

# ONLINE GROCERY RETAILING IN JORDAN: FUTURE PERSPECTIVES

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## Abstract

*Electronic commerce (e-Commerce) has been considered as the way of conducting business transactions online. The use of e-commerce technologies is widely accepted around the world since it offers organizations many opportunities to improve their performance. However, it is still skeptical that using this technology will come up with positive expectations. This study aimed at identifying the possible benefits and barriers that may affect the Jordanian grocery retailers' decision to adopt this kind of technologies.*

*Keywords — Benefits, Barriers, Developing Countries, Jordan, Online grocery Retailing (OGR).*

## 1. INTRODUCTION

Electronic Commerce (e-Commerce) as one of the major advancements in business operations offers organizations of various size enormous opportunities and benefits to improve their business (Turban et al. 2000). Online grocery shopping is one of the electronic commerce applications that received much attention in the last few years (Kurnia 2003, 2008). Online grocery shopping means: ordering of groceries online; the web site of the grocery store offers an electronic ordering interface for the customers, then the retailer take care of the processes of goods packaging and delivery to the customer (Kurnia and Chien, 2003). While online grocery shopping adoption has been concentrated in developed countries; there is still doubt about its positive expectations in the developing countries. This could be explained by the differences in advancement in ICT, social and cultural environment, political environment, business conditions and consumers' attitudes towards online shopping in these countries (Kurnia and Chien, 2003) and (Payne, 2010).

All over the world, the importance of Small and Medium Enterprises(SME's) comes from their significant contribution to the national economies including developing ones in terms of revenue generation, innovation and technological advancement as well as extensively providing of employment, services and products (Payne, 2010). However, SMEs in general have a centralized management with poor skills and short range perspectives as well as an intuitive decision making process (MacGregor and Vrazalic, 2004). They also have limited resources (financial, time, personnel and technical) as well as a limited market share and a narrow range of products or services therefore they are unable to compete with large organizations (MacGregor and Vrazalic, 2005). This study will attempt to fill the gap in literature about SMEs e-commerce trends in the developing countries. The overall aim of this study is to examine the factors that facilitate or hinder the adoption of online grocery shopping among SMEs in Jordan as a case study from the developing countries. The results and the recommendations from this study will serve as a basis for future exploration. It is also hoped to benefit grocery retailers, policy makers and those who are planning to invest in this new retail format in future in order to draw guidelines and develop a practical framework to promote e-commerce usage among SMEs.

Literature review about Jordanian grocery industry as well as used e-commerce technologies in general is discussed in the following section. Methodology being used is described in section 3. Results are discussed in section 4 and finally conclusion is drawn in section 5.

## **2. REVIEW OF LITERATURE**

### **2.1 Jordanian Grocery Industry**

The structure of the Jordanian Grocery market as a case of the developing countries markets mainly consists of small and medium grocery shops (between 50 to 200 square meters) with number of employees range from (1-99) [department of statistics, 2008; Jordan Small Businesses and Human Development, 2011]. The remaining includes supermarkets (more than 450 square meters), superstores and mall style markets (more than 5000 square meters) (USDA, 2006). During the last decade, Jordanian food retail sector has been rapidly expanding and it has witnessed a boom by establishing mass retailers that only appeared in urban areas and big cities, for example: C-TOWN and SAFEWAY (U.S. franchise) also CARREFOUR (French franchise). Also an American style Malls started to appear in Amman and other big cities like Irbid such as Al Mukhtar and Al Baraka Malls in Amman and Al Radaideh mall in Irbid. Other local grocery supermarkets also scattered in suburbs of Amman and other cities of Jordan such as Cozmo, Abbadi and Al-Farid supermarkets. In the small cities and villages, small grocery stores (bakalahs), governmental civil and military consumption corporations' and mini markets still play the main role in the retail business (Deacon 2004) and (EIU, 2007).

### **2.2 E-commerce In Jordan**

During the last decade, Jordan has witnessed improvements in the information and communication technology (ICT) and e-services sectors according to the e-readiness rankings from received from (Almeida et al. 2006), in terms of connectivity technology infrastructure, business environment, social and cultural environment, legal environment, government policy and vision and consumer and business adoption. Furthermore, Jordan in general has adequate and efficient e-commerce requirements (Technology and Telecommunication Infrastructure, Institutional and Governmental Support and Organizations Readiness and Support) that lead to reach the required level of E-commerce Readiness (Al-Debei and Shannak, 2005).

### **2.3 E-commerce adoption benefits and barriers**

Electronic Commerce offers many potential benefits to SME's mainly by boosting productivity gains and reducing transaction cost and time (Goldman, 1993) and (Alemayehu, 2005). By utilizing the information technology, E-commerce can give SME's the ability to expand their business and to compete locally and globally (Al-Qirim, 2010) and (Sagi, 2004). In the developing countries, electronic commerce has contributed towards removing barriers of culture and national boundaries that face firms, leading to a globalized and unified society in this new era of knowledge economy (Kapurubandara and Lawson, 2006).

Furthermore many studies have emphasized the previous mentioned benefits of e-commerce over the developing countries stating that electronic commerce will help business by the ability of easy access to global market, adequate and efficient market research, removal of business intermediaries, reduced transaction costs and value creation (Payne , 2009) and (Al-Qirim, 2010). It is then widely accepted that electronic commerce contributes to the advancement of businesses in the developing countries (Kshetri, 2008). However, the adoption process of electronic commerce technologies among SMEs is faced by many significant challenges that make it slower. Those challenges or barriers could be grouped into many categories such as internal or external barriers (IhIstrum et al. 2003). While the internal barriers come from inside the organization sphere such as lack of technical skills, the external ones come from outside the organization such as cultural and social barriers. In addition these challenges, SMEs in the developing countries also face many other challenges such as lack of telecommunications infrastructure, lack of technical skills, high cost to implement e-commerce technologies and internet, low e-commerce use by customers and supply chain partners and logistical challenges such as the lack of timely and reliable systems for the delivery of physical goods.

### 3. METHODOLOGY

4. This section provides a description about the research instrument design, the sampling procedure and data collection technique. In order to explore the drivers and barriers that affect Jordanian grocery retailers' decision to adopt online grocery retailing, a specially designed questionnaire was distributed among 45 grocery retailers selected from a database provided by the ministry of industry and trade in Jordan, only a total of 30 responses were used for the final analysis. The questionnaire was divided into four parts; the first part asked about the respondents demographic variables such as type, location. The second part of the questionnaire asked about the current use of internet. The final part is the main focus for this paper, asked about the expected benefits and barriers of online grocery shopping. The main objective measured was customers and retailers perception, attitudes and requirements toward online grocery shopping and home delivery service models in Jordan. This study considers that grocery retailers are SMEs with 1 to 99 employees. The questionnaire was carried out in three major cities in Jordan; Amman, Irbid and Karak, since they are the highly populated areas in the Middle, North and south of Jordan respectively. In addition, Cronbach alpha test was used to assess the reliability of the used scales. Cronbach alpha values were (0.725) for the benefits scale and (0.781, 0.748) for the internal and external barriers scales respectively. These values are considered to be acceptable because they are above (0.7). The statistical analysis tool SPSS was used to test the validity of the main hypothesis.

### 5. RESULTS AND DISCUSSION

Table 1 includes the expected benefits from adopting e-commerce technologies in grocery retailing in Jordan as a case from the developing countries.

Benefits	Mean
Reduce cost and time of business	3.39
E-Commerce will increase sales	4.10
Improve customer Services	3.80
Providing customers with more satisfying shopping experience	3.50
Launch new products and increase the availability of them	3.47
Expand the market access by the accessibility to more customers	4.03
Support Linkage with suppliers	3.63
Increase the ability to compete	3.83
Help in making decisions	2.90
Help in jobs creation employment opportunities	2.93
Improve collaboration and partnership among SMEs in order to increase the market share	3.37
All Paragraphs	3.59

Table 1. OGS BENEFITS.

From the answers of the respondents we can see that the majority of them agreed with the statements that identify the potential benefits of online grocery retailing. The results show that the most expected benefit from adopting online grocery retailing is increasing sales while the least expected one is helping in decision making.

This gives an indication of a positive attitude from the respondents toward the benefits of online grocery retailing in general. In order to prove our results statistically we have to formulate a hypothesis and test it:

H1: Relative advantages have a positive influence on the adoption of online grocery retailing among Jordanian grocery retailers.

According to T-test results, which show that the value of t-calculated (6.126) is larger than the value of (t-value = 2.05, p<0.05) see Table 2. This will prove the correctness of our hypothesis.

	Test Value = 3					
	t-calculated	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Low	Up
H1	6.126	29	.000	1.63	1.434	1.828

Table 2. T-test Results for H1

Based on the respondents' answers, Table 3 is made to show the possible internal barriers to adopt e-commerce technologies in the Jordanian grocery retailing industry.

Internal Barriers	Mean
Lack of technical skills to implement and maintain e-commerce project	3.90
Trust and security concerns with payments over the internet	4.53
E-Commerce not suited to way our business is conducted	3.57
Lack of time to initiate the project	3.80
Inability to make and receive payments	4.03
E-commerce not suited to our products and services	3.07
Lack of awareness of e-commerce technologies and its perceived benefits	3.77
E-commerce not suited to our customers and suppliers	3.40
Lack of fund to finance the project requirements (Computer, Internet price, etc)	4.40
All Paragraphs	3.83

Table 3. OGS Internal BARRIERS.

Referring to Table 3, it was found that the overall Mean (3.83) is greater than mean of the scale which is (3); this gives an indication of a negative influence for the internal barriers on the adoption of online grocery retailing among grocery retailers. In order to prove our results statistically we have to formulate a hypothesis and test it:

H2: Internal barriers have a negative influence on the adoption of online grocery retailing among grocery retailers in Jordan.

According to T-test results, which show that the value of t-calculated (5.982) is larger than the value of (t-value = 2.05, p<0.05) see Table 4. This will prove the correctness of our hypothesis.

	Test Value = 3					
	t-calculated	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Low	Up
H2	5.982	29	.000	1.870	1.59	2.15

Table 4. T-test Results for H2

Table 5 then shows the possible external barriers that face this industry divided into cultural, infrastructure, political, social, and legal and regularity. These barriers have been categorized and addressed by (Goldman, 1993) and (MacGregor and Vrazalic, 2004, 2005)

External Barriers	Mean
Online Sales are not popular	4.33
Lack of telecommunications infrastructure in terms of speed and quality	3.27
Low Internet penetration in the country	3.07
Inadequate transportation infrastructure and delivery networks	3.30
Unstable economic climate in the country	2.83
Changing regulations with each government change	2.90
Lack of information on e-commerce	4.27
Little support and policies for SMEs from government and industry association	4.17
Inadequate legal framework for business using e-commerce	4.13
All paragraphs	3.64

Table 5. OGS external BARRIERS.

Referring to Table 5, it was found that the overall Mean (3.64) is greater than mean of the scale which is (3); this gives an indication of a negative influence for the external barriers on the adoption of online grocery retailing among grocery retailers. In order to prove our results statistically we have to formulate a hypothesis and test it:

H3: External barriers have a negative influence on the adoption of online grocery retailing among grocery retailers in Jordan.

According to T-test results, which show that the value of t-calculated (6.288) is larger than the value of (t-value = 2.05,  $p < 0.05$ ) see Table 6. This will prove the correctness of our hypothesis.

	Test Value = 3					
	t-calculated	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Low	Up
H3	6.288	29	.000	.640	.432	.848

Table 6: T-test Results for H2

According to the respondents' answers, the internal barriers such as security and trust concerns over internet payments got a higher average comparing to the external ones such as popularity of online sales. This means, the respondents feel that the internal barriers which come from inside the organization sphere have more negative power on their decision to adopt online retailing than the external ones. This can be also explained by the nature of our sample in addition to the internal barriers, since our sample is composed from SMEs which usually characterized by its poor and centralized management and its limited financial, time and personal resources (MacGregor and Vrazalic, 2004, 2005).

## 6. CONCLUSION

The purpose of this study was to investigate the factors that affected Jordanian grocery retailers' decision to adopt online grocery shopping. The preliminary findings from our survey indicate that the respondents most of

the grocery retailers in our sample reported that the most expected benefit from adopting online grocery retailing is increasing sales while the least expected one is helping in decision making. According to the respondents', internal barriers such as security and trust over internet payments is more worrying to the external ones such as popularity of online sales. In the light of the survey findings, the results recommend that in order to have a healthy environment for OGS in Jordan, the grocery retailers specially small ones "bakalabs", which composes the major part of this industry, need to have support from the government and the technology vendors. This support could be in terms of technical and infrastructural advancements, provision of funds for SMEs and build a proper e-commerce education system.

Further research needs to be conducted to explore the online grocery shopping adaptation factors considering a larger sample covering all barriers in the developing countries. The research should also try to compare these findings with those from other developing countries. The research should examine the suitability and profitability business models for this type of retailing. The research should also try to compare its findings with those associated from other developing countries.

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