

**E-COMMERCE ADOPTION FACTORS AND THEIR IMPLICATIONS FOR
E-COMMERCE BUSINESS STRATEGY IN SAUDI ARABIA**

by

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Abstract

This research project provides a comprehensive overview and current perspective of e-commerce usage and adoption factors in Saudi Arabia and seeks to explain why e-commerce use is still in a relatively immature state when compared to other regions. This study examines Saudi Arabia's infrastructure readiness for online shopping and explores Saudi consumers' behaviour and attitudes with regard to shopping online. An online survey was conducted to elicit general perceptions of Saudi consumers, as well as more specific opinions about e-payments and perceived obstacles to online shopping. A total of 1,740 responses were received. The findings of this study are of interest to government agencies, Saudi banks, Internet entrepreneurs and established companies that wish to enter the e-commerce market in Saudi Arabia.

Keywords: E-commerce; Electronic commerce; Online shopping; Barrier of e-commerce; Adoption factors; Saudi Arabia; Saudis consumer behaviour

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Table of Contents

Approval	ii
Abstract	iii
Acknowledgements.....	iv
Table of Contents.....	v
List of Figures.....	vii
List of Tables	ix
1: Introduction	1
1.1 Research Objective.....	1
1.2 Why now is the right time for launching an e-commerce business in Saudi Arabia.....	2
1.3 Research Structure.....	5
2: Literature Review of E-commerce.....	6
2.1 E-commerce Definition	6
2.2 E-commerce Technologies	6
2.2.1 Electronic Data Interchange (EDI).....	7
2.2.2 Electronic Funds Transfer (EFT)	7
2.3 Types of E-commerce.....	8
2.4 Benefits of E-commerce	9
2.4.1 Open for Business 24x7:	9
2.4.2 Global Location.....	9
2.4.3 Increases Brand or Product Awareness.....	9
2.4.4 Allows for Smaller Market or Niche Targeting:	10
2.4.5 Lower Transaction Costs.....	10
2.4.6 Potential to Increase Overall Business Sales	10
2.4.7 Convenient Shopping.....	11
2.4.8 Benefits to Sellers/Buyers	12
2.5 Limitations of E-commerce.....	13
2.6 Elements of E-commerce.....	14
3: Internet Users and Usage in Saudi Arabia.....	15
3.1 Introduction	15
3.2 Number of Internet Users in Saudi Arabia	15
3.3 Internet Usage.....	17
3.3.1 Individual Usage	18
3.3.2 Business Usage.....	20
3.4 Number of ISPs in Saudi Arabia	26
3.5 Future of Internet in Saudi Arabia.....	27

4: Existing E-commerce Infrastructure in Saudi Arabia.....	28
4.1 Current Methods of E-payment in Saudi Arabia	28
4.1.1 Financial Cards (Credit, Charge, and Pre-paid Cards) in Saudi Arabia.....	28
4.1.2 SADAD Payment System	37
4.1.3 SambaConnect.....	39
4.2 Saudi Banks with Online Payment System	41
4.3 Postal Services.....	41
4.3.1 Wasel.....	42
4.3.2 Wasel Aalami	44
4.4 Saudi Arabia Financial System	44
4.4.1 Commercial Banks	44
4.4.2 Saudi Arabian Monetary Agency.....	45
4.4.3 National Centre for Digital Certification	45
4.5 Major Existing Websites with E-commerce Functionality.....	46
4.5.1 Websites using SambaConnect	46
4.5.2 Websites using SADAD.....	47
4.5.3 Websites found through World Wide Web.....	47
5: Saudi Perception of Online Shopping: A Survey Study	49
5.1 Purpose of the Research	49
5.2 Research Method and Survey Design.....	49
5.3 Data Presentation & Analysis.....	50
5.3.1 Part One: Demographic Information.....	51
5.3.2 Part Two: Respondents' Experience with Online Shopping.....	54
5.3.3 Part Three: Mobile Commerce and Online Banking.....	64
5.3.4 Part Four: Saudis Attitude and Perspective.....	66
5.3.5 Part Five: Online Shopping Obstacles	69
6: Conclusion & Recommendation.....	71
6.1 Conclusion.....	71
6.2 Recommendations:	75
6.2.1 Technical Recommendations:	75
6.2.2 Governmental Recommendations:	75
6.2.3 Market Recommendations:	76
Appendices.....	77
Appendix A - Financial Cards Forecast in Saudi Arabia: 2010-2015	78
Appendix B – How SADAD Works.....	79
Appendix C – SADAD Billers	80
Appendix D – Websites with SambaConnect.....	85
Bibliography.....	87

List of Figures

Figure 3-1: Middle East Internet Users, March 2011	17
Figure 3-2: Reasons for Using the Internet.....	19
Figure 3-3: Types of Internet Connections	20
Figure 3-4: Internet Penetration.....	21
Figure 3-5: Online Business Activities.....	22
Figure 3-6: Types of Internet Connections	23
Figure 3-7: Companies with Website	24
Figure 3-8: Services Offered on Companies' Website (2009)	25
Figure 3-9: Companies with E-commerce Practices	26
Figure 4-1: Number of Financial Cards in Circulation in Saudi Arabia.....	29
Figure 4-2: Percentage of Saudi Population Holding Financial Cards.....	30
Figure 4-3: Options of PayPal Accounts in Saudi Arabia	35
Figure 4-5: Methods of SADAD payments 2010	38
Figure 4-6: Number of Organizations Using SADAD	39
Figure 4-7: Addresses in Saudi Arabia Before Wasel Project 2009.....	43
Figure 4-8: Addresses in Saudi Arabia After Wasel Project 2009	43
Figure 5-1: Respondents' Geographical Distribution	52
Figure 5-2: Respondents' Gender Distribution	53
Figure 5-3: Respondents' Age Distribution	53
Figure 5-4: Respondents' Level of Education.....	54
Figure 5-5: Respondents' Employment Status.....	54
Figure 5-6: Percentage of Credit Card Holders	56
Figure 5-7: Types of Credit Card Held by Respondents	56
Figure 5-8: Frequency of Online Shopping.....	57
Figure 5-9: Online Shopping Obstacles.....	58
Figure 5-10: Percentages of Saudis who know their Address	59
Figure 5-11: Percentage of Saudis Who Shopped from Global Online Merchants.....	60
Figure 5-12: Percentage of Saudis Who Shopped from Saudi Online Merchants	61
Figure 5-13: Percentage of Saudis online purchases by Product Categories.....	61

Figure 5-14: Percentage of Saudis who Used PayPal.....	62
Figure 5-15: Percentage of Saudis SADAD Usage	63
Figure 5-16: Method of SADAD Payments	64
Figure 5-17: Percentage of Saudis Who Own Smartphones and Purchase Applications.....	65
Figure 5-18: Saudis Online Banking Usage Percentages	66
Figure 5-19: Saudis Level of Trust in Online Merchants.....	67
Figure 5-20: Attitudes and Perspective of Postal Services in Saudi Arabia.....	68
Figure 5-21: Percentage of Saudis who Trust PayPal	68
Figure 5-22: Saudi’s Website language preference.....	69
Figure 5-23: Saudi Arabian Online Shopping Obstacles.....	70

List of Tables

Table 2-1: Major Types of E-commerce	8
Table 2-2: Summarizes the Benefits of E-commerce to Sellers and Buyers	12
Table 2-3: E-commerce Limitations	13
Table 3-1: Growth of Internet Users in Saudi Arabia.....	16
Table 4-1: Financial Cards Performance 2005-2010.....	32
Table 4-2: Financial Cards % Growth 2005-2010.....	32
Table 4-3: PayPal Fees for Receiving Payments	36
Table 4-4: Most popular Online Stores in Saudi Arabia according to Google search	48

1: Introduction

1.1 Research Objective

The methods for establishing businesses are increasingly shifting to include the Internet and associated advances in information technology that affect consumers and businesses alike. This research project aimed at comprehensively studying the notion of e-commerce to obtain a thorough understanding of its condition in Saudi Arabia and to establish why it is still in an immature state. We began with an effort to obtain a comprehensive understanding of e-commerce in general and then focus on Internet growth and the existing e-commerce infrastructure usage in Saudi Arabia. To supplement our preliminary knowledge of the literature on e-commerce in Saudi Arabia, we conducted an online survey to examine Saudi Arabia's infrastructure readiness for online shopping and Saudi consumers' behaviour, attitudes and perceptions with regard to shopping online. We were particularly interested in behaviours and attitudes associated with making online payments and receiving shipments, and perceived obstacles pertaining to shopping online. The survey was distributed online via social networks and listservs. We received 1,740 responses from Saudi consumers. The results of this study will help this researcher and other merchants who plan to penetrate the Saudi e-commerce market to identify the opportunities and address challenges to create successful businesses.

1.2 Why now is the right time for launching an e-commerce business in Saudi Arabia

For e-commerce to be successful a number of prerequisite conditions and financial instruments need to be in place; for example widely available Internet access, trusted payment methodologies, a reliable addressing system, and consumer willingness to conduct a non-cash based transaction, to name a few. We believe these conditions and others, which we will examine later in this paper, have recently been met in Saudi Arabia.

The Internet in Saudi Arabia has grown substantially in the last ten years. In 2000, only 0.9% of Saudi population had Internet access. Eleven years later, the number of Saudis who had Internet access had risen to 43.6% of the Saudi population with an overall growth rate of 5,600% (Internet World Stats, 2011). In addition, Mctoom Media (2011) released a YouTube video showing that the average time a Saudi user spent on the Internet was 133 minutes per day compared to 130 minutes spent watching television. They also showed that 65% of Saudis own smartphones and half of those owners use it to access the Internet an average of 68 minutes a day. This huge progress in Internet use will result in a tremendous need for different kinds of Internet-related services and represents a great potential for those interested in selling their goods and services on the Internet.

The main reason for Internet growth in Saudi Arabia is the low average population age. Sixty percent of Saudi consumers are under the age of 30 (internet.gov.sa, 2011; Euromonitor International, 2010). Teenagers and young adults tend to adopt new technologies much faster than older people do. These younger consumers are generally more open to a western way of life and have boosted the development of the economy in many ways. Saudi Arabia is flourishing with a young

tech-savvy population (source: Arab Advisor's Group founder and General Manager Jawad Abbasi). Saudi youth are more outgoing and consumer oriented than the more conservative previous generations, a situation that paves the way for the increased popularity of e-commerce.

Another important consumer segment in Saudi Arabia is the 120,000 students studying abroad in many different developed countries (Al-Jazirah Newspaper, 2011). Most of those students have been exposed to online shopping during their stay abroad and have benefited from the convenience that it offers. What is more, when they return to Saudi Arabia, most likely they will look for online shopping opportunities in their home country. Thus, they will become a potential market for new e-commerce companies in Saudi Arabia. In our opinion, the repatriated students' experience with online shopping will influence family, friends and acquaintances, creating a larger market as time goes by.

E- government is rapidly growing in Saudi Arabia since the government assigns high importance to the e-government concept and the transformation process that leads to its realization. In 2005, the government started an e-government project called "Yesser" that aims to connect different government agencies electronically to provide a wide range of services online. Recently, "Yesser" established the national e-government portal (www.saudi.gov.sa) through which citizens, residents, businesses and visitors can not only access e-government services but also other government organizations and businesses' e-services. "Yesser" has been able to convert 300 governmental services to online access. In 2008, the number of e-government transactions through this portal reached 202.6 million (Yesser.gov.sa, 2008). Furthermore, a governmental initiative called "The Saudi Initiative for Home Computers" has enabled a million Saudi families

to purchase a personal computer by facilitating affordable, instalment e-payments. The initiative could potentially add at least one million consumers to the e-commerce market in Saudi Arabia. Although the government is undertaking major initiatives to develop e-government services, we believe that e-commerce practices are not progressing at the same pace (sadam.com, n.d.).

The vice president of Saudi Post (SP) said, “One of the reasons for the slow growth of e-governance in Saudi Arabia was the lack of a robust postal infrastructure in the Kingdom. This was preventing the delivery of goods and packages to a customer wishing to place orders via the Internet” (Arab News, 2008). We believe insufficient postal services not only affect e-government practices but also hinder the growth of e-commerce. That being said, from 2007 to 2009, SP took major steps to develop the postal infrastructure by assigning unique addresses for the whole nation. In the past, most residences and small businesses did not have street addresses. This will definitely facilitate the growth of e-commerce in Saudi Arabia.

A major factor in any e-commerce transaction is credit cards; without them online shopping cannot occur effectively. Between 2005 and 2010, the number of financial cards in circulation in Saudi Arabia increased by 362%, from 1.75 million in 2005 to 8.10 million in 2010. It is safe to assume that the rapid increase of credit card holders means that the potential market for e-commerce also increases (Euromonitor International, 2010).

The increasing number of young, tech-savvy Internet users, the increasing number of credit card holders, the facilitation of e-governmental services, and the improved mailing infrastructure leads us to conclude that a large potential customer base for e-

commerce is equipped with the tools and technology required to conduct an e-commerce transaction. To summarize, we believe that the e-commerce market is immature but growing; however, it is always better for any business to enter the market while it is in its growth stage in order to become a leader when it is at the mature stage.

1.3 Research Structure

This study has been organized into six chapters. An overview, objectives and why this study is relevant at this time are presented in chapter one. The second chapter is devoted to a review of e-commerce literature and includes a definition, and references technologies, types, and limitations. In the third chapter we focus on the number of Internet users and usage in Saudi Arabia by individuals and businesses. The current state of e-commerce infrastructure in Saudi Arabia is discussed in chapter four, including methods of e-payment, major financial players, postal services and main existing websites with e-commerce functionality. Chapter five describes our survey study, which examined Saudi consumers' experience and attitudes toward online shopping. Finally, chapter six provides a summary of our findings, presents conclusions and makes recommendations for future development and businesses who would like to enter the e-commerce market in Saudi Arabia.

2: Literature Review of E-commerce

2.1 E-commerce Definition

E-commerce, quite simply, is a tool that enables a company or individual to buy and sell products or services over the Internet and other electronic networks. E-commerce also includes the entire process of marketing, selling, and delivering products and services as well as order fulfillment systems and online payment transaction methods.

E-commerce, as defined by *businessdictionary.com*, is “Business conducted through the use of computers, telephones, fax machines, barcode readers, credit cards, automated teller machines (ATM) or other electronic appliances (whether or not using the internet) without the exchange of paper-based documents. It includes activities such as procurement, order entry, transaction processing, payment, authentication and non-repudiation, inventory control, order fulfillment, and customer support. When a buyer pays with a bank card swiped through a magnetic-stripe-reader, he or she is participating in e-commerce”.

Ecommerce allows firms to establish a market presence, or to enhance an existing market position, by taking advantage of an inexpensive and efficient distribution chain for their products or services (*investopedia.com*).

2.2 E-commerce Technologies

E-commerce technologies assemble all of the related processes in a comprehensive software solution that manages Electronic Data Interchange (EDI), Electronic Funds Transfer (EFT), Email, online transaction processing, inventory and

supply chain management, and Internet marketing. This software should manage the company's websites, databases, and the e-payment systems.

E-commerce usually makes use of the World Wide Web (WWW) as well as a range of other technologies such as email, mobile devices and conventional telephones. Most e-commerce transactions involve the transportation of physical items. However, many transactions for virtual products and services are carried out completely electronically; for example, access to premium content on a website, buying music from iTunes, an e-book from Amazon.com, tickets from ticketmaster.com or a coupon from Groupon.com.

2.2.1 Electronic Data Interchange (EDI)

EDI refers to the transmission of information between organizations by electronic means. EDI is used to transfer electronic documents or business data from one computer system to another computer system among stakeholders such as corporations, financial institutions, and government agencies. It also includes data and document transfer among these organizations and their customers. (Wikipedia, 2007; Alharby, 2006)

2.2.2 Electronic Funds Transfer (EFT)

EFT is the electronic exchange or transfer of money from one account to another, either within a single financial institution or across multiple institutions, through computer-based systems (Wikipedia, 2008). EFT is a low-cost technique for a paperless, virtual transfer of money over an electronic network. Companies and customers can use EFT to make a deposit to their bank account or to transfer money to a creditor's account.

2.3 Types of E-commerce

There are four major categories of e-commerce: business-to-business (B2B), business-to-consumer (B2C), customer-to-business (C2B) and consumer-to-consumer (C2C). Table 2-1 provides a brief overview of the four main types of e-commerce.

Table 2-1: Major Types of E-commerce

E-Commerce Types	Description	Example
B2B	Generally involves big companies transferring most or all of their purchasing and sales to the Web.	A typical example is Cisco (www.cisco.com), a supplier of Internet hardware. Cisco's system enables both buyers and suppliers to deal online.
B2C	Allows sellers to contact more customers and collect comprehensive, focused information about them, enabling sellers to target them more efficiently and effectively. With B2C, the customer initiates contact with the supplier's system. However, it has two-way functionality and is usually done solely via the Web.	A well-known B2C example is Amazon.com, a virtual bookstore.
C2B	C2B is a growing e-commerce sector that involves the consumer requesting a particular service from the business.	For example travellers can bid for airline tickets on www.priceline.com
C2C	Allows customers to interact with other customers. C2C typically consists of some form of auction web site. The customer lists items for sale with a commercial auction web site. Other consumers access the web site and place bids on preferred items. The web site then offers a link between the seller and buyer to complete the deal. The web site supplier usually charges a transaction fee.	A famous example is eBay where individuals can bid for goods being sold by other individuals.

Source: (Cornall et al. 2000 as cited by Alharby, 2006)

2.4 Benefits of E-commerce

Increasingly, e-commerce is becoming one of the most significant drivers of strategic change for business. Compared to ‘bricks and mortar’ stores, e-commerce offers a wide range of benefits, the most important being:

- low capital requirements
- easier and faster to set up and operate

An online store can offer additional benefits to both businesses and customers that ‘bricks and mortar’ stores could never provide. An overview of e-commerce benefits is presented below (Introduction - eCommerce Optimization, 2008).

2.4.1 Open for Business 24x7:

Online stores enable unlimited store hours. Customers can access e-commerce sites and purchase items 24 hours a day 7 days a week.

2.4.2 Global Location

Online business expands a company’s geographical reach to millions of consumers. In addition, sellers can manage their virtual stores from anywhere in the world.

2.4.3 Increases Brand or Product Awareness

With a global presence and 24x7 operations, a company has more and better opportunities to capture market share, increase brand and product awareness, and reach a much wider customer base.

2.4.4 Allows for Smaller Market or Niche Targeting:

E-commerce allows a company to target smaller consumer markets and buyer niches for e-commerce products. The company can target women or men, a particular generation of users, or consumers with identified interest in the company's product line. Niche markets are usually targeted using Search Engine Optimization (SEO) techniques. A common SEO technique is to include keywords in the company website that consumers in niche markets commonly use when searching or shopping for specific items that fall within the company's product line.

2.4.5 Lower Transaction Costs

A well-developed online store can automate many business processes. Through automation, E-business owners can cut costs in many areas by reducing the number of employees required. Since e-commerce does not require a physical store, E-business owners can also reduce costs related to building leases, maintenance, utility charges and other costs associated with running a brick-and-mortar storefront. Furthermore, if the products or services are downloadable, distribution costs are completely eliminated.

2.4.6 Potential to Increase Overall Business Sales

Having an online store in addition to a physical store will help a company increase exposure and generate new opportunities. Extending the business operation to the online market can boost overall sales and potentially increase company profits.

2.4.7 Convenient Shopping

From the consumers' perspective, shopping online is very convenient. They do not have to travel all the way to a physical store, which saves them time and the expense of operating their vehicle. They can browse many products across many stores and compare prices quickly and easily. Many shoppers search many different online stores for the product they want to buy and then travel to a selected physical store to buy it. Thus, the online store becomes an effective marketing tool for a company's products. Online shopping is an easy and convenient way to purchase whatever you want, whenever you want, without leaving your home.

2.4.8 Benefits to Sellers/Buyers

Table 2-2: Summarizes the Benefits of E-commerce to Sellers and Buyers

Benefits to Sellers	Benefits to Buyers
Expanded market reach and access to trading partners	Expanded access to trading partners and support services
Increased marketing and sales profile	Improved sourcing and procurement processes
Enhanced customer contact and service	Enhanced supplier relationships (contact and service)
Reduced cost of sales, technical documentation, and customer service	Lower purchasing prices through improved price transparency and comparison
Reduced transaction handling/processing costs	Reduced procurement costs
Reduced working capital and inventory requirements	Reduced operating costs and maverick spending

Source: (Aarabi, Bromideh, 2006; Moodley, 2003; as cited by Alharby, 2006)

2.5 Limitations of E-commerce

There are technical and non-technical limitations to e-commerce. These limitations are summarized in Table 2-3

Table 2-3: E-commerce Limitations

Technical Limitations	Non-Technical Limitations
Costs of a technological solution	Absence of trustworthy institutions such as banks and other financial and social institutions as intermediaries
Insufficient telecommunications bandwidth	Lack of rules and regulations
Security (vulnerability to fraud and other crimes)	Lack of critical mass in certain market areas for sellers and buyers
Software tools are constantly evolving	Different perceived level of risk
Integration of e-commerce applications with existing databases	The cost of developing e-commerce
Reliability	Not suitable for perishable goods
Conflict between e-commerce applications and certain operating systems	Privacy issues: customer fear of personal information being used wrongly

Source: (Turban et al., 2004)

The main difference between technical and non-technical limitations is that typically technical limitations are tangible limitations and can be resolved by spending enough money. For example, telecommunication bandwidth can increase by spending more money on the telecommunication infrastructure. However, non-technical limitations are intangible and hence are more complicated because they involve cultural considerations, perceptions of risk, resistance to change and other factors. An example for a non-technical limitation is that some people do not like to conduct business with

machines since they prefer to touch the items before buying it. Another example is the different level of risk perceived by each consumer and it is not easy to convince risk averse customers that e-commerce is as secure as any other commerce

2.6 Elements of E-commerce

To conduct e-commerce the seller must have the following elements:

- Product or service
- Website that displays the product or service
- Marketing tools to drive potential customers to the company website
- Shopping cart: a method of receiving orders
- Payment gateway: a way to accept money
- Order fulfilment facility to ship products to customers or download mechanism for virtual items
- Return and Warranty policy
- Customer service

It is important to mention that there are companies that provide complete e-commerce solutions. These companies offer turn-key solutions that include website templates, shopping cart software, integration with social media marketing, search engine optimization, analysis tools, and mobile commerce software. If you have a product or service you want to provide, you can build your e-commerce business in less than 24 hours. 3dcart.com is a good example of a company that provides complete e-commerce solutions.

3: Internet Users and Usage in Saudi Arabia

3.1 Introduction

This chapter will provide background information on Internet users, usage and services in Saudi Arabia. The first section is a general description of the evolution and growth of Internet users from 2000 to 2011. The second section focuses on individual and business Internet usage. The third section is an overview of existing Internet Service Providers (ISPs) in Saudi Arabia. The last section sheds light on the future of the Internet in Saudi Arabia.

The Internet was first introduced to Saudi Arabia in 1994 when government-sanctioned academic, medical and research institutions were given access. The Internet was officially made available to public in Saudi Arabia in 1997 by a ministerial decision and public access finally debuted in 1999 (internet.gov.sa, 2011).

3.2 Number of Internet Users in Saudi Arabia

In December 2000, there were 200,000 Internet users in Saudi Arabia. As shown in Table 2-1, by March 2011 the number of Internet users had reached a peak of 11.4 million users, an overall growth rate of 5,600%, which is a Compound Annual Growth Rate (CAGR) of 44%. As depicted in Figure 3-1, Saudi Arabia has the second largest Internet user base in the Middle East after Iran. Iran has the biggest Internet user base in the Middle East because it has the largest population in the region with 78 million compared to the second and third largest population in the region for Iraq and Saudi Arabia with 30 and 26 million respectively. Currently, approximately 43.6% of Saudi

Arabians use the Internet and it is reasonable to project that the number of users will continue to increase rapidly.

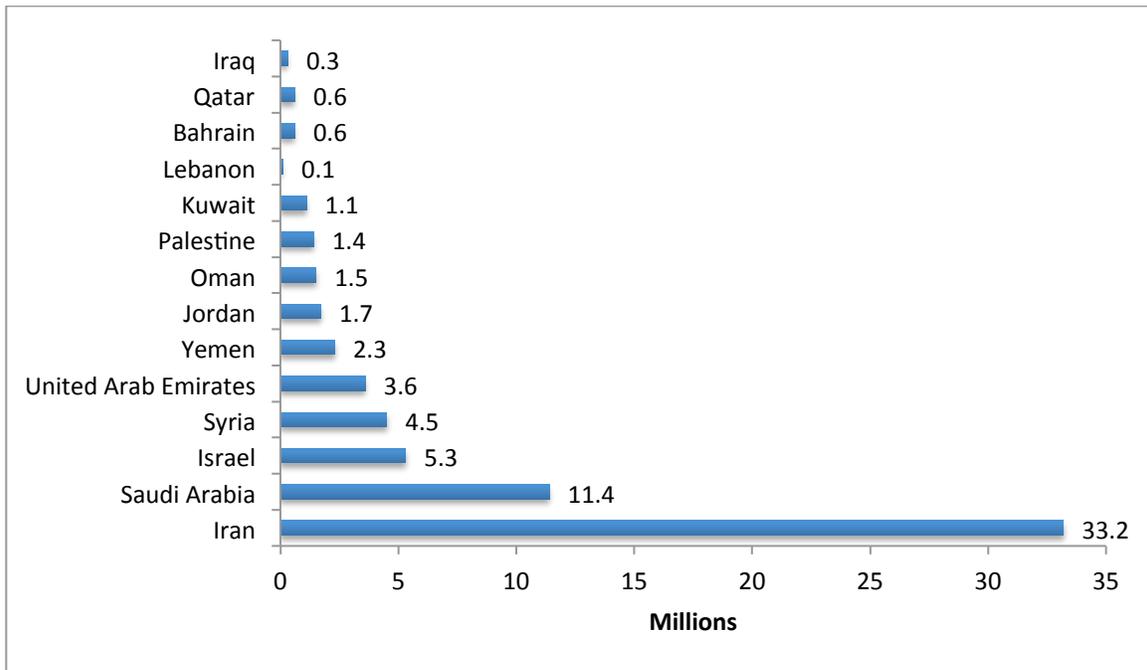
The marked upward trend in Internet penetration is due to the increase in broadband penetration and aggressive competition amongst service providers, which has reduced the price of Internet access (CITC of Saudi Arabia, 2010). In our opinion, one of the reasons for the increasing adoption levels starting in 2003 is the emergence of the Saudi online stock market (Tadawul.com.sa), which became available in 2003. At that time, the Saudi stock market was very bullish offering significant opportunities to make appreciable financial gains. When online trading became available, many people in Saudi Arabia were motivated to use the Internet to sell and buy stocks.

Table 3-1: Growth of Internet Users in Saudi Arabia

Year	Users (in thousands)	CAGR % (2000- "N" year)	Population (in millions)	% Population
2000	200	-	21.621	0.9%
2003	1,500	95.7%	21.771	6.9%
2005	2,540	66.3%	23.595	10.8%
2007	4,700	57%	24.069	19.5%
2009	7,761	50.2%	28.686	27.1%
March 2011	11,400	44.4%	26.131	43.6%

Source: (CIA: World Fact Book, 2011; internet.gov.sa, 2011; Internet World Stats, 2011)

Figure 3-1: Middle East Internet Users, March 2011



Source: (Internet World Stats, 2011)

3.3 Internet Usage

This section highlights key findings on individual and business Internet usage in Saudi Arabia. The findings have been extracted from a report issued by the Communications and Information Technology Commission (CITC) of Saudi Arabia: “Computer and Internet Usage in The Kingdom of Saudi Arabia”.

Regarding the validity of the report statistics, it is important to mention that this report is based on field surveys, which produced more than 10,000 interviews each year from 2007 to 2009 across a number of market segments. The survey data was gathered primarily from face-to-face interviews across all segments.

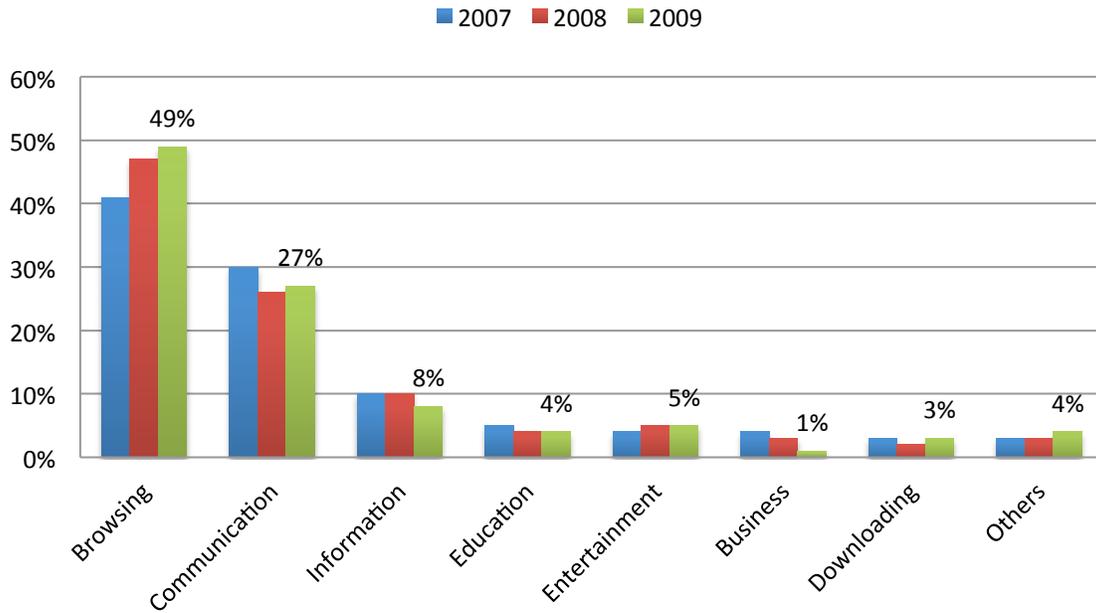
3.3.1 Individual Usage

This section examines Internet and computer usage for individuals at the household level in Saudi Arabia. These individuals include both the local population and expatriates residing in Saudi Arabia. A total of 9,151 face-to-face interviews were conducted in 2009; 8,943 in 2008 and 7,570 in 2007. The survey samples represented all segments of Saudi Arabian population (CITC of Saudi Arabia, 2010).

3.3.1.1 Reasons for Using Internet

As shown in the Figure 3-2 below, in Saudi Arabia the main reasons for using the Internet are for browsing the WWW and communication. Females tend to use the Internet for entertainment purposes and Saudis youth have stronger tendency toward gaming and music. In the last three years, the demand for movie downloading has increased substantially. Since movie theatres are still prohibited in Saudi Arabia, young Saudis frequently download movies from the Internet.

Figure 3-2: Reasons for Using the Internet

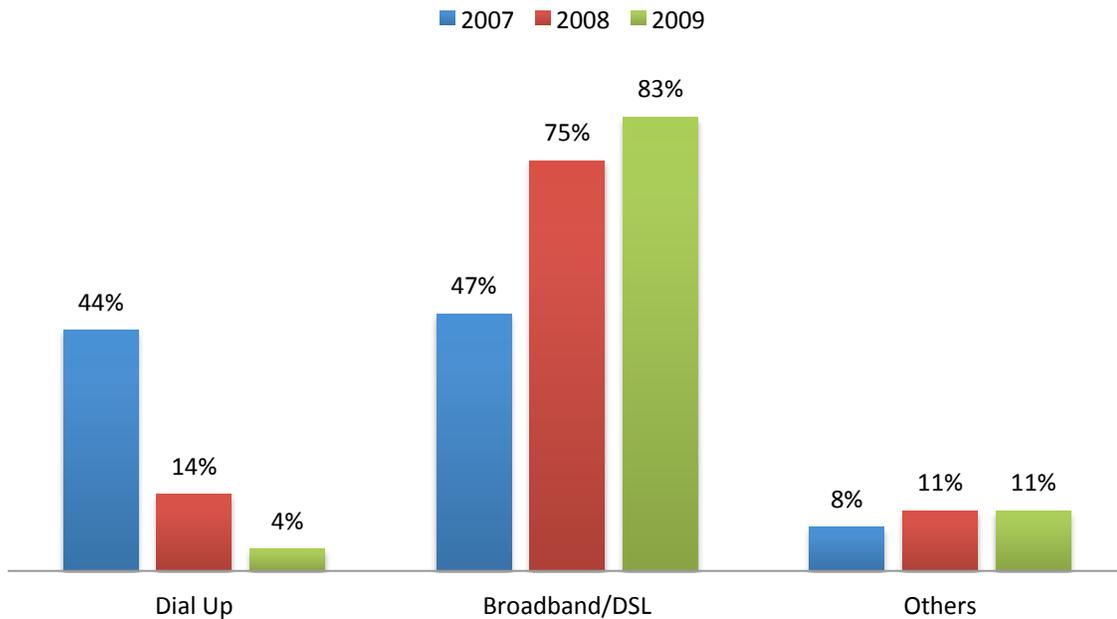


Source: (CITC of Saudi Arabia, 2010)

3.3.1.2 Type of Internet Connection

In Saudi Arabia, there has been a noticeable shift from dial up to broadband and Digital Subscriber Line (DSL) connections. This huge shift is due mainly to two reasons. First, new service providers have entered the market, which created aggressive competition among service providers. Service providers had to expand their broadband and DSL coverage to increase their market share. Furthermore, the cost of broadband or DSL connection has dropped sharply over the last years. Second, broadband and DSL connections have superior speed and quality compared to dial up.

Figure 3-3: Types of Internet Connections



Source: (CITC of Saudi Arabia, 2010)

3.3.2 Business Usage

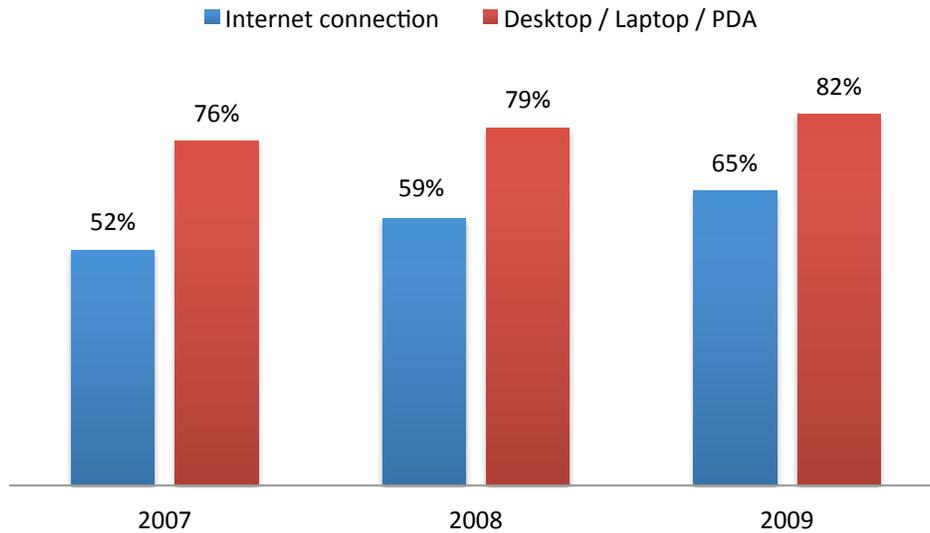
Field surveys were conducted by CITC to assess Internet and computer adoption and usage levels among different business entities. CITC consolidated information from interviews with head of IT department representing a cross-section of different business entities throughout Saudi Arabia. A total of 1,429 face-to-face interviews were conducted by CITC in 2009, 1,614 interviews in 2008 and 1,296 interviews in 2007 (CITC of Saudi Arabia, 2010).

3.3.2.1 Business with Internet Access

The number of business organizations with Internet access has increased from 52% in 2007 to 82% in 2009. The business organizations were categorized as large, medium, and small. Eighty-five percent of the large organizations have Internet access

while only 75% and 58% of medium and small organizations respectively have Internet access.

Figure 3-4: Internet Penetration



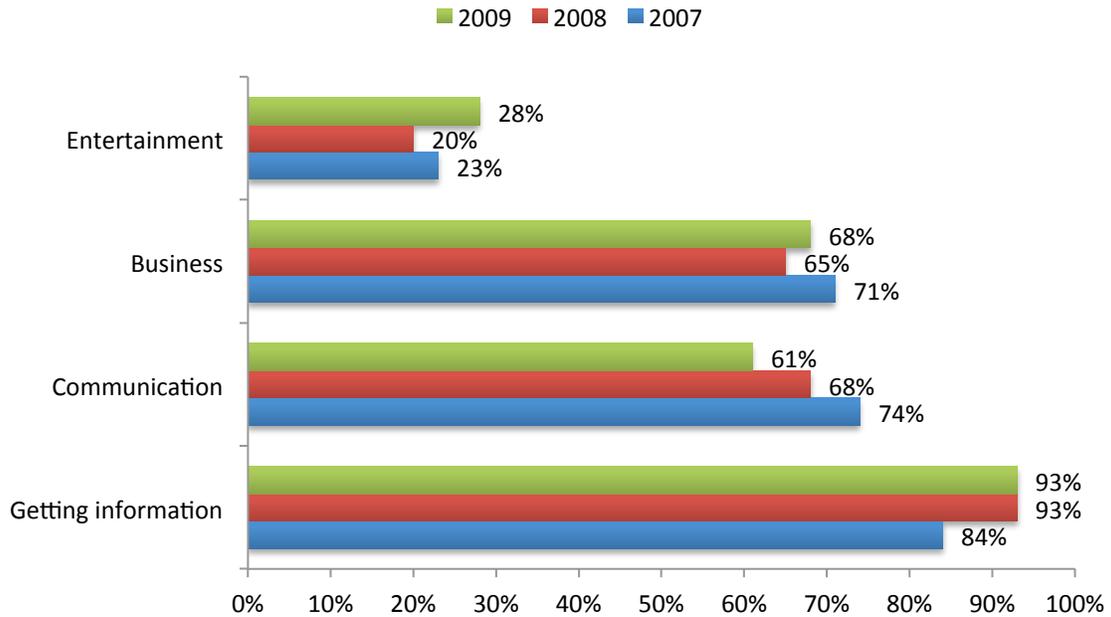
Source: (CITC of Saudi Arabia, 2010)

3.3.2.2 Reasons for Using Internet

Businesses' online activity remained almost stable between 2007 and 2009.

Figure 3-5 shows that most businesses are using the Internet to get information and for communication. Therefore, it is clear that the majority of Saudi companies are not conducting transactional business over the Internet. However, in 2010, a number of new entrants from Dubai, such as Cobone.com, Souq.com, and Sukar.com, have emerged in the Saudi market. These new entrants do not have physical stores and are conducting business over the Internet.

Figure 3-5: Online Business Activities

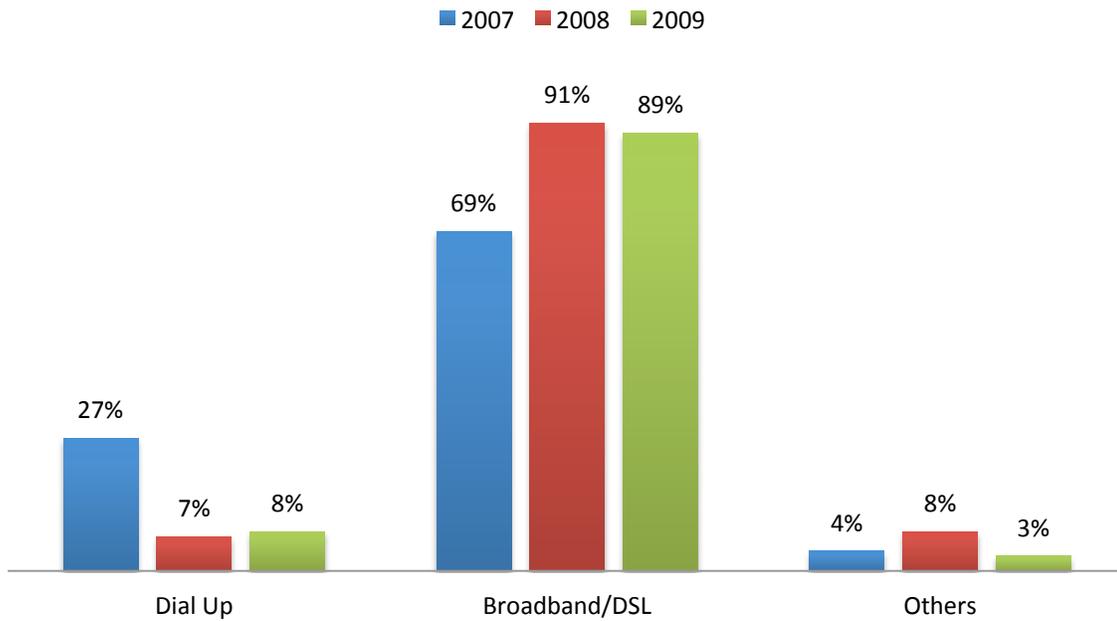


Source: (CITC of Saudi Arabia, 2010)

3.3.2.3 Type of Internet Connection

Companies are following the same shift from dial up to broadband and DSL connections as individual users for the same reasons: greater availability and lower prices. In fact, businesses have a greater level of need for high speed Internet in order to be able to conduct business online.

Figure 3-6: Types of Internet Connections

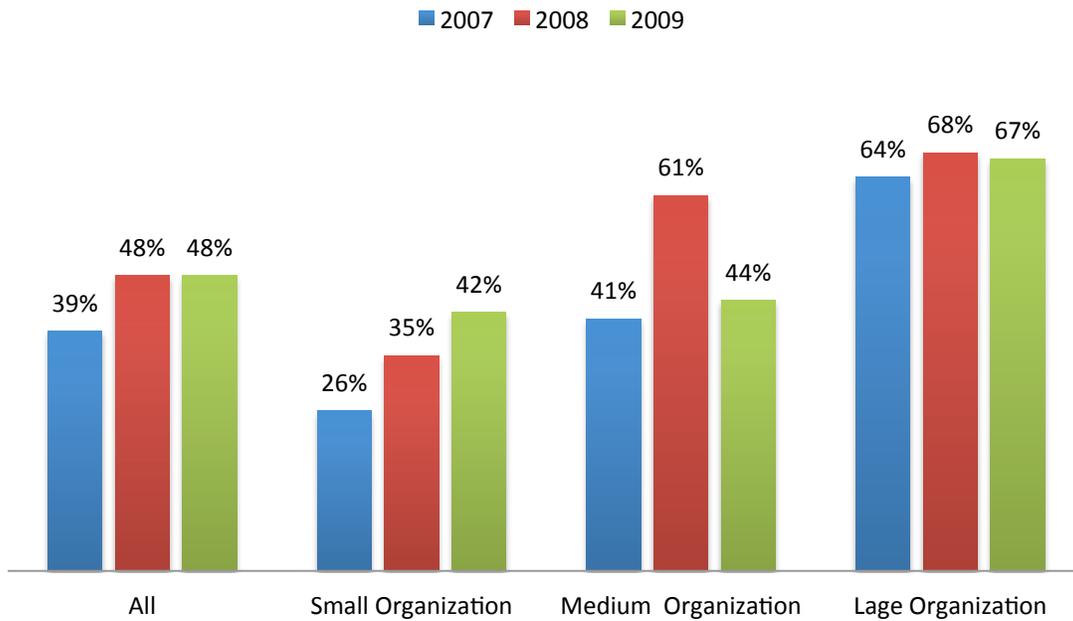


Source: (CITC of Saudi Arabia, 2010)

3.3.2.4 Companies with Online Websites

Forty-eight percent of the businesses surveyed in Saudi Arabia have an Internet website. As shown in Figure 3-7 below, the percentage of large companies that had their own website stayed almost stable from 2007 to 2009. However, in 2009, 67% had websites, which is a larger percentage than small or medium-sized businesses. There has been a steady increase among small businesses during the period from 2007 to 2009; however, the percentage of medium sized businesses fluctuated a great deal during the same period. One of the main reasons for businesses, especially small businesses, to have an online presence online is for marketing purposes - to reach new customers and increase their customer base.

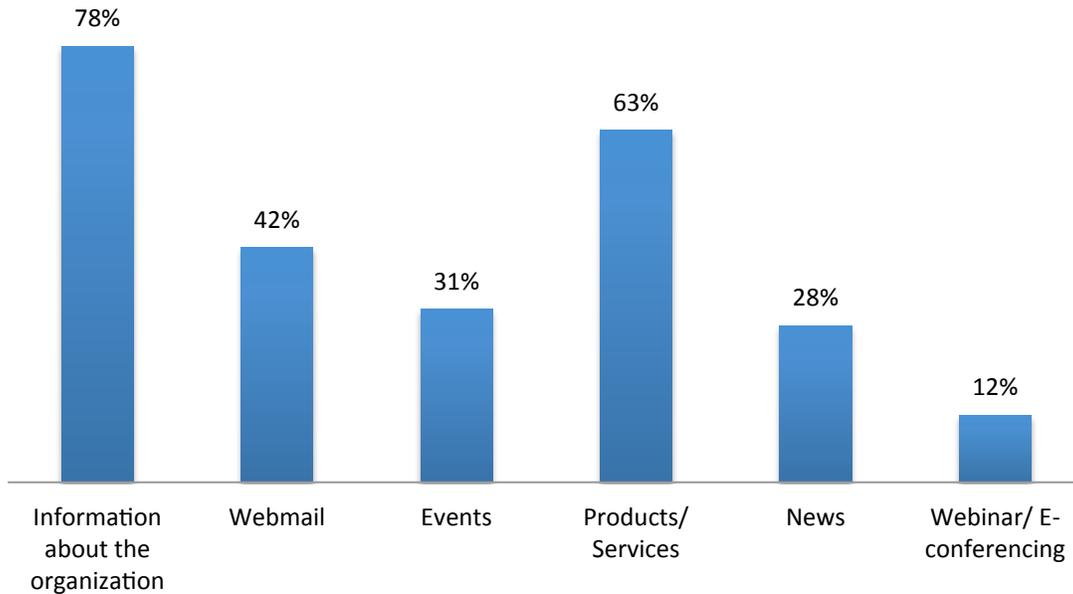
Figure 3-7: Companies with Website



Source: (CITC of Saudi Arabia, 2010)

We can see immediately from Figure 3-8 that most of the companies in Saudi Arabia use their website to provide information about the company and its product and services. For organization of all sizes in Saudi Arabia, advanced uses of websites, for example, e-commerce practices such as order entry and order tracking, have not been implemented. Having said that, a small percentage of the large organizations, such as banks and petrochemical corporations, have incorporated advanced website functionality. For example, Saudi Aramco, one of the largest oil producers in the world, has an e-commerce application called Internet Petroleum Products Sales. This e-commerce application allows the company to automate its sales process and manage tenders as well as other advance features.

Figure 3-8: Services Offered on Companies' Website (2009)



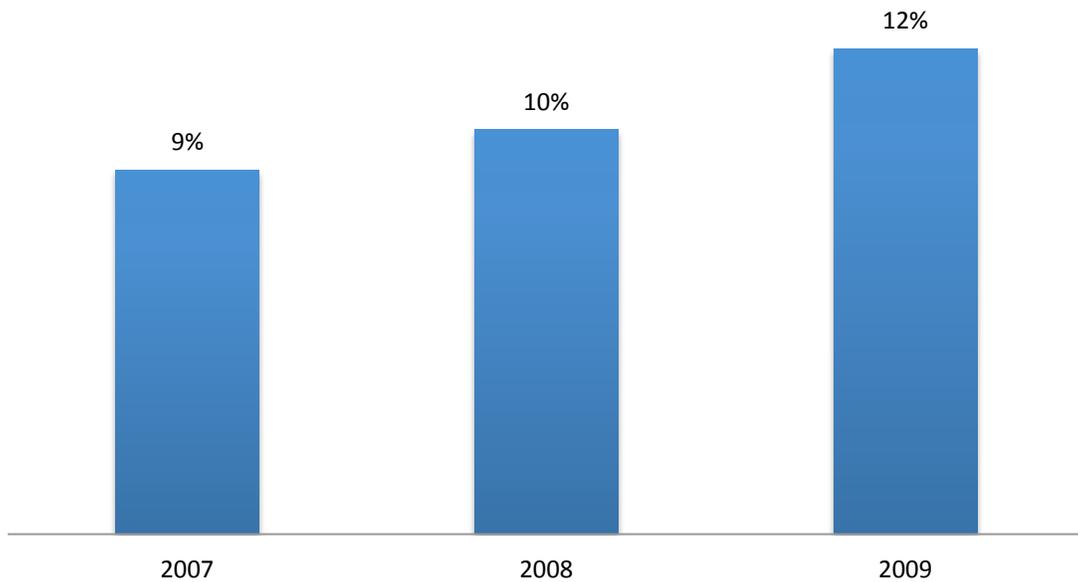
Source: (CITC of Saudi Arabia, 2010)

3.3.2.5 Companies with E-commerce Practices

It is clear from Figure 3-9 below that Saudi websites are not e-commerce-oriented and the current reality amongst many of the enterprises in Saudi Arabia is minimal use of e-commerce. In addition, the adoption level for e-commerce practices rose only slightly during the period from 2007 to 2009. E-commerce practices, such as buying and selling infrastructures, transaction processing, trust, e-payment, and rewards and loyalty programs are not at all commonplace on most of the Saudi websites. The absence or the lack of secure and legitimate e-payment tools can be explained by the lack of legislation, regulation and technical support from the Saudi monetary agency. In fact, the Saudi Electronic Transaction Act (ETA) was not approved until March of 2007. ETA is covered in more depth in Chapter four, section (4.4.3). Furthermore, 36% of the few companies

that do offer e-commerce services offer a payment upon product delivery option. If e-commerce is going to expand in Saudi Arabia in the future, it needs to receive more government attention and help developing the underlying infrastructure.

Figure 3-9: Companies with E-commerce Practices



Source: (CITC of Saudi Arabia, 2010)

3.4 Number of ISPs in Saudi Arabia

Saudi Arabia has three Data Service Providers (DSPs) and 55 ISPs. Data Service Providers are companies or organizations that provide the major gateways to the global Internet. ISPs buy Internet bandwidth from the DSPs and provide Internet connections to companies and individuals. (internet.gov.sa, 2011)

3.5 Future of Internet in Saudi Arabia

It is projected that Internet usage in Saudi Arabia will increase rapidly. One of the reasons for the projected growth is due to the intense competition between service providers and the new fibre optic project that is still undergoing in Saudi Arabia. This will reduce the price of Internet access and increase the Internet speed. The main reason for the growth is that 60% of the Saudi population consists of teenagers and young adults, under the age of 30. Teenagers and young adults tend to adopt new technologies much faster than older people (internet.gov.sa, 2011).

Since many universities are adopting e-learning in their programs, it has been estimated that the e-learning market would increase 33% annually between 2003 and 2008. The e-learning market is projected to reach USD \$125 million by 2008 (internet.gov.sa, 2011).

As well, many banks and companies have started offering online services in a way that will attract customers to use these services. It has been estimated that the e-commerce market in the Gulf Cooperation Council countries would hit USD \$1 billion by the end of 2008 (internet.gov.sa, 2011).

As the amount of Arabic content, and the number of online products and services that appeal to Saudi Arabia users increases, more users will be attracted to the Internet. Therefore, this anticipated expansion of the number of Internet users, which has grown rapidly since 2003, will, in turn, create increased demand for Internet-related services and a fertile market for potential sellers on the Internet.

4: Existing E-commerce Infrastructure in Saudi Arabia

4.1 Current Methods of E-payment in Saudi Arabia

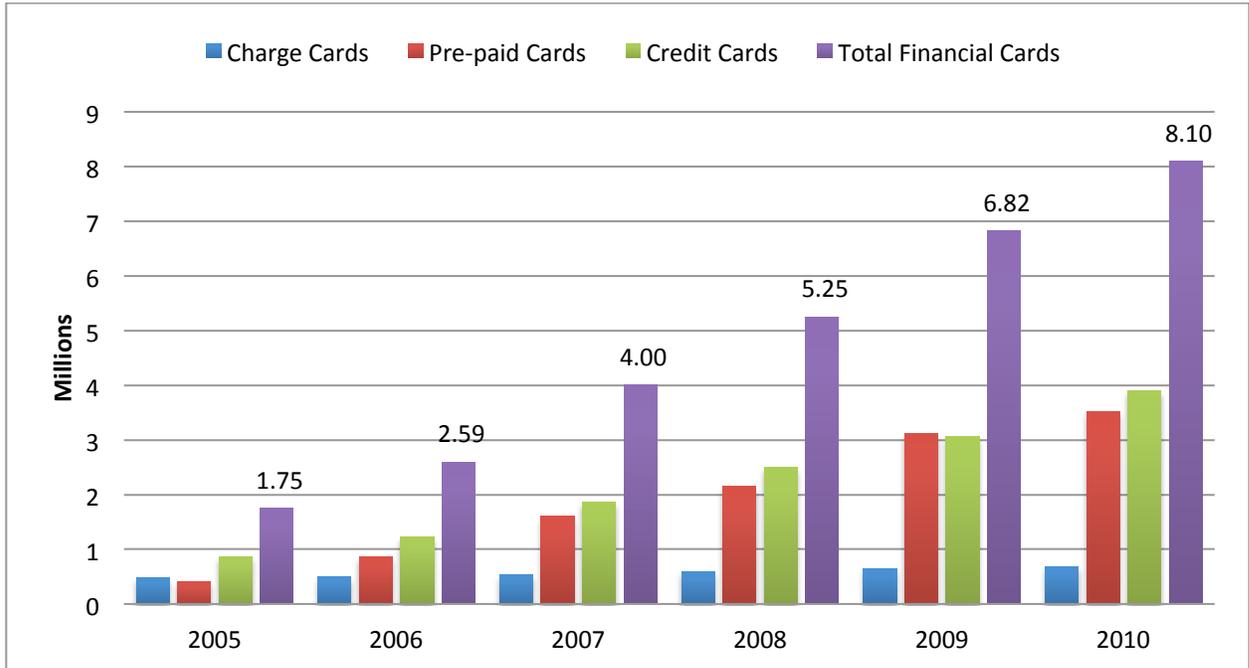
Like the rest of the world, Saudi Arabia is embracing the use of e-payment, although more slowly. Customs and traditions are making the transition to e-payment systems more challenging. Several different online payment systems are used in Saudi Arabia. In this chapter, the existing e-payment systems used in Saudi Arabia are described briefly. These include Financial Cards, PayPal, SADAD payment system (SADAD), and Samba Connect.

4.1.1 Financial Cards (Credit, Charge, and Pre-paid Cards) in Saudi Arabia

We will use the term “financial cards” to refer to credit, charge, and pre-paid cards. This category excludes debit and ATM cards. Between 2005 and 2010, the number of financial cards in circulation in Saudi Arabia increased by 35.8% CAGR. As depicted in Table 4-1, the number of financial cards in circulation has increased by 362%, from 1.75 million cards in 2005 to 8.10 million cards in 2010. As shown in Figure 4-2, the percentage of the Saudi Arabian population with financial cards (assuming only one financial card per person) has increased from 7% in 2005 to 31% in 2010. By 2015 the number of financial cards in circulation is expected to reach 21 million, an increase of 165% (22% CAGR). If we use the average annual population growth rate over the last five years to forecast the population, the Saudi population will be around 28 million. This means that by 2015 the percentage of Saudi Arabians with financial cards will have

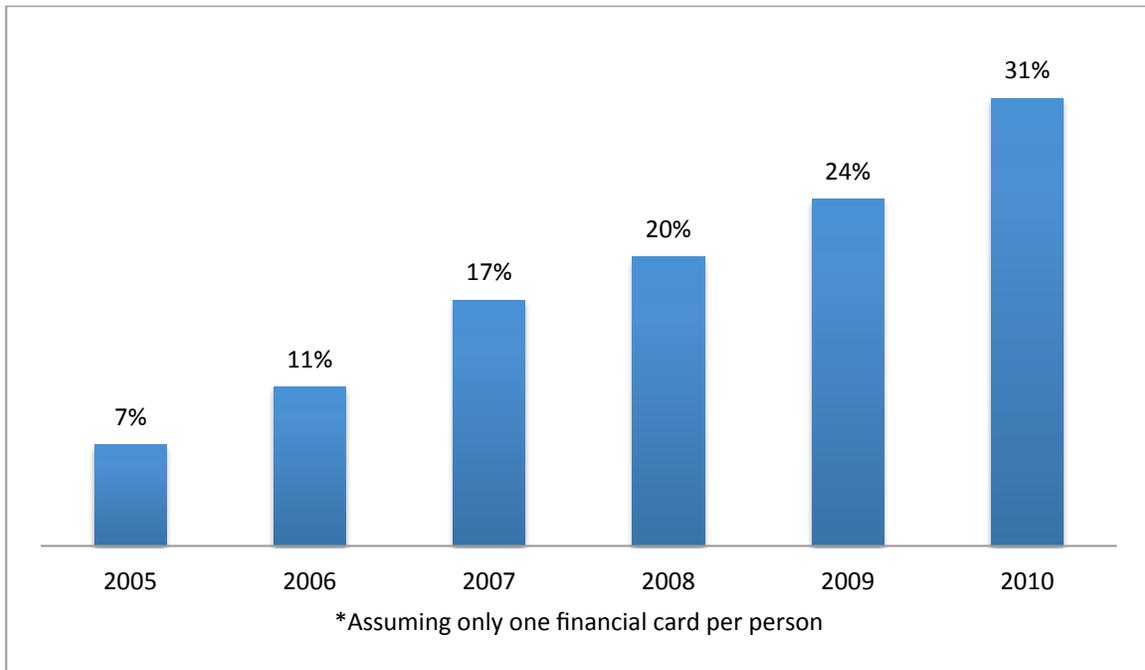
climbed to 75%. (See Appendix A for other informative statistics forecasting the use of financial cards in Saudi Arabia).

Figure 4-1: Number of Financial Cards in Circulation in Saudi Arabia



Source: (Euromonitor International, 2010)

Figure 4-2: Percentage of Saudi Population Holding Financial Cards



According to (Euromonitor International, 2010), two major factors are encouraging growth in financial card usage in Saudi Arabia:

1. The increased number of credit cards that are compliant with Islamic “Shari’ah” law, which holds that transactions involving interest are not acceptable, is a crucial factor boosting the growth of credit card use in Saudi Arabia. Credit cards that are seen to be compliant with “Shari’ah” law use the “Tawarruq” principle, an equivalent of interest acceptable in Islam (Wiki Islamic Finance, 2010; Azmi & Associates, 2008). In the last five years, Saudi Banks have been able to find ways to make credit cards culturally, religiously and socially acceptable in Saudi Arabia. Conventional interest on loans and credit are forbidden under Islamic law. If party A lends \$1,000 to party B for a period of one year, party B only has to pay back \$1,000. If party A requests any type of premium, service charge or attaches a conventional interest rate to the

loan and party B agrees to those terms, under Islamic law both parties are considered sinful. This, of course, raises the question of how Islamic banks would profit from lending money since banking institutions usually make money by lending capital at interest. To address this, Islamic rules for transactions that avoid the prohibition and allow the banks to make a profit have been created. These rules include “Tawarruq” and “Islamic mortgages”. In an Islamic mortgage transaction, instead of loaning the debtor money to buy an item, the bank itself could purchase the item from the seller and re-sell it to the debtor at a profit, allowing the debtor to pay the bank in instalments. Under “Tawarruq”, a similar principle of Islamic mortgage is applied to credit card transactions but at a more complicated level where outstanding balances are paid off according to the Tawarruq rules relating to transactions. Having said that, it is important to mention that buying and selling under Islamic law are the same as conventional buying and selling rules.

2. Sixty percent of Saudi Arabia’s population is under the age of 30 (internet.gov.sa, 2011). Younger Saudi Arabians are generally more open to western ideas and are also more receptive to the idea of credit. A great many have travelled to North America and Europe and been exposed to modern e-commerce and payment methodologies.

Transaction volume for financial cards has increased by 181% from 28.1 million transactions in 2005 to 79.1 million transactions in 2010. Transaction value has grown by 299% from USD \$1.3 billion in 2005 to USD \$5.2 billion in 2010. Detailed summaries of transactions volume and value over the last five years in Saudi Arabia are shown below in Table 4-1 and Table 4-2.

Table 4-1: Financial Cards Performance 2005-2010

	2005	2006	2007	2008	2009	2010
Number of Transaction (mn)	28.1	34.8	41.9	54.6	64.3	79.1
Transaction Value (USD mn)*	1,304.4	1,793.4	2,563.8	3,731.5	4,389.01	5,202.5

*Source: (Euromonitor International, 2010), * \$1 USD=0.26666 SAR*

Table 4-2: Financial Cards % Growth 2005-2010

	2009/10	2005-10 CAGR	2005/10 Total
Number of Cards	19%	35.8%	362%
Number of Transaction	23%	23%	181%
Transaction Value	19%	31.8%	299%

Source: (Euromonitor International, 2010)

The following section describes the financial cards currently used in Saudi Arabia:

4.1.1.1 Credit Cards

A credit card is issued by a financial institution. Credit cards have preapproved credit limits. Normally, cardholders must pay for credit card purchases within a specified period to avoid interest. The cardholder has the choice of paying the entire balance or paying a portion of the balance. When the cardholder carries a balance, there will be a required minimum monthly payment.

All the major players in the credit card industry, including Visa, Master Card, American Express, and Diners Club, operate in Saudi Arabia. The level of adoption of credit cards is increasing rapidly. For example, a source at Riyadh Bank, one of the biggest banks in Saudi Arabia, said the number of new credit cards is rising dramatically. He said that, as of 2011, 36% of the bank's customers have credit cards. Alinma Bank, a 30% government owned bank, announced that they will issue credit cards to new clients when they open an account (Reuters, 2009). As the number of cardholders increases so does the number of transactions. "The rising number of transactions is an indication of the growing comfort level of Visa cardholders when they make online payments" said Ihab Ayoub, General Manager, Saudi Arabia, Visa International (Stensgaard, 2005).

4.1.1.2 Pre-paid Cards

The Pre-paid card is a reloadable transaction instrument. Cardholders deposit, or load, funds from their bank account onto the card and can then use those funds to make purchases. There are no interest charges associated with pre-paid cards.

- In the past, many Saudis have chosen to shop online using prepaid cards. Most frequently these cards were issued by small vendors, such as CashU, OneCard, and Bitqa, because most of the large banks in Saudi Arabia did not offer prepaid credit cards. They only offered conventional credit cards. Saudis generally preferred prepaid cards over conventional credit cards for the following three reasons:
- Applicants had to meet too many requirements to obtain a credit card from the biggest vendors such as Visa, MasterCard, and AMEX.
- Many Saudis do not trust the banks' ability to protect against fraudulent activities.

- Saudis' Islamic culture encourages people to clear any debts they owe immediately and not to carry debt. Saudis are still somewhat cash-oriented and prefer keeping cash on them at all times.

However, in the last five to ten years, the use of both post-paid and prepaid credit cards from Visa, MasterCard, and AMEX has increased rapidly.

4.1.1.3 Charge Cards

A charge card is a credit card issued by a financial services company, like American Express. This type of charge card has a higher credit limit than a conventional credit card. In fact, some cards offer unlimited credit. As well, there are no associated interest charges since it requires holders normally to pay their balance in full monthly. Charge cards typically have more stringent qualification requirements including a high credit score and income level.

It is important to mention that charge cards are inherently Islamic law-compliant because they do not involve any interest charges. This was the main reason for the growth of charge cards and banks have capitalized on this religious and cultural aspect to market charge cards. However, with the new Islamic compliant credit cards, the demand for charge cards has decreased.

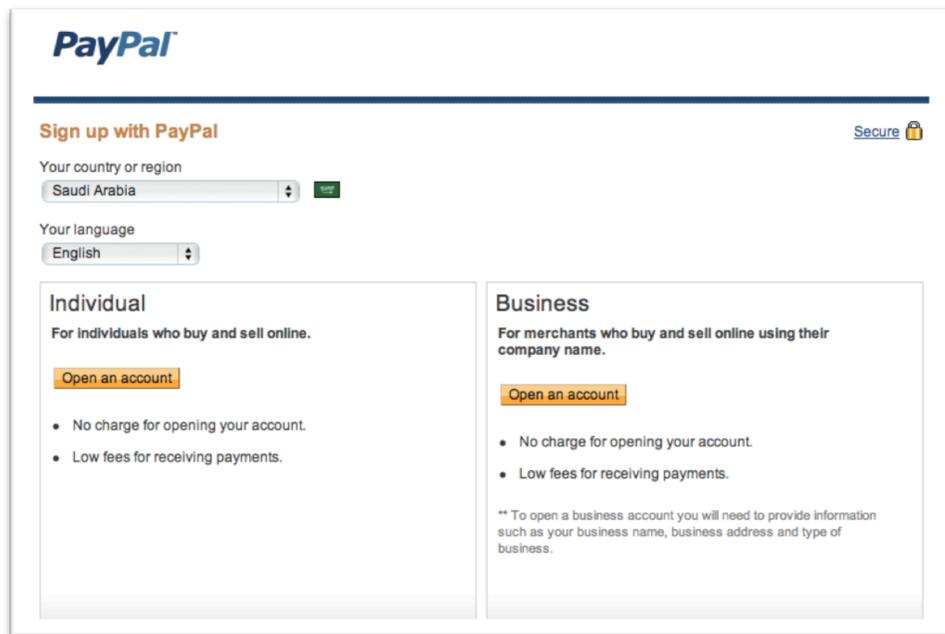
4.1.1.4 PayPal

Before March 29, 2011, Saudis could only open a buyer account on PayPal. They could not open a seller account linked to their Saudi bank account. This meant that if you have an online store in Saudi Arabia and would like to receive a payment as a merchant, you would have to open a bank account and PayPal account in another country, such as

the UK, the US, or Canada, and sellers would be subject to foreign currency exchange rates, which would be a new challenge for many of them. Up to the present the researcher has not found any bank in Saudi Arabia which offers an e-payment system that owners of small to medium-size online stores can use to receive payments from customers. Most of the e-payment systems offered by Saudi's banks were developed enterprise businesses. Therefore, PayPal was the last resort for these business owners and, within Saudi Arabia; it was restricted to buyer accounts until March 29, 2011 (PayPla Coummunity Help Forum, 2011)

Fortunately, now as is evident from Figure 4-3, online sellers as well as buyers in Saudi Arabia can open PayPal accounts and link it to their Saudi bank account.

Figure 4-3: Options of PayPal Accounts in Saudi Arabia



Source: (www.PayPal.com.sa)

It is important to mention that due to the monopoly position that PayPal occupies in Saudi Arabia, PayPal charges a higher percentage transaction fee compared to other countries, such as US and Canada. In Canada and the United States, the standard rate per transaction that PayPal charges sellers is 3.9% compared to 4.9% in Saudi Arabia. Table 4-3 presents a comparison of PayPal fees in Saudi Arabia, Canada, and United States.

Table 4-3: PayPal Fees for Receiving Payments

PayPal Fees for receiving payments in Saudi Arabia		
Monthly payments	Per Payments	Example
\$0.00 USD – \$3,000.00 USD	4.9% + \$0.30 USD	\$5.20 USD on \$100 USD sale
\$3,000.01 USD - \$10,000.00 USD	4.4% + \$0.30 USD	\$4.70 USD on \$100 USD sale
\$10,000.01 USD - \$100,000.00 USD	4.2% + \$0.30 USD	\$4.50 USD on \$100 USD sale
> \$100,000.00 USD	3.9% + \$0.30 USD	\$4.20 USD on \$100 USD sale

PayPal Fees for receiving payments in Canada & US		
Monthly payments	Per Payments	Example
\$0.00 USD - \$3,000.00 USD	3.9% + \$0.30 USD	\$4.20 USD on \$100 USD sale
\$3,000.01 USD - \$10,000.00 USD	3.5% + \$0.30 USD	\$3.80 USD on \$100 USD sale
\$10,000.01 USD - \$100,000.00 USD	3.2% + \$0.30 USD	\$3.50 USD on \$100 USD sale
> \$100,000.00 USD	2.9% + \$0.30 USD	\$3.20 USD on \$100 USD sale

Source: (www.paypal.com)

4.1.2 SADAD Payment System

“Sadad” is an Arabic word meaning payment. SADAD was established in late 2004 by the Saudi Arabian Monetary Agency (SAMA) as the national Electronic Bill Presentment and Payment (EBPP) service provider in Saudi Arabia. Initially, SAMA built the SADAD system to be the main E-payment channel for e-government services. SADAD is a payment system that links large organizations (telecom companies, government authorities, utilities companies, etc.) and their invoices with local banks. SADAD enables these large corporations to collect customer payments electronically through three banking channels 24 hours a day. The main three banking channels utilized by SADAD are ATM, telephony, and online banking. One hundred and four organizations have linked their bills/services payment to SADAD.

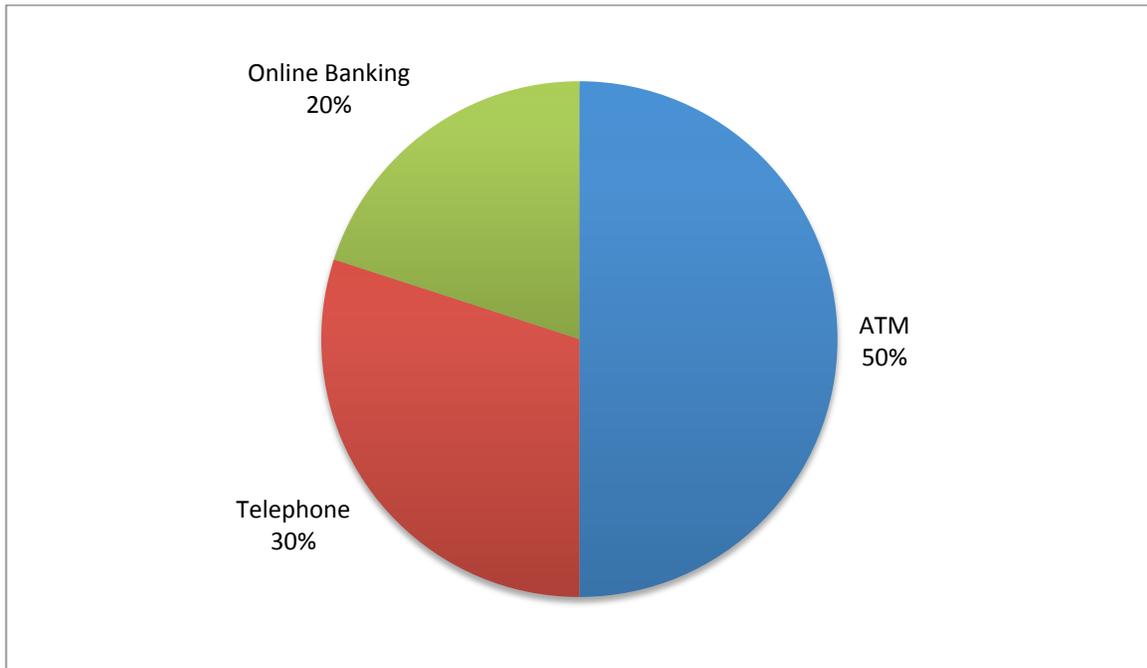
How does SADAD works? To understand the SADA system, consider the following scenario. The customer will request a product or service from a company’s website. The SADAD system will generate an invoice number for this transaction. The customer can then pay the invoice by using an ATM or through online or telephone banking services. (For detailed information on how SADAD works, see Appendix-B)

However, SADAD is built for large government and commercial organizations with high volume periodic/repetitive bills. Therefore, it is not suitable for small to medium-sized online businesses and PayPal will still be the only gateway to receive payments.

According to SAMA, the value of bills paid via SADAD reached more than US\$1 billion per month in 2010. Payment through ATMs is the most popular mechanism. Figure 4-4 indicates that Saudi consumers are still not familiar with online payment. Only

20% of Saudis who used SADAD payments opt to pay online. This study will focus on the consumers who pay online.

Figure 4-4: Methods of SADAD payments 2010



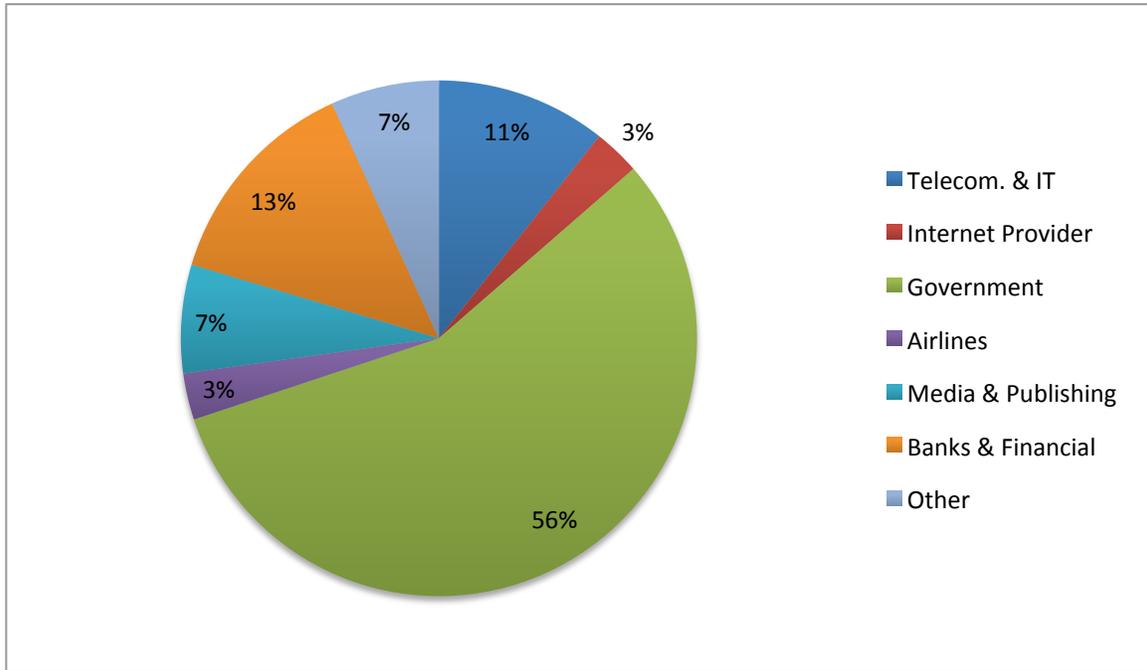
Source: (Saudi Arabian Monetary Agency “SAMA”)

Before the introduction of SADAD, 73% of bills were paid in cash at bank branches. After the introduction of SADAD, 85% of Saudis pay their bills using the SADAD system. Thus, the SADAD system has helped to increase Saudis familiarity with e-payments.

One hundred and three organizations use the SADAD e-payment system to receive money for their services (A list of the 103 organizations is provided in Appendix-C). However, 56% of the 103 organizations are government authorities. See Figure 4-5 for a summary of the organizations who take advantage of SADAD. Over 50% of the organizations using SADA are government agencies, which is not surprising as SADAD

was built to be a payment portal for e-government services. Since most people will need government services at some point, the availability of e-government will help ease Saudi culture toward e-payment practices and hence e-commerce.

Figure 4-5: Number of Organizations Using SADAD



Source: (www.sadad.com.sa)

4.1.3 SambaConnect

In 2004, the Samba Financial Group (Samba) launched SambaConnect, the first Internet payment service in Saudi Arabia. SambaConnect is a new, state-of-the-art, online payment system that provides a secure way for merchants to accept payments from online buyers on their websites or portals.

In 2004, only 8% of Saudis had credit, pre-paid, or charge cards while 56% of Saudis held debit cards. Therefore, SambaConnect has broadened the range of payment options available for online customers. Now online customers can pay using:

- Credit cards (Visa or MasterCard)
- Direct debit from any bank account in Saudi Arabia.

Eisa Al Eisa, CEO & Managing Director of SAMBA and Visa CEMEA Board Member said: "With Samba providing the solutions for online transactions as the only e-commerce acquirer in the Kingdom, we have witnessed increasing acceptance of online purchases. We expect greater online activity in the coming months as more merchants in Saudi Arabia begin to take advantage of this delivery channel and offer online purchase facilities, which are fully protected by Visa International's latest e-security programme, (Verified by Visa)" (Stensgaard, 2005).

However, it is important to mention that SambaConnect is mostly used by large organizations such as Saudi Airlines and Saudi Telecom. As of 2010, only 15 online merchants were using SambaConnect and all of them were large enterprises. One reason for this may be that it is expensive to install SambaConnect on a merchant's website. Hattan Bakhsh, Product Sales Manager, Cash Management & E-Banking at Samba, informed us that it cost USD \$1,300 to \$5,300 to integrate the SambaConnect system on a merchant's website. Also, Bakhsh mentioned that most of the participating online merchants have a high sales volume. This gives us a clear indication that SambaConnect was primarily meant for large businesses. Thus, as mentioned earlier PayPal remains the last viable option for small to medium-size online stores and until March 29, 2011, it was only available to buyers.

4.2 Saudi Banks with Online Payment System

Banks' e-commerce solutions or e-merchant services are online payment systems that provide a secure method for merchants to accept payments from online buyers on their websites or portals.

Until 2004, no bank in Saudi Arabia offered an online payment system that merchants could use to receive payments from potential clients. With the exception of SambaConnect, launched in 2004 by the Samba Financial Group (Samba), we are not aware of any bank in Saudi Arabia that offers a payment solution that online merchants can use to receive payments. However, a source at a major Saudi bank disclosed that the bank is currently testing the online payment system they are developing.

4.3 Postal Services

Before 2009, the postal infrastructure in Saudi Arabia was very poor. Traditionally, home and street addresses did not exist and people were dependent on mailboxes rented at post offices, such as SP, DHL, FedEx, and Aramex. Due to the lack of a reliable addressing scheme, many online shoppers have opted to open a US mailbox with a global courier provider (e.g. Aramex, DHL or MyUS), which offers mail forwarding to their offices in Saudi Arabia. As well as inadequate or non-existent addresses, there simply was no system in place for delivering mail to small businesses or homes (Bakheet, Saudi Post, 2011). In 2006, SP, the government-operated postal service planned to increase the efficiency of their services by providing mailboxes for every home. Unfortunately, people did not understand the underlying concepts and the mailboxes were frequently broken, covered with graffiti and otherwise vandalized. (Alriyadh Newspaper, 2006).

Since SP started to operate like a private sector company in 2002, it has undertaken a series of initiatives to improve the postal services. In 2007, they started a project to establish a completely new automation chain for mail distribution from reception to delivery point and decided to align the postal services with global standards. SP used a Geographic Information System (GIS) to create a unique addressing system for the whole nation (Microsoft Case Studies, 2008). The system included new mailing addresses for every private residence and every commercial or government building. SP introduced two smart products that will contribute to the development of Saudi Arabia's e-government and e-commerce initiatives. The two products are Wasel and Wasel Aalami.

4.3.1 Wasel

SP's new GIS based addressing system is called Wasel address, which means "direct" or "target" address. In October 2007, SP launched the Wasel Service Project. The project's mission was to install 5 million mailboxes by 2009 (Microsoft Case Studies, 2008). "These mailboxes, with state-of-the-art Radio Frequency Identification (RFID) Technology chips embedded in them, are much more than a repository of mail and packages. They will play an important role in supporting the infrastructure required for e-commerce and e-government services. The chip will contain the subscriber's data, which can be utilized for many other applications, including those relating to e-commerce and e-government" said Usamah Altaf, Vice President of SP.

Before the introduction of Wasel addresses, people had to go to the nearest post office to fetch their mail from a rented mailbox. In fact, in order to get mail delivered to their office or home address, people had to provide SP with a map or a detailed

During a preliminary interview with 20 Saudis studying in Canada and others living in Saudi Arabia, we asked whether they were aware of the new addressing system recently implemented in Saudi Arabia. Seventy-five percent, mostly Saudi's living abroad, did not know about this new system. It is evident that SP should undertake a campaign to educate people and inform them about their mission to create an "address for each person" and spread the word through social media, newspapers and TV commercials.

4.3.2 Wasel Aalami

In May 2011, SP launched a new free service called Wasel Aalami. This service allows subscribers to have a personal address in the US, the UK, Australia, and China. These are SP's addresses in these countries. Therefore, Saudis can now shop online on ebay.com or Amazon.com for example; online purchases made in these countries will be delivered to the purchasers address in the relevant country and then shipped directly to the subscriber's Wasel address in Saudi Arabia. It is important to mention that SP offers four free addresses, however it charges a discounted price for shipping. SP charges USD \$13 for the first kilogram and USD \$6 for each additional kilogram (Saudi Post, 2010).

4.4 Saudi Arabia Financial System

The Saudi Arabian financial system consists of commercial banks, the SAMA, and the National Centre for Digital Certification (NCDC).

4.4.1 Commercial Banks

Saudi Arabia has 20 commercial banks. These banks offer complete banking services to individuals, businesses, and governments sectors. All of these banks provide

online banking services for their clients. Banks are playing an important role in Saudi Arabia's developing e-commerce infrastructure by facilitating and promoting credit cards as well as developing new and secure e-payment methods for online shoppers.

4.4.2 Saudi Arabian Monetary Agency

SAMA is the central bank of Saudi Arabia. It was established in 1952 to serve as a regulatory agency and act as the government's bank. SAMA's functions include issuing the Saudi currency, Saudi Riyal, supervising commercial banks, and operating a number of cross-bank electronic financial systems.

4.4.3 National Centre for Digital Certification

NCDC is responsible for managing the Saudi Electronic Transaction Act; ensuring the secure, efficient transmission and exchange of electronic information; creating the national Public Key Infrastructure (PKI); and providing trust services to secure the exchange of information between key stakeholders (NCDC, 2011).

The Saudi Electronic Transaction Act was approved on March 2007. Its purpose is to regulate electronic transactions and provide an organized structure to achieve the following goals:

1. Establish rules for using electronic transaction and signature technology; reinforce confidence in these technologies; and facilitate their use in both the public and private sector by ensuring reliable electronic records.
2. Confirmation of electronic transaction usage on both local and international levels to utilize in all fields such as trade, medicine, education, e-government, e-payment and other applications.

3. Elimination of any obstacles impeding the use of electronic transactions and signatures.
4. Curtailing cases of misuse and fraud, such as forgery of electronic transactions and signatures.

These rules and regulations provide a strong foundation for Saudi Arabian e-commerce. This security structure will provide online shoppers with a secure and reliable environment (NCDC, 2011) in which to conduct electronic transactions

4.5 Major Existing Websites with E-commerce Functionality

Many forms of information technology are growing rapidly in Saudi Arabia. However, it is generally believed that e-commerce practices are not progressing at the same pace. To examine the main websites with e-commerce practices in Saudi Arabia, we have chosen the following three approaches.

1. Websites that use the SambaConnect e-payment system
2. Websites that use the SADAD e-payment system.
3. Other websites in Saudi Arabia with e-commerce capability

Brief summaries of the findings for the three approaches are presented below.

4.5.1 Websites using SambaConnect

As of July 2011, according to SambaConnect.com, only 14 merchants are currently utilizing SambaConnect as an e-payment gateway (A list of those sites is included in Appendix D). One common factor between all 14 websites that they all offer products and services that do not require shipping. Many of the products and services are downloadable. These include software, Internet subscriptions, magazine subscriptions,

and airline and train tickets. This clearly indicates that the postal infrastructure was not sufficiently reliable to facilitate e-commerce practices that involve shipping.

4.5.2 Websites using SADAD

As of July 2011, according to sadad.com 103 websites have implemented the SADAD e-payment system (A list of those sites is included in Appendix C). However, as mentioned earlier, 58% are e-government sites not commercial websites. Having said that, as people get used to making online payments to obtain government services it will increase Saudis' general familiarity with e-commerce. Once again, the common factor between the 103 websites is that all of their products or services do not require shipping.

4.5.3 Websites found through World Wide Web

We conducted a web search for online stores in Saudi Arabia using a range of different key words (for example, "online shopping in Saudi Arabia", "online Store in Saudi Arabia", "e-commerce in Saudi Arabia"). Our search focus was Business-to-Consumer (B2C) or Consumer-to-Consumer (C2C) websites. Our website search results are presented in Table 4-4 below. We did not focus on Business-to-Business (B2B), Government-to-Business (G2B), or Government-to-Consumer (G2C), since our research focus is on e-commerce at the consumer level. However, there are a number of successful B2B and G2C websites that have advanced e-commerce capability. These include leading Saudi oil, petroleum gas, and petrochemical companies, and government services systems. We also excluded Saudi banks' websites because our focus is on consumer level products and services websites and although the banks provide online banking services these are considered to be B2C.

As shown from the table below, many companies have just entered the e-commerce market in Saudi Arabia in 2010 and 2011. This is evidence that the e-commerce market in Saudi Arabia is in the early stage yet holds a promising potential for new entrants.

Table 4-4: Most popular Online Stores in Saudi Arabia according to Google search

Website Name	Product/Services	Similar Global Websites	Launch Date	Payment Options
Souq.com	Retail	eBay	2007	Visa MasterCard PayPal CashU, OneCard
Sukar.com	Private online shopping club	Gilt.com	2010	Visa MasterCard PayPal CashU, OneCard
Cobone.com	Group Buying Discount	Groupon	April 2011	Visa MasterCard PayPal CashU OneCard
E-Mall	Retail	Amazon	2010	SADAD
5 starts Hotels Website	Hotel reservations	-	-	Visa MasterCard
Desertstore.com	Online clothing store	-	-	Visa MasterCard PayPal
Homy.com.ca	Online electronic store	Wal-Mart	-	PayPal TeleMoney
All I do Online (aido.com)	Online entertainments & electronics store	-	-	Visa MasterCard

5: Saudi Perception of Online Shopping: A Survey Study

5.1 Purpose of the Research

The purpose of this study is to examine Saudi Arabia's infrastructure readiness for online shopping. The data analyzed is drawn from research on Saudi residents and expatriate consumers' behaviour with regard to shopping online. The study examines Saudi consumers' attitudes and perceptions of making online payments, receiving online shipments, and obstacles pertaining to shopping online. The results of this study will help this researcher and other merchants who plan to penetrate the Saudi e-commerce market understand the perceptions, attitudes and behaviour of Saudi consumers in the online market.

5.2 Research Method and Survey Design

The research methodology used was an online survey, a recognized form of primary market research. An online survey was a suitable method for this study because it facilitated contact with people in different geographical areas. The author is situated in Canada and an online tool enabled contact with Saudi's living in Saudi Arabia as well as those living temporarily in countries around the world. More importantly, the potential market for e-commerce is the Saudi Internet user; therefore it is logical to use an online survey to collect responses.

The survey is comprised of 31 questions divided into five parts. It was distributed in Arabic, which is the primary language in Saudi Arabia, but has been translated to

English for presentation in this research. The researcher determined the survey items based on a comprehensive review of the literature on e-commerce in Saudi Arabia, with particular attention to obstacles pertaining to online shopping.

The online survey tool used for this study was Survey Monkey (www.surveymonkey.com). Survey Monkey was chosen because it ensures the validity of responses since it saves the respondents' Internet Protocol (IP) addresses, which prevents multiple responses from the same address. This guards against the same person filling out the survey more than once. Survey Monkey also captures the unique Media Access Control (MAC) address for each respondent for the same reason.

The survey was distributed through a number of Saudi listservs and social network media, namely Facebook and Twitter. It was released on July 2nd, 2011 and was live until July 12th, 2011. The researcher was astonished by the number of responses. A total of 1,740 were received. This huge number of responses in a relatively short time indicates a high level of interest in the online market by Saudis and their eagerness to see it develop in Saudi Arabia.

5.3 Data Presentation & Analysis

The questionnaire tested Saudi consumers' attitudes and perceptions of making online payments, receiving shipments, and obstacles pertaining to shopping online. The main focus of this section is data presentation and analysis and follows the sequential order of the questionnaire to present the data and provide analysis of the results. It also includes a non-quantitative summary of the answers to several questions. The questionnaire was comprised of five parts: 1) Demographic Information, 2) Respondants'

Experience with Online Shopping, 3) Mobile Commerce and Online Banking, 4) Saudis' Attitudes and Perspective, and 5) Online Shopping Obstacles. We will follow the structure of the questionnaire and present each part separately. Tables and figures will be used to make data easy to understand and facilitate comparison.

5.3.1 Part One: Demographic Information

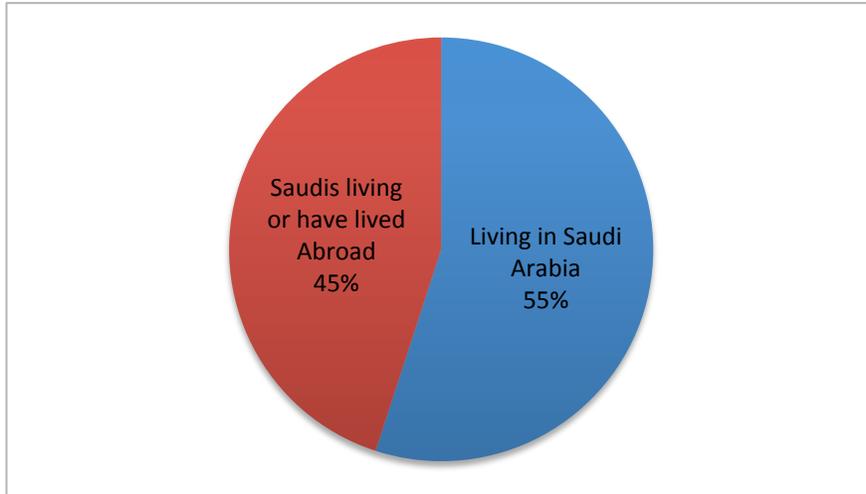
The first section of the questionnaire was designed to collect demographic information about the respondents: geographic distribution, gender, age, level of education and employment status.

5.3.1.1 Geographic Distribution

We believe that perceptions of e-commerce varies between Saudis living in Saudi Arabia and those who are living or who have lived abroad in developed countries for at least six months in the past ten years. There are a significant number of Saudis attending university outside of Saudi Arabia. According to the Ministry of Education, there are at least 120,000 Saudi students pursuing undergraduate or advanced degrees in developed countries. Most of those students will have been exposed to online shopping during their time abroad and benefited from the convenience that it offers. What is more, when they return to Saudi Arabia, they will very likely want to take advantage of access to online shopping in their home country. Thus, they will become a potential market for new e-commerce companies in Saudi Arabia. This group will form part of a base market for online shopping and they will undoubtedly influence family, friends and acquaintances, creating a larger market as time goes by.

As shown in Figure 5-1, 55% of respondents live in Saudi Arabia and 45% are living or have lived abroad; namely in Canada, the United States, the United Kingdom, New Zealand, Australia, Ireland, Germany, and Japan.

Figure 5-1: Respondents' Geographical Distribution



5.3.1.2 Socio-Demographic Information

To understand how different perceptions of e-commerce are formed, respondents' socio-demographic information was collected. Respondents' personal profile includes gender, age, level of education, and employment status, shown in Figure 5-2, Figure 5-3,

Figure 5-4, and Figure 5-5.

Figure 5-2: Respondents' Gender Distribution

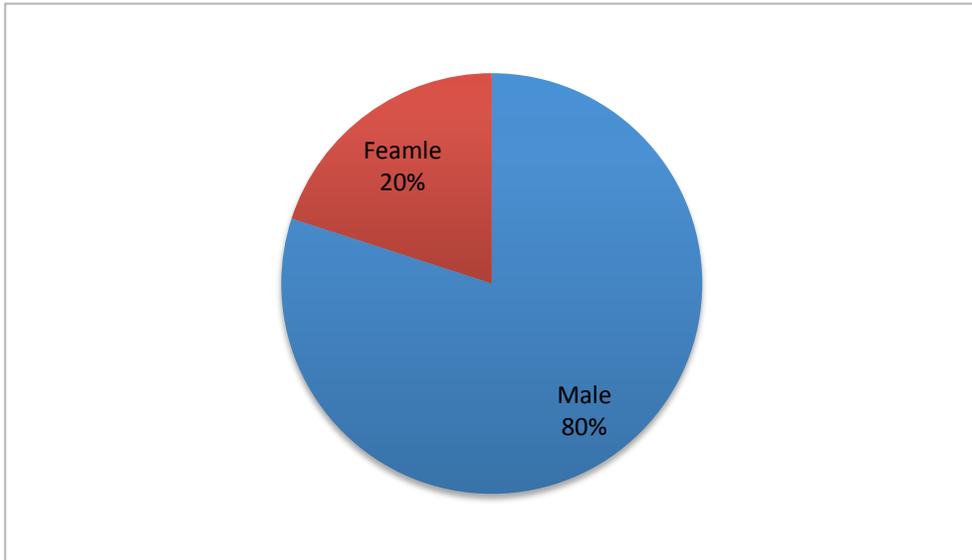


Figure 5-3: Respondents' Age Distribution

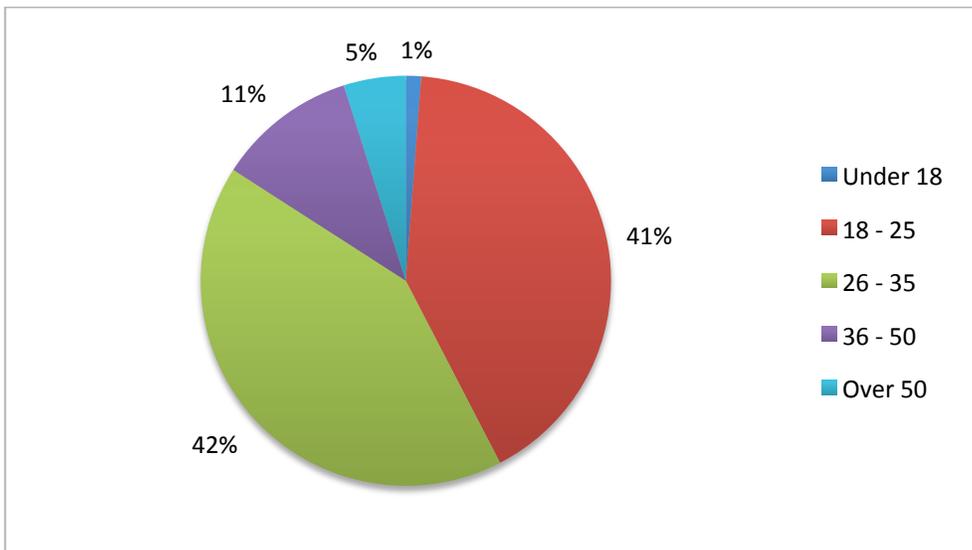


Figure 5-4: Respondents' Level of Education

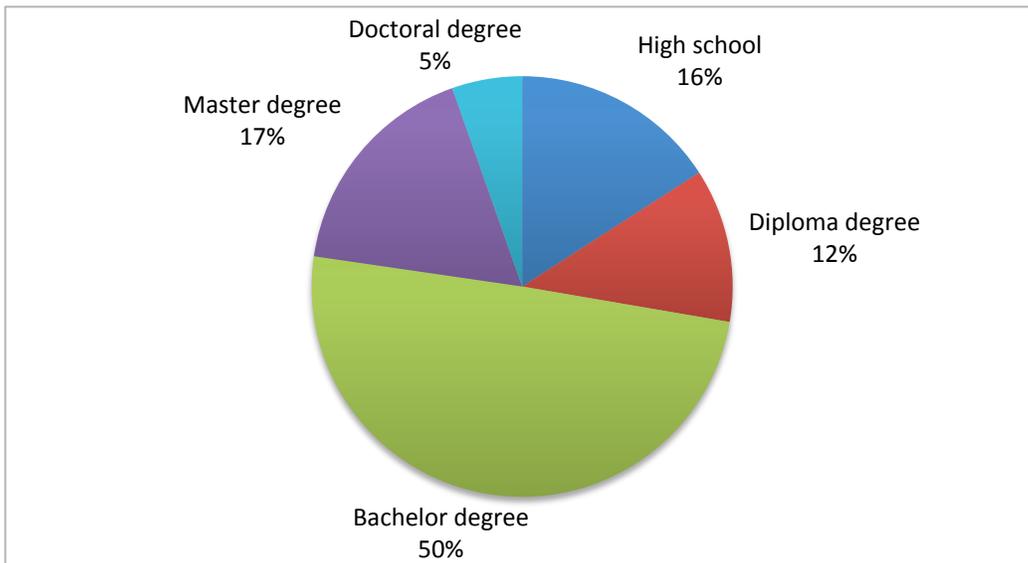
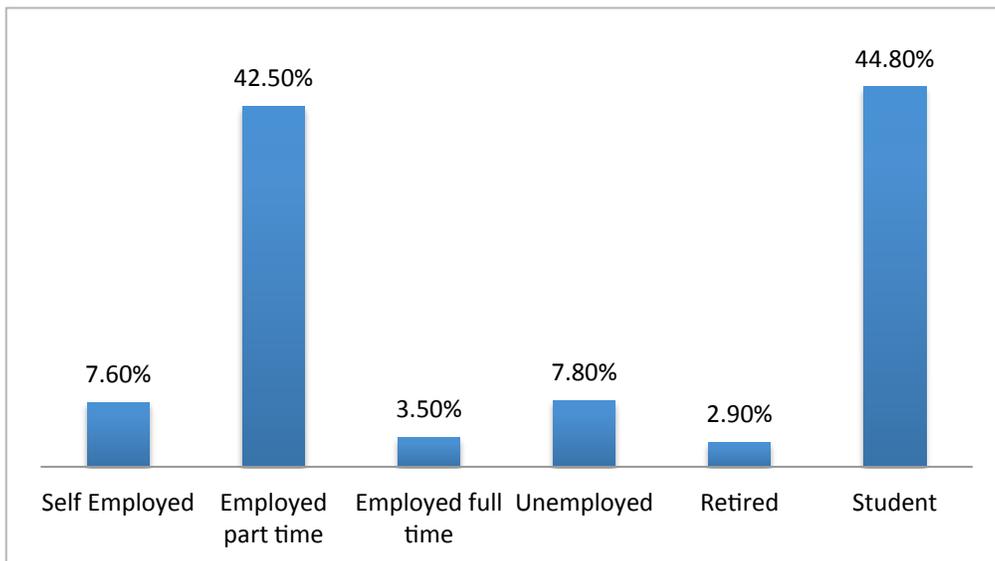


Figure 5-5: Respondents' Employment Status



5.3.2 Part Two: Respondents' Experience with Online Shopping

The second part of the survey asked respondents to answer eleven questions about their experience with e-commerce. The survey questions are listed and the respondents' answers are described in the following sections:

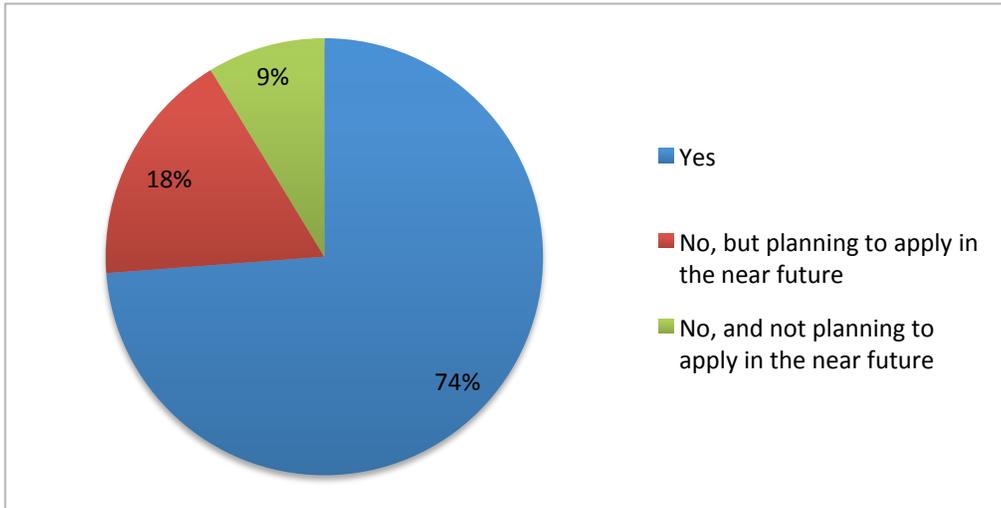
1. Do you have a credit card?

As indicated previously in Chapter four, in 2010, 31% of the Saudi population have credit cards. According to our survey, 74% of respondents hold credit cards. From the e-commerce perspective the results show a positive indication for online merchants, since 74% of respondents are both Internet users and are able to make e-payments.

Respondents who do not have credit cards and are not planning to apply for one gave the following reasons:

- Fear of fraudulent activities: Bad experiences and insufficient coverage in Saudi banks regarding fraudulent activities.
- The interest charges associated with credit cards is not compliant with Islamic “Shari’ah” law
- No immediate need for credit cards.
- Preference for cash and avoiding debt.
- Lack of knowledge about the uses and regulations for credit cards.
- Irregular income

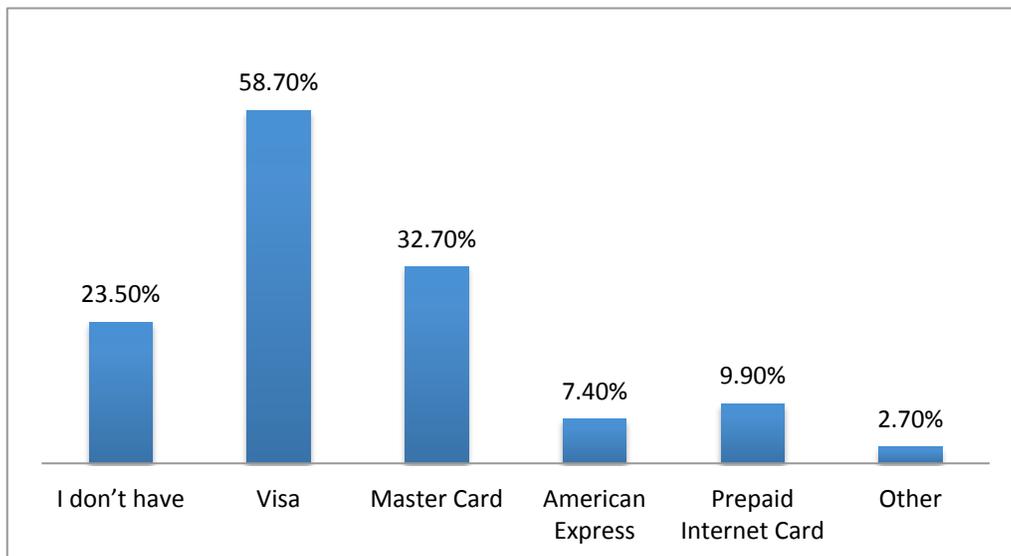
Figure 5-6: Percentage of Credit Card Holders



2. Which of the following credit cards have you used?

We can see immediately from Figure 5-7 below, that Visa is by far the most popular credit card held by Saudis. More than half of the respondents, 58.7%, had a Visa card.

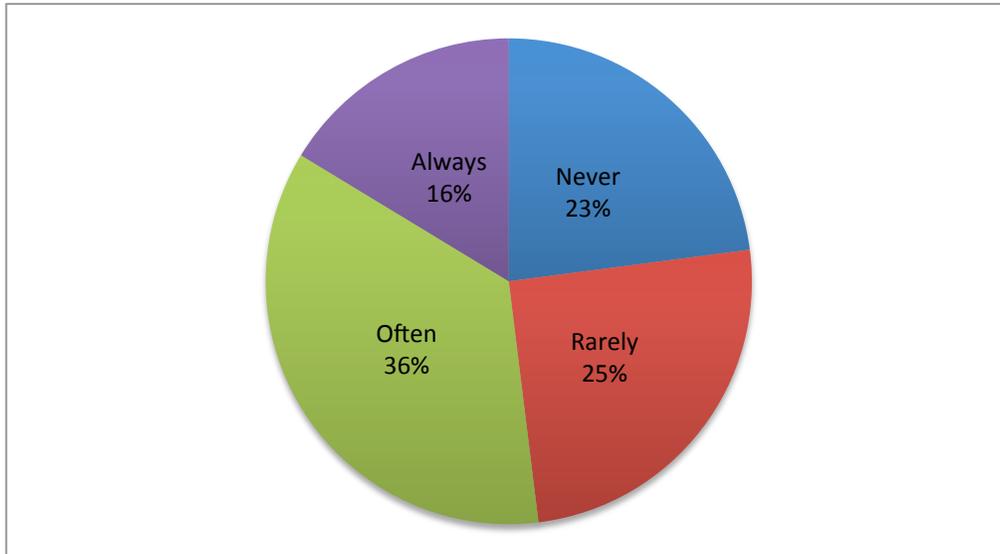
Figure 5-7: Types of Credit Card Held by Respondents



3. *How often do you shop online?*

As depicted in the Figure 5-8 below, a combined total of 52% of respondents always or often shop online.

Figure 5-8: Frequency of Online Shopping



4. *What are the reasons that deter you from shopping online?*

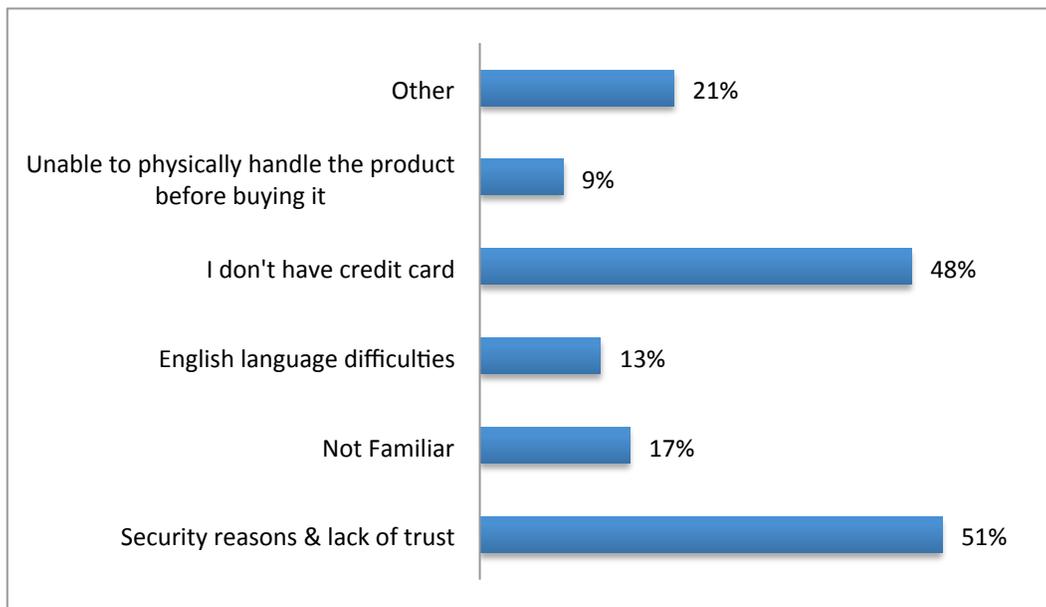
It is clear from Figure 5-9 that the two main reasons that deter the Internet users who responded to our survey from shopping online are security and lack of trust (51%) as well as not having credit card (48%). Respondents who answered “Other” had the following reasons for not shopping online:

- A large number of respondents commented that they would not mind shopping online in developed countries, but have doubts about shopping online from Saudi Arabia.
- Shipping issues, such as the high cost of shipping to Saudi Arabia, time needed for the arrival of purchases, and a huge lack of trust in Saudi customs regulations

regarding imported purchases (some respondents commented that products are destroyed), were also deterrents.

- The low quality of Saudi e-commerce sites in terms of presenting and providing information about the product.
- The presence of a large number of premium “brick and mortar” shopping malls in Saudi Arabia.
- Inadequate postal addressing system in Saudi Arabia.

Figure 5-9: Online Shopping Obstacles

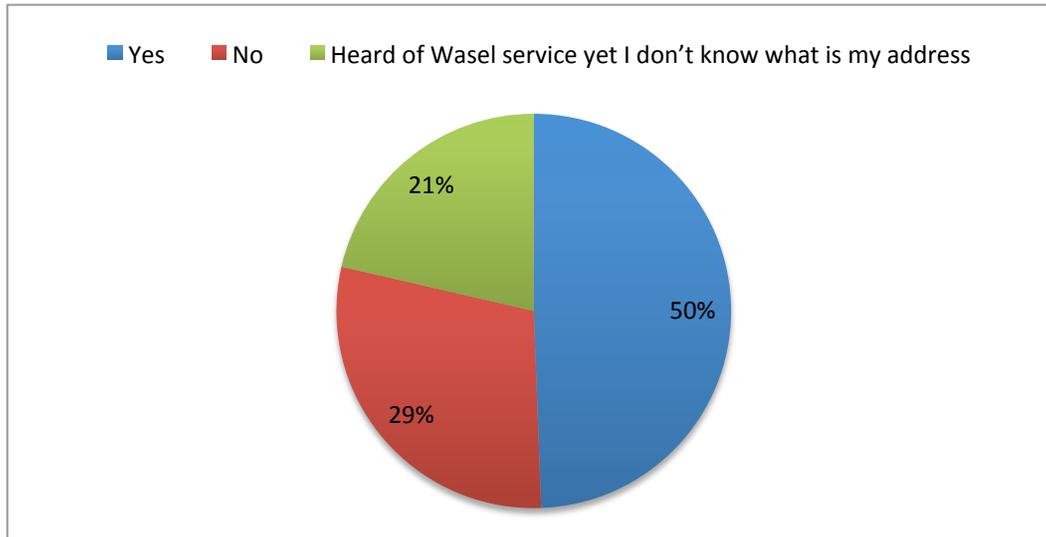


5. Do you know your address in Saudi Arabia and have you heard of Wasel address?

A total of 50% of respondents did not know their home address. Twenty-one percent had heard of the Wasel addressing system but still did not know their address. In our opinion, generally, Internet users are better educated than non-internet users. Thus, we believe it is reasonable to assume that the percentage of Saudis who do not know their

home address may be greater than 50%. This provides a clear indication that SP needs to educate people about their new addressing system.

Figure 5-10: Percentages of Saudis who know their Address

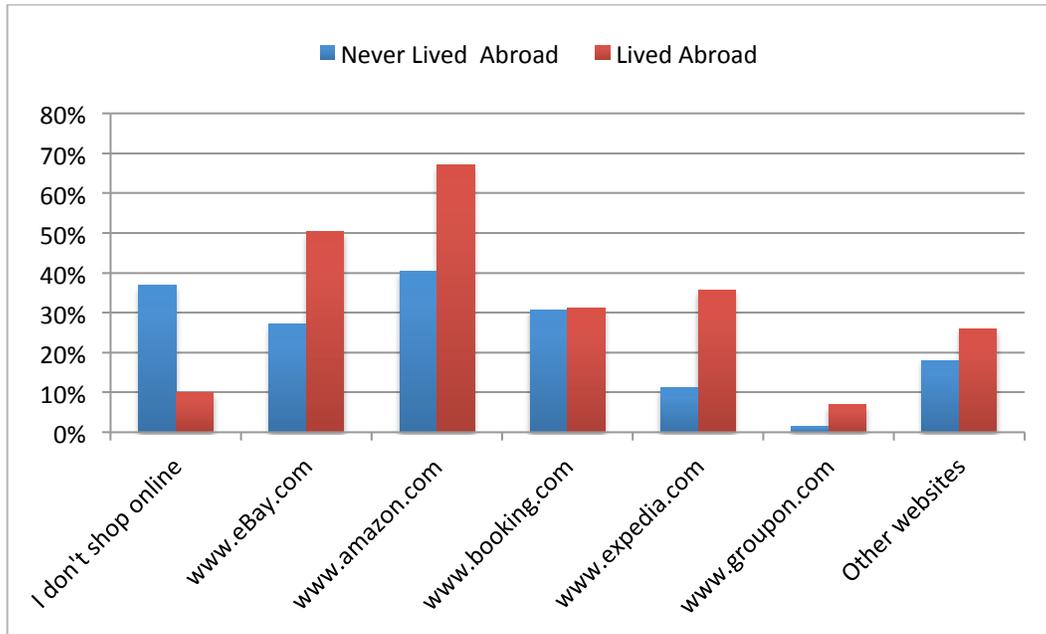


6. Choose the name of the global websites that you used for online shopping?

This question was cross-tabulated with whether or not Saudis had lived outside of Saudi Arabia for at least six months in the past ten years. We found that a greater percentage of people who had lived abroad were more familiar with online shopping than those who had not. As seen from Figure 5-11, most respondents who live or had lived abroad shop online more than their counterparts. In addition, respondents with experience outside Saudi Arabia who do not shop online are fewer than those who had never lived outside of Saudi Arabia and declared that they do not shop online. Having said that, it is important to mention that the websites included in this question are by no means inclusive. They are a representative sample of some of the most popular western e-

commerce websites with a global reach. The question was designed to examine respondents' perception of shopping online at these types of sites.

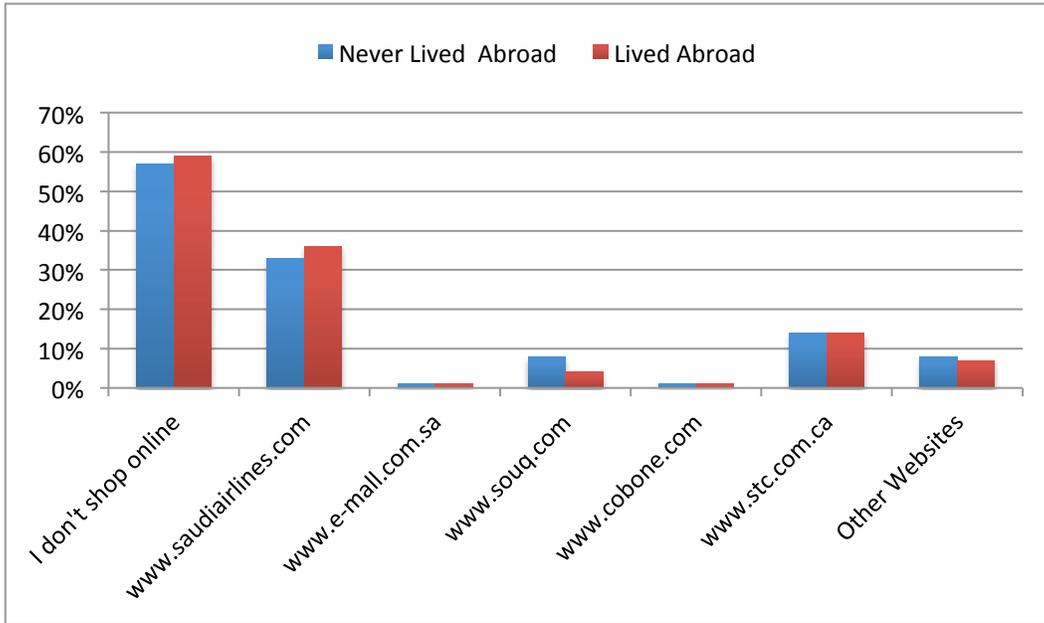
Figure 5-11: Percentage of Saudis Who Shopped from Global Online Merchants



7. Choose the name of the Saudi websites you have used for online shopping?

We can see immediately from Figure 5-12 that a significant percentage of Saudis do not make purchases from Saudi websites. From the previous question and the respondents written responses, we learned that Saudis who lived abroad are willing to shop online from western websites but do not trust Saudi online merchants' infrastructure in terms of shipping and payment protection. A second reason for less online shopping at Saudi websites is that they do not have attractive product offerings and they lack suitable presentation. However, a small percentage of respondents trust large organizations such as airlines and telecom companies.

Figure 5-12: Percentage of Saudis Who Shopped from Saudi Online Merchants

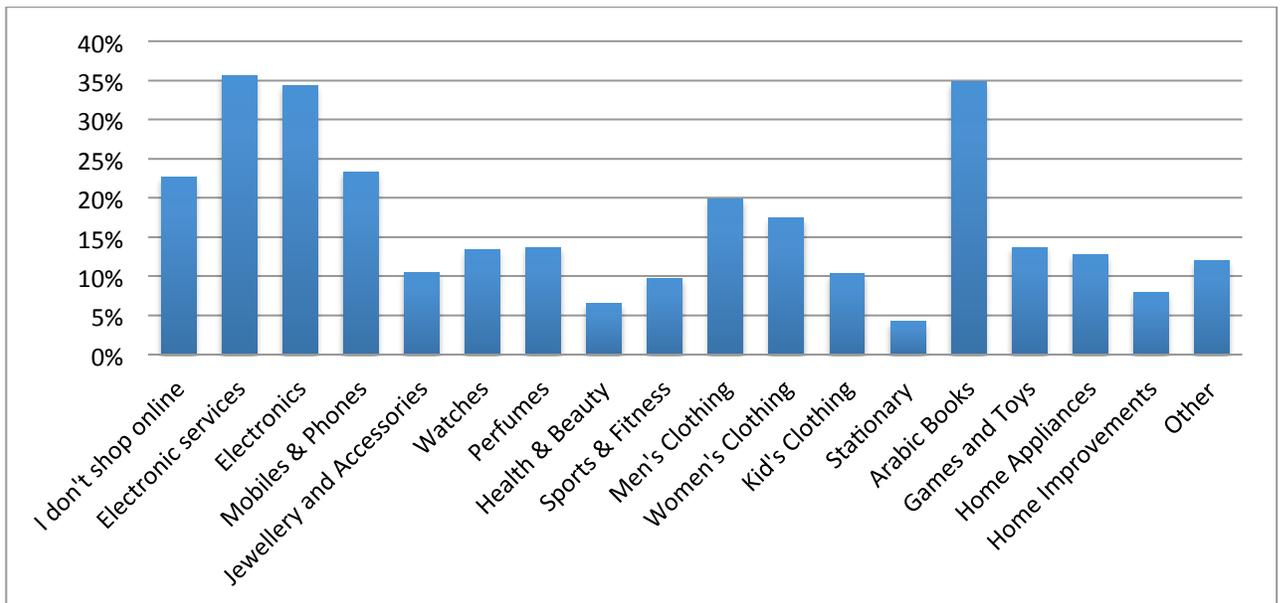


8. Select the items you have purchased online?

As shown in

Figure 5-13 below, most Saudis shop online for books, electronics and services.

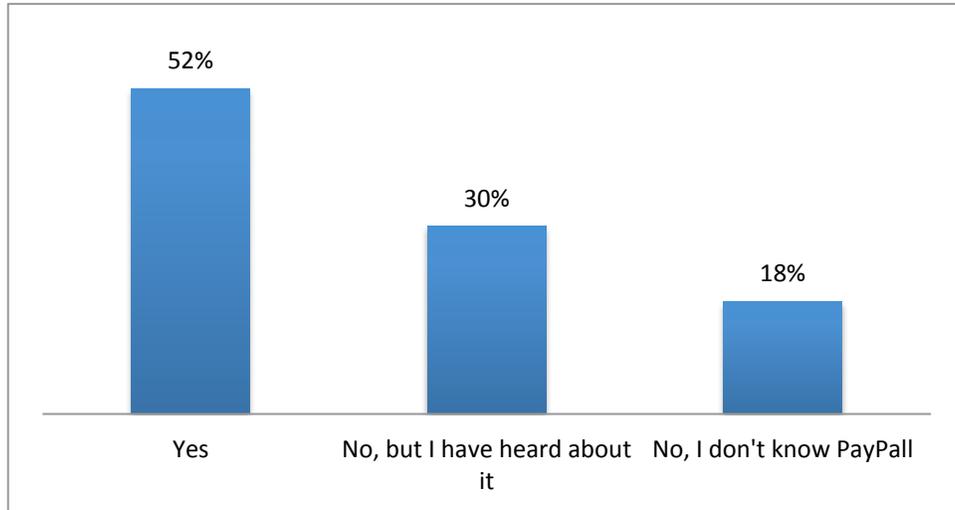
Figure 5-13: Percentage of Saudis online purchases by Product Categories



9. Have you ever paid using PayPal?

This question was cross-tabulated with “How often do you shop online?”. We found that 52% of online shoppers use PayPal as a payment method.

Figure 5-14: Percentage of Saudis who Used PayPal

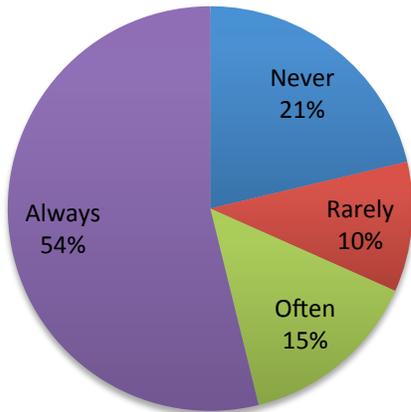


10. How many times have you used SADAD service to pay for your bills or used SADAD for online shopping?

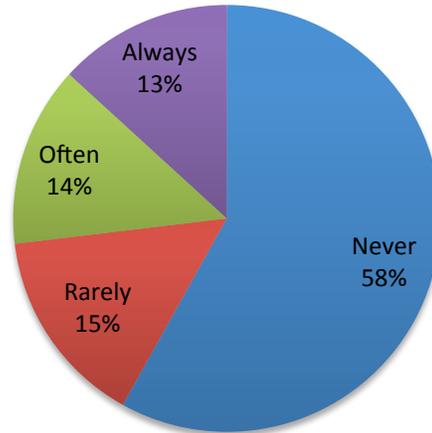
As shown Figure 5-15-A below, 54% of respondents have used SADAD to pay bills. On the other hand, Figure 5-15-B illustrates that 58% had never used SADAD for online shopping. This provides us with a clear indication that SADAD is not utilized, and as described in Chapter 4 was not designed, as an e-payment option for online shopping; however it was designed and is used for regular bill payment.

Figure 5-15: Percentage of Saudis SADAD Usage

A: Percentage Saudis using SADAD to pay for bills



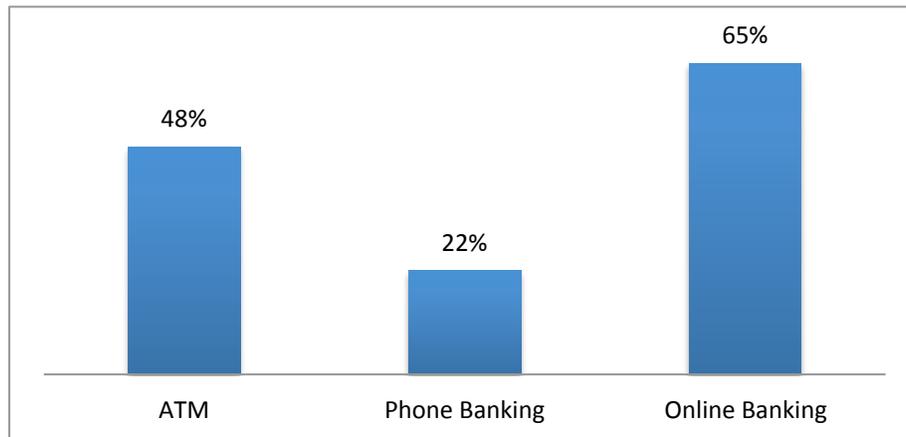
B: Percentage Saudis using SADAD to shop online



11. When pay using SADAD, which payment channel did you use?

Unlike data presented earlier in Chapter 4, where data retrieved from the SADAD website showed that 20% of SADAD users utilized online banking to pay their bills, our survey indicates that 65% of SADAD users are taking advantage of online banking for this purpose. The inference we are drawing is that being comfortable and familiar with making payments over the Internet helps people adapt to online shopping. In other words, in our opinion, paying bills online moves people a step closer to integrating online shopping into their shopping culture.

Figure 5-16: Method of SADAD Payments



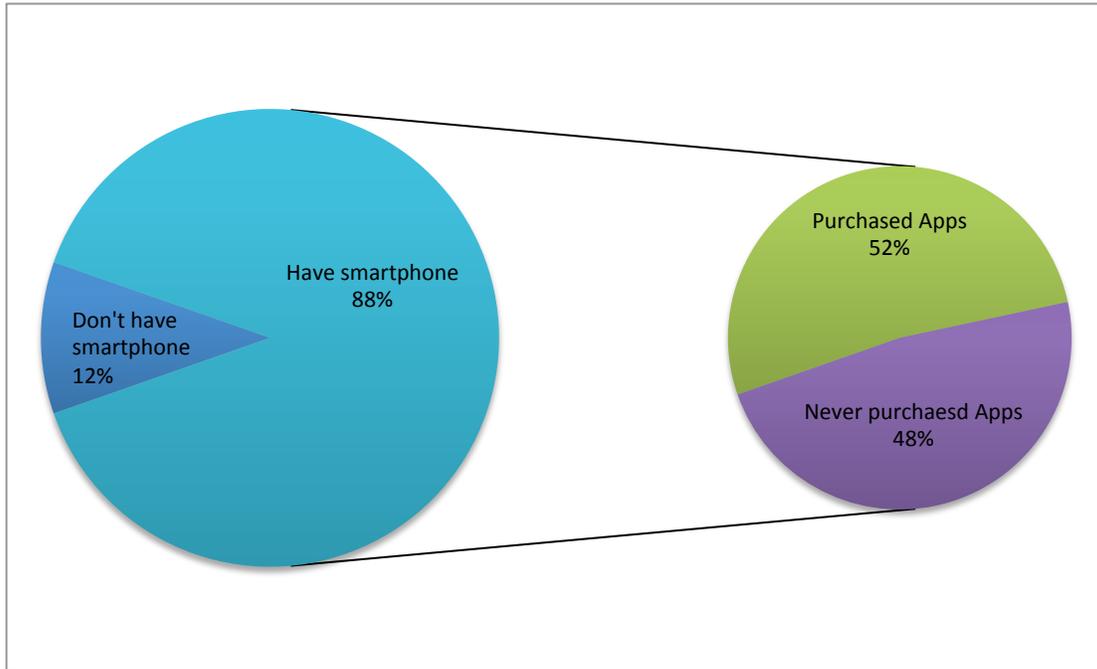
5.3.3 Part Three: Mobile Commerce and Online Banking

In part three of the survey, we examined Saudis' readiness for online shopping by exploring their experience with mobile commerce and online banking. We believe that if a consumer used an iPhone to buy an application from Apple's App Store for example, or has paid bills using online banking; this consumer would be more open to other e-commerce practices.

- 1. Do you have a smartphone? Have you used your credit card to buy applications for your smartphone? (For example, have you bought application from App Store, iTunes, etc.?)***

Although most respondents (88%) have smartphones, only 52% have purchased mobile applications. However, this is understandable given that Saudi consumers are in the early stages of mobile commerce. That being said, a large percentage of Saudis own smartphones, which could be a potential market base for e-commerce.

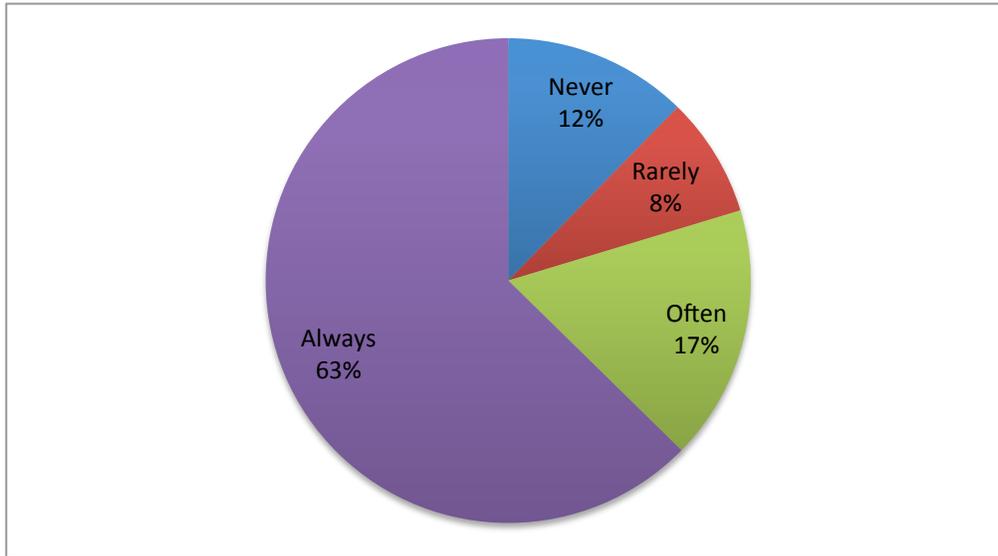
Figure 5-17: Percentage of Saudis Who Own Smartphones and Purchase Applications



2. How many times have you used online banking services? (For example: bill payment, funds transfers, etc.)

A significant majority of respondents (80%) either always or often utilize online banking services. This provides us with a clear indication that Saudis are familiar with e-transactions, which is a primary factor in any e-commerce process.

Figure 5-18: Saudis Online Banking Usage Percentages



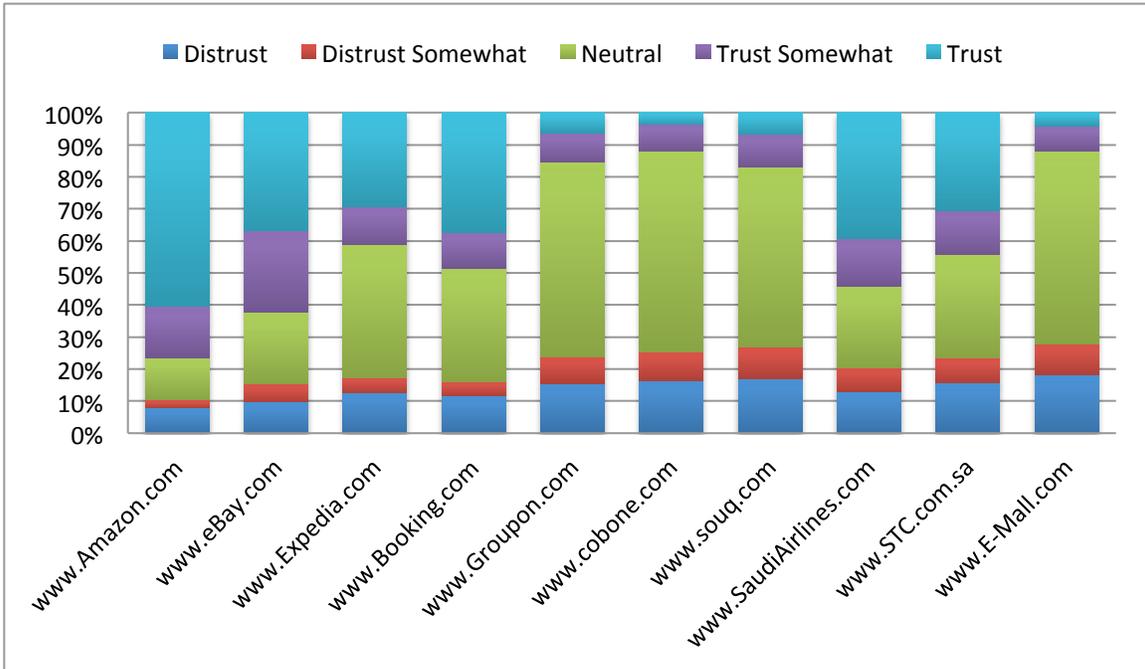
5.3.4 Part Four: Saudis Attitude and Perspective

In part four of the survey we attempted to discern the attitudes and perceptions of Saudi online shoppers. Essentially we focused on differences in the level of trust with regard to global western-based websites and Saudi websites, postal services, and PayPal as well as website language preferences.

1. Which websites do you trust most when thinking about shopping online?

As previously discussed in part two, questions six and seven asked about the global and local online merchants that the respondents had used. The findings from those questions are aligned with the level of trust depicted in Figure 5-19.

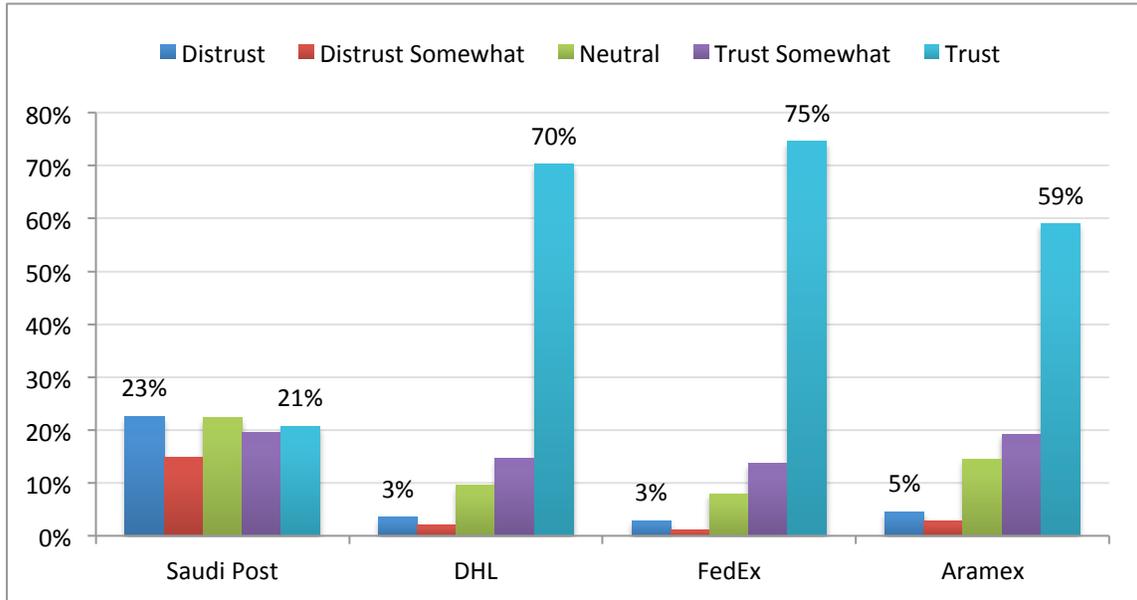
Figure 5-19: Saudis Level of Trust in Online Merchants



2. Which of the following postal companies you trust most to deliver your purchases online?

As seen from the results presented below, most Saudis do not trust SP to deliver their purchases. However, they do trust international postal services. We believe that the lack of development in services provided by SP has hindered progress in e-commerce.

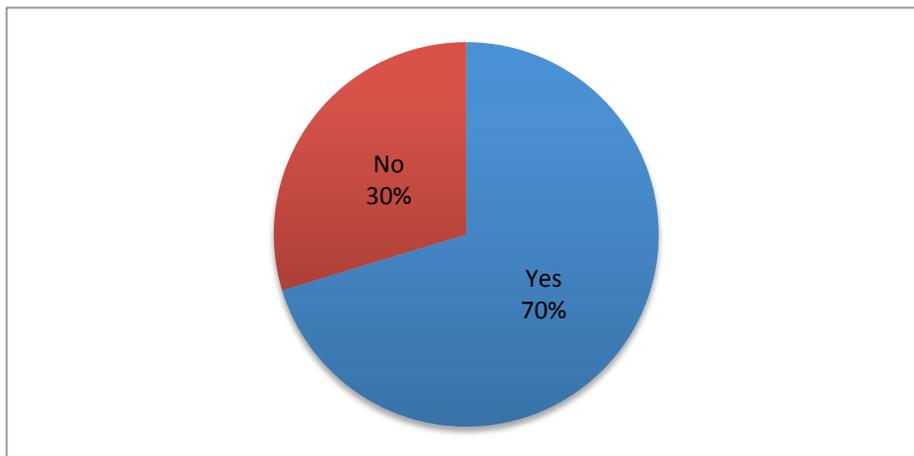
Figure 5-20: Attitudes and Perspective of Postal Services in Saudi Arabia



3. If PayPal were used in the Saudi websites, would you trust Saudi websites to make a payment?

As discussed in part two, question nine showed that 48% of respondents have not used PayPal. Nevertheless, 70% of Saudis trust this payment method.

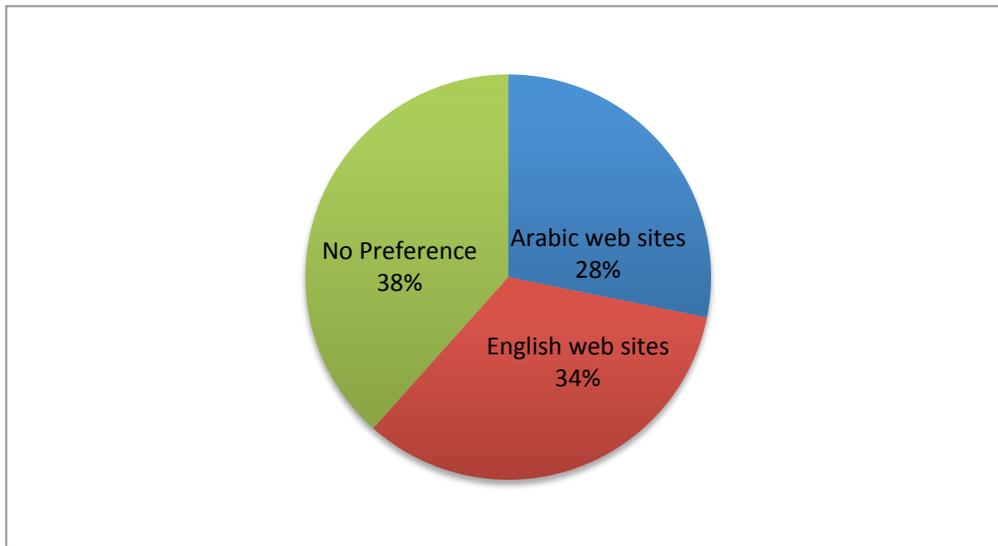
Figure 5-21: Percentage of Saudis who Trust PayPal



4. *Depending on the language used, what are the most preferred websites?*

Figure 5-22 below shows a normal distribution among respondents in terms of language preference. Whether or not the website is in English or Arabic is not a major factor as perceived by Saudi online shoppers.

Figure 5-22: Saudi's Website language preference



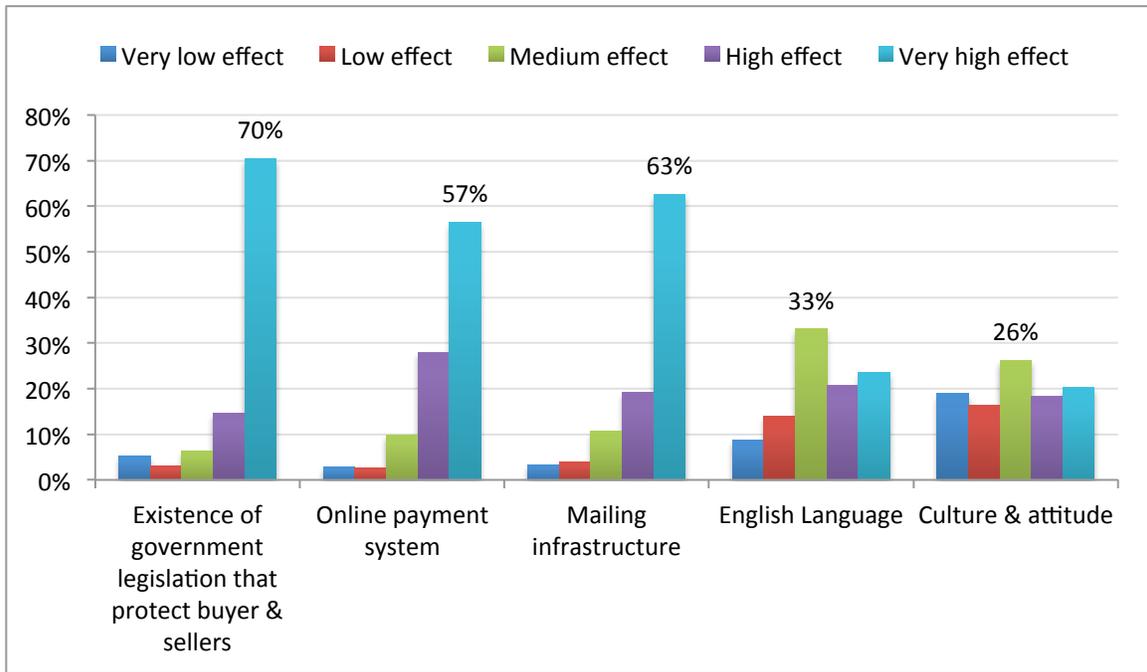
5.3.5 Part Five: Online Shopping Obstacles

The purpose of part five was to identify the obstacles that lie behind the immature e-commerce industry in Saudi Arabia. It can be seen from the figure below that the main three obstacles that hinder Saudis from shopping online, as perceived by respondents, are the lack of government regulations to protect buyers and sellers, lack of secure online payment systems, and the poor mailing infrastructure.

Having said that, we believe that these obstacles will gradually decline for three reasons. First, as discussed in Chapter 4, the Saudi Electronic Transaction Act (ETA), which was enacted in 2007, is intended to ensure the secure, efficient transmission and

exchange of electronic information. Second, as of March 29, 2011, PayPal has allowed Saudi online merchants to receive payments. Finally, even though not many people are aware of it, in 2009 SP implemented a new addressing system (Wasel).

Figure 5-23: Saudi Arabian Online Shopping Obstacles



6: Conclusion & Recommendation

6.1 Conclusion

E-commerce is an electronic tool that enables individuals and companies to buy and sell services or products over electronic networks such the WWW. Through e-commerce, consumers can purchase needed items, often at a discounted price, without the hassle of driving, parking, or standing in long queues. In addition, it is also often possible to find niche products and specialized services online that are not available in local “brick and mortar” stores. This study undertook a comprehensive review of e-commerce to obtain a thorough understanding of its condition in Saudi Arabia and to determine why it is still in an immature state. The research will be beneficial to the researcher and others who plan to enter the e-commerce market in Saudi Arabia. In order to fortify our preliminary knowledge of the literature on e-commerce in Saudi Arabia, we conducted an online survey that elicited general perceptions and attitudes of Saudi consumers as well as opinions about e-payments and perceived obstacles to online shopping of Saudi consumers. An online survey tool, which was distributed via social networks and listservs, collected 1,740 responses from Saudi consumers.

Research has also shown that in the last five years the percentage of the Saudi Arabian population with financial cards has increased from 7% in 2005 to 31% in 2010 (Euromonitor International, 2010). According to our survey, 74% of respondents have credit cards, leading us to believe that, even though only 31% of the Saudi population holds credit cards, the majority of Saudi Internet users (extrapolated from our

respondents), the target market for online merchants, hold credit cards. The reason behind the increase of credit card holders is the recent development of credit cards that are compliant with Islamic “Shari’ah” law (Euromonitor International, 2010). The 9% of survey respondents who do not hold credit cards and do not plan to apply for one mostly attribute this decision to doubt about Saudi banks’ coverage of fraudulent activities and the non-compliant nature of conventional credit cards with Islamic law.

The main online payment systems used in Saudi Arabia are SambaConnect, SADAD and PayPal. Because of the high cost associated with installing the system on a website, SambaConnect is only utilized by 14 online merchants. They are mostly large enterprises with high sales volume. The SADAD system differs from other e-payment methods in that it is the national e-payment channel for e-government services. Fifty-eight percent of the 103 organizations that use SADAD are e-government organizations. Our survey supports this statistic. We found that while 54% of respondents used SADAD to pay bills, 58% never used SADAD for online shopping purposes. This provides us with a clear indication that SADAD has not been utilized as an e-payment option for online shopping; however it is well utilized by e-government and commercial organizations that issue high volume periodic bills. Finally, PayPal is considered a trustworthy and inexpensive e-payment system that any online merchant in Saudi Arabia can employ. However, it was not available in Saudi Arabia until March 29, 2011. Our survey clearly indicated that a major obstacle to online shopping is payment security. Nevertheless, 70% of respondents said they would trust a Saudi website if it used PayPal as a payment option.

Saudi websites are not e-commerce-oriented (CITC of Saudi Arabia, 2010). Most companies in Saudi Arabia only use their websites to provide information about the company and its products and services. According to our research, the websites that have implemented SambaConnect and SADAD only offer products and services that do not require shipping. This clearly indicates that the postal infrastructure was not sufficiently reliable to facilitate e-commerce practices that involve shipping. Therefore, Saudi websites are not able to take advantage of business opportunities that require the use of advanced e-commerce practices.

Before 2009, shipping purchases to home addresses was definitely a problem because residential and many commercial addresses did not exist. In 2009, the SP installed a new GIS-based addressing system called Wasel that embedded state-of-the-art RFID technology chips. This addressing system created a unique address for all locations in the nation. Unfortunately our survey findings indicated that exactly half of the respondents were not aware of their home addresses. Another interesting finding from our survey relates to the trustworthiness of SP services in general. We found that most respondents do not trust SP to deliver their purchases. However, they do trust alternative global postal services.

Research has shown that the number of Internet users in Saudi Arabia increased by 44% CAGR from 200,000 in 2000 to 11.4 million in March 2011, which means that 43.6% of Saudis use the Internet (Internet World Stats, 2011). Our findings indicate that 52% of Saudi Internet users (survey respondents) always and often shop online. Interestingly, those who shop online prefer to shop at western global websites rather than Saudi websites. This concurs with our review of the literature that reveals the immature

state of e-commerce in Saudi Arabia. Saudis who do not make purchases from Saudi online merchants consistently cite two reasons: 1) they do not trust Saudi online merchants' infrastructure in relation to shipping and payment protection, and 2) Saudi online merchants do not have attractive offerings and the presentation of items is not appealing.

The research survey inquired about obstacles that deter Saudi online consumers from shopping online in Saudi Arabia. The main obstacles are inadequate security and lack of trust as well as not being able to physically handle items before purchase. Other major obstacles that respondents listed are the poor infrastructure of Saudi websites and shipment services, and a negative subjective perception of Saudi customs regulations. Surprisingly, we found a normal distribution amongst respondents in terms of language preference, leading us to believe that culture and language are not major factors affecting Saudi online shoppers.

In summary, e-commerce in Saudi Arabia is here to stay and can prove a valuable asset to any business only if its place in the business is recognized and its e-commerce services are implemented correctly. The main three obstacles that hinder Saudis from shopping online are the lack of government regulations that protect buyers and sellers, lack of secure online payment system, and the poor mailing infrastructure. We believe that these obstacles will gradually decline due to the release of ETA, PayPal and Wasel in Saudi Arabia. Given that these challenges are being addressed, we believe the future is bright for e-commerce in Saudi Arabia. In addition, many companies have only recently entered the e-commerce market in Saudi Arabia. For example, in 2010 and 2011, Souq.com (aka ebay.com), E-Mall.com (aka amazon.com), and Cobone.com (aka

Groupon.com) came online. This clearly indicates that e-commerce in Saudi Arabia is growing and has a promising future.

6.2 Recommendations:

Based on the results of our study, we are prepared to make the following recommendations that, when implemented, will enhance the success of e-commerce in Saudi Arabia. These recommendations would be of interest to government agencies, Saudi banks, entrepreneurs or established companies who want to enter the e-commerce market in Saudi Arabia.

6.2.1 Technical Recommendations:

- Create E-payment gateways and platforms in association with the financial system.
- Develop stronger security that ensures the confidentiality of transactions and websites.

6.2.2 Governmental Recommendations:

- The Saudi government needs to provide assistance to help develop the underlying infrastructure and support technical services to build a positive environment for accessible and effective e-commerce.
- It is evident that SP should undertake a campaign to inform people, through social media and newspaper and TV commercials, about their mission to create an “address for each person”. In addition, the government could require or encourage the use of the new SP addresses.

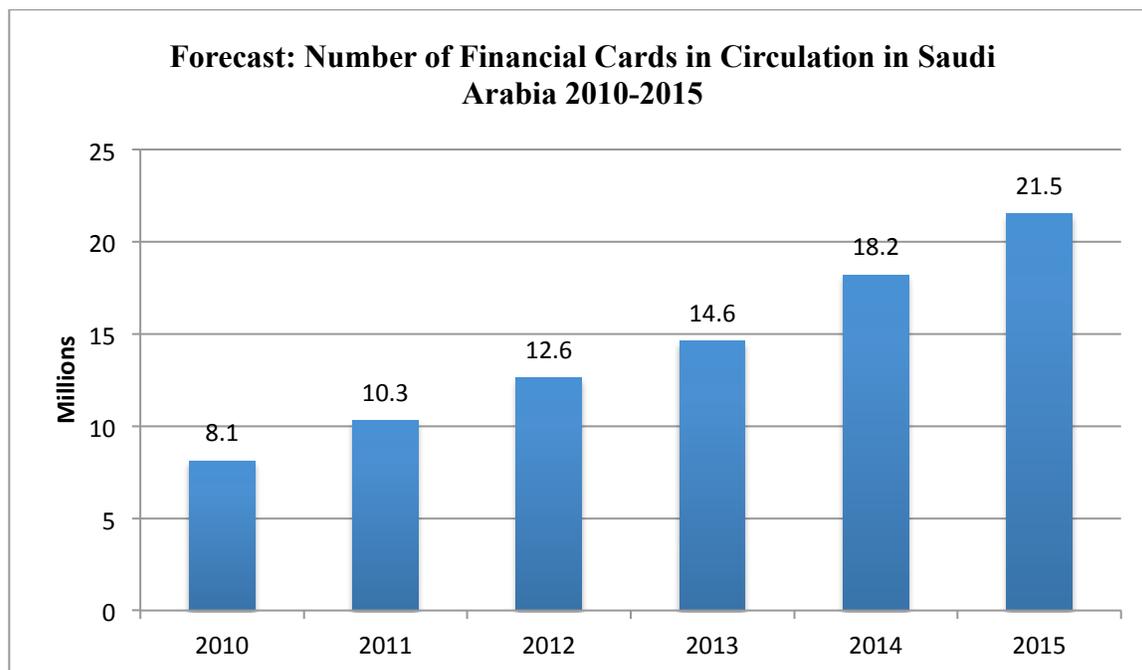
- We found that SADAD is a trusted e-payment tool; however it entails a complicated and expensive instalment procedure for online merchants. Therefore we recommend that the government simplify the installation of SADAD for online businesses to facilitate its use as an e-payment tool for online shopping.

6.2.3 Market Recommendations:

- A good way to enter the Saudi market is by providing services that do not require shipping since many people have had bad experiences with delivery of products and do not trust shipping companies. This is, in part, because delivery service is extremely slow.
- Since 65% of Saudi own smartphones and half of those owners use it to access the Internet an average of 68 minutes a day, online merchants can leverage the use of smartphones applications to market and sell their products.
- Another good way to enter the e-commerce market in Saudi Arabia is by
- Saudi banks could promote the newly implemented Visa debit card or MasterCard debit card, which is compliant with Islamic law. Unlike a conventional credit card, these credit-debit cards, does not incur interest, which is prohibited by Islamic law. Although these credit-debit cards are technically a debit card because it immediately deducts the purchase price from your bank account, it has some of the advantages of a credit card because it can be used online or internationally.

Appendices

Appendix A - Financial Cards Forecast in Saudi Arabia: 2010-2015



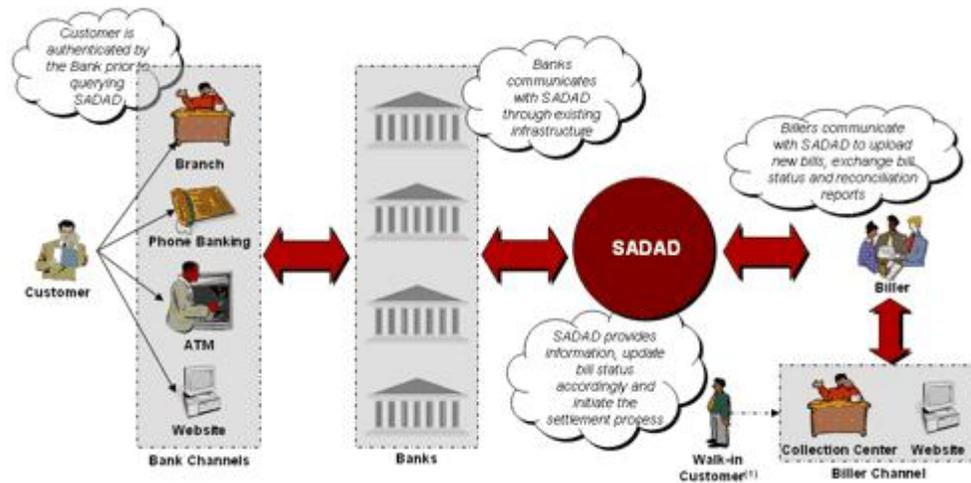
Source: (Euromonitor International, 2010)

Table A-1: Financial Cards Performance Forecast 2010-2015

Total	2005	2006	2007	2008	2009	2010
Number of Transaction (mn)	79.1	100.5	129.9	172.7	231.1	285.2
Transaction Value (USD mn)*	5,202.6	5,837.9	6,618.2	7,579.9	8,830.6	10,180.4

*Source: (Euromonitor International, 2010), * \$1 USD=0.26666 SAR*

Appendix B – How SADAD Works



Source: (www.sadad.com)

1. Billers send summary billing information to SADAD at a pre-determined schedule
2. SADAD validates data received and uploads it to its database
3. SADAD notifies Billers of any discrepancies
4. Customer requests bill(s) information through Bank channels(1)
5. The Bank forwards the request received to SADAD
6. SADAD retrieves billing information from its database and forwards it to customer
7. Customer selects the bill(s) to be paid and the respective amount(s)
8. The Bank debits the customer account and confirms the transaction
9. SADAD updates its database based on the Bank's confirmation(2)
10. SADAD notifies the relevant Biller(s)
11. At the end of the day, SADAD initiates settlement instructions through SARIE
12. At the end of the day, Billers receive reconciliation reports from SADAD showing a breakdown of all transactions processed by SADAD
13. SADAD updates bills status to "settled"

Appendix C – SADAD Billers

Biller Name (Biller Code)	Service Category
1 Saudi Electricity Company (002)	Telecom. & IT
2 Mobily (005)	Telecom. & IT
3 "Bravo" (Biller Code 014)	Telecom. & IT
4 Nesma Advanced Technology (Biller Code 037)	Telecom. & IT
5 SaudiNet (Biller Code 038)	Telecom. & IT
6 Zain telecommunication company (Biller Code 044)	Telecom. & IT
7 Go Telecom (Etihad Atheeb Telecom Company) (Biller Code 033)	Telecom. & IT
8 Saudi Business Machines (Biller Code 083)	Telecom. & IT
9 Perfect Presentation Telecommunication & IT (2P) (code 107)	Telecom. & IT
10 Al-Elm Information Security (code 085)	Telecom. & IT
11 Integrated Telecom Company (Biller Code 055)	Telecom. & IT
12 Cyberia (Biller Code 059)	Internet Provider
13 Sahara Net (Biller Code 048)	Internet Provider
14 AwalNet (Biller Code 041)	Internet Provider
15 NCCI (003)	Insurance
16 Cadre Economic Cities (Biller Code 035)	Human Development
17 Marafiq (Biller Code 004)	Utility
18 Sama airline (Biller Code 011)	Airlines
19 Nas Air (Biller Code 026)	Airlines
20 Saudi Arabian Airlines (022)	Airlines
21 United Instalment Sales Company (065)	Retail

22	Aljomaih Automotive Company (052)	Retail
23	Al-Hamrani Company for Investment in Trade (ACIT) (023)	Multi-Investment
24	ALJABR TRADING COMPANY (086)	Multi-Investment
25	Tajeer Company (063)	Leasing
26	Showtime (Biller Code 032)	Media & Publishing
27	AlYamamah Press Establishment (Biller Code 047)	Media & Publishing
28	AL-Jazirah Newspaper (Biller Code 053)	Media & Publishing
29	Arab Media Company (Biller Code 076)	Media & Publishing
30	Dar Alyoum pressing, printing and publishing (biller code 074)	Media & Publishing
31	Ola Almajd Trading Co. (AL MAJD TV channels) (081)	Media & Publishing
32	Awan For Market Data (Biller Code 039)	Media & Publishing
33	Samba Financial Group (credit card) (Biller Code 012)	Banks & Financial
34	NCB (credit card and Personal Finance) (Biller Code 016)	Banks & Financial
35	American Express (Saudi Arabia) (Biller Code 018)	Banks & Financial
36	SABB PS (Biller Code 029)	Banks & Financial
37	Alyusr Instalment Co. (Biller Code 024)	Banks & Financial
38	Saudi Hollandi Bank Credit Cards (Biller Code 031)	Banks & Financial
39	Mubasher (Biller Code 034)	Banks & Financial
40	The Saudi Arabian Agricultural Bank (Biller Code 045)	Bank & Financial
41	Falcon Credit Card from NCB (Biller Code 056)	Banks & Financial
41	Bank Al-Jazira Credit Card and Financing Services (Code 078)	Banks & Financial
42	Arab National Bank Payments (Biller Code 082)	Banks & Financial
43	AlRajhi Bank Services (Biller Code 054)	Banks & Financial
44	Al Amthal Financing and Leasing Co. Ltd. (Biller Code 079)	Banks & Financial

45	Riyad Bank Payments (biller code 067)	Banks & Financial
46	King Abdul Aziz University (009)	Government /Education
47	Qiyas (Biller Code 008)	Government /Education
48	Al-Yamamah University (Biller Code 072)	Government /Education
49	King Saud University (Biller Code 080)	Government /Education
50	Arab Open University (AOU) (biller code 017)	Government /Education
51	The Saudi Home PC initiative (CITC) (007)	Government
52	Madina Municipality (006)	Government
53	Ministry of Water and Electricity (015)	Government
54	Riyadh Municipality (Biller Code 010)	Government
56	The Department of Zakat & Income Tax (Biller Code 020)	Government
57	Holy Makkah Municipality (Biller Code 027)	Government
58	Jeddah Municipality (Biller Code 028)	Government
59	Communications and Information Technology Commission	Government
60	Eastern Province Municipality (Biller Code 025)	Government
61	JEDDAH Chamber of Commerce and Industry (Biller Code 019)	Government
62	Saudi Post (Biller Code 021)	Government
63	Saudi Arabian Standards Organization (Biller Code 049)	Government
64	Saudi Customs (Biller Code 030)	Government
65	Ministry of Commerce and Industry (Biller Code 013)	Government
66	General Commission for Tourism and Antiquities (Biller 057)	Government
67	Saudi Credit and Saving Bank (Biller Code 058)	Government
68	Tabouk Province Municipality (Biller Code 062)	Government
69	Hail Province Municipality (Biller Code 061)	Government

70	Jazan Province Municipality (Biller Code 064)	Government
71	Ministry of Transport (Biller Code 075)	Government
72	Ministry of Culture and Information (Biller Code 051)	Government
73	Ministry of Labor (Biller Code 050)	Government
74	Riyadh Chamber of Commerce and Industry (Biller Code 073)	Government
75	AlQassim Province Municipality (Biller Code 070)	Government
76	Real Estate Development Fund (Biller code 040)	Government
77	The Saudi Industrial Property Authority(Biller Code 068)	Government
78	The General Organization for Social Insurance (Code 060)	Government
79	Aseer Province Municipality (Biller Code 084)	Government
80	Saudi Project for Utilization of Hajj Meat (Biller Code 043)	Government
81	Ministry of Finance (Biller Code 088)	Government
82	MOI-Alien Control (Biller Code 090)	Government
83	MOI-Driving License (Biller Code 091)	Government
84	MOI-Saudi Passport (Biller Code 092)	Government
85	MOI-Traffic Violation (Biller Code 093)	Government
86	MOI-Motor Vehicle (Biller Code 094)	Government
87	MOI-Labour Importation (Biller Code 095)	Government
88	MOI-Civil Registration (Biller Code 096)	Government
89	Najran Province Municipality (Biller Code 087)	Government
90	AlJouf Province Municipality (Biller Code 103)	Government
91	Saudi Port Authority (biller code 089)	Government
92	Ministry of Islamic Affairs (MOIA) (biller code 077)	Government
93	Ministry of Social Affairs (Global Goodness) (066)	Government

94	Municipality of Northern Borders (biller code 102)	Government
95	Saudi Food And Drugs Authority (code 109)	Government
96	General Authority of Civil Aviation (GACA) (098)	Government
97	Baha Province Municipality (104)	Government
98	AlAhsa Municipality (code 112)	Government
99	Royal Commission for Jubail and Yanbu (RCY) (046)	Government
100	Taif Municipality (113)	Government
101	Saudi Arabian General Investment Authority (SAGIA) (108)	Government
102	Saudi Credit Bureau (SIMAH) (biller code 036)	Government
103	Deputy Ministry for Mineral Resources (DMMR) (biller code 116)	Government

Source: (www.sadad.com)

Appendix D – Websites with SambaConnect

Participating Online Merchants with Samba Connect

	Organization Name	Service Category	Website	Daily Visitor
1	Saudi Arabian Airlines	Airlines	www.saudiairlines.com	32,287
2	Hjzcom	Travel	www.hjzcom.com	1,323
3	Saudi Railways Organization	Train Tickets	www.saudirailways.org	454
5	Atheeb Telecommunication	Internet & Phones Cards	www.go.com.sa	3,339
6	Al-Elm Information Security	Tourist VISA application	www.etv.com.sa	< 10
7	Tatweer International Software Development Co. Ltd	Stock Trading Software	www.mostathmer.com	< 20
8	FanaPay	Software, Phone cards	www.fanapay.com	1,102
9	Rawabit Technology LTD	Software	www.sijil.com	< 10
10	Saudi Telecoms Co. (STC)	Telecom Provider	www.stc.com.sa	332,820
11	Arab Media Company	Publication Subscription	www.arabmediaco.com	< 20
12	US Embassy for Visa Payment	United State Visa	www.samba.com	NA
13	ASHARQIA Chamber	Government Services	www.chamber.org.sa	693

Source: (<http://www.sambaconnect.com>; <http://webinformation.co>)

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