The Reality of Businesses to Consumers E-Commerce in Jordan: A Study of the Jordanian Industrial Companies from the Perspective of Employees

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Abstract
This study aims to identifying the scope of e-commerce employment among businesses and customers. So, the present study aims at achieving the following goals:
1- Gaining knowledge concerning e-commerce, its characteristics, forms and requirements.
2- Identifying the scope of e-commerce at the Jordanian market, and awareness concerning e-commerce among individuals and firms.
3- Determining the degree of success of e-commerce usage on the operations and the value of companies and individuals from the perspective of employees at those companies.

The researcher found a number of recommendations based on the results of the study,
1- Conducting similar studies examining the factors affecting the application and adoption of e-commerce among Jordan firms, based on different years in which the required methods for encouraging e-commerce.
2- Approving laws and legislations which regulate e-commerce among the firms which adopt e-commerce.
3- The necessity of awareness and guidance provision for the employees at the e-commerce firms and their customers concerning the importance of e-commerce and employing its capacities which may yield great benefits for the firm and the customer if applied appropriately, supported by relevant regulations and laws.
4- providing training courses for the employees at the firms in order to create an environment which is suitable for, and aware of e-commerce.

Keywords: E-Commerce, Businesses, Jordanian Industrial Companies, Perspective of Employees

Introduction
The world has witnessed great changes in all Aspects of life, and these developments and changes included changes to the way of life. The technological revolutions and developments, especially communications and information technology played an important role on creating these changes. The emergence of internet led to a shift from traditional methods in transactions and doing business and communications towards the digital method which depends on machines and tools that are operated and managed digitally. Thus, a new concept has emerged, which is the concept of electronic commerce, which became an inevitable reality that can not be ignored or rejected by the countries in the world because e-commerce has achieved a remarkable development in the performance of companies and in using means of communications and information technology.

E-Commerce is an advanced method for doing business, which depends on executing all the processes of purchasing and selling commodities, services and information through the Internet (Rafat, 1999). E-Commerce means more than the processes of purchasing and selling of commodities, services and information through the internet, in that in incorporates all operations and communications which are performed electronically, and which are aimed at satisfying the desires and needs of consumers, firms and managers through decreasing the cost of services and enhancing their efficiency and rapid delivery (AL – Haje, 2004).

So, most companies and organizations began marketing, updating and developing their products through the various methods on the internet according to the electronic development and the various needs and requirements, and those firms give a lot of attention to e-commerce which a global form of trade which knows no borders and which exist and reach every place in the world, and which accrued 1 trillion dollar in 2002 (Salman, 2005).

On the other hand, the benefits gained through e-commerce are not less important than those benefits gained by the producer, the customer is no longer in need for moving the product he wants, and additionally, he is no longer under the mercy of the seller or producer who monopolizes a certain commodity in a certain region. Therefore, he is capable of saving money, time and effort related to gaining what he wants through the computer and the web, in that he can, through a single browser, arrive at the best commodities and the cheapest prices in any place in the world (Najm and Jafar, 2009).

Based on what is mentioned above, this study aims at examining e-commerce and identifying the scope of its application and distribution and its success in performing its role in the Jordanian market.
Problem and Questions of the Study
This study examines electronic – commerce in Jordanian society and market in order to identify its present reality in terms of its distribution, scope and application, and consequently the scope of its success in Jordan. This will be attempted through examining the perspectives and attitudes of employees at the firms operating in e-commerce which were ignored in the various studies. So, in this study, the attitudes of employees at the companies will be highlighted in terms of the scope and success of e-commerce in Jordan.

So, we can say that the questions below represent the problem of the study:
1- What is the scope of applying e-commerce and its success in the Jordanian market and society from the perspective of the employees at the companies working in the field of e-commerce?
2- Are there significant differences at the significance level of \( \alpha = 0.05 \) in applying e-commerce among businesses and consumers at the Jordanian market form the perspective of the employees at those companies, and which are due to the variables of: Gender, years of experience and their interaction?

Importance of the Study
The importance of this study is related to the importance of e-commerce in our time, despite the fact that it has became a reality in many countries, firms and markets, it is still new and vague to the Jordanian market, and there is still a knowledge gap in terms of the Jordanian companies and individuals concerning e-commerce as well as its importance, applications and uses. So, this study extends the previous studies which dealt with the topic of e-commerce in Jordan at present which is a late time. Actually, the study examines whether awareness has increased as well as the distribution of e-commerce and its value or are we still at the gates of this huge and successful electronic world from the perspective of the companies and customers. This study aims at aiding companies and customers in Jordan in identifying the importance and advantages of e-commerce, so that the advantages of that form of trade may be employed fully.

Purposes of the Study
This study aims at identifying the scope of e-commerce employment among businesses and costumers. So, the present study aims at achieving the following goals:
1- Gaining knowledge concerning e-commerce, its characteristics, forms and requirements.
2- Identifying the scope of e-commerce at the Jordanian market, and awareness concerning e-commerce among individuals and firms.
3- Determining the degree of success of e-commerce usage on the operations and the value of companies and individuals from the perspective of employees at those companies.

Limitations of the Study
The most important limitations of this study are the following:
1- The study was limited to the customers of Industrial firms listed in Amman stock exchange.
2- The study is limited to the customers of firms who were present there when the questionnaires were distributed at headquarters.
3- The results of the study depended on the questionnaire.
4- The study sample doesn't include all its population, a sample was chosen randomly.

Theoretical Framework
First : The concept of e-commerce
The concept of e-commerce has developed, based on the developments in the technology of communication and information in one hand, and the growth in commercial and economical interactions the on the other hand, and lastly due to the increase in internet access and its usage in transactions. The has led to extending the concept of e-commerce. Al-Isawi (2003) suggests that e-commerce in its narrow meaning is an exchange of commodities and services through an electronic means or medium. And in its broad meaning, e-commerce means any information or services provided by the company to another company or by the company to the customer or consumer through the internet or any other electronic means of communication.

Murad (2003) defines e-commerce as a new concept implying the process of selling and buying or the exchange of products, services and information through computer networks, which include the internet.

WTO defines e-commerce as "the distribution and marketing of commodities and services through electronic means".

AL- Sahawneh provided several definitions for e-commerce in his book which included the following: "e-commerce is a modern method for doing business and provision of services, characterized by rapid performance, and which incorporates the use of the internet in searching for, and retrieving information as well as the support of decision making among individuals and technology and services directed at accelerating
transactions and identifying a mechanism for the exchange of information within the organization and between businesses and agents”. Additionally, he provided the following definition: e-commerce is the production of, and promotion of products through the communications network, and it is also a form of commercial exchange through the use of communications networks between businesses and their customers or between businesses and the administration (Sahawneh, 2005).

Second: Advantages and Dangers of e-commerce

E-commerce can be distinguished from traditional commerce by a set of advantages which give it priority and advancement, which include:

1. Saving time, effort and expenses required for shopping and transportation.
2. Decreasing the costs of storing because purchasing is based on the demands of customers, which leads consequently to increasing the revenues of sales.
3. Saving the expenses of commissions, and wholesalers and retailers, because transactions are performed directly between the firm and the consumer.
4. The image of businesses is transformed from the traditional image which depends on the existence of huge buildings and using organizational structures which are complex, into the electronic method in which few employees are required and no need for huge buildings or geographical sites (Al-Isawi, 2003).
5. The costs of virtual stores which are lower than traditional stores.
6. Capacity for spreading out and accessing global international markets easily and with low costs.
7. Finding new means for the protection of intellectual property through the allegiance of customers and accessing new markets and finding new products (Al-Hajy, 2005).

However, despite these various advantages, several dangers related to e-commerce may exist (Najm and Jafar, 2009):

1. Falsification: due to the low costs of establishing new electronic websites and the easiness of copying pages through the internet, so that illegal websites imitate the interfaces and attract customers in order to steal their information and their credit cards numbers.
2. Eavesdropping: through browsing the internet and buying and selling items, personal information and credit cards numbers are stolen.
3. International damage: an unsatisfied agent or a rival may penetrate the website of the firm.
4. Changing data: in addition to stealing the information, data can be changed, including the customer's data or the data related to the price of the product or the quantities demanded which may cause a lot of problems.
5. Denying the transaction: A party in a transaction may deny the electronic transaction before and after, and that party benefits.
6. Unintentional mistake: such as when an agent inserts wrong information concerning the quantity of product required (100 items instead of 10 for example), which leads to a lot of problems.

Third: Patterns and Forms of E-commerce

E-commerce has a set of patterns which makes it a multi-dimensional concept that can be applied and used in various forms including:

1. Business to Business (B2B)

This form is between businesses through communications networks and information technology (IT), for making biddings and proposals to suppliers and handing invoices and completing paying processes. This form of e-commerce dates back to several years ago, especially in exchanging data electronically through intranets and is considered the most widely used form.

2. Business to Customer (B2C)

This form is related to retailing in normal commercial exchanges. On the web, several commercial centers have created their websites through which the customer and the businesses can make buying and selling electronically. Now, several Shopping Malls are providing their services and commodities, and executing transactions through the internet. Payments can be made through various means, including credit cards, electronic networks and cash payments upon delivery or completion of the transaction. This method is the one that will be examined in terms of its scope and success in the Jordanian context.

3. Business to Administrative

This form is concerned with the transactions between businesses and governmental organizations. Governmental purchases can be announced through the internet, and companies can have electronic correspondence with the governmental agencies (such as the case of the USA). The governments can publish the procedures and transactions forms which are of interest to businesses through electronic means, as well as making transactions electronically, without the need for a review or dealing with the offices of governmental agencies. But this form will expand rapidly if the governments adopt the methods of e-commerce.
4- Administrative to Customer

In this form, the governmental services are provided electronically to citizens, such as paying taxes, which can be completed electronically without the need for visiting the governmental agencies related. This form is not existent yet, but it may spread out with the growth in electronic transactions and the developments in (B2C) and (B2A) forms of e-commerce.

Fourth : E-Commerce between Businesses and Consumers

This type can be called (e-shopping) and tele-shopping. And as we mentioned before, electronic commerce between businesses and consumers is the same as traditional commercial transactions, but is completed electronically through means of communication and the internet without a need for a geographical site or a direct contact between the buyer and seller.

That is the reason why it is called also the electronic market, because it is a traditional market in which transactions are made electronically. The e-market is considered an area of competition among professionals, which requires dependence on e-markets, finding technical and marketing methods which are developed, acceptable and self-renewing which ensure the satisfaction and allegiance of customers. e-commerce between businesses and consumers used widely at the global level, which can be illustrated by the fact that global electronic commerce direct between businesses and consumers by 21% in to more than 1 trillion dollar for the first time in 2012. This figure is expected to increase by 18.3% this year, into 1.3 trillion dollar (motion point website).

E-commerce in developing countries is lagging behind, which is due to several reasons examined elaborately in literature in terms of their identification, discovery and analysis, including: Lack of knowledge and experience concerning the internet, lack of confidence and security in using means of communication, Lack of English language skills, which is the language mostly used on the web, the weak infrastructure of communication in those countries, the lack of qualifications required for establishing, and managing e-commerce websites, lack of skills required among citizens and consumers, low income in those countries and the limited use of credit cards (Abbad et al, 2011).

Fifth : E-commerce between Businesses and consumers in Jordan

Jordan is considered a successful model in the Middle East in terms of politics and economy, which means that it can play an important role in e-commerce. It is worth noting that Jordan has taken several steps in the field of communications and information technology, which enabled it to benefit globally. Additionally, Jordan has adopted the latest technological developments in communications sector as well as other sectors such as : Developing internet service and development of web sites used as well as e-banking and e-government (Abbad el – al, 2011).

In 11-12-2001, Jordan adopted the temporary law of electronic transactions number 85 for the year 2002, which is the first law among the information technology legislations in one hand and the second law related to the regulation of e-commerce in the Arab region, preceded by the Tunisian law on the other hand.

In a new study carried out by Visa, the results showed that Jordan was at the top among the countries in the region in terms of the number of e-commerce users. Retailers in Jordan employ e-commerce services for the purposes of developing their businesses. The survey employed in that study, concerning the attitudes of sellers and agents and financial institutions in Jordan, Lebanon, Saudi Arabia, UAE, in order to develop an accurate analysis of the present situation concerning e-commerce. Results showed that Jordan was at the front among the users of e-commerce in the region, where shopping on the web is high in Jordan, where 64% of the respondents indicating that they buy services and commodities electronically through their credit cards.

Ministry of Communications and IT, prepared a national strategy for e-commerce in the Hashemite kingdom of Jordan for the period (2008-2012), which aims at stimulating the society so that it develops technical and commercial capacities in e-commerce, and applying e-commerce principles in exchanging commodities and services between businesses and consumers in order to achieve the benefits of e-commerce and enhancing the contribution of Jordan to the development of e-commerce and the global commercial shift. This strategy was approved by the government in 9/9/2008.

Additionally, some studies and comments provide an alternative view. The study of Tarawnch and his colleagues (2012) revealed the weakness of customers appetite for e-commerce, and that they are unsatisfied because of the inefficiency of electronic websites which do not follow the least standards required. And they complained that the Jordanian government doesn't work at supporting and developing a mechanism and standards to be followed by firms so that they enhance their efficiency through being attentive to the needs and requirements of their customers. The Jordanian Chamber of Trade showed on its website the results of a study which revealed that e-commerce in Jordan is still in its infancy and its scope is narrow.
Review of Literature
Several studies handled and dealt with the topic of e-commerce. Some studies handled the topic theoretically in terms of its definition, possibilities of its application in multinational settings and failures of e-commerce, its barriers and challenges in firms and societies. The following review is based on their topics.

Abbad, Abbad and Saleh (2011) conducted a study which examined the barriers and limitation of e-commerce in the developing countries, while Jordan was used as a case study. Upon research and analysis, the study revealed six barriers which hinder the operations of e-commerce in the developing countries including: trust and security, in that the customers don't feel secure in giving their data through the web. Internet skills were another barrier; in that the lack of those skills among the people in the developing countries leads to the low use of it. Language was another barrier, meaning that the people in developing countries who do not speak English cannot use the internet efficiently, English being the most important language on the web. The legal aspect and the acceptance of modern technologies are additional barriers. Lastly, the study revealed that people in developing countries are not interested in using e-commerce.

AL – Dori examined e-commerce in Library sector. The study aimed at examining the effects of applying e-commerce on libraries and its applications is libraries. The results revealed that e-commerce has provided several advantages for libraries, including: the enhancement of the human resources levels, the high speed of supplying, on-time access to information, reducing the costs of properties, and opening up new horizons for libraries in the local and international markets.

The study of Al-Rfou and Abu Aleqa (2010) examined the effect of e-commerce in serving customers. The study revealed that firms and customers look positively at e-commerce services, but several barriers exist which hinder the shift towards e-commerce including: the lack of qualified and trained laborers in the field of e-commerce as well as the weakness and lack of legislations related to the regulation and protection of e-commerce.

The study of EL-Said and Galal–edeen (2009) examined the role of culture in using e-commerce among the Egyptian consumers. The study shed light on four factors affecting the attitudes of customers towards using e-commerce in dealing with a certain company: Trust, uncertainty, image of the firm and its reputation. Results showed an important role played by the image and reputation of the firm in building trust, but this relationship is culturally sensitive. Additionally, a high level of uncertainty was found, which was related to the effect of the reputation on trust. This review shows the quantity of studies which dealt with the topic of e-commerce from different perspectives. However, upon the researcher's knowledge, most of the studies which dealt with the topic of e-commerce and its applications focused on the firms or consumers. So, this study highlights the perspective of the firms' employees, and their attitudes on the processes of e-commerce, due to their important role in supporting the scope and success of e-commerce.

Methods and procedures
Method of the study
The researcher applied the descriptive survey method, which is suitable for the nature of this study.

Population of the Study
The population of the study included all the employees working at Jordan industrial firms listed in Amman stock Exchange for the year 2014, and whose number is 70 firms.

The sample of the study
The sample of the study consisted of 83 employees, males and females, who were chosen randomly, including 65 male employees and 28 female employees.

Table (1) shows the distribution of the members of the study sample according to the variable of Gender and years of experience.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N) of years of Experience</td>
<td>(n)</td>
<td>Percentage</td>
<td>(n)</td>
</tr>
<tr>
<td>Less than 10 years</td>
<td>39</td>
<td>47.0</td>
<td>20</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>16</td>
<td>19.3</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>66.3</td>
<td>28</td>
</tr>
</tbody>
</table>

(Tools of the Study)
A tool was designed for the purposes of achieving the goals of this study, based on a review of theoretical literature and the studies which dealt with applying e-commerce in terms of its definition and its background. Items of this tool were formulated based on a revision of literature concerning assessment tools in general. The initial tool was formulated containing 10 items.
Validity of content of the tool
In order to check the validity of the study tool, it was reviewed by 7 specialized referees from the department of psychology and Education at Yarmouk University, and Balqaa University, and two other referees specialized in Arabic language. Those referees were employed to assess the tool in terms of its items being representative of their domains, (Applying e – commerce), and the clarity of items in terms of their formulation, as well as any comments they deem necessary. Based on the comments of the referees, some items were reformulated, and 3 items were deleted, so the total number of items became seven.

Validity of construct
In order to check its validity of construct, the tool was administered on a pilot sample from the study population, which included 15 was calculated to determine the correlation between each item and the tool as a whole. Two standards were used for determining the item in the tool: The presence of a statistical significance for the correlation of the item to the total score of the tool. And that the whole is no less than (0.30). Upon applying the two standards on all the items (n = 7), an item was eliminated, so that the final version of the tool contained 6 items. Table (2) shows the corrected Item Total correlation of the items of the study.

### Table 2
Corrected Item – Total Correlation of the items of the tool:

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Corrected Item Total Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.60</td>
</tr>
<tr>
<td>2</td>
<td>.51</td>
</tr>
<tr>
<td>3</td>
<td>.39</td>
</tr>
<tr>
<td>4</td>
<td>.49</td>
</tr>
<tr>
<td>5</td>
<td>.50</td>
</tr>
<tr>
<td>6</td>
<td>.49</td>
</tr>
</tbody>
</table>

Reliability of the Tool
In order to check the reliability of the tool it was applied to the population of the study, which contains 15 employees, and Test – Retest Analysis was carried out with an interval of two weeks. Pearson Correlation Coefficient was calculated (0.87). Cronbach Alpha for internal consistency coefficient was calculated (0.93). This value is acceptable for the purposes of the present study.

Correction Method
The tool consisted of 6 items, and the respondent puts a tic mark (x) beside each item to identify his agreement with its content based on 5 points: strongly agree, (for point 5) and agree (4 points), neutral (3 points), disagree (2 points) and strongly disagree which was assigned one point.

The statistical standard
In order to interpret the assessment of the respondents concerning the items of the tool the means were calculated, and the statistical standard illustrated in table (3) below was employed.

### Table (3)
The statistical standard for interpreting the respondents' assessments of the items:

<table>
<thead>
<tr>
<th>Mean</th>
<th>Application Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 1.00 – less than 1.80</td>
<td>Very low</td>
</tr>
<tr>
<td>From 1.80 – less than 2.60</td>
<td>Low</td>
</tr>
<tr>
<td>From 2.60 – less than 3.40</td>
<td>Medium</td>
</tr>
<tr>
<td>From 3.40 – less than 4.20</td>
<td>High</td>
</tr>
<tr>
<td>From 4.20 – 5.00</td>
<td>Very high</td>
</tr>
</tbody>
</table>

Procedures of the Study
The Study employed the following procedures:
* The researcher developed a tool related to applying e – commerce, based on reviewing the theoretical literature related and the related tools.
* Validity was tested by 7 referees.
* Reliability was established through applying the tool on a pilot sample from among the population of the study (n = 15), and through test – retest analysis and cronbach alpha.
* Upon the identification of the population of the study and choosing the sample, the researcher applied the tool on the sample participants, after he explained to the them the way it can be answered and asking them to provide the demographic information in page on which are related to their gender and the number of years related to their gender and the number of years of experience. The researcher told them about the purposes of the study, and that their information will be confidentially analyzed.
* The participants were provided enough time for answering the items of the study, and their explanations were taken in to considerations and their questions were answered.
87 questionnaires were returned. Data were categorized and checked for analysis. 4 total numbers of participants in the sample of the study was 83.

**Variables of the study**
The study dealt with the following dependent and independent variables:
* The two independent variables were applying e-commerce: which is represented in the participant's assessments of the items.
  A- Gender: which has two categories, males and females.
  B- The number of years of experience: This has two levels, less than 10 years and 10 years and more.
* The dependent variable was: Applying e-Commerce which is represented by the participant's assessments of the items.

**Statistical processing**
For the purposes of answering the questions of the study, the researcher used the following statistical analyses:
- For answering the first question, means and standard deviations were calculated.
- For the purposes of answering the second question, two way ANOVA was used.

**Results of the study**
The results concerning the first question which was: what is the scope of e-commerce application among businesses and consumers at the Jordanian market from the perspective of their employees.
For the purposes of answering this question, means and standard deviations of the assessments of the employees were calculated. Table (4) below shows the results.

<table>
<thead>
<tr>
<th>Item number</th>
<th>Rank</th>
<th>The item</th>
<th>Mean</th>
<th>SD</th>
<th>Scope of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td>The firm is concerned with updating and developing it website regularly</td>
<td>2.95</td>
<td>1.17</td>
<td>Medium</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>The firm has qualified personnel in terms of internet and e-commerce</td>
<td>2.95</td>
<td>1.13</td>
<td>Medium</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>The firm is concerned with developing its methods and policies in accordance with e-commerce</td>
<td>2.72</td>
<td>1.03</td>
<td>Medium</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>The website is used in selling and purchasing</td>
<td>2.54</td>
<td>1.06</td>
<td>Low</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>The company is concerned with publicizing its website among customers</td>
<td>2.24</td>
<td>.85</td>
<td>Low</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>The website is visited by a lot of visitors</td>
<td>2.70</td>
<td>.78</td>
<td>Medium</td>
</tr>
</tbody>
</table>

(The maximum point is 5 and the minimum is (1)).

The table above shows that the degree of e-commerce employment among businesses and customers at the Jordanian market is (Medium) with the mean at (2.70) and the standard deviation (0.78). Item (3) which states that (the firm is concerned with developing its methods and policies in accordance with e-commerce) was ranked first (mean = 2.95, SD = 1.17, degree = medium). Item (2) which states that (the website is visited by a lot of visitors) was the lost (mean = 2.24, SD = 0.85, degree = low).

The table shows that 4 items had medium degrees (items 3, 6, 5, while 2 items had low degree (item 4, ).

Results concerning the second question which states that Are there statistically significant differences (α = 0.05) in applying:
e-Commerce among businesses and consumers at the Jordanian market from the perspective of their employees, which are due to: the variable of gender and the number of experience years and the interaction between them?

In order to answer this question, means and standard deviations were calculated for the study as a whole concerning the application at the Jordanian market, according to the variables of gender, and the number of years of experience as illustrated by table (5) below.
Table (5)

Means and standard deviations of the respondents assessments to the tool as whole, concerning applying e-commerce among businesses and customers at the Jordanian market according to the variable of gender and years of experience.

<table>
<thead>
<tr>
<th>Gender</th>
<th>No years of Experience</th>
<th>Mean</th>
<th>SD</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>* Less than 10 years</td>
<td>2.74</td>
<td>.70</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>* From 10 years and more</td>
<td>2.75</td>
<td>.72</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>* Total</td>
<td>2.74</td>
<td>.70</td>
<td>59</td>
</tr>
<tr>
<td>Females</td>
<td>Less than 10 years</td>
<td>2.41</td>
<td>.88</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>10 years more</td>
<td>2.96</td>
<td>1.07</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.59</td>
<td>.96</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>Less than 10 years</td>
<td>2.64</td>
<td>.76</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>10 years – more</td>
<td>2.81</td>
<td>.82</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.70</td>
<td>.78</td>
<td>83</td>
</tr>
</tbody>
</table>

The table shows the presence of differences in the means of the respondents assessments to the tool as a whole concerning applying e-commerce among businesses and customers at the Jordanian market based on the variables of: Gender and the number of years of experience. In order to determine the statistical significance of those differences, two ways ANOVA was employed as shown in table (6).

Table (6)

Results of two way ANOVA for the means of the respondents assessments of the tool concerning applying e-commerce among businesses and customers at the Jordanian market, according to the variable of : Gender and the number of years experience.

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Total squares</th>
<th>Freedom degrees</th>
<th>t-s</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>055</td>
<td>1</td>
<td>055</td>
<td>.090</td>
<td>.765</td>
</tr>
<tr>
<td>Experience</td>
<td>1.222</td>
<td>1</td>
<td>1.222</td>
<td>2.002</td>
<td>.161</td>
</tr>
<tr>
<td>Gender</td>
<td>1.096</td>
<td>1</td>
<td>1.096</td>
<td>1.796</td>
<td>.184</td>
</tr>
<tr>
<td>Error</td>
<td>48.219</td>
<td>79</td>
<td>.610</td>
<td>.100</td>
<td>.100</td>
</tr>
</tbody>
</table>

The table above shows the absence of statistically significant differences ($\alpha = 0.05$) between the means of the respondents assessments for the total item concerning applying e-commerce among businesses and customers at the Jordanian market, due to the variable of : Gender and the number of years of experience. The values for the two variables were above ($\alpha = 0.05$).

Recommendations

Based on the results of the study, the researcher recommends the following:

1- Conducting similar studies examining the factors affecting the application and adoption of e-commerce among Jordan firms, based on different years in which the required methods for encouraging e-commerce.
2- Approving laws and legislations which regulate e-commerce among the firms which adopt e-commerce.
3- The necessity of awareness and guidance provision for the employees at the e-commerce firms and their customers concerning the importance of e-commerce and employing its capacities which may yield great benefits for the firm and the customer if applied appropriately, supported by relevant regulations and laws.
4- Providing training courses for the employees at the firms in order to create an environment which is suitable for, and aware of e-commerce.

References

5-Ra'fat, Radwan, (1999), 'The world of E-commerce', the Arab Organization for Administrative Development, Cairo.
6-Salman, Haitham, (2005), 'Economics of E-commerce at the Arabian Gulf countries', the journal of economic sciences, AL- Basra, university issue 15.

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