

Attracting Customer in Saudi Arabia to Buy from Your Business Online

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Abstract

This paper reports on an exploration of the factors that attract consumers to buy online in Saudi Arabia. Few companies in that country have enabled business sites, but most of them are keen to present product information on their sites rather than have an online sales process. According to the latest report was issued in 2010 from the Communications and Information Technology Commission (CITC) in Saudi Arabia, there are only 8% of businesses have online purchase channel; in contrast 54% of companies have websites only to present products. Accordingly, new research has been conducted to explore the attraction of customers in Saudi Arabia to buy from businesses online. This will assist the Small and Medium Enterprises (SME) sector, which represents 90% of companies in Saudi Arabia, to increase communication channels with its customers electronically. A quantitative survey was conducted on a random sample of 381 consumer participants from Saudi Arabia who were interested to buy online to see what factors would attract them to online shopping. Several factors emerged as attracting factors which were divided into organizational, technical, and cultural factors.

Keywords: e-commerce, e-mall, Saudi Arabia, SMEs

1. Introduction

All commercial companies seek to increase their revenues by expanding their customer base. Doing so, in turn, increases profitability. In our modern Information Technology (IT) era, companies race to reach new customers and increase profits by utilizing IT. In particular, one approach many companies adopt is expanding the use of electronic trading channels to attract new customers. One of the most important steps in expanding the use of electronic trading channels is identifying the factors required to attract and convince customers to shop online.

This paper focuses on Saudi Arabian companies. According to a report issued by the Ministry of Communications and Information Technology of Saudi Arabia in 2011, Saudi Arabia experienced the 4th highest level of economic growth in the Middle East and was ranked 38th in the world in terms of the readiness of its Internet infrastructure. The same study showed that the rate of Saudi Arabia's population using the Internet is increasing 12% annually; 40% of the population already has Internet access. However, despite these advantages, Saudi Arabia's online trade volume, compared with other countries in the region such as Egypt and Turkey, is relatively low. In 2010, the trade volume reached \$800 million; 56% of online transactions were conducted through foreign websites that do not feature Arabic language.

This paper focuses on Small and Medium Enterprises (SME), because they represent 95% of all Saudi Arabian companies (Al-Mahdi, 2009). Such businesses have direct communication with end consumers, affording them a better understanding of the requirements needed to increase consumer trust in online shopping on Saudi commercial websites. Moreover, this paper will help SMEs that are seeking to increase their business via online channels identify the factors required to convince Saudi consumers to buy online from Saudi companies.

2. Literature Review

2.1 E-Commerce Overview

2.1.1 E-Commerce Plans of the Saudi Arabian Government

According to the information Centre of the Ministry of Commerce and Industry in Saudi Arabia (2006), the first e-commerce committee was established in 1999. This is one of the government strategies to adopt the e-commerce framework. There are many issues that encourage the government to start in the electronic field such as the online trading amount size. The study reported that the volume of online trading set to reach 15 billion SR (Alkalid, 2010). Additionally, figure 1 shows that there has been a significant increase in the number of broadband Internet users in the five years up to 2011 (CITC, 2011). This is due to the Internet's increased bandwidth and improved performance consistency. These developments in the information technology sector have led the government to pay consideration and take serious steps to organize and accommodate this rapid growth to support the national economy (Ministry of Commerce and Industry, 2006).

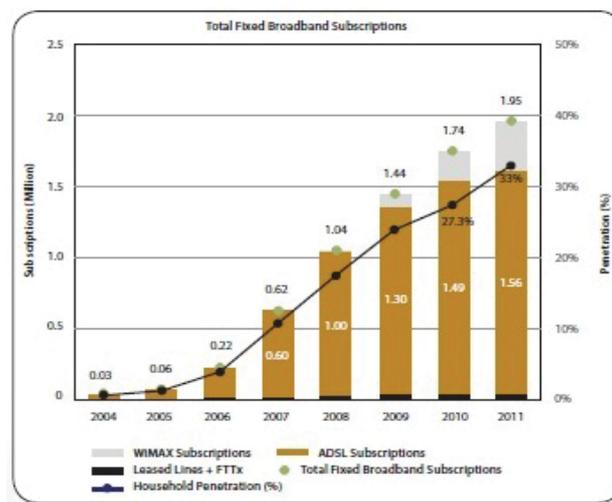


Figure 1. Fixed broadband market evolution in the KSA (2004-2011)

Adapted: (CITC, 2011).

The e-commerce committee in Saudi Arabia was assigned responsibility for determining basic infrastructural needs associated with the project and addressing communication, technical, security, and legal issues (Ministry of Commerce and Industry, 2010). So this committee was formed from several ministries. However, they are adopted these aspects slowly because of the government bureaucratic system which is take long time to approve new legislation.

2.1.2 Economic Growth in Saudi Arabia

In recent years, the rate of growth in the business private sector in Saudi Arabia has risen approximately 4.5 % annually. The growth is due to the emergence of many factors, including e-commerce (AMEinfo, 2008, Looney; 2004). Looney reported that many companies appeared to be using the Internet in business. In another study of the use of e-commerce in the private sector in the Kingdom (CITC, 2008), the authors reported the following findings:

- 1) Website ownership is directly associated with the size of the company. Almost four out of every ten firms with an Internet connection have their own website.
- 2) The website is often used to present information about the company. Some other popular uses include providing news and information on events, products, and services. Advanced services such as webinars and e-conferencing are comparatively less common in Saudi Arabia.
- 3) About 56% of company websites are hosted in English only, with the rest using both English and Arabic.

- 4) There is no clear preference for website hosting, with both domestic and foreign domain names commonly used. However, according to the CITC (figure 2), more companies (19,000) prefer to use a local domain name to enable them to interact better with their customers.

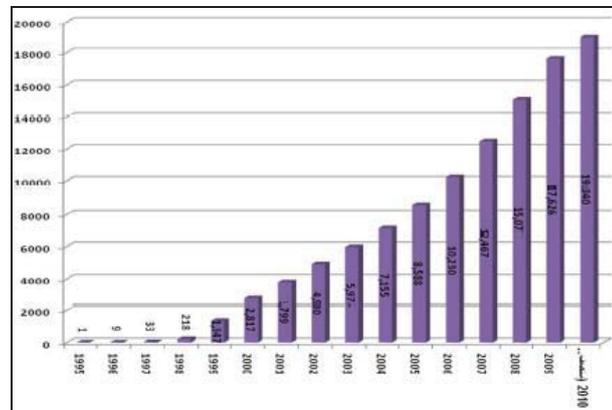


Figure 2. Number of registered domain names in the KSA

Adapted: (CITC, 2010)

Studies indicate that there is lack of e-commerce in the commercial sector, with just one out of every ten companies utilising e-commerce. The low uptake of e-commerce is in contrast to the number of companies (48%) that have a website (CITC, 2008). These are attributed to the following:

The company may lack the financial support to create interactive sites capable of making purchases and sales transactions over the Internet. It may prefer to work with an e-broker or e-Mall and use websites such as eBay. As well as, there is evidence to support the need for technical expertise and support. Money can help but there is still a lack of trained people as a human resource for the sector. Government have found the same issues (Alshehri et al., 2012).

The company may consider that both its investors and customers may feel more secure dealing with a government regulated body.

The using of e-Malls, which have the express authorisation of the government and are subject to government regulations and responsibilities, may be an ideal solution in many cases. Moreover, the companies can avail of an established market framework, which they can use to distribute their products and communicate at low cost with a broad customer base. This is could be one of the perfect solutions SME sector because it leverages the scalable nature of web services to support many companies without adding extra support costs and requirements for expertise.

In the long term, the government will need to address three important aspects of e-commerce. First, consumer trust will have to be established in e-commerce; such trust will not be forthcoming in the absence of government supervision (AlGhamdi & Drew, 2011b). Additionally, a dispute system will have to be put in place to deal with errors or complaints; such a system would rely on judicial intervention or intervention by some other relevant sector (Alfuraih, 2008). Finally, support needs to be given to SMEs to enable them to actively engage in e-commerce (Bahaddad et al., 2012).

2.2 Electronic Mall (E-Mall)

Electronic markets (e-Malls) can be defined as digital platforms to facilitate the meeting of buyers and sellers in the same place (Timmers, 1998). They represent an electronic interface for shops that want to provide a digital channel through which many essential services, such as procurement and supply, and delivery systems, can be managed (Asfoura et al., 2009). Also, an e-Mall can be recognized as a regional market of multinational products for one area or various contiguous regions (Zimmermann, 1997). One of the most important benefits of e-Malls for companies is providing wide informational forms of exchange and communication electronically as a means of reaching a target population of consumers needed by the vendors to promote their products (Laudon & Traver, 2007). Therefore, the e-Malls direct brokers to facilitate transactions between customers and companies, and supervise and follow-up the transactions that are executed. These platforms provide a good environment for investment through the issuance of clear policies that consumers' must accept in order to

participate in the e-Malls (Asfoura *et al.*, 2009). In addition, the e-Malls function as giant frameworks that assists the display of commercial products electronically of several vendors in one place, making comparisons of prices and features effortless.

The e-Mall should identify clearly what it has to offer (Informix, 2000). Moreover, the main subcategories such as computer hardware, software, video games, clothing, sports, garden supplies, and household products are mentioned on the first page of the website (Amazon.com, 2010). E-Malls should also incorporate multiple marketing methods, such as text, image, audio, and video conferencing to increase interactions with customers, the overall purpose being to consistently increase the number of customers willing to purchase at, and feeling confident in shopping at, these sites (Timmers, 1998; Informix, 2000; Fernandez, 2000).

The e-Malls represent the most significant purchasing sites worldwide, and were spread by small and medium enterprises (SMEs). SMEs face difficulties with creating special platforms on their own as they often lack the necessary resources to invest in the Internet, and develop an integrated e-purchasing site that will increase the number of their target segment (AlGhamdi *et al.*, 2011a). In addition, the e-Mall is a good way for SMEs' to access local and global markets through the expansion into other countries, such as eBay, an American company, which has entered the Australian and Chinese markets (Bahaddad *et al.*, 2012).

In the past decade, many global companies have grown financially by using this online shopping method, which has led to an increase in the number of customers worldwide. One of the main reasons for this increase in the popularity of online shopping was Netscape's development of the Secure Sockets Layer (SSL) encryption method to safely transfer data over the Internet. Ensuring a secure online shopping site became a key factor for gaining customer confidence and trust, and maintaining a positive reputation (Thomas, 1997). The websites established in the last decade can be considered the nucleus of commercial sites on the Internet, such as eBay, which was started in 1996, and Amazon, which appeared in 1995. Amazon and eBay, the main early players in the e-Mall field, achieved many successes by inviting existing SMEs to work within their frameworks, eventually gaining global reputations and dramatically increasing revenues (Amazon.com, 2012; eBay, 2010).

2.3 The Benefits and Difficulties of Integrating E-Mall Applications

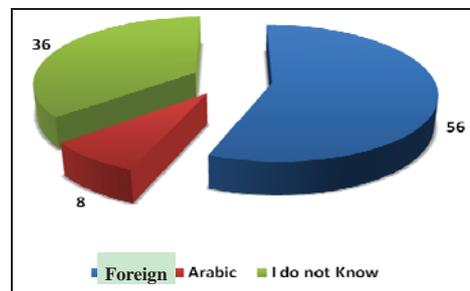


Figure 3. The people who trusted e-commerce web sites in KSA

Adapted: (Internet Service Unit, 2006).

Building strong relations between consumers and vendors is the most important competitive advantage needed to excel in the e-commerce sector. Therefore, the establishment of online markets is executing an online trading, as well as it is an effective tool to create and preserve these relationships. In addition, the competition to attract customers through the Internet is very severe, and it is easy for customers to quickly navigate away to another location on the Internet. So, the companies that are going to adopt e-commerce frameworks should consider the benefits of online markets to find a new and compelling way to ensure customer loyalty. Besides that, the companies should try to resolve the difficulties and obstacles of e-markets to help for building solid and strong relationships based on customer trust. Therefore, understand the benefits and obstacles to e-markets lead to the diffusion of this innovation, which helps to increase the local economy of the region (Aljefri, 2003).

Some studies have shown significantly higher profits from the e-Mall Model. For example, eBay has grossed nearly \$3 billion in 2010. Many studies argued the e-Mall model's benefits which are focused on risk reduction currently limited to transactions via third parties, the diffusion of SMEs' products globally, improved efficiency, and reduced prices (Kabir, 2011; Kutner, 1998; Laudon & Traver, 2007; Timmers, 1998). So, the director of e-commerce at Microsoft agrees that the good news is sharply lower prices because of increasing competition (Kabir, 2011; O'Hara, 1998).

2.4 Electronic Mall (E-Mall) in Saudi Arabia

The diffusion of e-Malls is one of the long-term goals of the extensive studies that have attempted to demonstrate their importance universally as mentioned previously. It has become one of the main objectives of the governmental bodies that try to utilize the electronic commerce activates. The only e-Malls currently operating in Saudi Arabia are two markets: souq.com, which was established in 2005, and e-Mall.com.sa that started in 2010.

Presently, Saudi consumers' confidence is still low across the Arabic marketing sites. A survey has been conducted on consumers from a Saudi Arabia Internet services unit, indicating that only 8% of consumers are buying through the Arabic sites, while 56% only trust foreign market sites (Internet Service Unit, 2006).

In addition, this perspective should be considered in the gulf countries and Saudi Arabia since these countries have significant attractive factors such as the technical infrastructure and governments who are interested in the development of electronic processes to increase their performance universally. Additionally, studies in Saudi Arabia are generally absent. Most studies have concentrated on the activation of e-commerce generally or to identify the factors that affecting to deal with e-trading. However, there are few studies to publish the particular sub-models of e-commerce such as B2C and B2B such as e-retailer (AlGhamdi *et al.*, 2011a). That leads to a lack of studies in the B2C frameworks, where e-Mall is one of its important B2C sub-categories. As well as, wide range of companies that cannot create an e-commerce site by themselves, so they can contract with e-Malls as alternative solutions for them. The companies able to offer their products without paying substantial costs to create and establish of a website as well as access to a large segment of consumers who are members of these e-Malls.

2.5 Small and Medium Enterprises (SMEs)

Private commercial sector represents one of the most important economic recourses for countries (Samiha & Sanjay, 2002; Al-Mahdi, 2009). Expanding the number and size of companies is helpful to increase corporate competitiveness and chances of success in the future. This aspect significantly influences the facilitation of ecommerce performance as well as exposing businesses to successful worldwide markets. Therefore, it is very important to know the characteristics of SMEs and why SMEs are important in Saudi Arabia.

2.5.1 SME Characteristics

The characteristics of SMEs are very different from large companies, especially when implementing new projects. Therefore, several studies have focused on the procedures and regulations that have been successfully implemented by large companies not yielding the same results in SMEs (Bose & Sugumaran, 2006). These characteristics can be summarized in the following points. First, SMEs do not need advanced technical expertise or human resource professionals to find solutions to complex technical issues (Barry & Milner, 2002). Second, SMEs consist of a small number of staff who usually depend on the owner or executive director for solutions (Bose & Sugumaran, 2006). They also do not have the centralized organizational structures of large companies for decision-making (Mintzberg, 1979). Therefore, SMEs avoid complex regulatory programs and focus on simple methods to manage their systems, which appear poor and weak in regard to the management of these companies (Tetteh & Burn, 2001).

The level of annual income in SMEs is limited, which is determined by the companies' capital. As a consequence, SMEs prefer to contract general workers because they are unable to satisfy the income requirements of specialists commensurate with their professional experience. Besides being difficult to retain specialized personnel, SMEs also have difficulty attracting distinctive competencies, which significantly influences these companies' performance levels (Blili, 1993; Gable, 1991; Nooteboom, 1988; Wang, 2004). Finally, adopting new technologies carries a risk and SMEs are unable to prevail over failure, and continue on trading; as a result, they are concerned about activating new methods (Thong *et al.*, 1994). SMEs are of the opinion that many business characteristics may be significantly affected when using modern techniques, such as the business sector size and age, the type of activity, and the level of technological knowledge (Auger & Gallagher, 1997; Wang, 2004).

2.5.2 Why SMEs Are Important in Saudi Arabia

SMEs in Saudi Arabia are the main source of private sector investment. Despite their strategic importance to economic development, from economic and commercial perspectives, SMEs have many shortfalls. For example of these shortage aspects lack the basic IS tools that will enable them to grow and prosper, they lack the funds and credit options, and they work without the availability of basic statistics and necessary data to ensure they take the right decisions in the investment sector (Bundagji, 2005).

Optimal solutions cannot be provided without government involvement and support. Moreover, government involvement will not succeed without the active participation of the private sector, including commercial banks, major institutions, and other stakeholders (Alfuraih, 2008; Aljefri, 2003; Bundagji, 2005). This solution will lead to the creation of a variety of options for SMEs to participate in significantly building the domestic economy.

2.6 Major Factors That Could Affect Electronic Market Diffusion

There are many issues associated with the adoption and application of online trading applications in organisations (Lee & Runge, 2001). However, many studies and theories have been presented to in pursuit of these issues and learn the appropriate frameworks to address the imbalance and shortage aspects. The factors that influence the system's performance should also be understood and tested periodically in order to comply with the contemporary requirements. (Bahaddad *et al.*, 2012) noted that there are many factors that affect the diffusion of e-Malls can be separated into three fundamental aspects: people and organisational factors, technology and environmental factors, and traditional and cultural factors, and the extent of these factors' impact on the key stakeholders, consumers, and sellers, should be proven (Aljafari, 2003; Alfuraih, 2008; Tan, Macaulay, & Scheurer, 2006; Bahaddad *et al.*, 2012). In the rest of this document, we describe a study to determine the effect of each factor on the stakeholders, and to learn about the global challenges of this study.

2.6.1 People and Organizational Factors

People and organizational factors relate to the improvement of individuals' and organizations' improvements. They can be further subdivided into the following factors: lack of interest and awareness, educational background, Previous IT experience, Lack of resources and IT skills, Firm size, Business sector, Electronic facilitator, and Online trading advantage. A variety of studies have been done in the online trading field (Koh & Maguire, 2004; Scupola, 2002; Tan, Macaulay, & Scheurer, 2006; Taylor & Murphy, 2004; Bahaddad *et al.*, 2012; AlGhamdi *et al.*, 2011), finding that SMEs are generally unaware that their business operations can be enhanced and supported electronically by information technology perspective (Bose & Sugumaran, 2006). The level of education affect onto the technology adoption decision, therefore it found that the vast majority of people living in a small locality or having a local business will be affected by educational level, and this should include senior executives of the companies. Similar to previous experiences with information technology (IT), the SMEs that have dealt with the Internet and technology in the implementation of its business activities in the past are possibly more likely to accept and adopt this method than companies that have not (Eastin, 2002; MacGregor, 2004). Additionally, the lack of technical skills and IT resources represents one of the fundamental challenges to activate new technology. Many studies noted that the main reason for delaying the adoption of the application is the shortage of IT resources, which negatively affects the implementation of modern technology in SMEs (Dixon *et al.*, 2002; Fillis *et al.*, 2004; Taylor & Murphy, 2004; Bahaddad *et al.*, 2012; AlGhamdi *et al.*, 2011). Moreover, the size of the company and its financial position are main factors that influence the SME's decision to adopt and use online shopping. Reducing the company's financial capacity is an important factor in adopting IT projects, which have not been a priority in some companies' plans (Fariselliet *al.*, 1999; Mirchandani & Motwani, 2001). This factor involves the volume of work, depending on the number of staff, the age of the firm, the business facilities sector such as service, manufacturing, or retail, the target population such as regional, local, national, or international, the level of technological expertise available, and the company's annual sales (Bose & Sugumaran, 2006). The kind of business sector is one of the main influence factors, the MacGregor study has shown that service-oriented companies are more likely to accept online trading companies than manufacturing firms (2004). That is because these activities do not have obstacles in the shipping and delivery system which is main problem in slice retail, wholesale and manufacturing industries. As well as, the electronic facilitator is useful to apply the e-government principle in the SMEs, even if they may have been necessary during the companies' infancy, because it allows them to replace paperwork with electronic work (Martin & Matlay, 2003). Finally, many online trading applications may be influenced by new facilities that are implemented with these applications. These facilities are helpful in terms of increasing the SMEs' efficiency, as well as their capacity to expand. So, these features comprise a key factor for SMEs to subscribe in the e-markets, and then to activate and participate in the e-markets' frameworks (Bose & Sugumaran, 2006; AlGhamdi *et al.*, 2012).

2.6.2 Technology and Environmental Factors

Technology and environmental factors relate to the infrastructure that should be provided in e-Malls. The availability of appropriate infrastructure leads to an increase in the e-Mall's performance and then influences customer confidence. The significant aspects can be summarized as follows: the application of innovation; the

communications infrastructure; security; the payment system and safety payment channels, and features of the e-Mall website. The acceptance of innovative technologies represents a significant factor in any new application, which is based on the practical ability and clear vision to adopt and implement it (Mustonen-Ollila & Lyytinen, 2003; Rogers, 1995). In this case, the e-Mall framework provides a high degree of cooperation and innovation more than other B2C business models (Vézina *et al.*, 2003). This is a challenge for many SMEs that have not yet adopted some basic online business requirements, such as broadband service, which is only provided to approximately 10 per cent of Saudi Arabia according to a report of the Communications and Information Technology (CITC, 2010) in Saudi Arabia. There are more than 88% of companies in Saudi Arabia do not have the broadband service, which is available now in major cities in Saudi Arabia (CITC, 2010). This issue may reduce the SMEs' performance in accessing the Internet due to the lack of cooperation in dealing with online trading (Tan, Macaulay, & Scheurer, 2006). In addition, the secure transfer of data and information is central to increasing consumer confidence and ensuring the continued use of online purchase channels. Implementation of a hierarchy of certification authorities (CA)s may reduce the perceived security risk to the lowest possible level, and satisfy the target segment for these commercial websites (Bose & Sugumaran, 2006; AlGhamdi *et al.*, 2012b). Similar to the security in payment capabilities are a key aspect of commercial transactions over the Internet. Many studies indicate that the security and speed of payment methods are important, but businesses must also be aware the payment component's infrastructure via Internet will be neither inexpensive nor simple (Alfuraih, 2008; Deck, 1997). In addition, the delivery service in Saudi Arabia is still not very effective because the government is responsible for the service, and the development remains quite slow (Alfuraih, 2008). Finally, It is essential to determine the structural properties of the e-Malls' framework and identify the key factors affecting the information's consistency in the system. For example of these characteristics are providing a supervisory system (Bose & Sugumaran, 2006), adding new services similar to new promotions (McIlraith, Son, & Zeng, 2001), and apply semantic consistency in the business processes (Bose & Sugumaran, 2006).

2.6.3 Traditional and Cultural Factors

Saudi Arabia's e-commerce is affected in similar ways as in other parts of the world by cultural and social traditions. These factors play an important role in encouraging and promoting e-commerce. Therefore, the successful adoption of online trade applications in a particular area does not necessarily mean it will be successful somewhere else. This is due to a number of influences and the most important are the cultural and traditional factors (Curbera *et al.*, 2003). The main components of these factors can be divided into three issues: the Arabic social environment; the development of the Internet resources in the small cities as compared to major cities (geographical restrictions); and cultural restrictions. The conservative social environment that limits the freedom of women to visit the physical mall centres alone may positively impact on the growth of the e-shopping method in Saudi Arabia (Aljefri, 2003). As well as this, the difference in development between the large cities and the rural areas is significant. The rural areas lack business centres and the diversity of the products offered in small towns and villages is minimal compared with major cities (Aljefri, 2003). This is of interest to e-Malls that provide products that are available in major shopping centres for purchase to any consumer; this may positively help growth, especially in areas that have less commercial shopping centres (Aljefri, 2003; AlGhamdi *et al.*, 2011a). The cultural and traditional aspects may influence on the consumers' confidence with online shopping, especially with delivery system issue. Therefore, there are still implications of lack of postal addresses and letter boxes for deliveries due to lack of trust in delivery providers is an issue as well. These issues will be beneficial to expand e-Mall framework if has been solved by support delivery system in the e-Mall framework such as designing e-Mall by post company in Saudi Arabia (e-Mall, 2012).

Table 1. Summary of major factors that could affect electronic market diffusion inseller and consumer parts

No	Factor	Type	Impact On	
			Seller	Consumer
1.	Lack of interest and awareness	People and organisational factors	√	
2.	Educational background		√	√
3.	Previous IT experience		√	√
4.	Lack of resources and IT skills		√	√
5.	Firm size			√
6.	Business sector			√
7.	Electronic facilitator			
8.	Online trading advantage			
9.	Applying an innovation	Technology and environmental factors		√
10.	Telecommunication infrastructure		√	√
11.	Website security		√	√
12.	Delivery system		√	√
13.	Safety payment method		√	√
14.	E-Mall's website characteristics	√	√	
15.	Arabic social structure	Traditional and cultural factors		√
16.	The level of development between large and small cities			
17.	Constraints that affect the application of e-Mall framework technology			√

Adapted: (Bahaddad et al., 2012).

Moreover, there are three difficulties that should be taken into account when applying the e-Malls in Saudi Arabia. First, it is important for people in Saudi Arabia to see and touch the goods before buying, especially with clothing and cosmetics and this is a cultural preference based on shopping habits (Aljefri, 2003; AlGhamdi et al., 2011a). Second, it is convenient for people in Saudi society to ask questions and get advice from the seller or other buyers, which will take longer through e-shopping due to the lack of direct contact between suppliers and customers (Qasrawi, 2001). However, it is not convenience it is cultural habit. As to the time it takes to do comparisons it depends on how many competitors have B2C systems so that online comparisons can be done by customers. When the system is running it is far quicker than walking and driving from shop to shop to chat and compare goods. Third, there are psychological obstacles to overcome with e-commerce models in regard to the use of non-visible currency or credit cards, which represent a major challenge to human nature, especially those not widely used to credit cards (Aljefri, 2003; Bahaddad et al., 2012). May be, it is due to lack of understanding of the technological aspect of e-commerce and e-payment. And the people usually are sort of fear of the unknown that creates an inertia to change. Therefore, the people prefer to use cash exchanges and face-to-face contact in business dealings (Bahaddad et al., 2012).

3. Methodology

In order to gather data relating to the adoption of e-Malls amongst retailers in KSA the following steps were taken. First of all, the research question was what the factors are attracting customer in Saudi Arabia to buy from your business online. For answer this question, the survey instruments were designed to capture data from target audience. Then, a survey was designed for customers so that a different perspective would be constructed for triangulation. Survey results were analysed using a tool to calculate the Mean, Std. Deviation, and t-value. These results were extracted from SPSS program.

A survey was used in this research because it was an appropriate method for two reasons. Firstly, the target audience consists of people from various cultures and traditions residing in the same community. Saudi society does not have much experience in online trading, despite having some basic susceptibility for jump-starting development and using technology in many aspects of economic and trade exchange (Aljefri, 2003; Tan & Macaulay, 2006). Therefore, they are seeking to simulate successful systems from other countries in order to easily and quickly apply this framework. Secondly, this e-Mall framework is not widely used in Saudi society, so there are varying opinions about it. Currently, consumers do not have specific ideas and optimal solutions for their needs. Considering these factors, a quantitative survey will allow respondents to voice their opinions using both multiple-choice and closed questions, and assist them to express their views on this framework by answering open questions (Neuman, 2006). Therefore, a research survey design was considered useful and

important in soliciting a wide range of community opinions regarding e-Mall use and development. This method is the best way to present a new framework and obtain information regarding audience satisfaction according to the characteristics and culture of the target audience in the society.

As stated above, the questionnaire includes both closed and open questions. The main purpose for choosing this methodology is its helpfulness in codifying the basic data and gaining more insight into the target demographics regarding the use of technology in this area. In addition, it specifically concentrates on the participants' points of view regarding the application of an e-Mall model (Neuman, 2006). Open survey questions allow us to take advantage of the knowledge of experts who have previously used the e-Mall framework, and focus on key aspects of their mission that may not exist in other communities and cultures (Neuman, 2006). Taking advantage of innovative ideas helps in developing a quality mechanism that works efficiently.

The quantitative method is used to collect data via questionnaire. It is an appropriate method for consumers who may not be familiar with the issue, to see its boundaries clearly and present his or her view due to lack of online trading importance (AboZaid, 2005). This includes consumers' society, who often do not have enough experience buying and selling over the Internet, and who want to try this field because of they think it will be value for them such as reducing the shopping price via online purchase (AboZaid, 2005).

3.1 Survey Design

The survey contains of four basic sections which are as follow:

- 1) First part concentrated on the demographic information, such as academic qualifications, age group, and demographics. Additionally, some questions related to average Internet usage, whether or not the participant purchased goods over the Internet, and the average times of purchase. The final question asks what products may be purchased online from the buyer's standpoint. There are further explanations of the main purposes for choosing these questions in the survey.
- 2) The second part consists of the factors influencing e-Mall diffusion globally. They were collected from similar European and U.S. frameworks. These factors should be studied and tested in the Saudi Arabian society to ensure their impact in Saudi society. The questionnaire asks the participant's views on the impact of these factors. He/she can choose one option of five (strongly agree, agree, I do not agree nor disagree, disagree, or strongly disagree). This part consists of 19 questions in the buyer survey and the 20 questions in the seller survey.

3.2 Choice of Target Participants

The target audience was been selected via various ways. Firstly, an e-invitation that was sent to the largest possible segment of the general public through social networking sites, forums, and mailing groups. Secondly, the paper questionnaire was distributed through educational communities such as schools and universities. Thirdly, via popular Malls Centres that was visited to collect the consumers' and vendors' participations. The participants were selected on the following criteria:

- 1) The consumer participant should has the following conditions:
- 2) Purchases or has experience purchasing via Internet.
- 3) Has used global e-Mall system website (e.g. eBay, Amazon).
- 4) The people who interesting to adapt this technology in the region field.
- 5) The participant is 18 years of age or older.
- 6) The participant should resident or lives in Saudi Arabia of couple of years or more.

3.3 Survey Distribution

The questionnaire was distributed in several ways:

- 1) The paperquestionnaire was distributed at malls and shoppers were asked their opinions about this new system and its adoption in Saudi Arabia.
- 2) Participants were invited to complete the online questionnaire, which would be distributed over the Internet via group mailing lists, forums, and social networking websites.
- 3) The questionnaire was posted via mailing lists to staff and students in selected educational communities, such as information technology, education, and economics and management colleges at King Abdul Aziz University. In addition, some secondary school teachers and students completed the paper questionnaire during field visits to collect data from that segment of the population.

- 4) A link to the online survey was placed in field-related e-magazines, as well as on personal blogs that receive a large number of visitors.
- 5) Some of previous plans were not solicited sufficient results due to several factors; therefore the plans for implementing the questionnaire have been altered in order to collect the required results.

3.4 Measuring the Sample Size

$$X = Z(C/100)^2 * r(100-r)$$

$$n = N * x / ((N-1) * E^2 + x)$$

$$E = \text{Sqrt} [(N - n)x/n(N-1)]$$

Source: (Raosoft, 2004)

Figure 4. Sample size equation

According to the Census which was conducted by Central Department of Statistics and Information (CDSI) in Saudi Arabia in 2011, the number of population in Saudi Arabia was 28.4 million (CDSI, 2012). Based on this information, the calculation of the sample size can be represented this sector, according to the sample size equation.

The number of sample size output was 271 responses, within 90% level of confidence (Bahaddad *et al.*, 2012; Raosoft, 2004). The samples have been collected in this study was 474 responses and its margin error was 5.02%. It was ignore 93 participants that do not answered 95% or less of the questionnaire questions. This was appropriate number for this study based on the sample size equation result.

Table 2. Attributes of consumer participants

Category of Consumer	No.	%
All participating	381	100%
Education level		
Secondary school	41	8.6%
Diploma	27	5.7%
Bachelor	192	40.5%
Higher Diploma	25	5.3%
Master	139	29.3%
PhD	50	10.5%
Age group		
18–24 years	39	10.2%
25–40 years	294	77%
41–65 years	49	12.8%
Gender		
Male	199	52.1%
Female	182	47.9%
number of hours spent on the Internet		
Less than 2 Hours	118	30.9%
2–5 Hours	182	47.6%
More Than 5 Hours	82	21.5%
Internet type		
Broadband	149	31.4%
DSL	290	61.2%

Dial Up	22	4.6%
Connect	65	13.7%
Smart Phone	61	12.9%
Monthly Income		
Less than 3000 SR.	63	16.7%
3000–Less than 6000 SR.	89	23.6%
6000–Less than 10000 SR.	114	30.2%
10000 SR and More.	111	29.4%
Internet to makes purchases online		
Yes	209	54.7%
No	173	45.3%
Making online purchases		
More than twice a week	9	4.2%
Once a week	34	15.7%
Once a month	11	5.1%
Rarely	162	75%
Business type		
Electronic & Electrical Devices	355	74.9%
Clothes	208	43.9%
Beauty & Health	197	41.6%
Furniture	156	32.9%
Automobile	118	24.9%
Jewellery& Watches	106	22.4%
Books & Academic Journals	46	9.7%
e-Tickets & Accommodation & Car Rent	33	7%
Programs & Web Services & Movies	18	3.8%
Foods & Medicines	11	2.3%
Toys & Children Needs	6	1.3%
Subscription & General Services	6	1.3%
Government Payments	5	1.1%
Gifts	4	0.8%
Real Estate	3	0.6%

4. Result and Data Analysis

The results in the general part focus on the demographic information that has a direct relevance to the research questions which have been presented in Table 1. The questions are directed at the three main aspects which are personal information of participants, the participants' details regarding to use the Internet, and the participants details of online purchases. The following are the most important results and main findings.

The personal information is provided by the answers to the first three questions, which have been presented in Table 1. Question one focuses on the education level of the participants. The results show the number of participants with post-graduate degrees (High diploma/Master/PhD), representing 45% of the total. This indicates that the people interested in technical developments and online purchasing are people who have a high level of education. The second question concentrates on age group. The results show that those aged 24–40 years old, generally representing university graduates with stable careers and family, represent 77%. This is helpful in identifying the main target audience, as well as learning their interesting aspects.

Activating the Internet in contemporary life is important. Many people have started using the Internet for their

own affairs. The increasing number of Internet applications provides an indication of the need to increase Internet effectiveness. The questionnaire focuses on this issue via two questions. The participants' daily rate of use for the Internet, and the kind of Internet the participants use. The results from the question on the daily rate of use for the Internet indicate that 47.6% of the participants chose 2–5 hours. This represents quite a few of the Internet users in Saudi society. The second question focuses on the type of Internet service. The results indicate that 61.2% of participants use a DSL service, while 31.4% use a Broadband service. This shows that a willingness to use the Internet began to use the Internet fast speed, especially with the incentive offers by telecommunications companies and Internet service providers.

In the third part, the general consumer questions focus on information about participant e-commerce. The responses of the participants are as follows: 54.7% have tried online purchasing, which is a moderate level, though 75% of these purchase only seldom through the Internet. These two questions indicate that e-commerce is weak. Results of the monthly income are almost equal for the groups of participants that tried to make purchases via the Internet. This indicates that people look for new ways to save while providing basic needs and supplies, and online purchases are one of the common methods. Finally, participants prefer to buy certain products over the Internet. The rates of the top five products are as follows: electronic and electrical devices (74.9%); clothes (43.9%); beauty and health products (41.6%); furniture (32.9%); and automobiles (24.9%).

Table 3 shows the details of factors which have an influence on increasing the attraction of consumers to online shopping. This shows in detail the analysis of all the factors of the participants in the questionnaire who were previously familiar with online shopping. Significant factors were recognized by using a standard T-test. Only 13 factors were considered and they were statistically significant in this test at the 0.05 level. These factors can be categorized into five factors within a people & organisational group, 6 factors from a technology & environmental group, and two factors from a traditional & cultural group. There more explanation about these factors in next section.

Table 3. Data analysis from all respondents showing factors listed in order of descending mean value for each group

		N	Missing	Mean	Std. Deviation	t-value	Level of Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
People & organisational factors	Online trading advantage	362	20	1.9061	0.69984	24.633	.000	0.90608	0.8337	0.9784
	Firm size *	369	13	1.9079	0.84195	20.713	.000	0.90786	0.8217	0.9940
	Business sector*	364	18	1.9368	0.71495	24.999	.000	0.93681	0.8631	1.0105
	Previous IT experience*	374	8	1.6524	0.70770	17.828	.000	0.65241	0.5804	0.7244
	Lack of resources and IT skills*	363	19	1.8926	0.80195	21.205	.000	0.89256	0.8098	0.9753
	Lack of interest and awareness	364	18	2.2060	0.94409	24.372	.000	1.20604	1.1087	1.3034
	Educational background*	374	8	1.7888	0.79932	19.084	.000	0.78877	0.7075	0.8700
Technology & environmental factors	E-Mall's website characteristics*	362	20	1.7127	0.80532	16.838	.000	0.71271	0.6295	0.7959
	Applying an innovation*	363	19	1.8320	0.91451	17.333	.000	0.83196	0.7376	0.9263
	Telecommunication infrastructure*	357	25	1.9580	0.83190	21.758	.000	0.95798	0.8714	1.0446
	Delivery system*	359	23	1.6574	0.85688	14.536	.000	0.65738	0.5684	0.7463
	Website security*	363	19	1.8154	0.99256	15.652	.000	0.81543	0.7130	0.9179
	Safe payment method*	363	19	1.6556	0.95182	13.124	.000	0.65565	0.5574	0.7539
Traditional & cultural factors	Arabic social structure *	360	22	1.7917	0.90707	16.560	.000	0.79167	0.6977	0.8857
	Constraints that affect the application of e-Mall framework technology	360	22	2.301	1.07516	22.8058	.000	1.3010	1.1896	1.4123
	The level of development between large and small cities*	360	22	2.0000	0.97889	19.383	.000	1.0000	0.8985	1.1015

* Significant at the 0.05 level for this group of all respondents.

5. Discussion

In the first group (Organizational and People), the previous experience and educational level factors are the highest ranked factors among the influence factors affecting online shopping. The next most important factors in the sample which increase online purchasing are resources and IT skills, information sources and technical support. It is shown that the number of online consumers who make purchase is below what might be expected in Saudi Arabia. Moreover, the survey results show the importance of the firms' size and brand name which also represent important aspects causing increases in consumer confidence in e-commerce. The commercial activities of the company are another of the most important aspects that make consumers willing to buy from them electronically and that have been addressed in table 2 previously. However, the factors of online trading advantage and lack of interest and awareness do not show a positive effect on consumers' opinions about dealing with electronic markets.

In Technical and Environmental factors, the interesting thing is that all the factors in this group showed the importance to consumers. These factors are website characteristics, the delivery system, and safe payment methods. These factors are effective in highlighting the competitive advantages of online shopping. In addition, if the online market website is enhanced with effective marketing tools and is easy-to-use this helps to adopt e-Mall solutions positively. Besides that, the level of consumer security helps to some extent, with the activation of secure payment methods and low-cost help needed to attract the largest possible market segment. Therefore, the electronic payment should provide a trustworthy method and plays a very positive and influential role. The level of telecommunications infrastructure plays an important role in deciding the adoption of e-Mall solutions and is beneficial to the suppliers to enable them to support and communicate anywhere with a mobile Internet service, which has become widely available in Saudi Arabia. Using e-commerce requires a minimum security level on the Internet, which is one of the sensitive issues among consumers. The risks include extortion and electronic theft, especially if these online shopping sites do not focus on reviewing their site security systems by independent security companies to ensure no gaps exist that can be used to reach the website system and its confidential customer information. This is important for promoting and managing the business on the one hand and increasing the level of confidence for the final consumer on the other. Finally, e-Malls represent one of the innovative projects and advanced areas in Saudi Arabia and there is a significant challenge to increase the level of attraction over time. Therefore, this challenge will rest on the business sector, and especially SMEs, because they deal directly with the final consumer, and seek to attract him or her through any means. It is also an opportunity for companies to expand their circle of customers and their geographical reach.

Traditional & Cultural factors are considered to be major challenges for SMEs, and represent a significant factor in attracting the final consumer. There are two factors which are the Arabic social structure and the level of development between large and small cities. For the content structure, it is important to establish the website in the target audience's language, which is helpful to increase people's confidence to find information and details clearly. In addition, in order to attract people from areas that are not physically close, it may be beneficial to give them more options and more computation which is considerable and easily to be available via adopting the e-Malls framework. So, this solution may be one of the most useful means to support this trend to attract this segment to online trading in a manner commensurate with the new aspirations of the community conditions.

6. Limitations and Managerial Implications

There are some limiting factors in this study that should be considered when designing future research. These can be divided into two essential categories: firstly, the actual number of participants was 381. We believe that the sample number will reflect up to a 95% confidence rate in the results if the number of participants is increased to between 550 and 600, according to the sample equation we mentioned previously. Secondly, the research includes only one quantitative method, so the researchers suggest using a mix of quantitative and qualitative methods for data collection (for example, certain cross-sections of Saudi society prefer interviews to filling in paper questionnaires). In terms of the questionnaire itself, it could have been filled out more in-depth if there were less questions overall, as this format would prompt participants to answer the questionnaire fully within a shorter period of time. When we used the questionnaire, around 19% of participants did not complete it, especially the electronic version. Overall, some of the participants did not have enough time to answer every question on the questionnaire. The researchers suggest that the research methodology should contain more than one tool to ensure the main findings enable a comprehensive understanding of this information.

Although this research was conducted in various communities, it did not prepare for the necessary technological communication (such as e-mail), especially in the case of e-mails coming from anonymous participants. Consequently, we faced some difficulty gathering data when communicating with important people, such as

academic faculty members at certain universities. An electronic invitation was sent via e-mail to more than 650 university members; however, the response rate was less than 5%. This emphasizes the importance of focusing on the appropriate means for communication within each community. A study conducted in 2012 found that the most effective means of communication in Saudi society is via mobile phone SMS messages, and the number of smartphones used in Saudi Arabia is up to 1.8 mobile phones per person (Alsenaidy & Tauseef, 2012). Therefore, it should be taken into account that the preferred means of communication are commensurate to each individual community. This may be helpful in selecting the target population, interacting with them, and retaining them in case they are needed for future research.

7. Conclusion

This paper reports on research into the influential factors affecting the handling of electronic markets from the consumers' view in Saudi Arabia. It has discussed 17 different factors, which are divided into three groups. These groups are people and organizational factors; technological and environmental factors; and traditional and cultural factors. A quantitative questionnaire was conducted to determine the influential factors that impact on the online purchase decisions of the consumer. The number of participants was 381. Thirteen factors were identified as considerable, and were distributed across the three groups. These factors concentrate on attracting customers and increasing the chance for dealing with electronic markets and online businesses significantly in Saudi Arabia in the future.

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