Perceptions and Characteristics of Potential Adopters of Online Shopping in Saudi Arabia

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ABSTRACT
This article reports on a research dealing with relationship between Saudi Arabian respondents’ acceptance of an online grocery store (OGS)-an innovation in Saudi Arabia, their reaction to the features and characteristics of an OGS, their of online behavior, their demographic and value profile, achievement motivation, attitude toward online grocery shopping, computer orientation, innovativeness and search proneness. Results of the study showed that there was a fair acceptance of an OGS. The store described by us met the five conditions laid out by literature for successful adoption of new innovation, namely, relative advantage, compatibility, complexity, trialability and results demonstrability. In terms of the features of a grocery store, home delivery and security of website were found to be the most valuable features. Service oriented features were valued more highly than price and discount oriented ones. As one would expect, it was also found that positive attitude towards OGS and frequency of the present online shopping were strong predictors of acceptance of OGS. Lastly it was found that future adopters of an OGS are likely to be oriented towards both humans and computers, have an account on You Tube, are innovative, tend to search extensively before purchasing, are competitive and search for excellence. They emphasize security of website and store services above price and promotions. Therefore, it appears there is a demand for OGS in Saudi Arabia. An OGS should provide excellent web security and service, and target present online shoppers who are oriented towards both computer and humans and are innovators. OGS design should provide a shopper facility for easy comparison of prices, brands, product expiry dates and other relevant
information for ideal choice decision. Visually oriented online media sources such as You Tube and Instagram should be chosen over others to promote the store.

KEYWORDS: online grocery shopping, innovativeness, achievement motivation, grocery store features, search proneness, Saudi Arabia.

Introduction

Growth in online grocery shopping is related to broadband expansion and internet penetration (Data monitor Report 2010). Many authors (i.e. Zaki 2013) suggest that one needs to find out how online shopping can be expanded in countries which have developed physical infrastructure and restrictive marketing such as Saudi Arabia. The greatest benefit that information technology offers to an emerging nation like Saudi Arabia is opportunity (AlGhamdi, Nguyen, Nguyen, and Drew, 2011). One of the most significant trends in the Saudi Arabia is the rapid spread of the internet and the growth of the social media applications. These are now used heavily by Saudi Arabians (Ahmed and Bahaziq, 2013). Despite pressing development concerns and the opportunities that commercial applications of information technology offer, no online grocery store (OGS) exists in Saudi Arabia. Also little research in Saudi Arabia has dealt with the feasibility of an OGS in a comprehensive manner. To that end, this article reports results of an empirical investigation of characteristics of potential customers of online grocery store (OGS) in Saudi Arabia. It deals with: a) conditions for successful adoption of OGS and b) the relationship between Saudi respondent’s acceptance of an online grocery store (OGSA) and their reaction to characteristics and features of a grocery shop, frequency of shopping for products and services
from an online store, their use of internet, their achievement motivation innovativeness and search proneness.

While possessing the largest and fastest growing information and communication technologies sector in the Arab region, Saudi Arabia has proceeded at a relatively slow pace in the e-commerce area (Al Ghamdi, Nguyen, Nguyen, and Drew 2011). It ranks third in terms of smart phone penetration globally, and 64th in terms of internet penetration (Zaki 2013). Although the internet has been adopted as an important shopping medium for grocery shopping with an increasing amount of online sale every year in Western nations (Kim and Forsythe, 2010), the idea of adopting e-grocery in Arab countries is relatively new, therefore, it is considered an innovation in Arab countries (Al Balushi and Al Lawati (2012).

According to Zaki (2013) demand for online food delivery in Saudi Arabia will continue to expand at a fast pace fuelled by high gross domestic product, well-urbanized regions, changing lifestyles and an emerging online culture of a young and tech-savvy population. Both traditional food delivery and online food delivery currently have lower penetration rates in Saudi Arabia compared to other countries around the world, which creates big opportunities for food retailers in Saudi Arabia. Therefore, OGS if properly marketed should find ready acceptance in Saudi Arabia. This is also because so far none of the Saudi cities have a public transportation system. Also women, the prime grocery shoppers, are not allowed to drive.

To provide insight into the specific issues dealing with OGS development in Saudi Arabia, our study a) assesses whether an OGS meets the five conditions for successful adoption of a new innovation laid out by Rogers (1961), and b) deals with the relationship between: i) the importance of features of a grocery store and OGSA ii) a shopper’s computer orientation, search proneness and innovativeness and achievement profile and OGSA. First, we describe the
research issue. Second, we discuss Saudi Arabia as a case for analysis. Third, relevant literature is reviewed and a set of hypotheses and research questions are presented. Fourth, the research design and methodological procedures are described. Fifth, the study findings are presented and discussed. Finally, the managerial and public policy implications and future research directions are highlighted.

**Research Issue**

One of the main steps in the global movement towards the digital and electronic-based world is providing online grocery services. Online grocery means ordering of the groceries on the internet where OGSs offer an electronic ordering interface, and retailer takes care of picking and delivering the goods to the customers (Raijas, 2002). Grocery shopping has been regarded as stressful and as a chore (Geuens et al., 2003). A survey conducted by the founders of the online grocer Peapod.com suggested that consumers regarded grocery shopping as the chore they dislike most next to going to the dentist (Corral, 1999). Similarly, a study by the University of Michigan found that among 22 favourite household tasks, grocery shopping came in next-to-last, just ahead of cleaning (Richards, 1996). This fact, together with the increasing levels of internet penetration and consumer time poverty (ONS, 2002), suggests that it would be reasonable to expect consumers to eagerly embrace the convenience brought by online grocery retailing. The online channel has some feature that can help a traditional retailer to appeal to more customers (available 24/7, no lines at the cashier, etc.). Furthermore, due to home delivery, the Internet promised to break the link between a shopper's distance from a store and its convenience in buying there.
To systematically examine the feasibility of an OGS in Saudi Arabia we a) ascertain level of acceptance of an OGS based on its descriptive profile, b) determine whether this OGS meets the five conditions for successful adoption of new innovation, namely, relative advantage, compatibility, complexity, trialability and results demonstrability c) relate OSGA with desirability of various features of a grocery store and frequency of shopping online for various categories of goods and services and d) relate with respondents computer orientation, tendency to indulge in extensive search before product purchase, innovativeness and score on Jackson, Ahmed and Heapy (1976) six dimensional achievement scale.

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 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 estimated to be 26 million including 6 million non-nationals with a size of 2,149,690 square kilometers, with per capita income of $24,200. It has 10 million internet users (30th in the world). The rate of literacy is about 85 percent among the males and 70 percent among the females (C.I.A. 2012). It is a very conservative, deeply religious country with the centuries-old attitudes and traditions, often derived from the Arab tribal culture Al-Rasheed (2010).

Literature Review

Online Shopping
Moving from the traditional way of doing business to electronic business is now a hot research topic. Purchasing via the internet is one of the most rapidly growing forms of shopping (Levy and Weitz, 2001. Sindhav and Balazs (1999) characterise consumers by their desire and ability to engage in internet shopping. Desire, in turn, is split up into preference for home-based shopping and technological orientation. Internet shopping can be regarded as one form of home-based shopping, and some consumers may be more prone to home-based shopping than others, for example because of lack of time or physical inability. Bellman et al. (1999), based on data from a web panel of 10,180 web users, find that among a host of profiling variables the ones which were best able to predict whether somebody engages in on-line shopping were related to a wired lifestyle (i.e. the length of time one has been online).

Perceived usefulness is the main reason for the internet users to carry out online shopping activities. A consumer’s positive attitude towards information and communication technologies is a major indicator of the 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 (Syzmanski and Hise 2000). Some shoppers also dislike traditional shopping (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 ((Levy, Grewal, Peterson. and Connolly 2005, Ganesh, Reynolds, Luckett and Pomirleanu (2010).

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 the security of the transactions are some of the characteristics that influence the online shopping (Lee, Park, and Ahn, 2000). According to Liang and Huang (1998), whether a consumer would buy a product online is determined by the perceived transaction costs. Bhatnagar, Misra, and Rao, (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 (2000) find that satisfaction with online shopping is related to convenience, information, site design, and financial security. Credit cards are the most widely used method of payment for online purchases (Hawk, 2004). Trusting 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, Zhiyong, McDougall; Bergeron 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 lower priced products. Consumers are most attracted to the 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.

Specifically, Lohse, Bellman, and Johnson (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 also been reported by the research carried out by Citrin, Sprott, Silverman and Stem (2000) on the role of internet usage in the acceptance of online shopping.

Sindhav and Balazs (1999) characterise consumers by their desire and ability to engage in internet shopping. Desire, in turn, is split up into preference for home-based shopping and technological orientation. Internet shopping can be regarded as one form of home-based shopping, and some consumers may be more prone to home-based shopping than others, for example because of lack of time or physical inability. Several studies have addressed the risk perceived by consumers as a major determinant of the acceptance of buying via the internet. Donthu and Garcia (1999), in a profiling study, found US internet shoppers to be less risk averse and de Ruyter et al. (2001) confirmed the importance of perceived risk when buying travel-related products on the net. Liebermann and Stashevsky (2002) identified internet credit card stealing and misuse of personal information as the major risk elements associated with internet shopping by a sample of Israeli consumers, and that the degree of perceived risk was in turn related to usage experience with the internet, findings corroborated in other studies (Evans et al., 2001; Sim and Koi, 2002).

There seems to be evidence that consumers with more experience with using the internet also are more prone to use it for shopping, which is not too surprising. This finding is linked to the finding that perceived risk and trust, both in the internet in general and in particular internet sellers, plays a role, since more familiarity can increase trust. Innovativeness (Eastlick and Lotz, 1999) may be other relevant personality or attitudinal variables.

*Online Grocery Shopping*
Although many companies in Arab countries have adopted e-commerce in business activities, the idea of adopting OGS that involves home delivery is new. Research dealing with OGSA (GfK, 2010) shows that only 5% of Dutch Internet users indicated to have purchased groceries online in 2010. In addition 57% of these respondents of show high resistance and have even indicated to be unwilling to purchase groceries online at all.

OGS offers some advantages and disadvantages to many stakeholders such as customers, suppliers, and retailers. Both traditional and online food delivery currently have lower penetration rates in Arab countries compared to other countries around the world, which creates big opportunities for food retailer (Zaki, 2013). This is because, the final shopping basket resulting from a trip to the supermarket tends be both bulky and heavy, so the consumer may see an added value in getting these items ordered from and delivered to her home, and may also be willing to pay for this added convenience. Ramus and Nielsen (2005) states that time and energy is saved when goods are delivered to the costumer’s doorstep and that OGS is always open, allowing the customer to shop at any time of the day or night.

Grocery shopping is regarded as stressful and as a chore by many consumers (Geuens et al., 2003). A survey conducted by the founders of the online grocer Peapod.com suggest that many consumers regard grocery shopping as the chore they dislike most next to going to the dentist (Corral, 1999). Similarly, a study by the University of Michigan finds that among 22 favourite household tasks, grocery shopping came in next-to-last, just ahead of cleaning (Richards, 1996). Ramus and Nielson (2005) finds that in the minds of consumers, internet grocery shopping is an advantage compared with conventional grocery shopping in terms of convenience, product range and price. They also find that mental barriers to online grocery shopping, are, the risk of receiving inferior quality groceries and the loss of the recreational aspect of grocery shopping.
Increasing levels of internet penetration and consumer time poverty (ONS, 2002 b), suggests that it is reasonable to expect consumers to eagerly embrace the convenience brought by online grocery retailing. For experienced online shopping consumers, online privacy and security is less of an issue (Forsythe and Shi, 2003) than the inexperienced consumers (Miyazaki and Fernandez, 2001). Many consumers who are not shopping for groceries online do have online shopping experience with other products (Forsythe and Shi, 2003).

**Characteristics of Innovation and of Potential Adopters**

Rogers (1961) listed five characteristics of innovations: relative advantage, compatibility, complexity, divisibility (trialability), and communicability (observability). Robertson (1971) and Rogers and Shoemaker 1971) find that the adoption process is positively related to a product's relative advantage, compatibility, divisibility, and communicability, and negatively related to its complexity and its cost. These characteristics have been linked to OGS shopping experience. According to Verhoef and Langerake (2001), the perceived relative advantage refers to the degree to which consumers perceive OGS shopping superior to in-store shopping. The perceived compatibility refers to the degree to which consumers perceive OGS shopping match their shopping needs. The perceived complexity refers to the degree to which consumers find OGS shopping is difficult to understand. The perceived divisibility refers to the degree to which OGS shopping can be tried on a limited basis. The perceived communicability refers to the degree to which the benefits of use of OGS shopping are observable or describable to others.

Henderson and Divett (2003) find that the technology acceptance model (Taylor and Todd, 1995) accounted for up to 15% of the explained variance associated with adoption behaviour. They find that relationship between and perceived ease and adoption behaviour is mediated by perceived usefulness. This proposition is supported within Davis’ (1993) work into the
relationship between ease of use and usefulness. Davis argues that ease of use has an impact upon usefulness, yet usefulness does have an impact upon ease of use. According to Jiang, Yang and Jun, (2013) five dimensions of online shopping convenience are: access, search, evaluation, transaction, and possession/post-purchase convenience.

Al Balushi and Al Lawati (2012) carried out a study of 224 respondents in Oman. As OGS was not available in Oman at the time of their research, their study focused on three characteristics that consumers were able to evaluate prior to using an OGS. They find that respondents who felt time pressure and wanted to reduce physical effort were most willing to adopt an online grocery. They find strong positive correlation between perceived relative advantage, relative compatibility and online adoption and negative relationship with complexity.

In a study conducted in the United States Degeratu, Rangaswamy, and Wu (2000) find that online grocery shoppers are more search conscious, and price sensitive than offline shoppers. Online shoppers like the ease of browsing for deals. According to Kantar Retail (2012) educated customers shop online to save time and low income customers to save money.

Online and offline grocery shoppers vary in price sensitivity, brand preferences and size differences. Convenience is major motivator of online grocery shopping, it requires less physical effort and more organized shopping (Andrews and Currim, 2004). Based on research conducted in twenty countries Datamonitor Report (2010) conclude that quality assurance is key to developing online grocery shopping as consumers are skeptical, demand freshness and such details as out of date products.

**Hypotheses**

Discussion of the literature above leads us to propose following six specific hypotheses:
**Ho. 1a**: OGSA is positively related to perceived relative advantage. Greater the perceived advantage of an online grocery store, more likely one is to accept an OGS.

**Ho.1b**: OGSA is positively related to perceived compatibility. Greater the perceived compatibility of an OGS, more likely one is to accept the OGS.

**Ho.1c**: OGSA is negatively related to perceived complexity. Lower the perceived complexity of an OGS, more likely one is to accept the OGS.

**Ho.1d**: OGSA is positively related to its perceived trialability. Greater the trialability of an OGS, more likely one is to accept the OGS.

**Ho.1e**: OGSA is positively related to its perceived results demonstrability. More demonstrable the perceived advantage of an OGS, more likely one is to accept the OGS.

**Ho. 2**: Online involvement will be positively related to acceptance of an OGS. Greater one’s involvement with internet more likely one is to accept the OGS.

**Ho. 3**: Online shopping frequency will be positively related to the OGSA. More frequently one shops online shopping more likely one is to accept an OGS.

**Ho.4**: Online shopping attitude will be positively related to the OGSA. More favourable one’s attitude towards an OGS more likely one is to accept the OGS.

**Ho.5**: Innovativeness will be positively related to the acceptance of an online grocery store. More innovative a person is more likely s/he is to accept an OGS.

**Ho.6**: Search Proneness will be positively related to the OGSA. Greater one’s tendency to engage in consumer search activities, more likely one is to accept an OGS.
Research Questions

In the following paragraphs we present our discussion of relevant literature and present our research questions.

Based on a sample of 808 Croatian online shoppers, Bosnjak, Galesic and Tuten, (2007) find that personality traits of neuroticism, openness to experiences and agreeableness are related to willingness to buy products online. Similarly Tsao and Chang (2010) based on a sample 439 Taiwanese online shoppers find that above three traits were also related to online purchasing. Childers, Carr Peck and Carr (2010) find that motivations to engage in retail shopping include both utilitarian and hedonic dimensions. Delafrooz., Haron., Sidin, and Khatibi, (2009) based on a sample of 370 students in Malaysia find that utilitarian orientation and hedonic orientation are positively correlated with the attitude towards online shopping.

Schiffman, Kanuk and Das (2005) delineate the importance of the role played by personality traits like achievement in the decision making process of consumers. Specifically, Schewe (1973) provides a detailed account of the role of achievement motivation has played in shaping in consumer behavior. Gardner (1972) based on the study of 100 U.S. students find that students with high need for achievement are more apt to buy high quality clothing products. According to Yankelovitch and Meer (2006), an important segment of consumers is motivated by the need for achievement in their shopping behavior. They favour products and services that show off their success to their peers.

Jackson, Ahmed and Heapy (1976 have shown that achievement is not a one-dimensional but a multidimensional need. They uncovered six dimensions, namely, concern for excellence, acquisitiveness, status with peers, achievement via independence, status with experts and
competitiveness. Subsequent research (i.e. Ahmed and Litvack 1998) have shown usefulness of this approach to achievement need in the international setting.

This discussion of the literature leads us to ask the following question.

**RQ 1**: Are Jackson, Ahmed and Heapy (1976) Achievement dimensions related to the acceptance of an OGS?

Mangaraj, and Benjamin (2002) conducted a study based on the responses from a sample of 1,000 shoppers. They find that in the selection of supermarket, top four characteristics are: a clean/neat store, high quality produce, high quality meats and courteous, friendly employees. Mukiibi, and, Bukenya,. (2008), using survey responses from over 500 shoppers conducted a market segmentation of grocery shoppers in Alabama. By employing cluster analysis technique, Alabama grocery shoppers are segmented into three different groups based on the relative importance of preferences for store features and lifestyles. They identified three segments, namely, back to nature (health and quality product conscious), convenience (conscious of quality of shopping experience) and typical shoppers (concerned solely with convenience, price and quality). Briesch, Chintagunta, and Fox (2009) using household-level market basket data find that, in general, assortments are more important than retail prices in store choice decisions.

Dunne, Lusch and Carver (2014) point out that stores must satisfy the attributes important to consumers in order to be successful, These include features like quality and variety of products, service in store, layout of the store, atmosphere in the store, location, and discount and promotions.

Anckar, Walden and Jelassi, (2002) based on a longitudinal case study of an OGS in Finland find that following four factors are sources of customer value: price level, product range,
shopping convenience and customer service. Chu, Urriza Cebollada-Calvo and Chintagunta (2010) find that households are more brand loyal, more size loyal but less price sensitive in the online channel than in the offline channel. The online–offline differences in brand loyalty, size loyalty and price sensitivity are larger for food products and for sensory products.

This discussion of the literature leads us to ask the following question.

**RQ 2**: Is the importance of features of a grocery store related to the acceptance of an OGS?

**Methodology**

**Sample Selection**

Data for this research were collected through an internet and personal interview survey of Saudi Arabian users during the period of May to August 2013. Target population for this study was potential Saudi OGS shoppers. For internet survey, the second author posted a link to our English or Arabic language questionnaire on her MonkeySurvey.com account. Through this link our questionnaires was made available on social media such as Facebook and Twitter accounts of herself, her friends and family members. A total of 82 respondents filled out the online questionnaire.

Due to very conservative nature of Saudi society, the personal interview data for this study was personally collected by the second author from female respondents or a male family member from male respondents. The potential respondents were approached in places such as their private homes, work places and institutions of higher education. They were requested to fill up the questionnaire in the presence of the interviewer. The response rate for this interview data was 40%. The interviewer ensured that the questionnaires were properly filled up. This procedure resulted in 137 properly completed responses.
All our respondents were Saudi residents, mostly from city of Jeddah, second largest and the most cosmopolitan port city located on the Red Sea in Saudi Arabia. The two procedures generated 207 usable personal interview and online responses.

**Questionnaire**

To generate items appropriate for testing our research hypotheses and to provide insight into the online shopping activities in Saudi Arabia, we created a bank of items based on our survey of the literature dealing with online shopping. We chose Jackson, Ahmed and Heapy (1976) Six Dimensional Achievement Scale (eighteen nine point Likert items) to measure Achievement motivation. Finally, the research instrument in English language was double translated into Arabic language and extensively pre-tested and refined through personal interviews with students in Saudi Arabia.

**Measures**

1. **Six Dimensional Achievement Scale**: Eighteen nine point bipolar items are grouped into six achievement dimensions as prescribed by Jackson, Ahmed and Heapy (1976), namely, excellence, acquisitiveness, status with peers, independence, status with experts and competitiveness. The value of these scales range from a minimum of three to a maximum of twenty-seven (See Appendix III for a description of the high scorers on this scale).

2. **Frequency of online shopping transactions**: Four point Likert scale ranging from very often to never, to measure frequency of the use of internet to purchase of nine products and services namely, banking, making travel arrangements, buy music films and videos, buy electronic goods, buy computer items, buy books/stationary, buy clothes, buy household items and buy furniture (See Appendix II for Factor Analysis based on these items).
3. **Acceptance of Online Grocery Store X**: A scale made up of four seven point items denoting acceptance of online grocery store described on a one page conceptual statement describing the online grocery store to be offered by a well-known grocery chain X in the city of Jeddah, Saudi Arabia (See Appendix I)

4. **Perceived Characteristics of an Online Grocery Store**: Five point Likert items to measure respondents’ perception of the following characteristics: relative advantage (a six item scale), compatibility (a 4 item scale), complexity (2 separate items), trialability (2 separate items) and communicability (2 separate items). These items were adapted from scales constructed to measure adoptability of social network sites by Lin, Chiu and Lim (2011) and online grocery store literature (see Appendix II for scale items).

5. **Attitudes**: Five point Likert items to construct following attitude scales: a) innovativeness (a 4 item scale from Lin, Chiu and Lim, 2011) b) involvement with computers (3 separate items), attitude towards online grocery shopping(a 4 item scale) and search proneness(a 3 item scale), all based on online grocery store literature (see Appendix II for scale items).

**Data Analysis**

Our analysis started with the frequency analysis of all our data and mean score on socio-demographic, personality and value variables, frequency of the use of internet to purchase products and services. Then we factor analysed the fourteen frequency items related to the use of internet to purchase products and services items using varimax rotation. This procedure resulted in three factors explaining 60% of the common variance. We named these factors: General Online Shopping (Factor 1), Foreign Social Media Shopping (Factor 2) and Financial and Traveling (Factor 3). Appendix II presents detailed factor analysis results. Lastly we created following scales using Cronbach reliability procedure: OGSA (alpha=.88) relative advantage
(alpha=.92) compatibility (alpha=.89) acceptance of X online grocery store (alpha=.84), innovativeness (alpha=.86), search proneness (alpha=.84) and attitude towards online grocery shopping (alpha=.89). This was followed by Pearson correlation of the acceptance of our online grocery store with online involvement items, features of a grocery store, perceived characteristics of an online grocery store, online shopping factors, Jackson, Ahmed and Heapy (1976) achievement dimensions, innovativeness and search proneness. Finally, to assess the predictive power of our online involvement items, online shopping frequency, achievement dimensions, innovativeness and search proneness we regressed them against the acceptance of X OGS using backward variable exclusion procedure. For this analysis, we only used items not directly associated with an online or other grocery store to assess their predictive power.

Results and Discussion

Sample Characteristics

Our frequency analysis indicated that on a seven point Likert scale ranging from the low end of not likely at all to the high end of very likely, Twenty percent of our respondents indicated that they are likely to shop through our OGS web site regularly and nineteen percent indicated that they are very likely to do so. Thus it appears that there is a fair potential demand for an OGS in the city of Jeddah.

As indicated on Table 1, the mean age of our participants is 30 years. The sample includes 50% married persons and 50% singles, 38% males and 62% females, 11% of the respondents have high school or less education, 21% have some post-secondary education, 48% have completed university, and 20% have post-graduate training. 64% of our respondents earn less than 150,000 Saudi Rials per annum and 36% over 150,000 Saudi Rials (Can $ = 3.70 Saudi Rials). In terms of computer usage 26% spend 1-2 hours a day on internet, 26% 2-3 hours and
48% four or more hours. The average age of the respondents is 30 years and 48% spend four or more hours per day on computer.

Our respondents scored highest on excellence and status with experts’ dimensions of the achievement scale, followed equally by acquisitiveness and status with peers. Achievement via independence was the lowest scored dimension. Family Security was the most important Terminal value held by our respondents followed by A Comfortable Life and Freedom. An Exiting Life was the least important value followed by Equality and A Sense of Accomplishment. Ambitious was the most important Instrumental value held by our respondents, followed by Capable, Independent. Imaginative was the least important value, followed by cheerful and Self-Controlled.

On the overall basis, our sample is biased towards, younger, well educated, computer savvy, middle income females. In terms of personality and values, it is strongly motivated towards doing everything well, respecting expert advice for the purpose of providing family security, comfortable life and freedom. The respondents also strongly value ambition and competence but put less emphasis on being daring, self-disciplined and lightheartedness.

**Acceptance of X Online Grocery Store**

Our frequency analysis indicated that on a seven point Likert scale ranging from the low end of not likely at all to high end of very likely, 20% of our respondents indicated that they are likely to shop through X OGS web site regularly and 19% indicated that they are very likely to do so. Thus it appears that there is a fair acceptance of X OGS in the city of Jeddah. Thus 39% of our respondents are quite favorably disposed towards adopting an OGS.

**Correlation of AOGS with Achievement Dimensions**
Out of the six achievement dimensions correlated, AOGS is found to be statistically significantly correlated with only two dimensions, namely, concern for excellence (r = .20, p < .01) and competitiveness (r = .17, p < .05). With a combined size of 0.18, the overall size of these correlations was small. Thus, our answer to our research question 1 is a weak yes.

This does, however, indicate that the potential adopters of OGS are likely to be both competitive and perfectionists. They are likely to be very meticulous in making their purchase decisions and would like to surpass others through their perceived ability to make the best purchase decisions.

**Correlation of AOGS with Features of a Grocery Store**

To answer our Research Question 2 dealing with the relationship of importance placed on various features of a grocery shop and acceptance of X grocery store, nine out of the fourteen features of a grocery store listed are significantly correlated with the acceptance of X grocery store. With an r = .37 and p < .001 strongest relationships is with home delivery. This is followed closely by security of store website. This result goes in the same direction as one found by Lee, Park, and Ahn, (2000) for online shopping. Weakest relationship are with freshness and discount and promotions (r = .14, p < .05 each). Relationships with service in store, service at check-out counter, discount and promotions, payment services, security service, and location are in the middle. Therefore, our answer to our Research Question 1 is a resounding yes.

It appears that the potential users of OGS in Saudi Arabia greatly value home delivery and security of store website. Although both freshness of products and price and discounts are important to them, they are less important than service at store and check-out counter, a finding earlier reported by Syzmanski and Hise (2000) for online shopping. An OGS that can generate confidence in the security of their website and assure quality home delivery of products is likely
to attract potential users of OGS. It appears that an OGS that provides excellent service will be patronized as long as pricing is reasonable.

**Correlation of AOGS with Online Involvement**

As seen on Table 2, out of the three alternatives provided for stating ones orientation towards computers, human and both computers and humans, only orientation towards both computers and human is statistically significantly related to acceptance of X grocery store ($r=.30, p<.01$). Out of the six social networks listed, only possession of YouTube account is statistically significantly correlated with acceptance of X grocery store ($r=.21, p<.01$). Thus we find that the support for our Ho.1 is rather weak. It appears that the potential users of online grocery shop in Saudi Arabia are likely to be subscribed to the You Tube services, oriented towards both computers and humans. Thus for potential OGS, You Tube appears to be the social media outlet to promote their products. The orientation of potential customers of an OGS towards both computers and humans underscores the necessity of providing a customer of OGS human as well as digital interactivity. This can be in the form of telephonic service to provide response to specific inquiries or complaints.

**Correlation of AOGS with Online Shopping Factors**

Out of the three online shopping factors and four individual items correlated with AOGS only one item failed to attain a statistical significance level of $p <.05$. The size of these significant correlations is not very large ranging from 0.20, and $p<.01$ with financial and travelling factor to 0.16 and $p<.05$ with shopping at Saudi online stores. Thus we find that although our Ho.2 is confirmed but the sizes of the correlations are not substantial.

As one would expect future adopters of OGS are likely to be already shopping on line.
Online shoppers are familiar with the mechanics of online shopping and have developed a trusting relationship with payment and delivery system. For experienced online shopping consumers, online privacy and security is less of an issue (Forsythe and Shi, 2003) than the inexperienced consumers (Miyazaki and Fernandez, 2001). Given the relatively small size of the relationship of online shopping with AOGS, one has to conclude, however, that not all the present online shoppers can be converted to adopt OGS. Many consumers who are not shopping for groceries online do have online shopping experience with other products (Forsythe and Shi, 2003).

**Correlation of AOGS with Perceived Characteristics of an OGS**

Perusal of Table 3 indicates that all our scales and individual items reflecting perceived characteristics of an OGS are positively correlated with AOGS. The strongest correlations are with the relative advantage scale. Correlation of AOGS with our relative advantage scale is $r=.68$ (p<.001), and for two individual items also reflecting relative advantage is $r=.52$ and $r=.51$ (p<.001) respectively. This is followed by correlation with compatibility. Correlation with compatibility scale is $r=.57$ and p<.001 and for the individual item reflecting compatibility is $r=.57$ (p<.001). The size of correlation with complexity, trialability, and communicability is smaller than with relative advantage and compatibility. The two items reflecting complexity are correlated at $r=.43$ (p<.001) and $r=.39$ (p<.001) respectively. The sizes of correlations with two items reflecting trialability are $r=.39$ and $.41$(p<.001) respectively and communicability are $r=.44$ and $r=.41$ and p<.001. These results show that our Hos. 6a, 6b, 6c, 6d and 6e are confirmed.

These results clearly show that favourable perception of the characteristics of an OGS is very closely associated with acceptance of X OGS. X OGS store is clearly perceived as both providing relative advantage and compatibility. Given the nature of service being provided,
smaller size of correlation with complexity, trialability, and communicability items is understandable. For our respondents who are oriented towards both humans and computers, a web based service appears somewhat more complex and less trialable and communicable. Therefore, an OGS launching its operations in Saudi Arabia will need to explain to its potential customers that its website is not very complex to maneuver in order to obtain home delivery of grocery products. Also it is easy to communicate its efficacy to others. Also, some special incentives need to be provided so that the potential customers may try the OGS.

*Correlation AOGS with OGS Shopping Attitude, Innovativeness and Search Proneness*

Out of the three attitude scales included in our study, strongest relationship of AOGS is found with online grocery shopping attitude. With a correlation coefficient size of 0.54 and p<.001, this is a particularly robust relationship, soundly confirming our Ho. 4. Strength of this relationship should come as no surprise.

Statistically significant correlation of 0.22 and p<.01 with innovativeness and 0.29 and p<.01 with search proneness with AOGS confirms our Ho. 5 and Ho.6. Thus, it appears that OGS is considered an innovative service in Saudi Arabia and appeals to innovators. Earlier (Eastlick and Lotz, 1999) suggested that online shopping itself appealed to innovators. Our results for search proneness go in the same direction as concern for excellence. This indicates that possibility of carrying out a thorough search for products, prices, product expiry dates etc. is very attractive to potential OGS customers in addition to the advantages such as home delivery of grocery products. These results go in the same direction as those found earlier by Syzmanski and Hise (2000) for online shopping customers.

*Multiple Regression Results*
Table 4 presents the backward regression model of AOGS with achievement dimensions, features of a grocery store, online involvement, online shopping, innovativeness and search proneness to assess predictive validity of these independent variables. With adjusted $r^2 = .17$, $F$ Value of 5.3 and $p < .0001$ the regression model is statistically highly significant. Explanation of the reasonable amount of the common variance to permits us to describe the regression model components. With a beta value of 0.22 and $p < .01$ orientation towards both humans and computers variable explains greatest portion of common variance. This is followed by search proneness ($\beta = .19, p < .05$), concern for excellence ($\beta = .18, p < .01$), general online shopping factor ($\beta = .17, p < .05$) and possession of an account in YouTube ($\beta = -.16, p < .05$).

Thus the general picture that emerges from this analysis is that individuals who are both computer savvy and human oriented, are presently shopping online, heavily involved with YouTube, perfectionists, meticulous and search extensively before shopping are most likely to be potential adopters of OGS. These results show the predictive power of the variables previously found statistically significant in correlation analysis.

**Limitations, Conclusions, Implications and Future Research**

**Limitations**

The major limitation of this research is that it was carried out with a convenient and limited sample of Saudi Arabian potential adopters of OGS only in one Saudi city. Future studies may seek probability based larger sample sizes across Saudi Arabia of respondents who are regular grocery shoppers. Second limitation of this study is that we did not complement our hard data with in depth qualitative studies to further probe issues such as what barriers they see in adopting an OGS.

**Conclusions**
Results of our study showed that there is a fair acceptance of an OGS. The store described by us meet the five conditions laid out in literature for successful adoption of new innovation, namely, relative advantage, compatibility, complexity, trialability and results demonstrability. In terms of the features of a grocery store, home delivery and security of website are found to be the most valuable features. Service oriented features are valued more highly than price and discount oriented ones. As one would expect, it is also found that positive attitude towards OGS and frequency of the present online shopping were strong predictors of acceptance of OGS. Lastly it is found that future adopters of OGS are likely to be oriented towards both humans and computers, have an account on You Tube, are innovative, tend to search extensively before purchasing, are competitive and search for excellence.

**Implications**

Based on our results, the business community in Saudi Arabia is recommended to develop online shopping as an additional vehicle to distribute grocery products. When adding an online OGS as a distribution channel, an existing or standalone new grocery super market is advised to target individuals who are both computer and human oriented, innovative, competitive, perfectionists who like to search extensively before making a purchase. In order to successfully launch their online store, an OGS must meet its future clients’ fundamental concerns regarding trust in the security of its online operations. It is particularly important to for the collectivist, cash oriented Saudi Arabians to feel secure when they make payment for products and services online without direct human contact. In terms of the specific shop features, home delivery, followed closely by security of the store website, check out service, payment service, security of the personal information collected by the store, competitive prices and discounts and promotions are the ones that should be provided.
Online shopping outlets sell their products to consumers without direct contact. Therefore, in addition to providing greater consumer welfare to the Saudis by such means as allowing them to make direct comparisons between different brands of products offered by the OGS and reaching underserviced areas of Saudi Arabia, OGS is can be a means of providing employment to females in Saudi Arabia, a country that maintains strict separation between males and females. Saudi Government can encourage OGS 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 the OGS industry sector. In order to help grocery 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 the payment and provision of credit may be made more consumers friendly. Additionally, the government may consider granting foreign firms like Amazon.com, Peabody.com that have well developed business model of online grocery shopping, special incentives to locate their retail operations in Saudi Arabia. This may encourage such firms to establish themselves in Saudi Arabia and thus serve as role model for Saudi enterprises interested in launching online stores.

In order to make online grocery shopping fully acceptable to the Saudis, the foreign enterprises perhaps seek a business model that is more in tune with cultural and legal realities of Saudi Arabia by providing greater level of voice based human contact and seamless integration with a traditional grocery store. They should be aware that potential Saudi customers of OGS are likely put a very high importance on guiding values family security, followed by comfortable life and freedom and Ambitious (Hard working, aspiring), Capable (Competent, effective) and
Independent (Self-reliant, self-sufficient) as a means of achieving these terminal values. Therefore promotional and advertising messages of an OGS may reflect these values.

**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 grocery store customers. Secondly, in depth studies need to be carried out with Saudi grocery store customers to probe them about reasons why they may or may not patronize an OGS. and from respondents most likely to patronize, an indication as to their lifestyle related to factors such as distance from nearest grocery supermarket, occupational status of family members, availability of drivers for female members of the household, time pressure felt by family members etc. Thirdly, both qualitative and quantitative studies of business sector associated with grocery shopping need to be carried out to ascertain why they have not fully adopted OGS as a channel for distribution of their products. The qualitative study may prod on what supports they need from their government and from such ancillary industries like suppliers of products sold in a grocery store. Fourthly, based on the results of in-depth qualitative survey of grocery store customers, additional questions should be included in the national Saudi Arabian survey of grocery store customers.
Table 1
Respondents Demographics, Achievement Motivation and Rokeach Rank Terminal Values

<table>
<thead>
<tr>
<th>Achievement Dimensions1</th>
<th>Time Spent on Internet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>Excellence</td>
<td>19.1</td>
</tr>
<tr>
<td>Acquisitiveness</td>
<td>17.5</td>
</tr>
<tr>
<td>Status with Peers</td>
<td>17.3</td>
</tr>
<tr>
<td>Independence</td>
<td>14.7</td>
</tr>
<tr>
<td>Status with Experts</td>
<td>19.1</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>17.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rank Terminal Values2</th>
<th>Rank Terminal Values2</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total Income in Saudi Dinars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Less than 50,000</td>
</tr>
<tr>
<td>A comfortable life</td>
<td>3.8</td>
<td>2</td>
</tr>
<tr>
<td>An exciting life</td>
<td>6.0</td>
<td>8</td>
</tr>
<tr>
<td>A sense of accomplishment</td>
<td>5.1</td>
<td>5</td>
</tr>
<tr>
<td>Equality</td>
<td>5.7</td>
<td>7</td>
</tr>
<tr>
<td>Family security</td>
<td>3.3</td>
<td>1</td>
</tr>
<tr>
<td>Freedom</td>
<td>4.8</td>
<td>3</td>
</tr>
<tr>
<td>Pleasure</td>
<td>5.1</td>
<td>5</td>
</tr>
<tr>
<td>Self-respect</td>
<td>4.8</td>
<td>3</td>
</tr>
<tr>
<td>Social recognition</td>
<td>6.4</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rank Instrumental Values2</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>V.138 Ambitious (Hard working, aspiring)</td>
<td>3.7</td>
</tr>
<tr>
<td>V.139 Broad-minded (Open-minded)</td>
<td>5.1</td>
</tr>
<tr>
<td>V.140 Capable (Competent, effective)</td>
<td>4.4</td>
</tr>
<tr>
<td>V.141 Cheerful (Lighthearted, joyful)</td>
<td>5.7</td>
</tr>
<tr>
<td>V.142 Imaginative (Daring, creative)</td>
<td>6.0</td>
</tr>
<tr>
<td>V.143 Independent (Self-reliant, self-sufficient)</td>
<td>4.5</td>
</tr>
<tr>
<td>V.144 Intellectual (Intelligent, reflective)</td>
<td>5.3</td>
</tr>
<tr>
<td>V.145 Responsible (Dependable, reliable)</td>
<td>4.7</td>
</tr>
<tr>
<td>V.146 Self-Controlled (Restrained, self-disciplined)</td>
<td>5.7</td>
</tr>
</tbody>
</table>

1 Mean scale values range from 3 (low) to 27 (high); 2 Mean rank values range from 1 (high) to 9 (low);
Table 2

Correlation of Online Grocery Shop Acceptance with Online Involvement, Online Shopping Factors and Features of a Grocery Store

<table>
<thead>
<tr>
<th>INDEPENDENT VARIABLES</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Achievement Motivation</strong></td>
<td></td>
</tr>
<tr>
<td>Concern for Excellence –</td>
<td>.20**</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>.17*</td>
</tr>
<tr>
<td><strong>Features of a Grocery Store</strong></td>
<td></td>
</tr>
<tr>
<td>Freshness</td>
<td>.14*</td>
</tr>
<tr>
<td>Service in store</td>
<td>.20**</td>
</tr>
<tr>
<td>Service at check-out counter</td>
<td>.22**</td>
</tr>
<tr>
<td>Discount and promotions</td>
<td>.14*</td>
</tr>
<tr>
<td>Payment Services</td>
<td>.18*</td>
</tr>
<tr>
<td>Security service (security of the personal information collected by the store)</td>
<td>.17*</td>
</tr>
<tr>
<td>Security of the store Website</td>
<td>.32**</td>
</tr>
<tr>
<td>Location</td>
<td>.19**</td>
</tr>
<tr>
<td>Home delivery</td>
<td>.37**</td>
</tr>
<tr>
<td><strong>Online Involvement</strong></td>
<td></td>
</tr>
<tr>
<td>I find myself to be oriented equally towards humans and computers.</td>
<td>.30**</td>
</tr>
<tr>
<td>Not have an Account with YouTube</td>
<td>-.21**</td>
</tr>
<tr>
<td><strong>Online Shopping Items and Factors</strong></td>
<td></td>
</tr>
<tr>
<td>Shop at Saudi Online Stores</td>
<td>.16*</td>
</tr>
<tr>
<td>General Online Shopping Factor</td>
<td>.16*</td>
</tr>
<tr>
<td>Foreign Social Media Shopping Factor</td>
<td>.19**</td>
</tr>
<tr>
<td>Financial and Traveling Factor</td>
<td>.20**</td>
</tr>
<tr>
<td><strong>Mean Acceptance of Online Grocery Store</strong></td>
<td>22.8</td>
</tr>
<tr>
<td>Sample Size</td>
<td>207</td>
</tr>
</tbody>
</table>

1Statistical Significance Level: *p<.05; **p<.01
Table 3

Correlation of Online Grocery Shop Acceptance with Perceived Characteristics of an Online Grocery Store, Achievement Motivation and Attitudes

<table>
<thead>
<tr>
<th>INDEPENDENT VARIABLES</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perceived Characteristics of an Online Grocery Store</strong></td>
<td></td>
</tr>
<tr>
<td>Relative Advantage Scale</td>
<td>.68**</td>
</tr>
<tr>
<td>Relative Advantage Item 1: Using home delivery will help me when I need to carry large or heavy items</td>
<td>.52**</td>
</tr>
<tr>
<td>Relative Advantage Item 2: Using a home delivery online grocery shop allows me to expand my selection of available products.</td>
<td>.51**</td>
</tr>
<tr>
<td>Compatibility Scale</td>
<td>.56**</td>
</tr>
<tr>
<td>Compatibility Item 1: Using a home delivery online grocery shop is convenient for me because I am online most of the time.</td>
<td>.57**</td>
</tr>
<tr>
<td>Complexity Item 1: Learning to use a home delivery online grocery shop would be easy for me.</td>
<td>.43**</td>
</tr>
<tr>
<td>Complexity Item 2: It would be easy for me to become skillful at a home delivery online grocery shop.</td>
<td>.39**</td>
</tr>
<tr>
<td>Trialability Item 1: I know that I can take a site tour to see a home delivery online grocery shop works before I decide to shop there.</td>
<td>.39**</td>
</tr>
<tr>
<td>Trialability Item 2: I know that I can place a small trial order with a home delivery online grocery shop works before I decide to do my main grocery shopping there.</td>
<td>.41**</td>
</tr>
<tr>
<td>Results Demonstrability Item 1: It is easy to communicate to others the consequences of using see a home delivery online grocery shop.</td>
<td>.44**</td>
</tr>
<tr>
<td>Results Demonstrability Item 2: It is obvious to me whether a home delivery online grocery shop is beneficial or not.</td>
<td>.41**</td>
</tr>
<tr>
<td><strong>Scales Measuring Attitudes</strong></td>
<td></td>
</tr>
<tr>
<td>Attitude towards Online Grocery Shopping</td>
<td>.54**</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>.22**</td>
</tr>
<tr>
<td>Search Proneness</td>
<td>.29**</td>
</tr>
<tr>
<td>Mean Acceptance of Online Grocery Stores Al Danoub</td>
<td>22.8</td>
</tr>
<tr>
<td>Sample Size</td>
<td>207</td>
</tr>
</tbody>
</table>

1Statistical Significance Level: *p<.05; **p<.01
Table 4
Regression Model Explaining Online Grocery Shop Acceptance

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Beta Weight β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Have Account on YouTube</td>
<td>-.16*</td>
</tr>
<tr>
<td>Shop at Saudi Online Stores</td>
<td>-.02</td>
</tr>
<tr>
<td>I find myself to be oriented equally towards humans and computers.</td>
<td>.22**</td>
</tr>
<tr>
<td>General Online Shopping Factor</td>
<td>.17*</td>
</tr>
<tr>
<td>Foreign and Social Media Shopping Factor</td>
<td>.13</td>
</tr>
<tr>
<td>Financial And Traveling Factor</td>
<td>.06</td>
</tr>
<tr>
<td>Concern for Excellence</td>
<td>.18**</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>-.03</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>-.11</td>
</tr>
<tr>
<td>Search Proneness</td>
<td>.19*</td>
</tr>
<tr>
<td><strong>Sample Size</strong></td>
<td>207</td>
</tr>
</tbody>
</table>

\(^1\) R^2 = .212, adjusted R^2 = .172; F = 5.3, p < .0001; *p < .05; **p < .01.
APPENDIX I

Please read the following description of the new home delivery service to be provided by a grocery store in Saudi Arabia and answer questions regarding the store services.

(X) grocery store website provides a home delivery services for its products with two different delivery times: first in the morning between 7:00a.m. to 9:00a.m., and second one in the afternoon from 5:00p.m. to 7:00p.m. Delivery charge is 10 riyal. The website has a store catalog which shows all the products available in the store along with their prices. A customer can select products and quantities they wish to purchase. An invoice of the total purchase is then prepared and the customer indicates delivery date and time of delivery (morning or afternoon) and how they wish to pay for the purchase. To use the service, the consumer has to create an account and provide personal information and their home address. (All the personal information will be secured in the Al Danoub website data base and will not be shared with other websites). There are two payment methods (Credit card or cash on delivery). There is also a special feature for loyal consumers, they can subscribe for a 6 months (3 deliveries) or 1 year period (7 deliveries) and pay a reasonable fee for the special deliveries (other than 7:00 a.m. to 9:00 a.m. and 5:00 p.m. to 7:00 p.m.). Subscribing to X web site will allow them to send you updated email about special deals and discounts and new store arrivals.

. Listed below are a series of statements related to your attitude towards a home delivery online grocery shop. Could you please tell us, on a scale of 1 to 7 how likely the following statements are true. The scale values are:

(1) Not likely at all
(2) Not likely
(3) Less likely
(4) Neither not likely or likely
(5) Somewhat likely
(6) Likely
(7) Very likely

I expect to visit home delivery web site of Al Danoub

I expect to shop through home delivery web site of Al Danoub regularly

I prefer to shop through home delivery web site of Al Danoub rather than at a regular grocery store.

I consider a home delivery web site of Al Danoub to be my first choice when I want to buy from a grocery shop.
### APPENDIX II

Results of the Principal Components Analysis of Online Shopping Activities:

Varimax Rotated Factor Matrix\(^1,2\).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Online Stores</td>
<td>.165</td>
<td>.744</td>
<td>.305</td>
</tr>
<tr>
<td>Internet Shop that has a Page on Facebook</td>
<td>.153</td>
<td>.782</td>
<td>-.024</td>
</tr>
<tr>
<td>Internet Shop that has a YouTube Clip Showing Products and Service</td>
<td>.306</td>
<td>.677</td>
<td>-.043</td>
</tr>
<tr>
<td>Banking</td>
<td>.135</td>
<td>.048</td>
<td>.866</td>
</tr>
<tr>
<td>Making traveling arrangements</td>
<td>.052</td>
<td>.229</td>
<td>.763</td>
</tr>
<tr>
<td>Buy Music, Films, and Videos</td>
<td>.180</td>
<td>.541</td>
<td>.193</td>
</tr>
<tr>
<td>Buy electronic goods</td>
<td>.632</td>
<td>.381</td>
<td>.183</td>
</tr>
<tr>
<td>Buy computer items</td>
<td>.650</td>
<td>.404</td>
<td>.124</td>
</tr>
<tr>
<td>Buy books/stationary</td>
<td>.636</td>
<td>.316</td>
<td>.155</td>
</tr>
<tr>
<td>Buy clothes</td>
<td>.273</td>
<td>.601</td>
<td>.118</td>
</tr>
<tr>
<td>Buy household items</td>
<td>.782</td>
<td>.229</td>
<td>.114</td>
</tr>
<tr>
<td>Buy furniture</td>
<td>.811</td>
<td>.105</td>
<td>.059</td>
</tr>
<tr>
<td>Buy grocery items</td>
<td>.718</td>
<td>.118</td>
<td>-.029</td>
</tr>
<tr>
<td>Pay bills and fees online</td>
<td>.093</td>
<td>.067</td>
<td>.881</td>
</tr>
<tr>
<td><strong>Eigenvalue</strong></td>
<td>5.3</td>
<td>1.9</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Proportion of Explained Variance</strong></td>
<td>37.7</td>
<td>13.0</td>
<td>8.7</td>
</tr>
</tbody>
</table>

\(^1\)Strongest Variables are in Bold Characters, \(^2\)Total Variance Explained=60.4%, Bartlett's Test of Sphericity Significance 0.0001
List of Items Included describing Five Characteristics necessary for the Adoption of X Grocery Store and Three Explanatory Traits

Acceptance of Online Grocery Store
a) I expect to visit home delivery web site of X Grocery Store.
b) I expect to shop through home delivery web site of X Grocery Store.
c) I prefer to shop through home delivery web site of X Grocery Store rather than at a regular grocery store.
d) I consider a home delivery web site of X Grocery Store to be my first choice when I want to buy from a grocery shop.

Relative Advantage
a) Using a home delivery online grocery shop allows me to do my grocery shopping more easily.
b) Using a home delivery online grocery shop is useful for saving time and effort.
c) Using a home delivery online grocery shop allows me to get to know products and prices better.
d) Using a home delivery online grocery shop will be more convenient for me because I can’t go to a shop by myself all or most of the time.
e) Using home delivery will help me when I need to carry large or heavy items.
f) Using a home delivery online grocery shop allows me to expand my selection of available products.

Compatibility
a) Using a home delivery online grocery shop is convenient for me because I am online most of the time.
b) Using a home delivery online grocery shop fits well with my shopping style.
Using a home delivery online grocery shop suits me because I mostly communicate with the people I know online.

Innovativeness
a) I like to learn about new ideas.
b) I like to explore new technology for communication

c) I like to keep up with new technologies.

d) I am willing to take risk.

Attitude towards Online Grocery Shopping
a) With online shopping I can have more free time to spend over other things
b) I think that online store is more reliable in keeping their customers.
c) I can search for special offers easily through online store.
d) Trusting an online store won’t be a problem to me.

Search Proneness
a) Before I buy a product in an online shop I search extensively.
b) I like to compare prices shops before buying.
c) I like to compare brands before buying.
APPENDIX III

Trait Description of High Scores on Six Dimensional Achievement Scale

The trait description of the high scorer on the personality variables is provided below:

Excellence: Does a good job; works hard to win; maintains high work standards; assures that the finished product looks good; spends extra time to improve the quality of the final product; concentrates effort on one job; sticks with a difficult task; works hard to achieve high standards; corrects every detail; aims for perfection; tries hard to do well; work comes before all else.

Acquisitiveness: values high-paying job; respects self-made rich persons; works hard to make money; seeks out opportunities to become rich; salary is very important; relates performance to salary paid.

Peer Status: values what people think of him; works hard for a popular teacher; cares what others think of his work; likes publicity about his work; works to impress friends; displays his work to others; likes efforts to be appreciated; displays his ability to others.

Achievement Vis Independence: likes to be evaluated solely on his own performance; dislikes team work; depends on his own efforts to get ahead; likes working alone; likes rewards based on initiative; takes personal responsibility for his success; enjoys the challenge of a new job; likes special bonuses for outstanding performance.

Expert Status: depends upon the opinion of experts; measures himself against acknowledged experts’ work; seeks high regard from superiors; anticipates criticisms of experts; achieves respect of renowned authority; works closely with superiors; learns from a teacher.

Competitiveness: likes to be more successful than others; is annoyed when passed on highways; enjoys competitive games; admires those who fought their way to the top; believes in survival of the fittest; enjoys the struggle for power; enjoys intense rivalry among business executives; likes heated arguments; like playing sports with someone better.
REFERENCES


*Internet Research, 15*(3) 335 – 352.


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