The Impact of Establishing a Governmental Consumer Agency in Jordan towards Expanding the Use of E-business

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Abstract

Although E-business and E-commerce have become essential in our daily lives, the use of E-business in the Middle East / Jordan is still limited due to many factors.

This study has three objectives; first, it determines whether the government in Jordan supports E-business; second, it determines whether people in Jordan are aware of the concept of E-business and its use; third, whether introducing a proposed Governmental Consumer Agency will help to expand and grow E-business in Jordan.

According to the result of the study (740) respondents indicated that the government in Jordan is not supporting the development of E-business and does not play any roles in encouraging the E-business expansion and it has to pay attention to the concept of E-business and support its development completely. Another indication was that the people in Jordan are aware of E-business.

Finally the establishment of a Jordanian Governmental Consumer Agency would have a significant impact on expanding the use of E-business and on encouraging people in Jordan to go online.

Keywords: E-business, E-commerce, governmental consumer agency

1. Introduction

Market has become a major and essential business tool in many countries all over the world. Most of the European countries have an ideal infrastructure for E-business, and they having a concept of E-business that is properly organized. On the other hand the concept of the E-business in the Middle East and Jordan is not as fully developed (Khushman, 2009).

The researchers are attempting to answer number of questions: Does Jordan have the proper infrastructure for successful E-business; Are people in Jordan aware of the advantages and disadvantages and the concept and use of E-business; Is the government in Jordan doing enough to increase the use of E-business and increase awareness levels of e-customers' rights and responsibilities.

Many barriers can still be found in Jordan, which make the use of the E-business limited. Some of these main barriers are:

1) Dealing with unknown vendors (Kshetri, 2007).

2) Trust. It is difficult for people to trust websites (unknown vendors), especially in the Middle East where culture plays an essential role in preventing people there from engaging in E-business. People in the Middle East in general prefer to see the item they plan to purchase, exanimate it, and negotiate the price…etc. These steps cannot be followed for online purchases (Akhter & Kaya, 2008).

3) Providing credit card details online (Obeidat & Abu Shanab, 2010).

4) Shipment. It might take time for purchased items to reach the buyer (Kshetri, 2007).

5) After-sales Service. If the buyer does not like the item purchased, or is not satisfied with the service and product provided, then it might be difficult for the buyer to contact the website, make a complaint, secure a

refund or exchange for the item in question …etc. (Obeidat & Abu Shanab, 2010).

6) Receiving Faulty goods and incorrect items (Obeidat & Abu Shanab, 2010).

These barriers play a major role in the Middle East / Jordan in preventing people from engaging fully in the use of the E-business.

2. Problem Statement

This study will explain the facts about engagement with E-business in Jordan, it will also explore a possible solution for improving engagement with E-business in Jordan. The following key questions can help clarifying the problems identified in this study:

1) Are people in Jordan aware of E-business's use and concept?

2) Is there a solution for the Jordanian government to help grow E-business nationally and internationally?

3) Does Jordan have the infrastructure to support the development of e-business?

4) Will the establishment of a Jordanian Consumer Agency encourage or improve engagement with E-business in Jordan?

3. Statement of the Research Objectives

The objectives of this study are to determine the impact of introducing a Government Consumer Agency in Jordan that will have responsibility to protect e-customers nationally and internationally, and investigate any complaints, issues, or queries…etc. from e-customers relating to their experience of engaging in E-business based in Jordan.

There are further objectives related to the statement of the research:

1) Advantages and disadvantages of E-business.

2) Determining if people in Jordan are aware of E-business.

3) Determining the role and responsibilities of a government in encouraging trust in E-business.

4) The final objective is to ensure that the role of a Jordanian Consumer Agency of making e- customers aware of their rights and responsibilities is known and fully understood by e-customers.

4. Research Hypotheses

The researchers have set three hypotheses:

H01: There is no significant relationship between the Jordanian government's roles and regulations and E-business use in Jordan.

H02: There is no significant relationship between the Jordanian customer's beliefs and E-business use in Jordan.

H03: There is no significant relationship between establishing a government consumer agency in Jordan and the use of E-business in Jordan.

5. Suggested Model

Based on some previous studies in E-business in the global environment (Kazerooni, Adlband, & Mahdiyar, 2011; Ashrafi & Baghdadi, 2009), the researchers suggest the following model as shown in Figure 1 which clearly shows the strong relationship between E-business, customers and government. The model explains the independent variables which are Jordanian government's roles and regulations, Jordanian consumer's beliefs, and government consumer agency establishment in Jordan. It also shows the dependent variable which is E-Business use in Jordan.
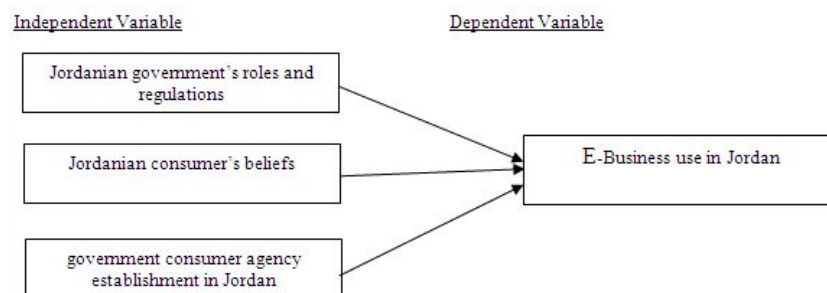

Figure 1. Research model

6. Study Population

To be able to examine the research problem and the questions raised in that respect, and in order to fulfill the objectives of this study, the researchers have chosen to conduct their research on E-business in Jordan and analyze feedback from people in Jordan.

1200 Questionnaires were distributed randomly to the Jordanian people who are older than 18 years old and the researchers received 800 responses. There were 740 valid responses, so the percentage of valid response is 0.616.

7. Validity and Reliability of the Instrument

The researchers use Cronbach alph to test the internal reliability of the measurement instrument. In this study 0.60 or higher is considered acceptance (Saunders, Lewis, & Thornhill, 2009).

The researchers used the following statistical methods to analyze the data collected and to draw the appropriate conclusions via SPSS version 19 (Joaquim, 2007):

1) Alpha Cornbach is used to measure the reliability of the instrument. The criterion used equals to 0.6, so whenever α of any variable equals to or more than 0.6, it is considered reliable.

2) Frequency and percent are used to describe the sample characteristics.

3) Mean and standard deviation are used to describe the instrument items.

4) One sample T-test is used to determine the degree of agreement of the effect of independent variables.

5) One way-ANOVA and two independent sample T-tests are used to determine whether the independent variable affect the dependent variable.

As shown in table 1 the Cronbach Alphas ranged from .729 to .882, thus establishing the reliability of the sample. It is clear that all values of alpha are high. This indicates that for each measurement of a variable, the items are highly correlated and consistent.

Table 1. Cronbach's alpha for each scale

No.	Variables	Cronbach alpha
1	The Government in Jordan plays a main role in expanding E-business in Jordan	.729
2	People in Jordan are aware of E-business	.818
3	Establishing a Jordanian Consumer Agency will help in expanding E-business.	.882

8. Literature Review

Recently, the terms E-business and E-commerce have been used in our daily lives. Most of the people today are using their online bank services rather than going to the bank by themselves, many of them are buying stuffs from the internet everywhere rather than travelling to get these stuffs (Gokmen, 2012).

E-business is the process of doing business and achieves work using the online services and the internet. In addition to selling goods, E-business is different from E-commerce that it has a lot of services and providing technical support (Shanshan & Lei, 2010).

In addition, E-business can also be identified to act as the application of information communication technologies (ICT). This ICT provide all the features of business starting from products exchange between individuals to exchange these products among organizations and groups (Weber & Kauffman, 2011). E-commerce can be defined as the process of buying, selling, transferring, or exchanging products, services, and/or information via electronic networks and computers. Nowadays, increasing the number of shopping online and increasing the number of stores that have shopping services online lead to introduce the term E-commerce, which has two major types business to customer (B to C) and Business to Business (B to B) (Turban & King, 2012).

8.1 E-business Goals

In order to find out the goals of any e-business, the following questions need to be answered: What shall the companies do in order to transform their strategies and processes to e-business? If a company wants to establish an E-business and start to expand globally, it needs to know what its goals are, what the benefits are of doing this, what its responsibilities are towards e-customers (Gani & Toleman, 2006).

The goals of any company to transfer to E-business are (Turban & King, 2012):

(a) reduced costs; (b) lowest product cycle time; (c) Faster customer response; (d) Improved service quality; (e) Expand the business internationally; (f) Customization; and (g) Lower communication cost.

8.2 Benefits of E-business

There are many benefits of E-business to the consumer, businesses, and society. Some of these benefits are:

1) Worldwide Existence: this is the most important advantage of the e-business. Most of the huge organizations become already using the e-business in serving customers and corporate with other companies and business such as IBM, Dell, and other huge business such as Amazon (Zhang, 2010).

2) Reducing the costs of marketing and increasing the size of the products markets: the e-business increases the range of the products market via the web market and reduce the cost of marketing because many people can see this e-business for almost free (Vijay & Kim, 2011).

3) Improving the Competitive Policy: increasing the number of organizations, which is using the e-business increase the demand of having competitive rules to manage this field (Turban & King, 2012).

4) Better Customer Relation Management (CRM): the studies prove that the customer satisfaction about the companies that are using e-business portals is better than the traditional companies mainly because of the online way of tracking customers' orders (Standing & Lin, 2007).

5) Availability: E-business is available 24 hours a day. The website can be navigated and products accessed on an ongoing basis (Vaithianathan, 2010).

8.3 E-business Limitations and Barriers

However, In the Middle East generally, and in Jordan specifically, there are barriers and limitation that prevent the companies from transferring their business to e-business (Ashrafi, Yasin, Czuchry, & Alhinai, 2007).

The researchers have identified the following barriers:

1) Culture: The culture of people in the Middle East plays a significant role among people and companies refusing to deal with unknown vendors / websites. People prefer to deal with face-to-face – in a more traditional way, preferring to examine the item if it is tangible, negotiate the price (Ashrafi, Yasin, Czuchry, & Alhinai, 2007).

A study has been published that explores the impact that culture plays in E-business use in the Middle East. It concludes that there is an increment in E-business implementation because of increased levels of education (Khushman, 2009).

In addition, another study has discussed the effect of expanding the ICT on economic freedom in the Middle East. The study showed that increasing the e-business market will increase the economic freedom but its various and different among the countries (Weber & Kauffman, 2011). Researchers have also described the culture that support doing e-business and e-commerce to be as e-culture. While the other culture that restricts using the e-commerce business to be traditional culture. Therefore, e-culture is the main source of our knowledge about the applications and resources needed in the e-commerce nowadays (Ashrafi, Yasin, Czuchry, & Alhinai, 2007).

Culture is not really the main factor of hiding the e-commerce in the Arab world. A study has been done to compare the Arab culture with the American culture related to the e-commerce. The result of that study showed that the Arab culture related to the e-commerce and e-business is not far-away from the American e-culture. Therefore, other factors affect the expanding of e-commerce in the Middle East and the Arab world such as informational bases and infrastructure in addition to the need to governments' guidelines to use e-commerce (Akhter & Kaya, 2008).

2) Security and trust: This can be explored from two perspectives (Beatty, Reay, Dick, & Miller, 2011):

(a) using a secure payment method; and (b) trust in unknown vendors and ensuring that items sold are of satisfactory quality.

Whilst the security of a website is always a worry, the vast and continued improvements in E-commerce security are whittling away at the danger. The main disadvantage is the time required to learn about good security measures, including digital signatures and encryption. If companies do not take that time, the damage could end up costing considerably more (Khasawneh, Azzam, & Bsoul, 2009).

Banks are increasingly taking responsibility for secure online payments to ensure that fraud will not take place. When they notice any suspicious transactions, Banks will block / hold the transaction and contact the credit card holder to make sure that the transaction is valid (Knight, Buffett, & Hung, 2007).

The second perspective, which is trusting unknown vendors, has nothing to do with the bank, as this is between the e-company and the e-customer directly. When a problem occurs and the customer is not happy or satisfied with the service he receives from the E-business, he will require support from an independent third party in order to build and maintain trust in E-business. This will be dealt with through the actual research and will be explored in detail throughout the entire dissertation by providing figures, surveys and actual research (Beatty, Reay, Dick, & Miller, 2011).

In many people's minds, purchasing products over the Internet is still not as safe as purchasing products in traditional bricks and mortar establishments. Since people cannot see the person on the other end of the computer, they might have issues purchasing products depending upon the product and sector. Poor or no consumer trust can negatively impact on sales and overall success (Knight, Buffett, & Hung, 2007).

3) Internet Technology: Most notably, businesses must ensure that their website stays up and functional; this is the equivalent to a physical store staying open. If an Internet business goes offline due to technical issues, it can cost them profit; therefore, it's essential to either have the technical skills or have someone in the company that possesses the technical skills to keep the company's website functional at all times (Ashrafi & Baghdadi, 2008).

8.4 Relationship between E-business and Government

There is a significant relationship between E-business and government roles on conducting E-business. By reviewing these roles we will discover that the government in Jordan does not have in place specific terms and conditions to protect consumers' rights or to even encourage those e-customers to engage in E-business (Diego, 2010; Dwivedi, Williams, & Alryalat, 2012).

Figure 2 shows clearly the relationship between E-business and government policy on E-business (Khushman, 2009).
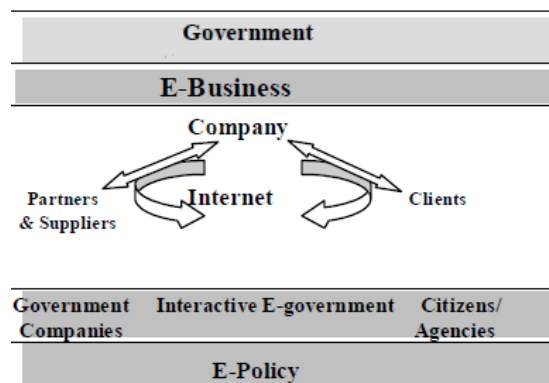

Figure 2. Relationship between government and e-business

One of the most significant reasons for many people in the Middle East not engaging in E-business, is the lack of government legislation, rules and protection for conducting business online (Obeidat & Abu Shanab, 2010).

In establishing E-business or E-commerce, both the e-company and the e-customer will need to establish, as a minimum, the following (Zhang & Guo, 2012; Abu Hamid, Shah, & Arshad, 2010):

(a) build customers trust; (b) high speed internet infrastructure; (c) web applications development and hosting; (d) security enhancement; (e) privacy policies and contracts; (f) secure payment gateways and methods; (g) increasing the number of people using credit cards or even debit cards; (h) legal requirements for E-business; (i) customer service support; and (j) terms and conditions.

8.5 Internet Usage

As shown in Figure 3 it is clear that the percentage of internet use in the Middle East is significantly low compared by the rest of world (Internet World Stats, 2013).
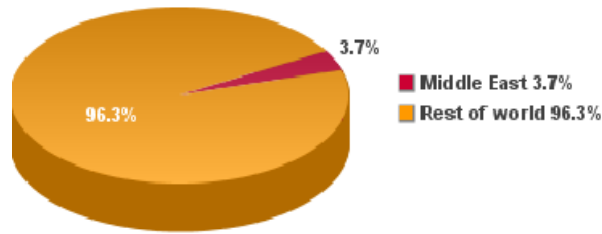

Figure 3. Internet users in the Middle East and the World - June 2012
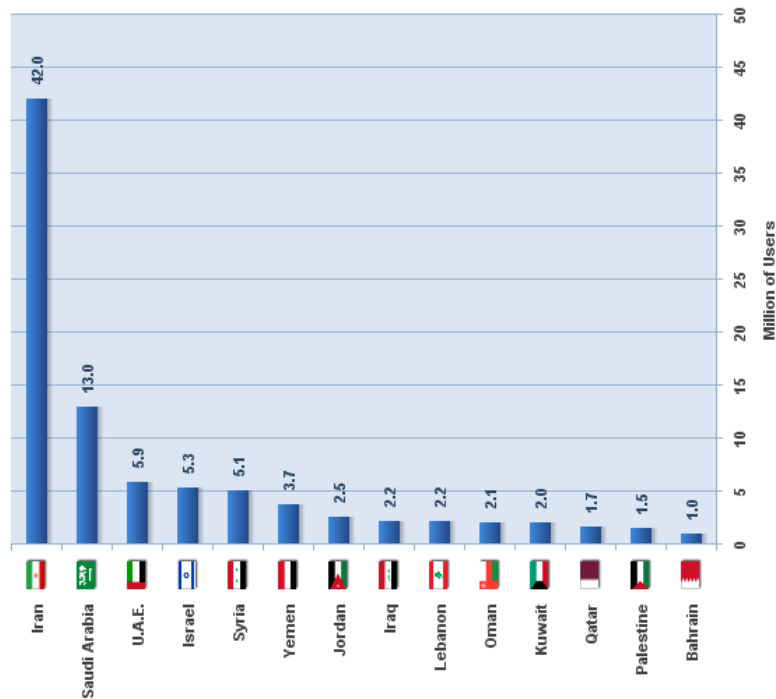

Figure 4. Internet usage in the Middle East

As shown in figure 4 internet usages in Jordan is among the lowest in the Middle East (Internet World Stats, 2013).

The Government in Jordan is trying to develop and improve the concept of technology and E-business. The government has handed over this role to be the responsibility of the Ministry of Information and Communication Technology (MoICT). The MoICT has played the main role of transferring Jordan to the socio-economic using the transformation to the knowledge based economy since 2002. In addition, all policies and privacy rules has been made by the MoICT in Jordan (MOICT, 2013).

MoICT has set up goals to be accomplished; these goals are (MOICT, 2013):

1) ICT supporting socio-economic growth.

2) Strong competitive ICT sector.

3) Legislative environment that is supportive to ICT and potential investments.

4) Contribute to efficient government and good governance

5) A connected ICT literate society

9. Data Analysis and Results

9.1 Population Description

This section gives a demographic breakdown of the questionnaire respondents in Jordan. It gives details of respondents' gender, age, educational level, internet access at home, Internet access at work, preferred method of payment, and online purchasing in the past. These details are included in Table 2 below.

Table 2. Population description

Variable	Category	Frequency	Percentage
Age	Under 30	190	25.7 %
	31-40	250	33.8 %
	41-50	180	24.3 %
	Over 50	120	16.2 %
Gender	Male	430	58.1 %
	Female	310	41.9 %
Educational Level	High school	120	16.2 %
	B.A	320	43.3 %
	Diploma	140	18.9 %
	Master	100	13.5 %
	PhD	60	8.1 %
Internet at Home	Yes	660	89.2 %
	No	80	10.8 %
Internet at work	Yes	700	94.6 %
	No	40	5.4 %
Have you ever purchased an item online?	Yes	470	63.5 %
	No	270	36.5 %
Do you have a credit card?	Yes	570	77 %
	No	170	23 %
What type of internet access you have?	Dial up	680	91.9 %
	Broadband	60	8.1 %
Which is your preferred method of payment when purchasing goods?	Visa Card	330	44.6 %
	Visa Debit Card	130	17.6 %
	Pre-Paid Card	280	37.8 %

9.2 Central Tendency Measures

In general terms they are several characteristics to distribution of a set of measurements or values around a given value or values at or near the middle of a set. The principal measures of central tendency are mean and median (Saunders, Lewis, & Thornhill, 2009). Mean and standard deviations were used to describe attitudes toward the following questions:

Table 3. Jordanian government's roles and regulations results

No.	Jordanian government's roles and regulations	Mean	Std. Deviation
1	The government in Jordan offers online discounts such as Car Tax, electricity bills….etc.	1.86	.648
2	The government in Jordan allocates a budget to expand E-business nationally and internationally	2.20	.720
3	The government in Jordan has established terms and conditions to manage the use of E-business	2.28	.673
4	The government in Jordan has established rules to protect e-customers for online purchases.	2.08	.430
5	The government in Jordan plays a main role in establishing a good internet service	2.82	.850
6	The government in Jordan will represent any e-customers who may have issues / complains about online purchases.	2.05	.826
7	The government in Jordan actively promotes awareness of the advantages of E-business through brochures, information leaflets	2.26	.470
8	The government in Jordan actively promotes awareness of e-customers rights and responsibilities.	3.95	.327

The respondents were asked to indicate whether or not they believe Jordan supports E-business. The means of the responses range from 1.86 to 3.95 as shown in Table 3.

On the five-point scale, this suggests that if the mean results are less than 3, the respondents are more inclined to believe that the Government in Jordan does not support E-business.

Table 4. Jordanian consumer's beliefs

No.	Jordanian consumer's beliefs	Mean	Std. Deviation
1	People in Jordan believe that a greater Variety of items can be found or purchased online as opposed to more traditional retailing.	3.50	.555
2	People in Jordan believe that E-business is much easier than purchasing goods in the traditional way	3.26	.525
3	People in Jordan trust Middle eastern websites	2.22	.625
4	People in Jordan trust websites not based in the Middle East.	3.69	.495
5	People in Jordan believe that cost of goods is cheaper online	2.93	.253
6	People in Jordan trust websites enough to provide their credit card details online.	2.53	.579
7	People in Jordan trust websites enough to provide their Prepaid internet cards online.	3.57	.723
8	People in Jordan are aware of the advantages of E-business	2.99	.767
9	People in Jordan are aware of the disadvantages of E-business	2.99	.767
10	People in Jordan believe that the government is doing enough to support E-business	2.41	.739

Table 4 shows the mean ratings of people in Jordan who expressed their beliefs and awareness levels of E-business. The mean results are between (2.22) and (3.69). Based on table 4, most of the results are around 2.5 and slightly above. This suggests that respondents' beliefs awareness levels in E-business are neither very high nor very low.

Table 5. Government consumer agency establishment in Jordan

No.	Government Consumer Agency Establishment in Jordan	Mean	Std. Deviation
1	Jordan is in need of a government entity to support the use of E-business nationally and internationally.	4.24	.491
2	Jordan can learn from the experience of countries such as UK / USA/ Canada and EU that are considered leaders in the use of E-business.	3.96	.671
3	People in Jordan will be more inclined to go online and feel protected if a Jordanian Consumer Agency is established by the government.	3.99	.202
4	There is a need for a Consumer Agency in Jordan that represents and gives voice to e-customers that have issues / concerns /complains relating to E-business.	4.15	.358
5	There is a need for the government in Jordan to establish a Consumer Agency that will protect e-customers and be responsible for resolving their issues relating to E-business.	4.01	.116
6	The establishment of a government Consumer Agency in Jordan will encourage people to engage in E-business.	4.28	.511
7	The establishment of a government Consumer Agency in Jordan will make people feel that consumer rights are protected when they engage in E-business.	4.18	.383
8	Jordan has the technical infrastructure to support increased use of E-business.	4.05	.639
9	People in Jordan have the education level and awareness to engage in E-business.	4.05	.571
10	The culture in Jordan is changing to the extent that it encourages grater engagement with E-business.	4.20	.405
11	The establishment of the Consumer Agency in Jordan will help minimize the percentage of fraudulent websites in Jordan.	4.34	.476
12	Will the establishment of a Consumer Agency in Jordan help to increase the use of E-business?	4.23	.484

As shown in Table 5 the rating scores for each of the twelve statements were more than 2.5. This suggests that respondents believe that Jordan is in need of establishing a Consumer Agency. This proposed agency will help to raise peoples' awareness of E-business and will help people to be confident in engaging in E-business.

9.3 Hypotheses Testing

Hypothesis (1):

H01: There is no significant relationship between the Jordanian government's roles and regulations and E-business use in Jordan.

Ha1: There is a significant relationship between the Jordanian government's roles and regulations and E-business use in Jordan.

Table 6. Test of hypothesis (Ho1)

T calculated	T tabulated	T Sig.	Result of Ho1
-15.170	3.18	0.829	Accept

Referred to Table 6, one sample T-test used at .05 significant level to test the hypothesis. It was found that Sig. T value is more than 0.05, and (calculated T = -15.170) which is less than T tabulated value. According to the decision rule: Accept Ho if calculated value is less than tabulated value, and reject Ho if calculated value is greater than tabulated value. Therefore, Ho1 is accepted and Ha1 is rejected. This indicates there is no significant

relationship between the Jordanian government's roles and regulations and E-business use in Jordan. Therefore there is no support from the government in Jordan in relation to expanding or supporting E-business.

Hypothesis (2):

H02: There is no significant relationship between the Jordanian customer's beliefs and E-business use in Jordan.

Ha2: There is a significant relationship between the Jordanian customer's beliefs and E-business use in Jordan.

Table 7. Test of hypothesis (Ho2)

T calculated	T tabulated	T Sig.	Result of Ho2
10.022	3.18	000	Reject

As Table 7 indicates, that one sample T-test used at .05 significant level to test the hypothesis. It was found that Sig. T value is less than 0.05, and (calculated T = 10.022) is more than T tabulated value Therefore, Ho2 is rejected and Ha2 is accepted. This indicates that there is a significant relationship between the Jordanian customer's beliefs and E-business use in Jordan. Therefore People in Jordan are aware of E-business.

Hypothesis (3):

H03: There is no significant relationship between establishing a government consumer agency in Jordan and the use of E-business in Jordan.

Ha3: There is a significant relationship between establishing a government consumer agency in Jordan and the use of E-business in Jordan.

Table 8. Test of hypothesis (Ho3)

T calculated	T tabulated	T Sig.	Result of Ho3
59.097	3.18	000	Reject

As Table 8 indicates, that one sample T-test used at .05 significant level to test the hypothesis. It was found that Sig. T value is less than 0.05, and (calculated T = 59.097) is more than T tabulated value Therefore, Ho2 is rejected and Ha2 is accepted. This indicates that there is a significant relationship between establishing a government consumer agency in Jordan and the use of E-business in Jordan. This leads to the conclusion that establishing the Jordanian Consumer Agency will have a positive impact on increasing the use of E-business in Jordan.

10. Conclusions and Recommendations

10.1 Conclusions

As shown in Table 9 the government in Jordan does not support E-business according to the following results:

- Government in Jordan does not encourage people to engage in the use of government services online. The main reason in support of this statement is that the Government does not provide any offers or discounts online.

- Government in Jordan does not promote any awareness of the advantages and disadvantages of E-business. The lack of resources such as leaflets, brochures, training programs, etc. are the main reasons that it is believed government in Jordan does not promotes such awareness.

- Government in Jordan does not support any e-customer when it comes to any escalated issues. This belief is held because no governmental agency in Jordan is mandated to do so.

Table 9. Conclusion study results

Hypotheses	Result of Ho
The Jordanian government's does not provide roles and regulations toward E-business use in Jordan.	Accept
People in Jordan are not aware of E-business.	Reject
Establishing the Jordanian Consumer Agency will not have a positive impact on increasing the use of E-business in Jordan.	Reject

Based on the results of the questionnaire, on the one hand it is clear that people in Jordan are somewhat aware of the concept of E-business. On the other hand however, the results indicate that people in Jordan still prefer not to use their credit cards online, do not trust websites based in the Middle East, and are not fully aware of their rights and responsibilities when engaging with E-business.

Furthermore, people in Jordan still believe that if they have any issues in relation to receiving faulty goods or in receiving substandard service, then it might take some time for those issues to be resolved, if at all.

Finally it is clear that there would be a significant impact on expanding E-business and increasing the awareness level of e-customers, if a Jordanian Consumer Agency were to be established.

People in Jordan would rely on the information provided by the Consumer Agency. People in Jordan would express their concerns; escalate their issues to the Consumer Agency in order for the Agency to resolve these issues.

10.2 Recommendations

Based on the previous results, the researcher recommends the following:

1) The government in Jordan has to support E-business by offering online discounts such as car tax, electricity bills and allocating budgets to expand E-business nationally and internationally. The government in Jordan has to consider developing and implementing a set of terms and conditions that will help to manage the use of E-business from both an e-customer and E-business point of view. Introducing these terms and conditions will help protect e-customers when making online purchases and using online services.

2) The government in Jordan has to represent any e-customers who may have issues / complaints about their online purchases.

3) The government in Jordan has to promote awareness of the advantages of E-business through brochures, information leaflets, and magazines, etc.

4) The government in Jordan has to actively promote awareness of e-customers rights and responsibilities.

5) The establishment of a Government Consumer Agency in Jordan will help people to feel that their consumer rights are protected when they engage in E-business.

6) The establishment of a Consumer Agency in Jordan will help minimize the percentage of fraudulent websites in Jordan.

Acknowledgments

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