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ONLINE SHOPPING BEHAVIOR OF SAUDI ARABIANS

Key Words

*Online Shopping;
E-Commerce; Socio-
Demographic Variables;
Saudi Arabia; Internet;
International Marketing.*

Abstract

A survey of 231 Saudi Arabian professionals was conducted and revealed the high usage of the Internet for social media, and internet shopping. The Internet is primarily used for banking, travel arrangements and purchase of videos and music, especially by computer savvy, young, single and highly educated individuals.

Introduction

E-marketing is similar to agricultural-age marketing, with direct recurring relationships between consumer and producer but with lower costs (Sheth and Sharma, 2004). Whereas online shopping has been widely adopted in countries with developed physical infrastructure and competitive marketing like Canada and the United States (Sheth and Sharma, 2005), Saudi Arabia's reasonably developed physical infrastructure for online shopping leads us to suggest a need for targeted strategic development of an online shopping strategy in Saudi Arabia. According to the Arab Advisory Group (2007), the opportunities of online shopping are large in Saudi

Arabia. Many authors (i.e. Douglas and Wind, 1987) suggest that one needs to find out how online shopping can be expanded in countries which have a developed physical infrastructure such as Saudi Arabia. To that end, this study reports the results of an empirical investigation of business and public sector professionals resident in Saudi Arabia. The investigation elicits the respondent's frequency of internet use, to purchase products and services, possession of accounts in the social networks, reservations about buying a product on line, opinions about marketing strategies to make e-commerce attractive, the trends affecting e-commerce, and the users' socio-demographic profile.

Online shopping strategies have received considerable research attention over the last two decades (Watson *et al.*, 2002). A major part of this research has focused on the online shopping strategy in developed countries. However, somewhat less empirical attention has been paid to the online shopping in Saudi Arabia. Further empirical evidence from Saudi Arabia will broaden our understanding of the strategic choices facing online shopping decision makers in Saudi Arabia and to determine if the online shopping theory based on industrial economies also applies to it.

Sheth and Sharma (2005) stated that the development of online shopping in a nation is related to its infrastructure and marketing institutional development. Infrastructure development in the context of online shopping refers to physical infrastructure such as roads and telecommunication and socio-political infrastructure such as legislative and justice systems. Marketing institutional development is associated with the availability of competitive efficient and effective marketing institutions that includes efficient and effective distribution and communication channels.

To provide insight into the specific issues dealing with the development in Saudi Arabia, our study deals with the relationship between socio-demo-

graphic profile of professional residents of Saudi Arabia and their online shopping behavior, online shopping concerns, online shopping trends in Saudi Arabia, and desirability of various marketing strategies. First, we describe the research issue. Second, we discuss Saudi Arabia as a case for analysis. Third, relevant literature is reviewed. Fourth, the research design and methodological procedures are described. Fifth, the study findings are presented and discussed, and finally, the managerial and public policy implications and future research directions are highlighted.

Research Issue

In Saudi Arabia, before the discovery and exploitation of its vast oil wealth in 1941, consumers and businesses bought products close to their physical location and had these adapted toward their needs. In this structure, most marketing transactions were initiated by the customer and adapted to her/his specific needs (e.g. tailors and clothing). Production was typically initiated after receiving the customer's order, and specialization was at a local level. This mode shifted with the advent of mass transportation after full-scale development of the oil fields began in 1941 (Al-Rasheed, 2010). The costs of mass-manufactured imported and local

goods were dramatically lower than the small-lot adaptable local products, leading to market dominance by mass-produced goods. Therefore, marketing became more organization-initiated as products were first manufactured and then marketed (Sheth *et al.*, 2000).

One of the most significant trends in Saudi Arabia is the rapid spread of the internet and the growth of the social media applications. These are now used heavily by Saudi elites (Arab Advisory Group, 2007). Despite pressing development concerns and the opportunities that commercial applications of information technology offer, limited research in Saudi Arabia has dealt with the relationship between socio-demographic profile of Saudi Arabians, and the use of online shopping and how it may be expanded. To that end, in this research we provide additional information regarding Saudi consumers' frequency of the use of internet to purchase products and services, their possession of accounts in the social networks, any reservations they have about buying a product on line, their views regarding the trends affecting online shopping, and beliefs they have about the marketing strategies that can make online shopping attractive along with their socio-demographic profile. We do this by a) providing the means and rank order of Saudi

respondents' online shopping activities (b) correlating online shopping behavior and the related beliefs with the most relevant socio-demographic variables (c) group the frequency of online purchase of products and services using the factor analysis technique, and(d) relating the respondent socio-demographic profile with product and services purchase groups by using the multiple regression technique. Thus our objectives is to present the empirical evidence of the interplay between the socio-demographic profile of respondents and their online purchase activities, reservations they have about buying a product on line, the opinions they hold about the trends affecting online shopping in Saudi Arabia and their beliefs regarding marketing strategies used by the Saudi Arabian enterprises.

Saudi Arabia

Saudi Arabia was one of the poorest countries in the world, reliant on limited agriculture and pilgrimage revenues before 1941. Since then when oil was commercially exploited, it has shifted effort to build physical infrastructure as a major driver of its economic development (Al-Rasheed, 2010). This process was accelerated in 1973 when world oil crisis resulted in large increase in oil revenue. Saudi Arabia was acceded to the World Trade Organization in December 2005.

Saudi Arabia is one of the most sparsely populated countries in the world with a population with per capita income of \$24,200. It has well developed telecommunications infrastructure with 4.166 million telephone land lines, and 52 million cellular phones in use. It has 10 million internet users (30th in the world). The literacy rate is about 85 percent among the males, and 70 percent among the females (C.I.A. 2011). According to the latest Saudi census, Saudi Arabia's population has reached 27,136, 977, out of which 18,707,576 (68.9) percent of the population were Saudis and the rest, 8,429,401 (31.1%) were expatriate workers (Saudi Gazette 2012).

Literature Review

Perceived usefulness is the main reason for internet users to carry out online shopping activities. A consumer's positive attitude towards information and communication technologies is a major indicator of their intention of using online shopping (Siddiqui, 2008). Past researchers find that the online shoppers are very concerned with convenience and are willing to pay a slightly higher price to save time. They demand more product information, more product variety, and more personalized products compared to the traditional shoppers (Szymanski and Hise, 2000). Some shoppers also dislike traditional shop-

ping (Morganosky and Cude, 2000). Majority of today's online shoppers are in fact quite similar to the traditional shoppers in terms of their shopping motivations and the importance they place on the store attributes (Ganesh *et al.*, 2010; Levy *et al.*, 2005).

Krishnamurthy and Singh (2005) stated that online shopping has grown almost five-fold since the year 2000. It still only accounts for just over three per cent of the total retail sale. Perceived usefulness, perceived ease of the use, perceived risk of the product/service failure, and perceived risk of the security of the transactions are some of the characteristics that influence the online shopping (Lee *et al.*, 2000). According to Liang and Huang (1998), whether a consumer would buy a product online is determined by the perceived transaction costs. Bhatnagar *et al.* (2000) argue that the likelihood of purchasing online decreases with increases in the product risk. Lower search costs traditionally associated with the online shopping are thought to result in consumers buying better quality items (Bakos and Yanis, 1997). Based on an online survey of 1007 shoppers, Szymanski and Hiss (2,000) find that satisfaction with online shopping is related to convenience, information, site design, and security. Credit cards are the most widely used method of payment for online purchases (Hawk, 2004). Trust-

ing their e-payments has a strong impact on the consumer's acceptance of the e-business, and on the success of the e-business (Ho and See-To, 2010). Lack of trust is an obstacle to accepting online shopping (Laroche *et al.*, 2004).

According to Europe Economics (2007), online consumers tend to be younger, better off, and better educated than their offline counterparts. Higher computer literacy makes internet shopping more attractive. Familiarity with the internet also makes them better placed to identify and take advantage of the lower priced products. Consumers are most attracted to internet for products like books, CDs and PCs where the attributes of the product can be clearly identified online. For low priced products such as CDs, the convenience offered by the internet is an important factor. For products requiring direct contact - 'high touch products' - or for which service and delivery are important factors, the internet is a less attractive shopping channel.

Income and gender are some of the most common demographic variables that marketers use to segment markets (Kotler and Keller, 2008). Also there is considerable evidence that women display lower levels of computer aptitude (Morrow *et al.*, 1986). Research-

ers have argued that men would perceive internet, email etcetera more useful (Venkatesh and Morris, 2000). Teo (2001) finds that males use the internet for downloading and purchasing activities to a greater extent compared to females.

In general, researchers find a negative relationship between age and degree of search (Schaninger and Sciglimpaglia, 1987). Specifically, Zeffane and Cheek's (1993) study of computer usage in an Australian telecommunications organization find that age is negatively correlated with online buying behavior and with computer usage. More educated persons are early adopters of the internet (Donthu and Garcia, 1999). Ratchford *et al.* (2003), find that internet experience is positively related with the degree of online search. Specifically, Lohse *et al.* (2000), using a panel data, find that the percentage of panelists making a purchase online increases as a function of the time spent online. Similar findings are been reported by the research carried out by Citrin, Sprott *et al.* (2000) on the role of internet usage in the acceptance of online shopping.

Country-level cultural factors are emerging as an important determinant in global online shopping. Research shows that the culturally adapted web content leads to better

usability, more favorable attitude towards an online site, and higher level of purchase intentions (Singh *et al.*, 2004; Luna *et al.*, 2002). However, with few exceptions (Singh *et al.*, 2005), research is lacking on how to develop culturally congruent user-interfaces.

Online shoppers from different countries have different cultural perspective, different ways of life, different ways of thinking, and different perceptions of online shopping (Srinivasan *et al.*, 2002). The collectivists tend to be concerned with affiliating closely with others, maintaining connectedness, and blending the self/other boundary. In the collective and high-context cultures, group bonds and harmony are viewed as important, while analytical procedures and structures tend to be avoided. On the contrary, in the individual and low-context cultures, explicit communication and clear procedures are preferred. Such traits are represented in pursuing the values or benefits from certain activity or behavior. Harmonic and holistic benefits are preferred in collective cultures while accurate and analytical benefits are opted for in individual cultures (Lee *et al.*, 2003). Based on the online data collected from 150 South Korean (collectivist) panel members and 132 convenience (individualist) U. S. sample, Lee *et al.*

(2003) find that while internet usage in Korea is greater than in the US, there are no significant differences in the online shopping experience between the two countries. Internet is used primarily for non-shopping activities in Korea. As Korea is a collective society, involvement in the online communities is higher than in any other individualist country. Fewer Koreans tend to trust online shopping in Korea and that more Koreans perceive high risk in online shopping.

Websites designed for western cultures are not suited for Arab cultures. The success of the online retail stores in Arab countries depends on the level of trust (Khushman *et al.*, 2009). In Saudi Arabia, availability of a secure e-payment method is also one of the main issues that affect the adoption of online shopping. Most of the Saudis are still cash-oriented and their trust of the online transactions is very low. Another issue that affects the adoption of online shopping is the fear of cybercrimes, information security and/or privacy. Most of the Saudi consumers do not have a history of online shopping. Therefore, trust between the consumers and the couriers who deliver products, which is required for online shopping, has not yet been established (Shafi, 2002). Additionally, such factors as, unreliability of postal services; paucity of the

full-fledged department stores and the unavailability of individual postal addresses as late as the year 2009 (for efficient door to door delivery of products) has impeded the development of online shopping operations in Saudi Arabia.

A survey of 1,919 internet users in Saudi Arabia shows that 48 % of the internet users in Saudi Arabia are purchasing products and services online. It is estimated that online shoppers in Saudi Arabia exceed 3.5 million representing 14% of the population. Out of the Saudi internet users, 46 % access it at work, 37% uses the internet cafes and 34 % use the Wi-Fi hot spots. 42% of the Saudi Arabia's online customers make their payments through credit cards, 12% use internet shopping cards provided by their banks (Arab Advisory Group, 2007). According to Nielson (2010), shopping online is the most under-developed in the Middle East, Africa and Pakistan region. Almost half (47%) of online consumers in their survey indicated that they have never made an online purchase-the highest percent of any other region in the world. The most popular products and services for planned online purchase across the region are books (29%), airline tickets/reservations (24%) and electronic equipment such as TV's and cameras (23%).Based on

the data from 107 Saudi female respondents, Jalal (2009) found that because women in Saudi Arabia are restricted in their movement due to factors such as prohibition to drive a car show very strong desire to purchase from online stores. Al Maghrabi and Dennis (2009) carried out an online survey of 465 respondents who were actively engaged in internet and online shopping in Saudi Arabia. Their results showed that perceived enjoyment, usefulness, and subjective norms are determinants of online shopping continuance in Saudi Arabia. The authors also found that their male respondents were somewhat more likely to place greater emphasis on the utilitarian and hedonistic aspects of online shopping.

In a subsequent study of 650 female respondents, Al Maghrabi and Dennis (2010) also found that there were no significant differences between low and high spender online shoppers in Saudi Arabia.

Most of the internet shopping sites used by Saudi Arabians are foreign sites. Regional Arabic-focused email providers have less than a 10% share of the Internet users in Saudi Arabia (Arab Advisors Group, 2007). For cultural and legal reasons, the out of home social recreational facilities such as movie theatres, pubs and discothe-

ques, which are quite popular with the singles in the Western countries, are prohibited in Saudi Arabia, so Saudi singles are more likely to look for recreational opportunities at home and on computers with more time spent carrying out online shopping activities. Young single men are often barred from the shopping malls during certain hours of weeks in Saudi Arabia (Al-Fawaz, 2011). Additionally, it is reported that many Saudi singles purchase products that are unavailable from the traditional Saudi stores from the international online shops and resell them. Under the prevailing rules, women, are prohibited from driving cars (Long, 2005) so they have to rely on drivers, taxicabs and relatives for transportation.

Hypotheses

Above discussion of the literature above leads to following hypotheses:

Ho.1: Simplicity of carrying out an on line shopping will be related to purchase frequency of a product/service. Internet will be more frequently used to carry out more convenient online transactions like banking, travel arrangement, and purchasing music, films, videos and books than less simple online shopping transactions like buying electro-

nic goods, computer items, clothes and household items.

Ho.2: Education will be related to frequency of online shopping transactions. Respondents with education level greater than bachelor's degree are more likely to carry out online shopping transactions than ones equal to or less than bachelor's degree.

Ho.3: Computer orientation will be related to frequency of carrying out online shopping transactions. Respondents oriented towards computer are more likely to carry out online shopping transactions than those who are human oriented.

Ho. 4: Gender will be related to frequency of carrying out online shopping transactions. Female respondents are more likely to carry out online shopping transactions than male respondents.

Ho. 5: Income status will be related to frequency of carrying out online shopping transactions. Respondents earning less than 250,000 Saudi Riyals are more likely to carry out online transactions than those earning more than 250,000 Saudi Riyals.

Ho.6: Age will be related to frequency of carrying out online

transactions. Younger respondents are more likely to carry out online transactions than older respondents.

Ho. 7: Marital status will be related to frequency of carrying out online transactions. Single respondents are more likely to carry out online transactions than married respondents.

Methodology

Sample Selection

Data for this research was collected through an internet survey of Saudi Arabian professionals. We used a convenient purposeful sampling technique to obtain the data for this study. The target population of the study was Saudi professionals who were listed as friends on the second author's Facebook account. The second author posted a link to our English language questionnaire on his MonkeySurvey.com account. Through this link, our questionnaire was made available on social media such as Facebook and Twitter. We also solicited direct response through email. The list of contacts was generated through friends where the second author had worked and the universities he had attended. The potential respondents were all residents of Jeddah, second largest and the most cosmopolitan port city located on Red Sea in Saudi Arabia. This

procedure generated 231 responses. Our goal was to reach a broad and large spectrum of Saudi professionals distributed across all educational, income, age, marital and sex groups. Eighteen% of our responses came from personalized email invitation, 52% from both Facebook and Twitter solicitation, and 30% from second author's former customers in Jeddah while he was employed by a Honda distributor and Savola Packaging Systems,.

Questionnaire

To generate items appropriate for testing, our research hypotheses and provide insight into online shopping in Saudi Arabia, we created a bank of items based on our survey of the literature dealing with online shopping. Given the emerging nature of the subject area and Saudi Arabian economy, we opted for providing more bandwidth than fidelity. Thus our items were selected to provide a broad picture of the domain rather than reliable scales. This bank covered the seven general areas of online shopping. These are: (1) frequency of the use of internet to purchase products and services (8 products and services) (2) possession of accounts in a social network (5 social networks), (3) concerns about buying a product on line (5 concerns), (4) desirability of appropriate marketing tactics (8 tactics) and trends affecting e-commerce (8 tren-

ds). These questions were revised again with the help of Saudi professional friends of second author. Finally, the research instrument in the English language was extensively pre-tested and refined through personal interviews with professionals in Saudi Arabia.

The completed instrument, which included ten professional socio-demographic items, was administered through the Internet monkey survey through self-selection on the second author's and his friend's Facebook accounts. These respondent socio-demographic items are; nationality, educational status, computer orientation, age, gender, marital status, income, hours spent on internet, and if ever purchased a product/service online. Appendix 1 contains questionnaire 1 items.

Data Analysis

Our analysis started with the frequency analysis of all our data and Pearson correlation of our independent socio-demographic variables with our dependent frequency of the use of internet to purchase products and services, concerns about buying a product on line, desirability of appropriate marketing tactics, and trends affecting online shopping. Then we factor analysed the frequency of the use of internet to purchase products and services items using varimax rotation. To assess the predictive power of our socio-de-

mographic variables, we regressed the two resulting factors with eigen value greater than 1.0 using backward variable exclusion procedure.

Results and Discussion

Sample Characteristics

The mean age of the participants was 38 years. The sample included 141 married persons and 90 singles, 171 Saudis and 60 Non-Saudis, 83 with post graduate studies and 148 with bachelors and less education, 134 with computer orientation and 97 with human orientation, average age was 29 years Five % had high school or less education, 15% some post-secondary education, 58% completed university, and 22% had post-graduate education. Eleven% our sample consisted of students and 79% were gainfully employed. Sixty percent of our respondents earned less than 250,000 Saudi Riyals per annum and 40% over 250,000 Saudi Riyals (Can \$ = 3.70 Saudi Riyals). Compared to census proportion of 31% (Saudi Gazette, 2012), Non-Saudis (26%) were slightly under-represented in our sample. Comparison of means of Saudi and Non-Saudi subsamples indicated that both samples were demographically quite similar, except the Non-Saudis reported slightly higher family income. Therefore, we did not treat these Saudi-Non Saudi residents

as separate potential demographic segmentation variable.

In terms of computer usage, 98% of our respondents use internet at home. Fourteen % spend 1-2 hours a day on internet, 61% 3-5 hours and 25% more than 5 hours and 99% purchase product and services online. All of respondents have a Face-Book and YouTube account, 14% have a twitter account and 6% have Linked-In account.

Online Shopping for Products and Services

The results covering online shopping for products/services and their socio-demographic correlates are presented on Table 1, results of factor analysis of these products and services is presented on Table 2 and multiple regression of the factors with the demographic variables on Table 3. As can be seen in Table 1, respondents were most likely to buy music and videos, followed by banking and making travel arrangements online and least likely to buy house-hold items like furniture followed by clothes. Surprisingly, frequency of the purchase of electronic goods, computer items and books was quite low, 2.0 and slightly below 3 (mid-point) on a five point frequency of purchase scale. These results follow existing literature. Europe Economics (2007) find that online shopping takes place for

products like books, CDs and PCs and less for products where the attributes of the product can be clearly identified online. For products requiring direct contact (i.e. clothes) online shopping is less attractive.

Examination of the correlation coefficients of selected demographic variables with use of internet sites indicates that with eight statistically significant correlations with an average size of .33, human-computer was the most strongest demographic variable, followed by education with seven significant correlations with an average size of .24 and marital status with five significant correlations and an average size of .21. With only one significant correlation each with a size of .17, gender and income were the least important demographic variables. Computer oriented respondents who are single with postgraduate education were most likely to carry out online banking, buy electronic goods, buy computer items and to a lesser extent buy clothes. Computer oriented respondents with postgraduate education make travel arrangements and to a lesser extent buy clothes online. Computer oriented, postgraduate, female respondents buy books through internet. Although relationship of demographics with buy/download music was not very strong, computer oriented, lower income sin-

gle respondents are somewhat more likely to carry out this activity.

Results of our principal components factor analysis with varimax rotation is shown on Table 2. They show that first two factors explaining 68% of the common variance with eigen value of greater than 1.0 were extracted. The heaviest loading of first factor was with banking (.85), followed by buy electronic goods (.84), buy computer items (.82), make travel arrangements (.81), buy books (.65) and buy/download music, film, videos (.56). The heaviest loading of second factor was with buy household items (.90) and buy clothes (.74) Based on these factor loadings, we name Factor

1, Easier E-Shopping and Factor 2, Complex E-Shopping.

Table 3 presents regression models of online shopping behaviour with demographic variables. Regression model for Simple Online Shopping factor showed that with F Value of 9.5 and $p < .0001$ the demographic variables explained 25% of the common variance. In the case of Complex Online Shopping with $F = 6.7$ and $p < .0001$, the demographic variables explained 18% of the common variance. These results are considered satisfactory. Results indicate that computer oriented, single, young and postgraduate respondents were more likely to carry out simple online shop-

Table 1
Online Shopping for Products/Services and their Socio- Demographic Correlates

Use Internet Sites For:	Selected Socio- Demographic Variables					Online Shopping	
	Education	Computer - Orientation	Gender M/F	Marital Sin/Mar	Income	Mean	Rank
Banking	.24**	.42**	-0.03	-.24**	-0.08	3.40	2
Making Travel Arrangements	.26**	.38**	0.12	-0.12	-0.04	3.16	3
Buy/Download Music, Videos	0.07	.19**	-0.04	-.15*	-.17**	3.71	1
Buy Electronic Goods	.20**	.36**	0.04	-.26**	-0.06	2.00	4
Buy Computer Items	.26**	.38**	0.09	-.24**	-0.01	1.95	6
Buy Books	.36**	.36**	.17*	-0.12	0.05	1.96	5
Buy Clothes	.19**	.27**	0.03	-.18**	0.00	1.51	7
Buy Household Items	.18**	.24**	0.08	0.04	0.08	1.21	9
No. of Sig. Correlations	7	8	1	5	1		
Mean Size of Sig. Corr.	.24	.33	.17	.21	.17		

Statistical Significance of Correlation Coefficients: * $p < .05$, ** $p < .01$

Table 2
Results of the Principal Components Analysis of Online Shopping Activities
(Varimax Rotated Factor Matrix)^{1,2}

Shopping Activities	Factor loadings	
	Factor 1	Factor 2
Banking	.85	.12
Make travel arrangements	.81	.18
Buy / Download music, films, videos	.56	.21
Buy electronic goods	.84	.18
Buy computer items	.82	.30
Buy books	.65	.49
Buy clothes	.37	.74
Buy household items	.08	.90
Eigenvalue	4.4	1.0
Proportion of Explained Variance	55%	13%

¹ The variables were measured on 5-point scales. ² The strongest loadings are in bold characters.

ping. Results for this regression equation reflect earlier simple correlation results for relationship between the frequency of use of internet for such simple activities like banking, travel, buy books, electronic goods and books and computer orientation, marital status and education and On the other hand, students, single and to a lesser extent, higher income, female and computer oriented respondents are more likely to buy complex products through online shopping. Results for this regression equation does not fully reflect the earlier simple correlation results for relationship between frequency of the use of internet for such complex activities like “buy clothes and household items like fur-

niture”. Whereas computer orientation was the strongest predictor of these items, followed by education, in the regression equation their role was negligible. On the other hand, student status was a very strong predictor in regression equation to be followed at distance by gender and income. Thus it appears that relationship between complex e-shopping factor and socio-demographic variables is rather complex.

Earlier, Lohse *et al.* (2000), Citrin *et al.* (2000), Ratchford *et al.* (2003), Krishnamurthy and Singh (2005), and Europe Economics (2007) have pointed out the pre-eminent role played by computer orientation in explaining online shopping behavior.

According to Europe Economics (2007), online consumers tend to be younger, better off and better educated than their offline counterparts. Zeffane and Cheek's (1993) study of computer usage in an Australian telecommunications organization found that age was

Table 3
Regression Models of Online Shopping Behavior
with Socio-Demographic Variables¹

Regression Beta Values and Their Significance Level		
Variables Entering the Regression Equation	Factor 1: Simple Shopping	Factor 2: Complex Shopping
Saudi-Non Saudi Residents	.05	.05
Student versus Non Student	-.04	-.38****
Educational Level	.17**	.08
Computer versus Human Orientation	.31****	.11*
Time Spent on Internet	-.05	-.01
Age	.20**	.11*
Gender: Male versus Female	.04	.16**
Marital Status: Single versus Married	-.26****	-.02
Family Income Level	-.13	.14*
$R^2 = .28$, adjusted $R^2 = .25$; $R^2 = .21$, adjusted $R^2 = .18$; $F = 9.5$, $p < .0001$; $F = 6.7$, $p < .0001$;		

¹N=231. Negative Entries in Dark Color Statistical Significance Levels of Beta Values: * $p < .10$, ** $p < .05$, *** $p < .01$, **** $p < .0001$

Table 4
Concerns About Buying Online and their Socio-Demographic Correlates

Factors	Selected Socio- Demographic Variables					Mean	Rank
	Education	Computer Orientation	Gender M/F	Marital Status S/M	Income		
Quality	.07	.15*	.06	.03	-.07	1.18	3
Security	-.13	-.19**	.03	.05	-.06	1.82	1
Price	.08	.05	-	-.07	-	1.02	5
Service	.11	.10	-	.10	.05	1.12	4
Method of Payment	-.05	-.17*	-.14*	.02	.01	1.75	2
No.of Sig. Corr	-	3	1	-	-		
Mean Size	-	.17	.14	.-	-		

¹**Question:** Polarity has been reversed on the table. Polarity reversed on this table. Statistical Significance of Correlation Coefficients: * $p < .05$, ** $p < .01$.

negatively correlated with online purchasing.

Table 4 presents correlation of selected demographic variables with concerns about buying online. Results indicate that, the respondents were most concerned about security and the method of payment. Price, service and quality were of least concern to them. Previous study carried out in Saudi Arabia by Shafi, (2002), had also shown that security and method of payment were the main impediments to adoption of online shopping. Earlier studies carried out in the United States also point out that security and method of payment are principal obstacles to the online shopping (Ho and See-To, 2010; Zhiyong, McDougall and Bergeron, 2004; Lee, Park, and Ahn, 2000; Laroche, Szymanski and Hiss, 2000). Correlation of demographics with concerns about buying online indicates that these relations are not very strong. Only four out of 40 possible correlations were statistically significant and the largest size of this significant correlation was.19. Although it appears that the concerns about online shopping were rather homogeneous, computer oriented respondents are somewhat less concerned about security and method of payment and females are somewhat less concerned about method of payment. Computer oriented respondents are also somewhat concerned about quality.

Trends Affecting E-Commerce and Desired Marketing Approaches

Table 5 presents respondents' opinions with regards to trends affecting online shopping in Saudi Arabia and their socio-demographic correlates. The objective of this question was to find out respondents views about issues affecting online shopping at present. Among the eight items contained in our question, government regulation was the most important trend, followed by shortage of technologically sophisticated staff, trust in new internet shops and availability of traditional products with internet shopping. The respondents felt least affected by globalization, followed at some distance by complexity, use of mobile phones and video conferencing. Thus respondents would like to see more consumer friendly government regulations, more technologically sophisticated personnel, trustworthy online stores and preferably who also have traditional stores. The respondents' answers were fairly homogeneous, with only eight statistically significant correlations out of possible 40. The largest size of this correlation was.17. With three significant relationships computer orientation was the most important socio-demographic variable, followed by marital status with two significant correlations and gender and income with one significant correlation each.

Table 5
Trends affecting Online Shopping and their Soco-Demographic Correlates

Online Shopping Trends	Selected Demographic Variables					Mean	Rank
	Education	Computer Orientation	Gender M/F	Marital Sin/Mar	Income		
Globalization	-0.01	.17**	0.07	-.17**	-.12	3.55	8
Complexity	-	0.01	0.02	-0.07	-.05	3.91	7
Use of Mobile Phones	-	0.10	0.06	-.10	-.03	3.95	6
Video Conferencing	-	0.11	0.07	-.09	-.01	4.01	5
Government Regulations	-0.01	-	.09	-.02	-.02	4.42	1
Traditional with Internet Shopping	-	.09	.13*	-.14*	-.07	4.32	4
Trust in new Internet Shops	-	.16*	.09	-.03	-.15*	4.35	3
Shortage of Technologically Sophisticated Staff	-	.15*	.02	-.02	-.05	4.39	2
No. of Sig. Correlations	-	3	1	2	1		
Mean Size of Sig. Corr.		.16	.13	.16	.15		

Polarity of the question has been reversed for this table. Statistical significance of correlation coefficient: *p < .05, **p < .01.

Table 6 presents desired marketing strategies in Saudi Arabia and their socio-demographic correlates. The objective of this question was to elicit what marketing strategies were favoured by Saudi Arabians. By and large, the respondent did not have very strong opinion about this topic. The results indicate that with a mean value of 2.92 on a scale of 1 to 5, “availability of credit

and delayed payment of purchases” was the most favoured strategy, followed distantly by “competitive prices and discounts”, “large variety” and “high quality goods and services”. With a mean value of 1.68, “service personnel” was the lowest rated marketing strategy, after “service personnel”, “massive advertising and promotions” and “ease of finding a product in a store”.

With eight significant correlations with an average size of .25, computer orientation was the most important socio-demographic variable. Computer oriented respondents were in favour of all the marketing strategies listed except “service personnel”. This was followed by marital status with eight significant correlations with an average size of .19. Single respondents were in favour of all the marketing strategies listed except availability of credit. With four signifi-

cant correlations and an average size of .18 education was the third most important socio-demographic variable.

Hypothesis Testing

Above results clearly confirm our Ho.1 dealing with simplicity of carrying out an on line transaction and its relation to purchase frequency of a product/service. The same is the case with Ho.2 dealing with education, Ho.3 dealing with computer orientation and Ho. 5 dealing with marital

Table 6
Desired Marketing Approaches and their Socio-Demographic Correlates

Desired Marketing Approaches	Selected Socio-Demographic Variables					Mean	Rank
	Education	Computer Orientation	Gender M/F	Marital Sin/Mar	Income		
Competitive Prices & Discounts	.12	-.24**	-	-.16*	-0.11	2.26	2
Large Variety	.08	-.22**	-.03	-.20**	-0.10	2.18	3
After Sale Service	.09	-.23**	-.02	-.15*	-0.01	2.00	7
High Quality Goods & Services	.16*	-.32**	-.12	-.22**	-0.09	2.06	4
Massive Advertising & Promotions	.19**	-.25**	.10	-.24**	-0.09	1.92	6
Easiness of Finding a Product in a Store	.23**	-.26**	-.04	-.20**	0.00	2.05	5
Availability of Credit and Delayed Payment of Purchases	-.04	-.14*	.00	.15*	0.06	2.92	1
Service Personnel (Sales Person, Call Center Representative)	.15*	.32**	-.02	-.21**	-0.08	1.68	8
No. of Sig. Correlations	4	8	-	8	-		
Mean Size of Sig. Corr.	.18	.25	.19				

Statistical Significance of Correlation Coefficients: *p < .05, **p < .01.

status. Although our Ho.6 was only tested with our regression equation, it was confirmed that younger respondents were more likely to purchase more frequently on line. Our Ho. 4 dealing with gender was clearly confirmed. Unlike their Western counterpart; our female respondents were more likely to purchase books and complex products on line. We believe that this result is due to restrictive environment Saudi females' face in terms of their ability to circulate freely for traditional shopping activity because they have to be accompanied by family members (and sometimes by a male guardian) when they go to a shopping centre and also because they do not have official permission to drive a car (Jalal, 2009).

Limitations, Conclusions and Implications

Limitations

The major limitation of this research was that it was carried out with a convenient and limited sample of Saudi Arabian elites and only within one Saudi city. Future studies may seek probability based larger sample sizes across Saudi Arabia of respondents who are familiar with internet. Second limitation of this study was that we did not complement our hard data with in depth qualitative studies to further probe issues such as why the use of

internet to purchase goods and services in Saudi Arabia is so low in comparison with the use for accessing social media.

Conclusions

Results of this study indicate that the online shopping is far less developed in Saudi Arabia in comparison with other uses of internet such as of membership in social media such as Facebook. The frequency of online shopping in Saudi Arabia is largely confined to simpler transactions like banking, making travel arrangements and downloading music and videos. Socio-demographic correlates of online shopping are to a large extent similar to what current literature based on studies conducted in the industrialized nations would suggest. Two exceptions were singles and the female's use of internet shopping. Compared to industrialized nations, Saudi females were as likely to carry out online shopping activity as males. This was attributed to culturally determined traditional shopping restrictions placed on females in Saudi Arabia, where females need to be accompanied by family members (sometimes a male guardian) to enter a shopping center and are not allowed to drive a car. Single males are also not allowed to enter a shopping center.

Managerial and Public Policy Implications

Based on our results, the business community in Saudi Arabia is recommended to develop online shopping as

an additional vehicle to distribute their products. When adding an online shopping store as a distribution channel, they are advised to target computer oriented and single Saudi residents. In order to successfully launch their online store, they must attempt to meet their client's fundamental concerns regarding trust in the security of the online operations. It is particularly important to collectivist, cash oriented Saudi Arabian residents to feel secure when they make payments for products and services purchased online without direct human contact. Our respondents seem to believe that this trust in an online shop may be enhanced by employing technologically competent staff and by government actions to make regulations regarding payment for products and services, and provision of credit to be more consumer friendly. In terms of the specific marketing strategies, availability of credit and delayed payment of purchases, competitive prices and discounts and large variety are the one of the most preferred in that order. This is more so true by singles and less so by computer orientation segments. Although the size of computer oriented segment is bigger than singles segment, given the special impediments suffered by singles in Saudi market, quicker success can be obtained by first targeting singles segment..

Online shopping outlets sell their products to consumers without direct contact. Therefore, in addition to providing greater consumer welfare by such means as allowing for direct comparisons between different brands of products offered by online stores and reaching underserved areas of Saudi Arabia, online shopping can be a means of providing employment for females in Saudi Arabia, a country that maintains strict separation between males and females. Additionally, by providing service to singles and unaccompanied females who, for cultural and legal reasons are unable to frequent shopping centers, reduce their level of alienation from Saudi society. The Saudi Government can encourage online shopping by accelerating computer training of their citizens. In addition to encouraging greater use of internet by providing computer literacy, they can also help by providing educational services to train technologically sophisticated personnel for online shopping industry. In order to help business sector to get involved in opening online shops, training programs can be set up for interested persons. More importantly regulations governing online shopping, especially those dealing with payment and provision of credit may be made more consumer friendly. Additionally, the government may consider granting foreign firms like Amazon.com, that have well devel-

oped business model of online shopping exemption from ownership rules governing retail operations. This may encourage such firms to install in Saudi Arabia and thus serve as role model for Saudi enterprises.

In order to make online shopping fully acceptable to Saudi residents, the Saudi enterprises perhaps adapt the store model to cultural and legal realities of Saudi Arabia by providing greater level of human contact and seamlessly integrate with a traditional store.

Future Research

This research has implications for future research. Firstly, our results

have to be verified with an all-encompassing probabilistic sample of Saudi Arabian adult internet users. Secondly, in depth studies need to be carried out with Saudi internet users to probe them about reasons why they are making limited use of online stores, especially for complex products like furniture and clothes. Thirdly, both qualitative and quantitative studies of business sector need to be carried out to ascertain why they have not fully adopted online shopping as a channel for distribution of their products. The qualitative study may prod about what support they need from their government and from such ancillary industries like banking, packaging and delivery of products.

Appendix 1

Questionnaire Items

A. Please tell us how often you use internet to carry out the following activities.

Banking					
Make travel arrangements					
Buy music, films, videos	1	2	3	4	5
Buy electronic goods	1	2	3	4	5
Buy computer items	1	2	3	4	5
Buy books/stationery	1	2	3	4	5
Buy clothes	1	2	3	4	5
Buy household items	1	2	3	4	5
Furniture	1	2	3	4	5
Buy other items	1	2	3	4	5

B. Do you have accounts on the following social networks? Yes or No.

Flicker

Twitter

YouTube

Facebook

Linked-in

C. What makes you feel concerned about buying a product online? (Pick 2)

Quality

Security

Price

Method of Payment

Nothing

D. Please tell us how desired are these marketing approaches. Please circle the number that best expresses your desirability

Competitive Prices & Discounts	1	2	3	4
Large Variety (Many Brands in same product line)	1	2	3	4
After Sale Service(Warranty, Return Policy, Exchange)	1	2	3	4
High Quality Goods & Services	1	2	3	4
Massive Advertising & Promotions	1	2	3	4
Easiness of Finding a Product in a Store (Store Design, Availability)	1	2	3	4
Availability of Credit and Delayed Payment of Purchases	1	2	3	4
Service Personnel (Sales Person, Call Centre Representative)	1	2	3	4

E. Listed below are a series of statements related to trends affecting e-commerce as it occurs in your country. Could you please tell us, on a scale of 1 to 5 how important you think these issues will be in your country in the near future? The scale values are:

More Globalization of Internet Based Shopping	_____
Frustration with increasingly Complex Internet Shopping	_____
Greater Use of Mobile Phones for Internet Shopping	_____
Use of Video Conferencing to do Internet Shopping	_____
Government Regulations affecting Internet Shopping	_____
More Traditional Stores offering Internet Shopping	_____
Necessity of Creating Trust in new Internet Shops	_____
Shortage of Technologically Sophisticated Staff	_____

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الملخص

سلوك تسوق السعوديين عن طريق الإنترنت

ياسر باهزيق

أحمد صدر الدين

جامعة أوتاوا

كشفت دراسة حديثة باستخدام الإنترنت من خلال ٢٣١ شخصاً قاموا بتعبئة استبانة في المملكة العربية أن الساعات التي يقضونها على الإنترنت واستخدام وسائل الإعلام الاجتماعية مرتفعة جداً بالمقارنة باستخدام التسوق عبر الإنترنت. وتستخدم شبكة الإنترنت بشكل رئيسي للمعاملات التي هي أقل تعقيداً مثل الأعمال المصرفية، وحجوزات السفر، وشراء وتحميل الأفلام والموسيقى. وهناك نسبة كبيرة من الذكور لمستخدمي الكمبيوتر، خريجي الجامعات، غير المتزوجين (العزاب)، وبعض من الإناث للقيام بالتسوق عن طريق الإنترنت. وهذا يشبه الدراسات التي أجريت في الدول الصناعية والحديثة باستثناء أن هذا البحث يشمل في دراسته على غير المتزوجين والنساء. وقد ظهر أن المخاوف الرئيسية التي تضمنها هذا البحث تتمثل في عدم ثقة السعوديين في الإنترنت وقلة حماية مستخدمي الإنترنت.

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