted for better and maximum reliability. The following section will cover all reliabilities for each individual item.

1- CONTINUANCE INTENTION TO USE

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.798	0.828	6

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Continuance intention to use 1	24.73	20.779	0.695	0.627	0.747
Continuance intention to use 2	24.86	19.361	0.670	0.817	0.741
Continuance intention to use 3	24.77	18.851	0.740	0.866	0.725
Continuance intention to use 4	25.55	21.879	0.205	0.243	0.869
Continuance intention to use 5	24.73	20.398	0.500	0.330	0.779
Continuance intention to use 6	25.14	17.838	0.727	0.571	0.722

The Cronbach's α for continuance intention is 0.798, which is with the recommended alpha range. But by looking to the total item statistics, the deletion of item 3 would improve reliability and Cronbach's α to 0.869. This omission is supported by the corrected item-total correction of 0.205, which is less than the recommended correction total item of 3 and above (Field, 2005). After the deletion, Cronbach's α is improved from 0.798 to 0.869 as seen below.

2- PERCEIVED USEFULNESS

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.893	0.901	6

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Perceived usefulness 1	28.23	19.898	0.751	0.709	0.872
Perceived usefulness 2	28.32	18.513	0.688	0.578	0.878
Perceived usefulness 3	28.36	19.766	0.460	0.302	0.921
Perceived usefulness 4	28.50	19.214	0.750	0.755	0.869
Perceived usefulness 5	28.32	18.227	0.806	0.730	0.859
Perceived usefulness 6	28.27	17.065	0.927	0.904	0.838

The Cronbach's α for perceived usefulness is 0.893, which is above the recommended alpha range of >= 0.7. But by looking to the total item statistics, the deletion of item 3 would improve reliability and Cronbach's α to 0.921. This omission is supported by the corrected item-total correction of .460, which is slightly above the recommended correction total item of 0.3 and above (Field, 2005). After the deletion, Cronbach's α is improved from 0.893 to 0.921 as seen below.

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.921	0.923	5

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Perceived usefulness 1	22.59	14.063	0.759	0.708	0.912
Perceived usefulness 2	22.68	12.608	0.734	0.575	0.918
Perceived usefulness 4	22.86	13.361	0.777	0.750	0.907
Perceived usefulness 5	22.68	12.703	0.805	0.730	0.901
Perceived usefulness 6	22.64	11.766	0.926	0.893	0.875

3- SUBJECTIVE NORMS

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.966	0.967	6

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Subjective Norms 1	23.00	58.762	0.915	0.856	0.957
Subjective Norms 2	22.68	62.132	0.845	0.806	0.965
Subjective Norms 3	22.86	60.219	0.861	0.817	0.963
Subjective Norms 4	23.50	58.452	0.850	0.801	0.964
Subjective Norms 5	23.09	57.134	0.948	0.909	0.953
Subjective Norms 6	23.27	55.827	0.935	0.911	0.955

Cronbach's α for subjective norms is 0.966, which is considered excellent and much better than the recommended alpha of >= 0.7. No deletion is recommended as none would improve the current alpha. This is also supported by the corrected item-total correction, as all of them are above the recommended range of 0.3 (Field, 2005).

4- TRUSTING BELIEF

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.924	0.928	11

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Trusting Beliefs Benevolence 1	51.77	83.041	0.446	0.730	0.929
Trusting Beliefs Benevolence 2	51.73	79.446	0.553	0.648	0.925
Trusting Beliefs Benevolence 3	52.32	76.418	0.674	0.781	0.919
Trusting Beliefs Integrity 1	51.82	76.537	0.915	0.880	0.909
Trusting Beliefs Integrity 2	51.68	76.799	0.816	0.813	0.912
Trusting Beliefs Integrity 3	51.73	74.779	0.753	0.834	0.915
Trusting Beliefs Integrity 4	52.00	78.667	0.653	0.813	0.919
Trusting Beliefs Competence 1	51.41	79.110	0.726	0.803	0.916
Trusting Beliefs Competence 2	51.77	76.851	0.767	0.640	0.914

Trusting Beliefs Competence 3	51.36	80.909	0.658	0.777	0.919
Trusting Beliefs Competence 4	51.50	77.500	0.786	0.741	0.913

The Cronbach's α for trusting belief is 0.924, which is above the recommended alpha range of >= 0.7. But by looking to the total item statistics, the deletion of item 1 would improve reliability and Cronbach's α to 0.929. This omission is supported by the corrected item-total correction of 0.446, which is slightly above the recommended correction total item of 0.3 and above (Field, 2005). After the deletion, Cronbach's α is improved from 0.924 to 0.929 as seen below.

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.929	0.932	10

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Trusting Beliefs Benevolence 2	46.59	69.301	0.559	0.559	0.931
Trusting Beliefs Benevolence 3	47.18	67.299	0.639	0.710	0.927
Trusting Beliefs Integrity 1	46.68	66.989	0.900	0.878	0.914
Trusting Beliefs Integrity 2	46.55	66.641	0.837	0.813	0.916
Trusting Beliefs Integrity 3	46.59	64.920	0.761	0.810	0.920
Trusting Beliefs Integrity 4	46.86	67.838	0.702	0.768	0.923
Trusting Beliefs Competence 1	46.27	69.636	0.696	0.752	0.923
Trusting Beliefs Competence 2	46.64	67.290	0.752	0.617	0.920
Trusting Beliefs Competence 3	46.23	70.470	0.681	0.760	0.924
Trusting Beliefs Competence 4	46.36	67.576	0.790	0.723	0.918

5- TRUSTING INTENTIONS WILLINGNESS

RELIABILITY STATISTICS

Cronbach's α Cronbach's α	Cronbach's α Cronbach's α Based on Standardized Items	N of Items
0.749	0.750	4

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Trusting Intentions Willingness 1	14.86	8.314	0.614	0.678	0.664
Trusting Intentions Willingness 2	14.73	6.684	0.637	0.686	0.634
Trusting Intentions Willingness 3	15.27	7.160	0.612	0.414	0.650
Trusting Intentions Willingness 4	14.86	9.171	0.349	0.284	0.789

The Cronbach's α for Trusting Intentions Willingness is 0.749, which is with the recommended alpha range of >=0.7. But by looking to the total item statistics, the deletion of item 4 would improve reliability and Cronbach's α to 0.789. This omission is supported by the corrected item-total correction of 0.349, which is slightly above the recommended correction total item of 0.3 and above (Field, 2005). After the deletion, Cronbach's α is improved from 0.749 to 0.789 as seen below.

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.789	0.800	3

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Trusting Intentions Willingness 1	9.82	4.918	0.735	0.670	0.637
Trusting Intentions Willingness 2	9.68	3.656	0.734	0.683	0.592
Trusting Intentions Willingness 3	10.23	4.946	0.475	0.227	0.879

6- SATISFACTION

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items

0.897	0.903	6

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Satisfaction 1	23.55	62.641	0.655	0.560	0.893
Satisfaction 2	23.95	55.474	0.756	0.829	0.874
Satisfaction 3	25.00	49.714	0.754	0.688	0.875
Satisfaction 4	24.59	51.206	0.700	0.727	0.885
Satisfaction 5	24.14	52.504	0.823	0.786	0.863
Satisfaction 6	24.45	55.022	0.717	0.572	0.879

Cronbach's α for satisfaction is 0.897, which is within the recommended alpha of >=0.7. No deletion is recommended as none would improve the current alpha. This is also supported by the corrected item-total correction as all of them are above the recommended range of 0.3 (Field, 2005).

7- PERCEIVED ENJOYMENT

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.612	0.613	8

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Perceived enjoyment 1	33.36	19.100	0.431	0.451	0.541
Perceived enjoyment 2	33.27	22.779	0.115	0.094	0.638
Perceived enjoyment 3	32.68	22.989	0.130	0.716	0.629
Perceived enjoyment 4	33.55	23.879	0.042	0.485	0.654
Perceived enjoyment 5	33.00	22.095	0.288	0.376	0.587
Perceived enjoyment 6	32.86	18.600	0.545	0.796	0.508

Perceived enjoyment 7	32.73	19.922	0.394	0.724	0.555
Perceived enjoyment 8	32.95	18.045	0.614	0.758	0.486

The Cronbach's α for enjoyment is 0.612, which is below the recommended alpha range of >= 0.7. But by looking to the total item statistics, the deletion of items 2,4, and 5 would improve reliability and Cronbach's α to 0.722. This omission is supported by the corrected item-total correction of .115.130, and 0.042, which is way below the recommended correction total item of 0.3 and above (Field, 2005). Deletion of items 2,4, and 5, which is supported by the corrected item-total correction, would improve Cronbach's α from 0.612 to 0.722, as seen below.

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.722	0.724	5

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Perceived enjoyment 1	19.86	13.171	0.357	0.393	0.727
Perceived enjoyment 3	19.18	14.156	0.315	0.594	0.735
Perceived enjoyment 6	19.36	11.766	0.606	0.716	0.624
Perceived enjoyment 7	19.23	12.851	0.443	0.645	0.690
Perceived enjoyment 8	19.45	11.022	0.727	0.719	0.573

8- LOYALTY INCENTIVES

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.448	0.488	3

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Loyalty incentive 1	8.41	4.063	0.386	0.530	0.141

Loyalty incentive 2	8.41	3.777	0.556	0.530	-.151(a)
Loyalty incentive 3	8.00	5.714	0.000	0.039	0.833

a The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

The Cronbach's α for loyalty incentive is 0.448, which is way below the recommended alpha range of >= 0.7. But by looking to the total item statistics, the deletion of item 3 would improve reliability and Cronbach's α to 0.833. This omission is supported by the corrected item-total correction of .000, which does not meet the recommended correction total item of 0.3 and above (Field, 2005). After the deletion, Cronbach's α is improved from 0.448 to 0.833, as seen below.

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.833	0.835	2

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Loyalty incentive 1	4.00	1.524	0.717	0.514	.(a)
Loyalty incentive 2	4.00	1.810	0.717	0.514	.(a)

a The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

9- PERCEIVED SITE QUALITY

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.694	0.729	5

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Perceived Site Quality 1	20.09	11.801	0.262	0.206	0.724
Perceived Site Quality 2	20.86	12.028	0.280	0.120	0.711
Perceived Site Quality 3	20.41	10.158	0.691	0.658	0.557

Perceived Site Quality 4	20.14	9.742	0.808	0.765	0.516
Perceived Site Quality 5	20.68	9.656	0.391	0.476	0.688

The Cronbach's α for perceived site quality is 0.694, which is below the recommended alpha range of >= 0.7. But by looking to the total item statistics, the deletion of item 1 and 2 would improve reliability and Cronbach's α to 0.784. This omission is supported by the corrected item-total correction of 0.262, and 0.280, which is below the recommended correction total item of 0.3 and above (Field, 2005). Deletion of items 1 and 2, which is supported by the corrected item-total correction, would improve Cronbach's α from 0.694 to 0.784, as seen below.

RELIABILITY STATISTICS

Cronbach's α	Cronbach's α Based on Standardized Items	N of Items
0.784	0.825	3

ITEM-TOTAL STATISTICS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's α if Item Deleted
Perceived Site Quality 3	10.27	4.970	0.608	0.645	0.737
Perceived Site Quality 4	10.00	4.381	0.830	0.751	0.540
Perceived Site Quality 5	10.55	3.403	0.548	0.441	0.883

FACTOR ANALYSIS

The researcher started the factor analysis procedures by conducting maximum likelihood procedure with direct oblimin rotation on fifty five items to determine the related factors for the proposed research model. As shown in the table, the statistics for the KMO test show 0.973 at a significance level of 0.000, chi-square = 56133.057 with 1485 degrees of freedom, indicating that the data is suitable for factor analysis (Field, 2000).

KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.973
Bartlett's Test of Sphericity	Approx. Chi-Square	56133.057
	df	1485
	Sig.	0.000

The next stage is to determine the number of factors extracted by using the eigenvalue method (Hair *et al*., 2006). As shown in the following table, the initial maximum likelihood procedure with direct Oblimin rotation for the 55 items generated eight factors that account for 75.5% of the variance.

Furthermore, exploratory factor analysis loading with maximum likelihood procedure with direct Oblimin rotation and communalities were investigated. As suggested by Hair, factor loadings below 0.5 are considered low, and as such should be deleted from further statistical analysis (Hair *et al*., 2006). The initial interpretation of the factor analysis findings showed a few items considered as problematic and in need of further consideration because some items were loaded on more than one factor, and others were loaded with factor loading below 0.5, e.g., the loyalty incentive factor and all its items loaded with factor loadings below 0.436. This can be seen in exploratory factor loading below. Additionally, satisfaction has six items, of which three loaded below 0.4 (a) satisfied decision of using the website for my online shopping; (b) wise choice to use the website for my online shopping; and (c) did the right thing by deciding to use the website for my online shopping), and the other three cross-loaded with loyalty incentive and enjoyment (a) not happy with my earlier decision to use the website for my online shopping experience, (b) with using the website for my online shopping was very unsatisfactory, and (c) If I were to do it again, I would feel different about using the website for my online shopping).

Even though the items that represent Sat 3, Sat 4, and Sat 6 had factor loadings above 0.5 and cross-loaded with two items related to perceived enjoyment and two items related to loyalty incentive, the visual assessment of the factorability of the correlation matrix identifies that the Measure of Sampling Adequacy (MSA) for these items falls below the acceptable range of 0.5 and, thus, is not statistically significant (Hair, 2006). The three variables that represent trust (Trusting beliefs benevolence, Trusting beliefs competence, and Trusting intentions willingness) all have load factors below 0.5. As a result of the problematic nature of the loyalty incentive, three trust and satisfaction factors were removed from any further consideration of statistical analysis (Hair, 2006).

Communality is also seen to be a useful interrelations measure between items. A good factor should have a minimum communality value of 0.4 (Field, 2000). The communality finding of the research's initial statistical factor analysis, as seen in communalities table below, showed that the communality values for all items exceeded the acceptable cut-off level of 0.4, aprt from loyalty incentive (item 3), which had a communality below 0.4.

TOTAL VARIANCE EXPLAINED

Factor	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**			**Rotation Sums of Squared Loadings(a)**
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	26.891	48.893	48.893	26.075	47.409	47.409	17.930
2	4.724	8.590	57.483	3.942	7.168	54.577	10.883
3	2.714	4.935	62.418	2.220	4.037	58.614	20.268
4	1.945	3.536	65.954	2.625	4.772	63.386	4.501
5	1.553	2.823	68.776	1.348	2.450	65.836	18.386

6	1.373	2.496	71.273	1.080	1.965	67.801	14.532
7	1.263	2.297	73.570	0.852	1.549	69.350	13.015
8	1.061	1.929	75.499	0.860	1.564	70.914	17.949
9	0.930	1.690	77.189				
10	0	1.498	78.688				

Extraction method: maximum likelihood.

a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

EXPLORATORY FACTOR LOADING (PATTERN MATRIX)

	Factor							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Trusting Beliefs Integrity 2	0.912							
Trusting Beliefs Integrity 4	0.893							
Trusting Beliefs Integrity 1	0.807							
Trusting Beliefs Integrity 3	0.706							
Trusting Beliefs Benevolence 3	0.526							
Trusting Beliefs Competence 4								
Trusting Beliefs Benevolence 2								
Trusting Beliefs Competence 2								
Trusting Intentions Willingness 2								
Trusting Intentions Willingness 3								
Trusting Intentions Willingness 1								
Trusting Intentions Willingness 4								
Subjective Norms 5		0.908						
Subjective Norms 4		0.904						
Subjective Norms 6		0.854						
Continuance Intention to Use - 3			0.985					
Continuance Intention to Use - 4			0.980					
Continuance Intention to Use - 2			0.921					
Continuance Intention to Use - 5			0.764					
Continuance Intention t Use - 1			0.681					
Continuance Intention to Use - 6			0.674					
Satisfaction 3				0.866				

Satisfaction 4				0.861				
Perceived Enjoyment 3				0.814				
Perceived Enjoyment 7				0.809				
Satisfaction 6				0.479				
Loyalty Incentive 3				0.436				
Loyalty Incentive 2								
Perceived Usefulness 4					0.922			
Perceived Usefulness 5					0.903			
Perceived Usefulness 6					0.856			
Perceived Usefulness 3					0.846			
Perceived Usefulness 2					0.766			
Perceived Usefulness 1					0.644			
Trusting Beliefs Benevolence 1								
Trusting Beliefs Competence 1								
Perceived Enjoyment 5						0.750		
Perceived Enjoyment 6						0.734		
Perceived Enjoyment 4						0.514		
Perceived Enjoyment 2						0.493		
Perceived Enjoyment 8						0.474		
Perceived Enjoyment 1						0.470		
Loyalty incentive 1								
Subjective Norms 1							0.879	
Subjective Norms 2							0.841	
Subjective Norms 3							0.718	
Perceived Site Quality 3								0.829
Perceived Site Quality 2								0.804
Perceived Site Quality 1								0.760
Perceived Site Quality 4								0.686
Perceived Site Quality 5								0.607
Satisfaction 5								
Trusting Beliefs Competence 3								
Satisfaction 2								
Satisfaction 1								

a Rotation converged in 10 iterations.

COMMUNALITIES

	Initial	**Extraction**
Perceived Usefulness 1	0.656	0.629
Perceived Usefulness 2	0.683	0.665
Perceived Usefulness 3	0.789	0.799
Perceived Usefulness 4	0.804	0.821
Perceived Usefulness 5	0.812	0.825
Perceived Usefulness 6	0.740	0.741
Trusting Beliefs Benevolence 1	0.639	0.533
Trusting Beliefs Benevolence 2	0.719	0.611

Trusting Beliefs Benevolence 3	0.662	0.545
Trusting Beliefs Integrity 1	0.796	0.803
Trusting Beliefs Integrity 2	0.821	0.837
Trusting Beliefs Integrity 3	0.776	0.771
Trusting Beliefs Integrity 4	0.830	0.841
Trusting Beliefs Competence 1	0.803	0.715
Trusting Beliefs Competence 2	0.803	0.699
Trusting Beliefs Competence 3	0.833	0.717
Trusting Beliefs Competence 4	0.774	0.676
Trusting Intentions Willingness 1	0.637	0.528
Trusting Intentions Willingness 2	0.804	0.613
Trusting Intentions Willingness 3	0.806	0.620
Trusting Intentions Willingness 4	0.622	0.491
Perceived Site Quality 1	0.774	0.782
Perceived Site Quality 2	0.726	0.724
Perceived Site Quality 3	0.749	0.763
Perceived Site Quality 4	0.720	0.709
Perceived Site Quality 5	0.635	0.618
Satisfaction 1	0.756	0.633
Satisfaction 2	0.829	0.735
Satisfaction 3	0.731	0.750
Satisfaction 4	0.741	0.758
Satisfaction 5	0.757	0.711
Satisfaction 6	0.457	0.424
Perceived Enjoyment 1	0.742	0.629
Perceived Enjoyment 2	0.817	0.774
Perceived Enjoyment 3	0.694	0.680
Perceived Enjoyment 4	0.591	0.568
Perceived Enjoyment 5	0.817	0.845
Perceived Enjoyment 6	0.838	0.862
Perceived Enjoyment 7	0.681	0.670
Perceived Enjoyment 8	0.753	0.738
Subjective Norms 1	0.779	0.840
Subjective Norms 2	0.784	0.823
Subjective Norms 3	0.773	0.789
Subjective Norms 4	0.909	0.950
Subjective Norms 5	0.885	0.909
Subjective Norms 6	0.843	0.848
Continuance Intention of Use - 1	0.812	0.773
Continuance Intention of Use - 2	0.892	0.884

Continuance Intention of Use - 3	0.917	0.941
Continuance Intention of Use - 4	0.895	0.908
Continuance Intention of Use - 5	0.803	0.769
Continuance Intention of Use - 6	0.695	0.641
Loyalty Incentive 1	0.725	0.401
Loyalty Incentive 2	0.746	0.444
Loyalty Incentive 3	0.394	0.230

Extraction method: maximum likelihood.

APPENDIX G: ONLINE SURVEY
English Version

Customer Continuance e-Shopping Intention
In the developing countries
The case of Saudi Arabia

I am currently a PhD researcher at the Business School, Brunel University in West London, UK. As part of my academic research, I am investigating and understanding the factors that influence continuance online shopping in the Kingdom of Saudi Arabia. In this context, I would highly appreciate if you could kindly give a few minutes of your valuable time to complete this questionnaire. It should take you about 15 – 20 minutes to complete.

In the context of this questionnaire, e-shopping, electronic shopping, online shopping, and internet shopping are considered the same. All these activities can include the activity of searching, buying, and selling, products and services through the internet.

Your participation in this study is completely voluntary. There are no foreseeable risks associated with this project. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any point. It is very important for us to learn your opinions.

Your survey responses will be strictly confidential. If you have questions at any time about the survey or the procedures, you may contact me at my email address specified below.

Your contribution to this questionnaire would help us understand the factors that influence continuance online shopping

Thank you very much for your time and support.

Talal Al-maghrabi
PhD Researcher
Brunel Business School
Marketing Department
Brunel University
United Kingdom
Talal.Almaghrabi@brunel.ac.uk

Dr Charles Dennis FCIM
Senior Lecturer
Brunel Business School
Brunel University
Uxbridge, Middlesex, UB8 3PH,
United Kingdom
Tel: +44 (0) 1895 265242
E-mail: Charles.Dennis@brunel.ac.uk

APPENDIX G: Online Survey (English Version)

Customer Continuance e-Shopping Intention

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
1. Learning to use the website I use for my online shopping is easy.	O	O	O	O	O	O	O
2. It is easy to get the website I use for my online shopping to do what I want.	O	O	O	O	O	O	O
3. The interactions with the website I use for my online shopping are clear and understandable.	O	O	O	O	O	O	O
4. The website I use for my online shopping is easy to use.	O	O	O	O	O	O	O
5. The website I use for my online shopping is flexible to interact with.	O	O	O	O	O	O	O

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
6. The website I use for my online shopping is useful for searching and purchasing.	O	O	O	O	O	O	O
7. The website I use for my online shopping improves my performance in searching and purchasing.	O	O	O	O	O	O	O
8. The website I use for my online shopping enables me to search and purchase faster.	O	O	O	O	O	O	O
9. The website I use for my online shopping enhances my effectiveness in searching and purchasing.	O	O	O	O	O	O	O
10. The website I use for my online shopping makes it easier to search for and purchase.	O	O	O	O	O	O	O
11. The website I use for my online shopping increases my productivity in searching and purchasing.	O	O	O	O	O	O	O

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
12. I believe that the website I use for my online shopping would act in my best interest.	O	O	O	O	O	O	O
13. If I required help, the website I use for my online shopping would do its best to help me.	O	O	O	O	O	O	O
14. The website I use for my online shopping is interested in my well-being, not just its own.	O	O	O	O	O	O	O

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
15. The website I use for my online shopping is truthful in its dealings with me.	O	O	O	O	O	O	O
16. I would characterize the website I use for my online shopping as honest.	O	O	O	O	O	O	O
17. The website I use for my online shopping would keep its commitments.	O	O	O	O	O	O	O
18. The website I use for my online shopping is sincere and genuine.	O	O	O	O	O	O	O

APPENDIX G: Online Survey (English Version)

Customer Continuance e-Shopping Intention

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
19. The website I use for my online shopping is competent and effective in providing online business.	O	O	O	O	O	O	O
20. The website I use for my online shopping performs its role of giving shopping advice very well.	O	O	O	O	O	O	O
21. Overall, the website I use for my online shopping is a capable and proficient Internet shopping provider.	O	O	O	O	O	O	O
22. In general, the website I use for my online shopping is very knowledgeable about its service.	O	O	O	O	O	O	O

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
23. When an important shopping issue or problem arises, I would feel comfortable depending on the information provided by the website I use for my online shopping.	O	O	O	O	O	O	O
24. I can always rely on the website I use for my online shopping in a tough shopping situation.	O	O	O	O	O	O	O
25. I feel that I could count on the website I use for my online shopping to help with a crucial shopping problem.	O	O	O	O	O	O	O
26. If I had a challenging shopping problem, I would want to use the website I use for my online shopping again.	O	O	O	O	O	O	O

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
27. I use the internet for my shopping activities frequently.	O	O	O	O	O	O	O

28. On average, how many different online shopping places do you visit in a given month (choose only one)?

O	None	O	1 - 2
O	3 - 5	O	6 - 20
O	Over 20		

29. In general, how much time do you spend doing online shopping activities per week (choose only one)?

O	0 - 5 minutes	O	6 - 15 minutes
O	16-60 minutes	O	Over 60 minutes

30. On average, how frequently do you use the internet for your shopping activities (choose only one)?

O	Once a year	O	Two or three times a year
O	Monthly	O	Daily

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
31. Overall, this website worked very well technically.	O	O	O	O	O	O	O

APPENDIX G: Online Survey (English Version)

Customer Continuance e-Shopping Intention

32. Visually, this website resembled other sites I think highly of.	O	O	O	O	O	O	O
33. This website was simple to navigate.	O	O	O	O	O	O	O
34. On this website, it was easy to find the information I wanted.	O	O	O	O	O	O	O
35. This website clearly showed how I can contact or communicate with online shopping customer service.	O	O	O	O	O	O	O

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
36. The website I use for my online shopping is well respected by the profession.	O	O	O	O	O	O	O
37. The website I use for my online shopping is reputable firm.	O	O	O	O	O	O	O

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
38. The website I use for my online shopping execution meets my expectations.	O	O	O	O	O	O	O
39. My website I use for my online shopping gives me all the information and tools needed to place and execute purchases.	O	O	O	O	O	O	O
40. My online shopping experience via internet falls short of my expectations.	O	O	O	O	O	O	O
41. The website I use for my online shopping is generally good at handling questions or complaints before or after a purchase.	O	O	O	O	O	O	O
42. After-sales service that provided by the website I use for my online shopping meets my expectations.	O	O	O	O	O	O	O
43. I generally get the level of service I expect from the website I use for my online shopping.	O	O	O	O	O	O	O
44. The website I use for my online shopping provides me with customised one-on-one marketing, as I would expect.	O	O	O	O	O	O	O
45. Products and services recommended to me by the website I use for my online shopping meet my expectations.	O	O	O	O	O	O	O
46. The direct marketing activities of the website I use for my online shopping meet my expectations.	O	O	O	O	O	O	O

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
47. I am satisfied with my decision of using the website for my online shopping.	O	O	O	O	O	O	O
48. My choice to use the website for my online shopping was a wise one.	O	O	O	O	O	O	O
49. I am not happy with my earlier decision to use the website for my online shopping.	O	O	O	O	O	O	O
50. My experience with using the website for my online shopping was very unsatisfactory.	O	O	O	O	O	O	O

APPENDIX G: Online Survey (English Version)

Customer Continuance e-Shopping Intention

51.	I think I did the right thing by deciding to use the website for my online shopping.	O	O	O	O	O	O	O
52.	If I were to do it again, I would feel different about using the website for my online shopping.	O	O	O	O	O	O	O

		Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
53.	The website I use for my online shopping offers incentives for its continued use, such as frequent flier miles or bonus points.	O	O	O	O	O	O	O
54.	I am rewarded for my continued patronage of the website I use for my online shopping.	O	O	O	O	O	O	O
55.	The website I use for my online shopping generally does not give me any loyalty incentives for my continued use of its services.	O	O	O	O	O	O	O

		Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
56.	Shopping online in this website would be fun for its own sake.	O	O	O	O	O	O	O
57.	Shopping online in this website would make me feel good.	O	O	O	O	O	O	O
58.	Shopping online in this website would be boring.	O	O	O	O	O	O	O
59.	Shopping online in this website would involve me in the shopping process.	O	O	O	O	O	O	O
60.	Shopping online in this website would be exciting.	O	O	O	O	O	O	O
61.	Shopping online in this website would be enjoyable.	O	O	O	O	O	O	O
62.	Shopping online in this website would be uncomfortable.	O	O	O	O	O	O	O
63.	Shopping online in this website would be interesting.	O	O	O	O	O	O	O

		Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
64.	Most people who are important to me would think that using the website to shop online is a wise idea.	O	O	O	O	O	O	O
65.	Most people who are important to me would think that using the website to shop online is a good idea.	O	O	O	O	O	O	O
66.	Most people who are important to me would think I should use the website to shop online.	O	O	O	O	O	O	O
67.	My family who are important to me would think that using the website to shop online is a wise idea.	O	O	O	O	O	O	O
68.	My family who are important to me would think that using the website to shop online is a good idea.	O	O	O	O	O	O	O
69.	My family who are important to me would think I should use the website to shop online.	O	O	O	O	O	O	O

APPENDIX G: Online Survey (English Version)

Customer Continuance e-Shopping Intention

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
70. I want to continue using the website I use for my online shopping rather than discontinue its use.	O	O	O	O	O	O	O
71. My intentions are to continue using the website I use for my online shopping rather than any alternative means.	O	O	O	O	O	O	O
72. If I could, I would like to discontinue use of the website I use for my online shopping	O	O	O	O	O	O	O

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
73. The website I use for my online shopping has fun, interactive features.	O	O	O	O	O	O	O
74. The website I use for my online shopping contains entertaining audio clips.	O	O	O	O	O	O	O
75. The website I use for my online shopping is designed in a fun and entertaining manner.	O	O	O	O	O	O	O
76. The website I use for my online shopping makes good use of the video capability of the web.	O	O	O	O	O	O	O
77. The website I use for my online shopping has attractive background and color scheme.	O	O	O	O	O	O	O

	Strongly Disagree	Disagree	Some what Disagree	Neutral	Some what Agree	Agree	Strongly Agree
78. I say positive things about the website I use for my online shopping to other people.	O	O	O	O	O	O	O
79. I would recommend the website I use for my online shopping to those who seek my advice about such matters.	O	O	O	O	O	O	O
80. I would encourage friends and relatives to use the website I use for my online shopping.	O	O	O	O	O	O	O
81. I would post positive messages about the website I use for my online shopping on some Internet message board.	O	O	O	O	O	O	O
82. I intend to continue to do business with the present web site.	O	O	O	O	O	O	O
83. I intend to do more business with the present web site.	O	O	O	O	O	O	O

Please select the suitable box in each question.

84. Where do you usually access the internet?	Never	Seldom	Sometimes	Mostly	Always
Home	O	O	O	O	O
Office	O	O	O	O	O
University/School	O	O	O	O	O
Internet Cafe	O	O	O	O	O
Other - specifiy:					

85. Gender

O Male O Female

APPENDIX G: Online Survey (English Version)

Customer Continuance e-Shopping Intention

86. Age

- ○ Less than 18
- ○ Between 18 - 25 years
- ○ Between 26 - 35 years
- ○ Between 36 - 45 years
- ○ Above 46 years

87. What is your current Education Level?

- ○ Less than high school
- ○ High school
- ○ Diploma
- ○ Bachelor
- ○ Post-graduate

88. What is your occupation?

- ○ Government employee
- ○ Private sector
- ○ Businessmen
- ○ Student
- Other - specify: _____

89. Income level per month

- ○ Less than £1000
- ○ Between £1000 - £2000
- ○ Between £2001 - £4000
- ○ Between £4001 - £7000
- ○ Between £7001 - £10000
- ○ More than £10000
- ○ Dependent on others (e.g. husband, Parents)

90. Why do you use the Internet? Please tick all options that apply to you.

- ☐ Information searching (using search engines e.g. Google ...)
- ☐ Entertainment
- ☐ Social e.g. Chat , e-mail
- ☐ Work related
- ☐ Studies related
- ☐ Online purchasing
- ☐ Online banking
- Other - specify: _____

91. How important the following issues when purchasing online?

	Completely Not Important	Not Important	Neutral	Important	Very Important
Security	○	○	○	○	○
Price	○	○	○	○	○
Service/delivery	○	○	○	○	○
Quality	○	○	○	○	○
Payment Method	○	○	○	○	○
Language barrier	○	○	○	○	○

Other - specify: _____

92. How much do you spend or intend to spend per year on online shopping?

- ○ None
- ○ Between £100 - £500
- ○ Between £501 - £1000
- ○ More than £1000

93. Which companies do you trust more?

- ○ Local companies
- ○ International companies
- ○ I trust them both the same

94. What is the most likely payment method, you use for online shopping

- ○ Credit Card/Visa
- ○ Cheque
- ○ Cash at delivery
- Other - specify: _____

APPENDIX G: Online Survey (English Version)

Customer Continuance e-Shopping Intention

95. When comparing e-shopping in Saudi Arabia with others, Do you think that E-shopping is	Strongly Disagree	Do not Agree	Neutral	Agree	Strongly Agree
Well developed	O	O	O	O	O
Need extra effort to improve	O	O	O	O	O
Will be the Ideal way of shopping in the near future	O	O	O	O	O
Will never be suitable for everyone	O	O	O	O	O
In need for Government Support	O	O	O	O	O
The improvement of e-commerce will depend on the internet growth	O	O	O	O	O
Other - specify:					

96. If you have bought some things over the internet in the last six months, what did you buy?	Please tick all options that apply to you
Books	☐
Music CD or DVD or videotapes	☐
Clothes	☐
Sports equipment	☐
Travel reservation and ticketing	☐
Hotel booking	☐
Other - specify:	

97. Which region of KSA do you live in?	Please tick the option that applies to you?
East region	O
West region	O
Middle region	O
North region	O
South region	O

Thank you for your valuable time and contribution towards making this PhD research successful in understanding the driving factors for Customer Continuance e-Shopping Intention in Saudi Arabia

APPENDIX H: ONLINE SURVEY (ARABIC VERSION)

Arabic version

Customer Continuance e-Shopping Intention

بسم الله الرحمن الرحيم

دراسة لمعرفة العناصر المؤثرة في استمرارية التسوق الالكتروني عبر الانترنت

أنا باحث لنيل درجة الدكتوراة في جامعة برونيل بلندن ـ المملكة المتحدة. هذا الاستبيان الالكتروني يجرى كجزء من أطروحتي لشهادة الدكتوراة لفهم العناصر المؤثرة في استمرارية التسوق الالكتروني عبر الانترنت في المملكة العربية السعودية. أرجو منك الإجابة على الأسئلة بمصداقية، علما أنه لا يمكن التعرف عليك من خلال المعلومات المقدمة. من المتوقع أن يستغرق الاستبيان منك ما بين (15) إلى (20) دقيقة لإكماله.

علما بان (التسوق الالكتروني، التسوق عبر الانترنت، الشراء الالكتروني، أو الشراء عبر الانترنت) يمكن تعريفه بأنه مجموعة من أنشطة وعمليات البحث عن المعلومات، بيعا وشراء والمقارنة بين الخدمات والمنتجات عبر الانترنت.

الرجاء الإجابة عن الأسئلة في الفراغ المتاح عبر الاستبيان الالكتروني. لا تستغرق وقتا طويلا في الإجابة على أي سؤال. عادة ما تكون أول أفكارك هي الأفضل! حتى ولو شعرت أن النقاط المغطاة لا تنطبق عليك أرجو عدم إهمالها. قد تبدو بعض الأسئلة مكررة، هذه الأسئلة تقيس بُعد سيكولوجي في تفكير الإنسان والذي لا يمكن أن يقاس بسؤال واحد أو سؤالين. أجوبتك في غاية الأهمية في بناء صورة دقيقة للقضايا المهمة المتعلقة بتحديد عوامل قبول واستمرارية التسوق عبر الإنترنت.

أرجو التكرم بإكمال الاستبيان لأهمية ذلك شاكراً لكم مساعدتي. في حالة وجود أي استفسارات لديكم أو تودون المزيد من المعلومات الرجاء التواصل معي عبر البريد: talal.almaghrabi@brunel.ac.uk شاكراً تعاونكم سلفاً.

الدكتور / تشارلز دينيز
مشرف بحث الدكتوراة ومحاضر بالجامعة
كلية برونيل للأعمال
جامعة برونيل، لندن، المملكة المتحدة
تلفون 265242 1895 (0) 44+
ايميل Charles.Dennis@brunel.ac.uk

أخوكم/طلال المغربي
باحث دكتوراة في التسويق والتجارة الالكترونية
كلية برونيل للأعمال
جامعة برونيل، لندن، المملكة المتحدة
Talal.Almaghrabi@brunel.ac.uk

APPENDIX H: ONLINE SURVEY (ARABIC VERSION)

Customer Continuance e-Shopping Intention

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
1. تعلم استخدام الموقع في تسوقي الالكتروني سهل بالنسبة لي	○	○	○	○	○	○	○
2. من السهل جعل الموقع الذي استخدمه في التسوق الالكتروني أن يعمل ما أريد	○	○	○	○	○	○	○
3. التفاعل مع الموقع الذي استخدمه في تسوقي الالكتروني واضح و مفهوم	○	○	○	○	○	○	○
4. الموقع الذي استخدمه في تسوقي الالكتروني سهل الاستخدام بالنسبة لي	○	○	○	○	○	○	○
5. الموقع الذي استخدمه في تسوقي الالكتروني مرن للتفاعل معه	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
6. الموقع الذي استخدمه في تسوقي الالكتروني مفيد في البحث و الشراء	○	○	○	○	○	○	○
7. الموقع الذي استخدمه في تسوقي الالكتروني طور من أدائي في البحث و الشراء	○	○	○	○	○	○	○
8. الموقع الذي استخدمه في تسوقي عبر الانترنت يمكنني من البحث والشراء بطريقة أسرع	○	○	○	○	○	○	○
9. الموقع الذي استخدمه في تسوقي الالكتروني يحسن من استفادتي من البحث و الشراء	○	○	○	○	○	○	○
10. الموقع الذي استخدمه في تسوقي الالكتروني يجعل البحث و الشراء أكثر سهولة	○	○	○	○	○	○	○
11. الموقع الذي استخدمه في تسوقي الالكتروني يزيد من إنتاجيتي في البحث والشراء	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
12. اعتقد إن الموقع الذي استخدمة في تسوقي الالكتروني سوف يقوم بما هو الأفضل لمصلحتي	○	○	○	○	○	○	○
13. عند الحاجة لمساعدة فان موقعي الذي استخدمه في التسوق الالكتروني يقوم بأفضل ما في وسعه لمساعدتي	○	○	○	○	○	○	○
14. الموقع الذي استخدمه في تسوقي الالكتروني يهتم بي وليس فقط بمصالحه	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
15. الموقع الذي استخدمه في تسوقي الالكتروني صادق في تعاملاته معي	○	○	○	○	○	○	○
16. أستطيع أن اصف موقعي الذي استخدمه في تسوقي							

APPENDIX H: ONLINE SURVEY (ARABIC VERSION)

Customer Continuance e-Shopping Intenti

الالكتروني بأنه آمين	○	○	○	○	○	○	○
17. الموقع الذي استخدمه في تسوقي الالكتروني يفي بالتزاماته	○	○	○	○	○	○	○
18. الموقع الذي استخدمه في تسوقي الالكتروني صادق و أمين	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
19. أستطيع أن اصف الموقع الذي استخدمه على الانترنت بأنه ماهر وفعال في توفير خدمات التسوق الالكتروني	○	○	○	○	○	○	○
20. الموقع الذي استخدمه عبر الانترنت يؤدي دوره في تقديم الخدمات الالكترونية بطريقة جيدة جدا	○	○	○	○	○	○	○
21. بشكل عام الموقع الذي استخدمه عبر الانترنت متمكن وبارع في توفير خدمات التسوق الالكتروني عبر الانترنت	○	○	○	○	○	○	○
22. بشكل عام الموقع الذي استخدمه لديه معرفة بمعاملات التسوق الالكتروني و خدماته	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
23. عندما تظهر مسالة أو مشكلة لها علاقة بالتسوق سأشعر بالارتياح في اعتمادي على المعلومات المقدمة من الموقع الذي استخدمه في تسوقي عبر لانترنت	○	○	○	○	○	○	○
24. أستطيع أن اعتمد دائما على موقعي الذي استخدمه في التسوق الالكتروني في حالات التسوق المهمة	○	○	○	○	○	○	○
25. اشعر أني أستطيع أن اعتمد على الموقع الذي استخدمه في تسوقي الالكتروني للمساعدة في العمليات التسوق الالكترونية المهمة	○	○	○	○	○	○	○
26. إذا واجهت مرة أخرى صعوبة في تسوقي, فإني أرغب في استخدام موقعي الذي استخدمة في تسوقي عبر الإنترنت مرة أخرى	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
27. أنا استخدم الانترنت دائما في تسوقي	○	○	○	○	○	○	○

28. في المتوسط، كم عدد المحلات و المواقع التي تزورها في الشهر عند التسوق الالكتروني (اختر جواب واحد فقط)

- ○ لا شئ
- ○ 1-2
- ○ 3-5
- ○ 6-20
- ○ أكثر من 20

29. في العادة ما هو الوقت الذي تقضية أسبوعيا في التسوق الالكتروني (اختر جواب واحد فقط)

- ○ اقل من5 دقائق
- ○ 6-15 دقيقة
- ○ 16-60 دقيقة
- ○ أكثر من 60 دقيقة

APPENDIX H: ONLINE SURVEY (ARABIC VERSION)

Customer Continuance e-Shopping Intentio

30. في المتوسط، كم مرة في السنة تستخدم الانترنت في الأنشطة التسويقية (اختر جواب واحد فقط)

- ○ مرة في السنة
- ○ مرتين إلي ثلاثة في السنة
- ○ شهريا
- ○ يوميا

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
31. بشكل عام، الموقع الالكتروني الذي أتسوق منه يعمل بشكل جيد تقنيا	○	○	○	○	○	○	○
32. مظهر الموقع الذي أتسوق منه عبر الانترنت يضاهي المواقع الأخرى التي اعتقد بها بدرجة عالية	○	○	○	○	○	○	○
33. الموقع الالكتروني الذي أتسوق منه سهل الوصول إليه	○	○	○	○	○	○	○
34. أستطيع أن أجد المعلومات التي تلبي احتياجاتي بسهولة في الموقع الذي استخدمه في تسوقي الالكتروني	○	○	○	○	○	○	○
35. عند التسوق الالكتروني الموقع يعطي بوضوح المعلومات التي أحتاجها للاتصال والتواصل مع مركز خدمة العملاء	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
36. الموقع الذي أتسوق منه عبر الانترنت له الاحترام في مجاله	○	○	○	○	○	○	○
37. الموقع الذي استخدمه في تسوقي الالكتروني عبر الانترنت له سمعه جيدة	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
38. العمليات التسوقية التي يقدمها الموقع الذي استخدمة في تسوقي عبر الانترنت تطابق توقعاتي	○	○	○	○	○	○	○
39. يوفر الموقع الذي استخدمه في تسوقي الالكتروني جميع المعلومات و الأدوات التي احتاجها لتنفيذ عملية التسوق و الشراء	○	○	○	○	○	○	○
40. تجربتي في التسوق عبر الانترنت اقل من توقعاتي	○	○	○	○	○	○	○
41. الموقع الذي استخدمه في تسوقي يكون جيدا في تعامله مع استفسارات و شكاوى العملاء قبل و بعد الشراء	○	○	○	○	○	○	○
42. خدمات ما بعد البيع التي يقدمها الموقع الذي استخدمه في تسوقي الالكتروني تطابق توقعاتي	○	○	○	○	○	○	○
43. احصل على مستوي الخدمة الذي أتوقعه من الموقع الذي استخدمه في تسوقي عبر الانترنت	○	○	○	○	○	○	○
44. يقدم الموقع الذي استخدمه في تسوقي الالكتروني اهتمام خاص لكل عميل كما توقعت	○	○	○	○	○	○	○
45. المنتجات و الخدمات التي يقدمها لي الموقع الذي استخدمه في تسوقي الالكتروني تطابق توقعاتي	○	○	○	○	○	○	○
46. أنشطة التسوق المباشر التي يقدمها الموقع الذي استخدمه في تسوقي عبر الانترنت تطابق توقعاتي	○	○	○	○	○	○	○

APPENDIX H: ONLINE SURVEY (ARABIC VERSION)

Customer Continuance e-Shopping Intent

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
47. راضي عن قرار استخدام الانترنت للتسوق الالكتروني	○	○	○	○	○	○	○
48. اختياري للتسوق في الموقع الذي استخدمه الكترونيا كان حكيما	○	○	○	○	○	○	○
49. أنا غير سعيد بقراري السابق لاستخدام الموقع الذي استخدمه للتسوق عبر الانترنت	○	○	○	○	○	○	○
50. تجربتي في استخدام الموقع الذي استخدمه للتسوق عبر الانترنت كانت غير مرضية	○	○	○	○	○	○	○
51. اعتقد إنني اتخذت القرار الصحيح لاستخدام الموقع الذي استخدمه في التسوق عبر الانترنت	○	○	○	○	○	○	○
52. لو رغبت في التسوق الالكتروني مرة أخرى سوف اشعر بطريقة مختلفة	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
53. يقدم الموقع الذي استخدمه في التسوق الالكتروني الكثير من الحوافز لعملائه الذين يستمرون في استخدام خدماته مثل النقاط و الأميال وغيرها	○	○	○	○	○	○	○
54. احصل على مكافآت على الاستمرار في استخدام الموقع الذي أتسوق منه عبر الانترنت	○	○	○	○	○	○	○
55. الموقع الذي استخدمة في تسوقي عبر الانترنت عموما لا يقدم أي حوافز لعملائة المخلصين عند الاستمرار في استخدام خدماتة أو منتجاته	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
56. التسوق عبر الانترنت ممتعا بحد ذاته	○	○	○	○	○	○	○
57. التسوق الالكتروني من خلال الموقع الذي استخدمة يجعلني اشعر براحة	○	○	○	○	○	○	○
58. التسوق عبر الانترنت من خلال الموقع الذي أستخدمه مملا	○	○	○	○	○	○	○
59. التسوق الالكتروني من خلال الموقع الذي أستخدمه يشركني في العملية التسوقية	○	○	○	○	○	○	○
60. التسوق عبر الانترنت من خلال الموقع الذي أستخدمه يكون مثير	○	○	○	○	○	○	○
61. التسوق عبر الانترنت من خلال الموقع الذي استخدمه ممتعا	○	○	○	○	○	○	○
62. التسوق عبر الانترنت من خلال الموقع الذي استخدمه يكون غير مريح	○	○	○	○	○	○	○
63. التسوق عبر الانترنت من خلال الموقع الذي استخدمه مفيدا	○	○	○	○	○	○	○

APPENDIX H: ONLINE SURVEY (ARABIC VERSION)

Customer Continuance e-Shopping Intention

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
64. معظم الأشخاص المهمين بالنسبة لي يعتقدون أن التسوق عبر الانترنت فكرة حكيمة	○	○	○	○	○	○	○
65. أكثر الزملاء المهمين بالنسبة لي يعتقدون أن استخدام التسوق الالكتروني عبر الانترنت فكرة جيدة	○	○	○	○	○	○	○
66. الأشخاص المهمين بالنسبة لي يعتقدون انه يجب علي استخدام الإنترنت للتسوق	○	○	○	○	○	○	○
67. أسرتي تعتقد بان التسوق الالكتروني عبر الانترنت فكرة حكيمة	○	○	○	○	○	○	○
68. أسرتي تعتقد بان التسوق الالكتروني عبر الانترنت فكرة جيدة	○	○	○	○	○	○	○
69. أسرتي تعتقد أنه يجب علي أن استخدم التسوق الالكتروني عبر الانترنت	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
70. أود الاستمرار في استخدام الموقع الذي استخدمه للتسوق الالكتروني عبر الانترنت	○	○	○	○	○	○	○
71. انوي الاستمرار في استخدام التسوق الالكتروني عبر الموقع الذي استخدمه في الانترنت بدلا من إيجاد بدائل أخرى	○	○	○	○	○	○	○
72. إذا كنت قادرا، فاني ارغب عدم الاستمرار في استخدام الموقع الذي أتسوق منه عبر الانترنت	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
73. الموقع الذي استخدمه في تسوقي عبر الانترنت يحتوي على خصائص المتعة والتفاعل	○	○	○	○	○	○	○
74. الموقع الذي استخدمه في تسوقي عبر الانترنت يحتوي على مقاطع صوتيه ممتعة	○	○	○	○	○	○	○
75. الموقع الذي استخدمه في تسوقي عبر الانترنت مصمم بطريقة ممتعة ومسلية	○	○	○	○	○	○	○
76. الموقع الذي استخدمه في تسوقي عبر الانترنت يستخدم الفيديو بطريقة جيدة	○	○	○	○	○	○	○
77. الموقع الذي استخدمه في تسوقي عبر الانترنت يحتوي على ألوان وخلفيات جذابة	○	○	○	○	○	○	○

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	أوافق إلى حد ما	أوافق	أوافق بشدة
78. أتكلم بصورة ايجابية عن الموقع الذي استخدمه للتسوق عبر الانترنت	○	○	○	○	○	○	○

APPENDIX H: ONLINE SURVEY (ARABIC VERSION)

Customer Continuance e-Shopping Intention

79. انصح الذين يطلبون مني الاستشارة باستخدام الموقع الذي استخدمه للتسوق عبر الانترنت	○	○	○	○	○	○	○
80. أشجع الأصدقاء والأقرباء لاستخدام الموقع الالكتروني الذي استخدمه في تسوقي عبر الانترنت	○	○	○	○	○	○	○
81. أشجع الأصدقاء والأقرباء لاستخدام الموقع الالكتروني الذي استخدمه في تسوقي عبر الانترنت	○	○	○	○	○	○	○
82. انوي الاستمرار في التسوق عبر الموقع الحالي الذي استخدمه في تسوقي عبر الانترنت	○	○	○	○	○	○	○
83. انوي زيادة عدد مرات التسوق عبر الموقع الحالي الذي استخدمه عبر الانترنت	○	○	○	○	○	○	○

	أبدا	نادرا	أحيانا	غالبا	دائما
84. أستخدم الانترنت في					
المنزل	○	○	○	○	○
العمل	○	○	○	○	○
المدرسة- الجامعة-الكلية	○	○	○	○	○
مقهى الانترنت	○	○	○	○	○
في مكان آخر- فضلا حدد: _____	○	○	○	○	○

85. الجنس

○ أنثى ○ ذكر

86. العمر

○ اقل من 18 سنة ○ من 18-25 سنة
○ من 26-35 سنة ○ من 36-45 سنة
○ أكثر من 46 سنة

87. المستوى التعليمي

○ اقل من الثانوية العامة ○ ثانوية عامة
○ دبلوم ○ جامعي
○ دراسات عليا

88. الوظيفة

○ موظف حكومي ○ موظف قطاع خاص
○ رجل/ امرأة أعمال ○ طالب
أخرى- فضلا حدد: _____

89. الدخل الشهري

○ اقل من 4000 ريال ○ 4000-6000 ريال
○ 6001-8000 ريال ○ 8001-10000 ريال
○ 10001-15000 ريال ○ أكثر من 15000 ريال
○ اعتمد على (الزوج _ العائلة)

90. أستخدم الانترنت من اجل (اختر جميع الإجابات المطابقة)

☐ البحث عن المعلومات ☐ الترفيه
☐ للاجتماعيات (الايميل- الشات) ☐ مهام خاصة بالعمل
☐ مهام خاصة بالدراسة ☐ التسوق و الشراء بالانترنت
☐ الأعمال البنكية أخرى فضلا -حدد: _____

	غير هام تماماً	غير هام	محايد	هام	هام جداً
91. ما مدى أهمية العناصر التي تأخذها بالاعتبار عند التسوق بالانترنت					
الأمن	○	○	○	○	○
الأسعار	○	○	○	○	○
الخدمات	○	○	○	○	○

APPENDIX H: ONLINE SURVEY (ARABIC VERSION)

Customer Continuance e-Shopping Intention

الجودة	○	○	○	○	○
طرق الدفع	○	○	○	○	○
اللغة المتاحة	○	○	○	○	○

أخرى –فضلا حدد: _____

92. ما هو معدل الإنفاق السنوي على الشراء من الانترنت؟

○ لا شئ ○ من 100 ريال - 1000 ريال
○ من 1001 إلى 5000 ريال ○ أكثر من 5001 ريال

93. أي الشركات تحوز على ثقتكم أكثر؟

○ الشركات المحلية ○ الشركات العالمية
○ الشركات المحلية و العالمية

94. ما هي آلية الدفع الأكثر استخداما من قبلكم عند التسوق عبر الانترنت؟

○ البطاقة الائتمانية ○ الشيكات
○ الدفع نقدا عند التسليم أخرى-فضلا حدد:

	لا أوافق بشدة	لا أوافق	محايد	أوافق	أوافق بشدة
95. عندما تقارن التسوق الالكتروني في السعودية مع الدول الأخرى، هل تعتقد انه					
متطور جدا	○	○	○	○	○
يحتاج إلى جهد إضافي للتحسن	○	○	○	○	○
سوف يكون الطريقة المثلى قريبا	○	○	○	○	○
لن يكون الطريقة المناسبة لكل فرد	○	○	○	○	○
يحتاج لدعم حكومي للتقدم	○	○	○	○	○
تطور التسوق الالكتروني يعتمد على نمو انتشار الانترنت	○	○	○	○	○

أخرى –فضلا حدد: _____

96. إذا اشتريت بعض الأشياء من الانترنت خلال الستة الأشهر الماضية، ما هي تلك الأشياء — اختر جميع الإجابات المطابقة

☐ كتب
☐ أشرطة سي دي- دي في دي و فديو
☐ ملابس
☐ مواد رياضية
☐ حجز رحلات السفر و التذاكر
☐ حجز الفنادق
أخرى- فضلا حدد: _____

97.في أي منطقة من المملكة العربية السعودية تسكن

○ المنطقة الشرقية
○ المنطقة الغربية
○ المنطقة الوسطى
○ المنطقة الشمالية
○ المنطقة الجنوبية

شكرًا لك على وقتك الكريم في المساهمة لإنجاح البحث لنيل درجة الدكتوراة في معرفة العناصر المؤثرة في استمرارية التسوق الالكتروني عبر الانترنت في المملكة العربية السعودية

APPENDIX I: INTERVIEW QUESTIONS

Customer Continuance e-Shopping Intention

In the developing countries
The case of Saudi Arabia

I am currently a PhD researcher at the Business School, Brunel University in West London, UK. As part of my academic research, I am investigating and understanding the factors that influence continuance online shopping in the Kingdom of Saudi Arabia. In this context, I would highly appreciate if you could kindly give a few minutes of your valuable time to complete this guided interview questionnaire. It should take you about 15 – 20 minutes to complete.

In the context of this questionnaire, e-shopping, electronic shopping, online shopping, and internet shopping are considered the same. All these activities can include the activity of searching, buying, and selling, products and services through the internet.

Your participation in this study is completely voluntary. There are no foreseeable risks associated with this project. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any point. It is very important for us to learn your opinions.

Your survey responses will be strictly confidential. If you have questions at any time about the survey or the procedures, you may contact me at my email address specified below.

Your contribution to this questionnaire would help us understand the factors that influence continuance online shopping

Thank you very much for your time and support.

Talal Al-maghrabi
PhD Researcher
Brunel Business School
Marketing Department
Brunel University
United Kingdom
Talal.Almaghrabi@brunel.ac.uk

Dr Charles Dennis FCIM
Senior Lecturer
Brunel Business School
Brunel University
Uxbridge, Middlesex, UB8 3PH,
United Kingdom
Tel: +44 (0) 1895 265242
E-mail: Charles.Dennis@brunel.ac.uk

APPENDIX I: INTERVIEW QUESTIONS

Brunel UNIVERSITY WEST LONDON

Interview Questionnaire

Customer Continuance e-Shopping Intention

1. About Your Organisation

1.1 Based in:

City: ☐ Jeddah ☐ Riyadh ☐ Dammam ☐ Makkah
☐ Other: _____

1.2 Primary Business

☐ Public utilities ☐ Manufacturing ☐ Non-profit Organisation
☐ Retailing & wholesaling ☐ Government & education ☐ Banking/Insurance/Real estate
☐ Service (Law, Medical, etc.) ☐ Other: _____ ☐ Aviation and Transportation

1.3 Annual revenue

☐ Under $10 million ☐ $10 million – $100 million ☐ Over $100 million

2. About You

2.1 Role in the organisation:

2.2 Are/were you involved in the E-commerce (e-business + online shopping) project planning, implementation, monitoring?
☐ Yes, your role:
☐ No

3. About E-commerce, E-shopping, Internet Shopping In Your Organisation

3.1 What is the current stage of your overall e-business project implementation?

☐ Beginning of implementation ☐ Mid-way implementation ☐ Fully implemented

3.2 How much did the organisation (spent) on your e-business implementation?

☐ Under $1 million ☐ $1 million – $10 million ☐ Over $10 million

4. About e-business (online shopping) Project Implementation

4.1 What are the primary channels for reaching your customer? (Please check all that apply)

☐ Direct contact ☐ Mobile phone (SMS) ☐ Internet
☐ Call Centre ☐ e-mail ☐ Branch location
Other: _____

4.2 Why did your organisation adopt e-business system? (Please check all that apply)

☐ improving customer retention and customer satisfaction ☐ Identifying the most profitable customers ☐ Achieving business process change
☐ Supporting new business strategies ☐ Improving responsiveness to customers ☐ provide better customer service
☐ Accommodating business growth ☐ Increased marketing and selling, opportunities ☐ Identifying different customers
☐ Improving IT architecture ☐ Increased efficiency through automation ☐ Deeper understanding of customers
☐ Obtaining information that can be shared with business partners Other: _____

4.3 Has the implementation of e-business **changed the business process** in the organisation? ☐ Yes ☐ No ☐ Not implemented ☐

If Yes, what was the **degree of change**? ☐ ***Minor improvement*** ☐ ***Redesign*** ☐ ***Radical***

4.4 Who is **primarily responsible (supporter) for the e-business** project management?

☐ Chief Executive Officer (CEO) ☐ Chief Information Officer (CIO) ☐ e-business software provider
☐ Consultants ☐ Other:

3

Brunel UNIVERSITY WEST LONDON

4.5 How great a **challenge** were the following factors to your e-business project implementation?

	Minor challenge ←				→ Major challenge	Not applicable
Resistance to change	1	2	3	4	5	☐
Business process change requirements	1	2	3	4	5	☐
Integration with other software	1	2	3	4	5	☐
Understanding customer needs	1	2	3	4	5	☐
Data and information	1	2	3	4	5	☐
Segmentation and targeting	1	2	3	4	5	☐
Other:	1	2	3	4	5	☐

4.6 Was the **Return On Investment (ROI) calculated** at the beginning of the e-business project? ☐ Yes ☐ No ☐ Not applicable

if Yes, how did the ROI compare to the initial estimate
☐ **Higher** ☐ **Lower** ☐ **About the same**

4.7 Please indicate the **benefits resulting from your e-business** project implementation

	Expected	Realised
Reduced operating cost	☐	☐
Customised product and services	☐	☐
Increased productivity	☐	☐
Delivering service to customer on time	☐	☐
Improving relationship with customer	☐	☐
Improving customer responsiveness	☐	☐
Improving quality of information	☐	☐
Increased revenue and profits	☐	☐
Increased efficiency through automation	☐	☐
Deeper understanding of customers	☐	☐
Improve on-time delivery performance	☐	☐
Build customer Trust	☐	☐
Increase customer Satisfaction	☐	☐
Increase Customer Loyalty	☐	☐
Other: _____	☐	☐

4.8 In your estimation, how **successful** has your overall e-business project implementation been? (Please indicate the %)

0% 50% 100%

4.9 Did you hire consultant(s)? ☐ Yes ☐ No

If Yes, please indicate the **service** provided by consultant(s), and its **effectiveness**:

	Ineffective ←				→ Effective	Not applicable
E-business software selection	1	2	3	4	5	☐
Business process change	1	2	3	4	5	☐
Organisational change	1	2	3	4	5	☐
Customisation	1	2	3	4	5	☐
Training	1	2	3	4	5	☐

Brunel UNIVERSITY WEST LONDON

E-business maintenance and support	1	2	3	4	5	☐
Other: _____	1	2	3	4	5	☐

4.10 What was the contribution of the following factors **to the success** of your e-business (online shopping) project implementation?

	Not at all	Minor	Moderate	Major	Critical	Not applicable
Strategy (**developing customer-centric business strategies**)	1	2	3	4	5	☐
Clear project vision/Scope	1	2	3	4	5	☐
Strong executive level commitment	1	2	3	4	5	☐
communication	1	2	3	4	5	☐
Business justification	1	2	3	4	5	☐
Organisational change	1	2	3	4	5	☐
Project planning and management	1	2	3	4	5	☐
Segmentation and Targeting	1	2	3	4	5	☐
Business process change	1	2	3	4	5	☐
Holistic approach	1	2	3	4	5	☐
Resource and Budget	1	2	3	4	5	☐
Understanding customer needs	1	2	3	4	5	☐
Employees acceptance	1	2	3	4	5	☐
Data and Information	1	2	3	4	5	☐
Software Selection	1	2	3	4	5	☐
Integration	1	2	3	4	5	☐
Client Consultation	1	2	3	4	5	☐
Customer Trust	1	2	3	4	5	☐
Customer Satisfaction	1	2	3	4	5	☐
Customer Loyalty	1	2	3	4	5	☐
Other: _____	1	2	3	4	5	☐

4.11 How important the following **Factors** when developing your organizational e-business project implementation?

	Not at all	Minor	Moderate	Major	Critical	Not applicable
Security	1	2	3	4	5	☐
Price	1	2	3	4	5	☐
Service\Delivery	1	2	3	4	5	☐
Quality	1	2	3	4	5	☐
Payment Methods	1	2	3	4	5	☐
Language	1	2	3	4	5	☐
Ease of Use	1	2	3	4	5	☐
Usefulness	1	2	3	4	5	☐
Presenting Strong Brand	1	2	3	4	5	☐
Site Quality	1	2	3	4	5	☐
Trust	1	2	3	4	5	☐
Satisfaction	1	2	3	4	5	☐
Loyalty Incentives	1	2	3	4	5	☐
Enjoyment	1	2	3	4	5	☐
Other: _____	1	2	3	4	5	☐

Brunel UNIVERSITY WEST LONDON

4.12 Overall, what is the level of **satisfaction** your organization has on the e-business project? (Please indicate the %)

0% 50% 100%

4.13 Overall, what is the level of your customer **satisfaction** on your e-business (e-shopping) project? (Please indicate the %)

0% 50% 100%

If you want to add any thing that is useful, please indicate it below:

Thank you for your co-operation

If you would like a copy of the study results report, please complete the following details

Name _____
Organisation _____
Address _____
_____
E-mail _____