

Online Shopping Adoption in Saudi Arabia: An Empirical Research

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Abstract – Proliferation of Web 2.0 and its associated technologies has provided many incentives and opportunities to the firms as well as the consumers. This has tremendously affected the attitudes of people about many aspects of our life, especially the way we shop. The online shopping has occupied a large portion of the traditional way of buying goods and services. The online mode of shopping is undoubtedly an ideal way for those with disabilities with a limitation of walking and communication. But it seems that the online is also a preferred mode of shopping amongst the working middle class. The aim of this article is to analyze and report the behaviors of the Saudi Arabian consumers towards the online shopping in the Makkah region. Our study also attempts to understand the relationship between demographic variables and online shopping adoption. Here, we also explore risk factors influencing Saudi Arabian consumers towards online shopping.

Keywords: Electronic Commerce, Internet Users, Online Shopping, Electronic Retailing, Saudi Arabia, Gulf Cooperation Council

1. INTRODUCTION

Throughout this article we shall use the word Saudi to mean Saudi Arabian or Saudi Arabia, depending on the context. The purpose of this research is to analyze the behavior of the Saudi shoppers towards the online shopping in Makkah region and, identify and analyze their opinions regarding online shopping. Also, we shall analyze the relationship between the buyers attribute towards the online shopping adoption, and to find how risk factors which influence them towards online shopping.

1.1. Paradigm Shift

Many years ago, people used to do shopping physically, and they had to go to local shops to buy and fulfill their needs, and there was no any other way to do shopping. The big revolution in the internet and network technology has transformed many aspects of shopping such as location, type of items, services and cost. Online shopping (The Economic Times, 2006), became popular during the Internet boom in 1999-2000. Amazon, an online bookstore founded by Jeff Bezos, created history by becoming the first bookstore with a presence only on the Internet. Following the success of Amazon, many existing bookstores (with a physical presence) also adopted an mode of business. Later, portals such as Yahoo.com and MSN.com also came into existence where people could buy apart from books, many other things. Nowadays, the online market is attracting consumers through many channels such as websites, physical stores, magazines, e-mail, call centers, mobile devices, social media, televisions, gaming consoles, networked appliances, home services, and more. In addition to that, consumers can source almost anything they need from any place in the world through the online stores, which exist in the most prosperous markets.

1.2. Research Objective

The aim of this article is to analyse and investigate the relationship between consumers' behavior and online shopping in Makkah region of the Kingdom of Saudi Arabia. This task will be achieved by determining a number of variables outlined below.

H1 Demographic Variables: This is a group of hypotheses determinants representing different kind of relationships between demographic attributes and online shopping.

H1a: There is a significant relationship between gender and online shopping adoption.

H1b: There is a significant relationship between age and online shopping adoption.

H1c: There is a significant relationship between education level and online shopping adoption.

H1d: There is a significant relationship between occupation and online shopping adoption.

H2 Risks Variables: This is a group of hypotheses determinants representing different kind of associations between various risk factors and online shopping adoption.

H2a: There is a significant relationship between shipping cost and online shopping adoption.

H2b: There is a significant relationship between product delivery and online shopping adoption.

H2c: There is a significant relationship between after sale services and online shopping adoption.

H2d: There is a significant relationship between website security and online shopping adoption.

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2. E-COMMERCE IN SAUDI ARABIA

The number of commercial organizations (Loudon and Traver, 2007), that utilize electronic commerce systems is on the rise. In future, these systems are likely to become not only a tool for increasing income but also an essential means of competition. While e-commerce (Al Ghamdi, Nguyen and Drew, 2010), has become a familiar part of life in developed nations, it is still considered an innovation in the Kingdom of Saudi Arabia. Despite possessing the largest and fastest growing Information and Communication Technologies (ICT) sector in the Arab region. The country has proceeded at a relatively slow pace in the e-commerce area. At present, only a tiny number of Saudi commercial organizations, mostly medium and large companies in the manufacturing sector, are involved in e-commerce activities, and these are mostly Business-to-Business (B2B). See (CITC, 2007) for details. Ministry of Commerce (MOC) has established a dedicated committee for E-Commerce. This committee is fully responsible for dealing with E-Commerce requirements. It aims at preparing for the creation of a suitable environment for E-Commerce to serve the global economy. Saudi businessmen, in coordination with Ministry of Commerce, created an E-Commerce consultation team to connect different Saudi businesses together, and to provide proposals and consultations in the E-Commerce field (Maamar and Berrah, 2004).

Saudi Arabia lies in the Middle East and North Africa (MENA) region and has registered the MENA's highest e-commerce growth rate in first quarter of 2014, according to the latest analysis by Visa (Pupic, 2014). The Kingdom saw an estimated 43 percent overall e-commerce growth, comparing 2013 and 2014 data, the retail electronic payments network's study revealed. The first quarter of 2014 growth was driven by increases in both domestic and cross-border e-commerce, which saw a 67 percent and 36 percent growth over the same period last year, respectively. Emerging as the leading categories for spending were a general department store and airline transactions, followed by travel agencies, financial services and fashion retail.

While the government has played a significant role in promoting the rapid growth of ICT in general, it appears to have placed rather less emphasis on e-retailing than on e-learning and e-government. In 2001, the Saudi Ministry of Commerce established a Committee for e-Commerce, with members drawn from various government agencies and the private sector. The Committee prepared a general framework and plans for improving factors,

which influence e-commerce development – such as IT infrastructure, legislation and regulation, payment systems, security needs, delivery systems, and education and training. In 2007, the Saudi (CITC) carried out an extensive study of various aspects of Internet usage in Saudi Arabia, one of which is e-commerce awareness and activity. It reported that only 9% of Saudi commercial organizations, mostly medium and large companies from the manufacturing sector were involved in e-commerce, and only 4 out of 10 private companies had their websites. As for the customers, while 43% were aware of e-commerce, only 6% had ever bought or sold products online, mainly airline tickets and hotel bookings. CITC's IT Report 2010 reiterated that e-commerce in Saudi Arabia is still in its early stages. In particular, most Saudi retail chains have yet to establish an online channel and only 8% of Saudi businesses sell online. See (CITC, 2007) for details.

Table 1 Saudi Internet Ecosystem Development, 2010 (CITC, 2010)

Year	Event
1993	King Fahd University of Petroleum and Minerals (KFUPM) in Dhahran becomes first Saudi institution to connect to the internet.
1994	King Abdulaziz City for Science and Technology (KACST) becomes the '.sa' domain manager to coordinate internet services within the Kingdom.
1999	Internet access begins the move from government and academia into the mainstream.
2004	Liberalization of the ICT market by introducing new licenses for telecom services.
2004	SADAD enters production.
2005	The Ministry of Communications and Information Technology (MCIT) establishes e-Government Program.
2006	The transfer of internet-related responsibilities from KACST to CITC.
2007	Saudi Electronic Transactions Act promulgated – establishes rules for electronic transactions and digital signatures.
2010	Household broadband penetration reaches 41.6 % in Saudi Arabia.
2010	Saudi Post addressing system certified as complete.
2010	Registration opened for Arabic domain names under (.السعودية).

Saudi Arabia ranked 52nd out of the 70 countries listed in a 2010 e-readiness report. This report assessed the quality of each country's ICT infrastructure as well as the ability of its government, businesses, and people to use ICT (The Economist, 2010).

2.1. E-Commerce Obstacles

Foreign and domestic observers (CITC, 2007) have pointed to a tendency among the public to resist social adaptation to new commercial paradigms, lack of trust toward online businesses, and the shortage of skilled employees suitable for the implementation and maintenance of e-business systems. The lack of individual home addresses was presented as a significant obstacle. Before 2005, individuals had no uniquely identifying addresses, and mail was not delivered to homes and offices but instead, was collected from postal offices. Postal deliveries to homes and buildings have been made since 2005. Nevertheless, a significant proportion of the public has remained without home addresses, largely as the matter of old habit and personal choice.

An e-government plan was set up by following the vision of Al Ghamdi, Nguyen and Drew (2010) that adopted a qualitative approach and used information obtained from a series of interviews to form a list of factors that inhibit or discourage retailers from adopting online retail. These inhibitors were identified as follow: 1. Setup cost; 2. Delivery issues; 3. Resistance to change; 4. Lack of e-commerce experience; 5. Poor ICT infrastructure; 6. Lack of online payment options to build trust; 7. Mistrust of online sales; 8. The habits/culture of people in Saudi Arabia not being favorable towards online purchases; 9. Lack of clear rules/law for e-commerce in Saudi Arabia 10; Difficulties in offering a competitive advantage on the Internet; 11. Lack of profitability; 12. Situations where products are not suitable to be sold online.

2.2. E-Retailing in Saudi Arabia

At the end of 2010, Saudi Post launched an electronic Mall (E-Mall, 2010), the first online marketplace in Arabic and English, giving Saudi retailers the chance to sell their products online and benefit from cheap delivery fees. In March 2011, there were 46 sellers and 50,000 buyers, with the preferred payment method being SADAD, which is an online payment system (Al-Ramlawi, 2011). As for the share of the e-commerce market in 2011, the biggest player in the Kingdom of Saudi Arabia (Al-Makhlafi, 2013), is "Souq" Company by 13%. The next biggest is "Sukar" by 8%, followed by "Namshi" by 7% and then "MarkaVIP" by 5%. These regional companies makeup only a third of Saudi Arabia's e-commerce market, but have a strong presence in the rest of the region.

2.3. Internet Users

In Saudi Arabia, the main reasons for using the internet (CITC, 2009), are for primary purposes like browsing, communication, getting information and for entertainment. Browsing and communication are common across all the provinces and demographics. Entertainment is a stronger reason for females while downloading is skewed more towards younger individuals as they are heavily into gaming and listening to music.

Table 2 Middle East Internet Users and Population (Nov 15, 2015)

MIDDLE EAST	Population (2015 Est.)	Users, in Dec/2000	Internet Usage 15 Nov 2015	% Population (Penetration)
Bahrain	1,346,613	40,000	1,297,500	96.4 %
Iran	81,824,270	250,000	46,800,000	57.2 %
Iraq	33,309,836	12,500	11,000,000	33.0 %
Israel	7,935,149	1,270,000	5,928,772	74.7 %
Jordan	6,623,279	127,300	5,700,000	86.1 %
Kuwait	3,996,899	150,000	3,145,559	78.7 %
Lebanon	4,151,234	300,000	3,336,517	80.4 %
Oman	3,286,936	90,000	2,584,316	78.6 %
Palestine (West Bk.)	2,785,366	35,000	1,800,000	64.6 %
Qatar	2,194,817	30,000	2,016,400	91.9 %
Saudi Arabia	27,752,316	200,000	18,300,000	65.9 %
Syria	22,878,524	30,000	6,426,577	28.1 %
United Arab Emirates	9,445,624	735,000	8,807,226	93.2 %
Yemen	26,737,317	15,000	6,029,265	22.6 %
Gaza Strip	1,869,055	n/a	see Palestine	n/a
TOTAL Middle East	236,137,235	3,284,800	123,172,132	52.2 %

Table 2 (Internet World Stats, 2015), represents Middle East countries' population and internet users. In December 2000, the internet users in Saudi Arabia were 200,000. However, in November 2015, 65.9% of the population (18,300,000 users) of Saudi Arabia were using Internet, which shows a huge increase.

2.4. Online Shoppers

According to Payfort (Online Payment Gateway) study (Al Jazeera.net, 2014), 3.9 million users make transactions over the Internet. It is expected that Saudi Arabia will witness a remarkable increase in the volume of electronic transactions because of the low penetration of credit cards rates, and internet incentive packages, to become the highest country in the region regarding transactions specifically electronic commerce. The proportion of males in the population census in Saudi Arabia is 57% compared to 43% for females. According to the study, males cover 85% of electronic transactions versus 15% for females, the highest proportion of transactions between males in the region. Most of the contributions to digital transactions in the area are by the young consumers, where the cyber buyers under 35 years make up 60% of the total online transactions, representing at the same time 75% of the population. The sectors that have the most online transactions are airline tickets, electronics and hotel booking by 56% while the fashion industry does not exceed 8% of transactions, and

books sector at 11% of the transactions. According to Secretary General of the Information Committee and Banking Awareness (Al Amin, 2016), the Saudi's online purchases value by credit cards rose in the 3rd quarter of 2015 which reached SR10 billion. This is due to several reasons; the most important reason was demographics of the Kingdom of Saudi Arabia and the growing youth numbers, where the proportion of young people is 60% of the population. In addition to the expanded use of the Internet, more than 20 million people used internet in Saudi Arabia by the end of 1st quarter of 2015.

3. RESEARCH METHODOLOGY

A hypothetic-deductive approach was used to explain the relationship between variables and to test the research hypotheses. Survey strategy was used to collect quantitative data, which can analyze quantitatively using descriptive and inferential statistics, and to suggest possible reasons for the particular relationship between variables, to produce models of these relationships and give more control over the research process. Questionnaires were used to collect data to measure the variables, and it was deemed to be the most suitable method for collecting quantitative data for this study. As quantitative research, statistical analysis used in this study is descriptive analysis to find out the behaviors of Saudi shoppers and their opinions on the use of online shopping.

3.1. Data Collection

An online self-administrated questionnaire was used to collect quantitative data to explain the relationship between one variable with another through the research elements. We had prepared a questionnaire and a set of questions that were asked of the participants. Survey results were extracted from SPSS program to provide a descriptive analysis by using tools to calculate frequency, mean, std. deviation and One-Way ANOVA. After the questionnaire had been completed, each item was analyzed separately to create a score for each item and then as a group of items.

3.2. Sample Collection

The sample size was calculated to assure a sufficient number of respondents. Therefore, Steve Thompson's formula has been used to calculate the required sample size as follow:

$$n = \frac{N \times p(1-p)}{\left[N - 1 \times (d^2 + z^2) \right] + p(1-p)}$$

n = required sample size (minimum size)

N = Population (Makkah region population is 8,293,300)

z = Confidence level at 95% (standard value of 1.96)

d = Margin of errors at 5% (standard value of 0.05)

After applying the above equation, the minimum sample size was 385. The questionnaire was prepared by using Google Doc. Application and distributed via WhatsApp in Arabic language. The survey attracted a large sample of participants and reached 795 responses within one week.

3.3. Statistical Procedures

The collected data were analyzed statistically using SPSS program. Questions presented using a Seven-Point Likert-type scale. This type of scale measures how much the respondents agrees with the question. Respondents specify their level of agreement or disagreement on a symmetric agree-disagree scale for a series of statements. Thus, the range captures the intensity of their feelings for a given item. The Likert scale was conducted from a scale from

1 to 7 as follow: 1 = Completely Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Neutral, 5 = Somewhat Agree, 6 = Agree, 7 = Absolutely agree.

4. SURVEY RESULTS

The analysis of this survey results was extracted from SPSS program to provide a descriptive analysis by using tools to calculate frequency, mean, std. deviation and One-Way ANOVA to test the hypotheses of the research.

4.1. Internet Usage

To investigate the behavior towards internet usage, we counted the frequency of responses to the question "Why are you using the internet?" and the statistics were as in Fig 1, the study population uses browsing and social media intensively. Research, business and studying come next while shopping has a low usage comparing to the other uses.

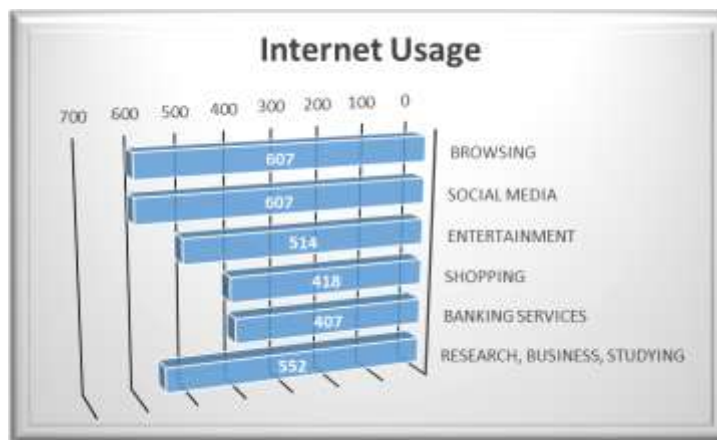


Fig. 1 Participants' Internet Usage

4.2. Online Shopping Vs. Regular Shopping

To investigate the behavior of shopping, we counted the frequencies of responses to the question "Do you prefer online shopping or regular shopping?" and the statistics in fig 2, show that 66.6% of the study population prefer to buy online while 33.4% prefer regular shopping.



Fig. 2 Percentage by Shopping Behavior



Figure 3 Reasons for Buying Online

Table 4 shows that 67% of the male participants and 33% of the female participants prefer online shopping. Table 5 shows that the majority of the participants are from Generation Y which their age between (26 – 35 years) who are strongly preferred online shopping with 53% followed by Generation Z which their age (18 – 26 years), and Generation X which their age (36 – 45 years) with 21.5% each and the last age category was

(above 45 years) with 4%. In Table 6, the majority of the participants are holding a bachelor degree with 50% which shows that they are educated, followed by who have higher studies with 21%, who have high school certificate with 15%, and participants who have a high diploma with 14%. In Table 7, the majority of the participants are working in the private sector with 39%, followed by who working in the government sector with 30%. Then, who are a student with 17%, who are not working with 11%, and participants who own business with 3%.

Table 4. Percentage of Participants by Gender

Gender	Frequency	Percentage
Male	345	67
Female	172	33
Total	517	100

Table 5. Percentage of Participants by Age

Age	Frequency	Percentage
18 - 25	111	21.5
26 - 35	274	53
36 - 45	111	21.5
Above 45	21	4
Total	517	100

Table 6 Percentage of Participants by Education

Education level	Frequency	Percentage
H. school	75	15
Diploma	70	14
Bachelor	261	50
H. studies	111	21
Total	517	100

Table 7 Percentage by Occupation

Occupation	Frequency	Percentage
Private	201	39%
Government	155	30%
Student	91	17%
F. Business	14	3%
No work	56	11%
Total	517	100%

4.3. Reasons for Shopping Online

To know what influence participants to buy online, we analyzed the question "Why do buy online?" Based on Fig. 3, the leading factor to buy online is shopping website availability all the time with 35%. The availability of more collections that not available in local stores with 33%. Online stores are offering lower products prices than a local store with 32%.

Table 8 Participants' Opinions about Online Shopping

Clause	Measure	Disagree	Comp.	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Absolutely Agree	Mean	Std. Deviation
Provides more collections	Freq.	10	27	23	88	237	238	153	5.37	1.308	
	%	1.3	3.5	3	11	30	30	20			
Provides cheaper products	Freq.	29	47	55	106	222	196	121	4.95	1.562	
	%	3.7	6	7	13	29	25	16			
Minimizes overall shopping time	Freq.	15	35	44	85	179	251	167	5.32	1.462	
	%	1.9	4.5	5.7	11	23	32	22			
Easy to use online websites	Freq.	10	28	42	88	197	289	122	5.31	1.331	
	%	1.3	3.6	5.4	11.3	25.4	37.2	15.7			
More comfortable in physical shops	Freq.	12	17	26	91	148	246	236	5.61	1.362	
	%	1.5	2.2	3.4	12	19	32	30			

In Table 8, we analyzed the participants' opinions means and standard deviation towards online shopping and conclude that:

- 1. Online shopping provides more products collections that not available locally:** the participants behavior towards online shopping is preferable over regular shopping with Mean = 5.37, due to online store provides more products collections that not available in local stores.
- 2. Online shopping provides cheaper goods and services:** the participants' behavior towards online shopping is moderate with Mean = 4.95.
- 3. Online shopping minimize shopping time:** the participants' behavior towards online shopping is preferable over regular shopping with Mean = 5.32.
- 4. Online shopping websites are easy to use:** the participants' behavior towards online shopping is preferable over regular shopping with Mean = 5.32.
- 5. More comfortable to physical shopping:** the participants prefer regular shopping over online shopping with Mean = 5.6. They are critical to physical shopping where they can see, touch and feel the product, also, to test how the product fit on them, better customer service and easy to return or replace the product which is difficult in the online shopping process.

4.4. Payment Method

To know what kind of payment method that participants prefer, we analyzed the question "What is your favorite payment method?" and the statistics were as Fig. 4, the study population prefers the most to pay cash on delivery when they want to buy their products.

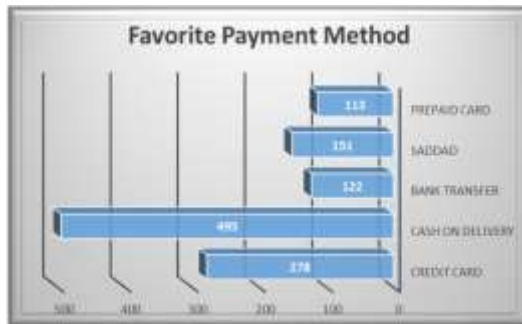


Fig. 4. Preferable Payment Method

Table 10 One-Way ANOVA for Risk Factors

Variables	F	Sig.
Gender	31.017	.000
Age	4.196	.006
Education Level	2.667	.047
Occupation	7.385	.000
Average	11.316	.013

4.5. Demographic Variables and Online Shopping

We applied One-Way ANOVA test for each of the variables of consumer behavior with all demographic factors, which comparing averages by F test and significance level.

Table 9 One-Way ANOVA for Demographic Variables

- 1. Gender:** The significance level of the consumer behavior is 0.000, which is lower than 0.05. Therefore, we accepted H1a, which proposes that there is a statistically significant difference relative to the consumer gender and online shopping adoption.
- 2. Age:** The significance level of the consumer behavior is 0.006, which is lower than 0.05. Therefore, we accepted H1b, which proposes that there is a statistically significant difference relative to the consumer age and online shopping adoption.
- 3. Education Level:** The significance level of the consumer behavior is 0.047, which is lower than 0.05. Therefore, we accepted H1c, which proposes that there is a statistically significant difference relative to the consumer education level and online shopping adoption.
- 4. Occupation:** The significance level of the consumer behavior is 0.000, which is lower than 0.05. Therefore, we accepted H1d, which proposes that there is a statistically significant difference relative to the consumer occupancy and online shopping adoption.

From the above statistics and result, we have found that the average of demographic variables significance level is 0.013, which is lower than 0.05. Therefore, H1 was accepted, which presents that demographic variables affect the consumer behavior towards online shopping adoption.

4.6. Risk Factors Influence on Online Shopping

We applied One-Way ANOVA test for each of the factors that influence consumer behavior towards online shopping, which comparing averages by F test and significance level.

- 1. Shipping Cost:** The significance level of the consumer behavior is 0.012, which is lower than 0.05. Therefore, we accepted H2a, which proposes that high shipping cost influence the consumer behavior towards online shopping.
- 2. Non-arrival Items:** The significance level of the consumer behavior is 0.000, which is lower than 0.05. Therefore, we accepted H2b, which proposes that fear of not receiving shipment influence the consumer behavior towards online shopping adoption.
- 3. No After-Sale Services:** The significance level of the consumer behavior is 0.000, which is lower than 0.05. Therefore, we accepted H2c, which proposes that no after-sale services influence the consumer behavior towards online shopping adoption.
- 4. Website Security:** The significance level of the consumer behavior is 0.003, which is lower than 0.05. Therefore, we accepted H2d, which proposes that website security influence the consumer behavior towards online shopping adoption.

From the above statistics and result, we found that the average of risk factors significance level is 0.004, which is lower than 0.05. Therefore, H2 was accepted, which presents that risk factors influence consumers behavior towards online shopping adoption.

4.7. General Consumers' Perspective

Table 11 Participants' Perspective towards Online Shopping

Clause	Measure	Comp. Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Absolutely Agree	Mean	Std. Deviation
Online shopping is safe	Freq.	44	88	110	150	253	115	16	4.15	1.480
	%	5.7	11.3	14.2	19.3	32.6	14.8	2.1		
Online shopping is a good idea	Freq.	13	20	17	77	204	304	141	5.47	1.260
	%	1.7	2.6	2.2	9.9	26.3	39.2	18.2		

- The participants behavior towards the online shopping security is critical with Mean = 4.15, which indicates that the consumer's behavior is in the beginning stage of using online shopping, which agreed and supported the previous studies that conducted before.
- The participants' behavior adoption is bound to increase in the future with Mean = 5.47.

5. RESEARCH DISCUSSION

5.1. Discussion

The survey results showed that 59.9% of the participants were males, and 41.1% were females, most of them from Generation Y with 51.14% which was followed by Generation X with 24.1%. Also, the results showed that 51.1% of the participants have a bachelor degree. Followed by 19.1% have higher studies, and 15.2% have a diploma. This indicates that 666 out of 776 participants are educated which is a result of the government prospect in encouraging the citizens for educations. 65.1% of the participants are employees, 16.9% are students and 14.3% are not working. Internet browsing and social are the most attractive part that attracts the participants to use the internet. Research, businesses, studying and entertainment purposes come next, after that comes online shopping, this indicates that online shopping adoption is in the beginning stage. The findings showed that 66.6% of the participants who prefer online shopping and 33.4% who prefer regular shopping, 67% of the participants who prefer online shopping are males and 33% are females, this indicates that online shopping is attracting the males more than the females. Furthermore, online shopping is attracting mostly educated and working Y Generation, who have more potential to shop online because of their interest in using new technologies to search for product information, compare, and evaluate alternatives, in addition to their ability to buy because mostly they are employees. Findings were clarified several reasons that encourage consumers to shop online. The most prominent reason was online stores availability 24/7, which can save time. The second reason was that online stores provide more collections than local stores, and online stores provide cheaper products and services come after. Furthermore, findings indicate several reasons that prevent or limit consumers from shopping online. These reasons are high shipping costs, no after sale service, and it is complicated if it is available and the threat of not receiving the shipment because there are concerns about postal services in Saudi Arabia. Also, Saudi consumers prefer physical shopping, which allows them to see, touch and feel the products, test the product how to fit on them, better customers services and easy to return or replace the products which are difficult on online shopping process. Also, cash on delivery is the preferable payment method instead of other methods, and this factor moves Saudi consumer away from online shopping because most of the online shopping websites are not providing this kind of payment method. The hypotheses testing in the results analysis presents that demographic variables (gender, age, education level and occupation) have their effect on online shopping. Also, risk factors (high shipping cost, items non-arrival threat, no after-sale services and shopping websites security) have a significant influence on online shopping adoption. Finally, security of the online shopping website is a critical factor for the consumers, and that agree and support the previous studies, which presents that online shopping in the beginning stage. Furthermore, the findings represent that the consumers' online shopping adoption is bound to increase in the future.

5.2. Limitation

The time limitation of this research has led to a limitation in the scope of the research. The focus of the research was to understand the Saudi consumers' behavior towards online shopping in Makkah region and to find the factors that influence online shopping adoption. The online survey generated on Google Doc. application and was sent through WhatsApp program. However, the survey may suffer a non-responses bias, but there is no systematic way to determine the response rate in an online survey. The study has not focused on any particular products or services; this research may be extended to a specific products or services. Without referring to the nature of the products or services, participants in this research used their online shopping preferences to answer the questionnaire. Also, the study was conducted only in Makkah region. Therefore, further researches are needed to assess the generalizability of online shopping relatively to the other Saudi regions and specific products or services.

6. RESEARCH CONCLUSION

6.1. Conclusion

The aim of this study is to understand Saudi consumers' behavior in Makkah region towards online shopping.

A hypothetic-deductive approach was used to find the relationship between demographic variables and online shopping adoption, also, to find how risk factors influence Saudi consumers' behavior towards online shopping adoption. The results of this study show that there is an improvement in online shopping adoption.

This study approved that there is a significant relationship between demographic variables (gender, age, education level and occupation) and online shopping adoption. Also, it approved that there is a significant relationship between risk factors (high shipping cost, items non-arrival threat, no after-sale services and shopping websites security) and online shopping adoption and had their influence on consumers behavior. Internet browsing and social media are the most attraction to use the internet. 66.6% of the participants prefer online shopping while 33.4% prefer regular shopping. This shows that the males prefer online shopping more than the females. Young, educated employees are the most online shopping adopters. We found that the most prominent reasons encouraging the participant to shop online are the availability of online shopping websites all the time, which save time and providing more products collections than the local stores. Cash on delivery is the preferable payment method when shopping through online stores.

Furthermore, the results show that the findings represent that the consumers' online shopping adoption is bound to increase in the future. The finding of this study will help government and business organizations to use different strategies to attract customers and strengthen their understanding of customers' need.

6.2. Recommendations

- The government should raise awareness of e-services benefits or their relative advantages, is crucial for increasing engagement. People are more likely to adopt or use such service when they perceive that advantages outweigh disadvantages. Therefore, it is recommended that the Saudi government should consider launching campaigns on how to use the online services as well as engage in promoting the Internet and its e-services benefits.
- E-commerce committee should provide educational programs to contribute to the development of online shopping in Saudi Arabia, to remove the fear of online shopping and demonstrate the benefits of using online shopping. Media and social media including the internet, TV and newspapers should plant the idea that everyone can access and buy from online shopping websites.
- Local Organizations should make more effort to advertise/offer their products and services online via websites to consumers who are shifting to international inline stores. These products and services should satisfy consumers' expectations. Organizations and online shoppers should cooperate jointly to develop privacy policies, policies guidelines, and privacy seal programs.
- Organizations should change their strategies that considering credit cards as primary payment method. They should provide alternative payment methods that include cash on delivery, electronic wallet.
- Consumers should get benefit from the new payment methods that appeared recently, which provides a secure payment method that protects consumers' payment transactions and identities. i.e. PayPal, which uses the latest in data encryption and anti-fraud technology to keep consumer's information secure and to reduce the risk of online fraud.
- Creating universal certification program that certifies online shopping websites that are trustworthy, meet the required standards, and have no suspicious transactions, or security problems and identity theft. Also, creating a website that includes a list of certified online shopping stores, so consumers can access this website and identify the certified

online shopping stores that they can buy from them without any fears. This certification will eliminate dealing with insecure online stores and the consumers' money and identity will be protected.

6.3. Implications

This study provides government and business organizations with useful and important information to encourage shoppers to purchase through online websites, and this should feed into website planning and marketing strategies. Business organizations should focus on the quality and informative content on their websites, which reflect usefulness and enjoyment to the online shoppers. Business organizations should increase and focus their effort to eliminate risks that consumer may lose their money or identity in fake websites by issuing a secure website that serves consumers and organizations with high-security standards. More local organizations involvement in e-commerce will attract online shoppers. Ministry of Commerce should apply and implement rules and regulations that support consumers and to increase their awareness of how to use online shopping websites by providing websites that include procedures and steps of how to purchase online. Improving home postal services will benefit government, organization and customers by reducing the time and face-to-face services costs.

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