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THE IMPACT OF EXTERNAL ORGANIZATIONAL FACTORS ON THE USE OF E-COMMERCE CASE STUDY: INTERNATIONAL TEEN TRANSPORT CO.

TOLOUE MOLAVI KHARAYEM¹

¹ MA in Business Management-International Business, Department of Management & Economics, Abhar Branch, Islamic Azad University, Abhar, Iran.

*Correspondence Author: E Mail: toloue_m3@yahoo.com; Tel: +989123260939

ABSTRACT

One aspect of the information age is profound changes, which have been developed in the economic relations between individuals, companies, and governments; so that a new phenomenon called, "E-business and E-commerce" has been raised. Therefore, the goal of this research is to study the impact of external organizational factors on the use of E-commerce in International Teen Transport Co. Statistical population includes thirty-two personnel of this company. Questionnaire was data collection tool. It was used descriptive and inferential statistics to analyze data. It was used one sample T-test for hypotheses testing. Results showed that cultural, environmental, and market factors are affecting the use of e-commerce in International Teen Transport Co. Some suggestions were made, actually and theoretically.

Keywords: E-Commerce, Cultural Factors, Environmental Factors, Market Factors

1. INTRODUCTION

Today, the presence in global markets with the aid of successful and efficient ways, which itself project a view of the country's economic empowerment, is among the necessity to adapt with the current international system in terms of its achieved

advances in economical and industrial fields.

One aspect of information age is profound changes that have been developed in the economic relations between individuals, companies, and governments so that a new phenomenon called "E-business and E-commerce" has been raised and many

economical concepts, principles, and theories have changed; as far as, the term "internet economy" is began to replace the term "traditional economy" little by little. Internet has been faced human with new arena for publishing, exchange, and offering information that is considered a revolution in many aspects. Revolution means that it gradually change economical, social, cultural, political, and technological bases for the communities. One important features of using this technology is to make activity methods smoothing, consequently, to reduce cost. Undoubtedly, wisely using e-commerce technology can help us to improve business efficiency, to participate more actively in the world trade arena, and to strengthen country position in the regional and global markets. In current research, , in addition of reviewing the concept of e-commerce, it has tried to open a way to identify suitable solution to improve development process of this new phenomenon in the country through identifying growth barriers and developing this concepts in Iran (Gholchehreh Nodehi, 2014).

E-commerce is the result of information technology development that has faced with great luck in the business world. However, e-commerce was primarily created in the

domain of industrial and development countries, but also developing countries tend to use it due to its numerous advantages. Of course, existence of infrastructures and beds of traditional trade is not enough for trading in the modern economic (digital). Therefore, companies have to identify and provide necessary infrastructures and beds to use e-commerce (Moshabaki et al., 2010). According to the numerous advantages of using e-commerce, great advertisement to use it, and taking to the account specific cultural, social, and infrastructure features of the country, it should be seen that moving toward it could result in customer behavior, customer satisfaction, and obtaining profit for the enterprise to be changed or not. Thus, the goal of this research is: 1- to identify and determine factors affecting the use of e-commerce in International Teen Transport Co., 2- to suggest solutions to promote e-commerce in International Teen Transport Co.

2. E-COMMERCE:

E-commerce is buying, selling, and the exchange of product, services, and information through computer networks including Internet. This kind of commerce is based on electronic processing and transformation of data including text, video,

and audio. E-commerce also includes various activities such as transaction, instant delivery of digital contents, electronically funds transfer, electronically stock exchange, electronic bill of lading, commercial and engineering projects, and after-sales services. The main feature of this type of trade is to facilitate business processes, to eliminate unnecessary and redundant processes in doing business affairs, to reduce costs through improvement and increasing coordination, to reduce administrative costs particularly the costs of communications, to improve accessibility to the market, and to increase the diversity for the customers. Meanwhile, new communication technologies such as internet, extranet, e-mail, and mobile phones play an important role in the development of e-commerce (Naqshineh, 2007).

In general, the term "e-commerce" refers to electronic transactions which are took place over communication networks. First, buyer or consumer seeks virtual shop over internet and order a good through web or e-post. Finally, the good will be delivered (Nikbakhsh Tehrani, Saberi, 2001).

3. CULTURAL FACTORS

Aspects that study items related to the difference between cultures, tendency to

face-to-face transactions, language, diversity of market, and the difference in customs.

4. ENVIRONMENTAL FACTORS

Environmental factors are divided to two parts -direct and indirect. Direct environmental factors include merchants, competitors, physical distribution units, and customers. Indirect environmental factors include economic, social, cultural, political, legal, and demographic.

5. MARKET FACTORS

Market factors affecting the establishment of e-commerce are the number of competitors in the industry, competitor's emulation speed of new products and services, competitor's reaction speed against the solutions and activities of the company, competitors' attempt to increase their market share, usage rate of new technologies by competitors, the volume of customer feedbacks, and loyalty.

Mohamadifar (2011), in his master thesis entitled "factors affecting the establishment of e-commerce", found that organizational, managerial, technological, cost, cultural, and market factors are affecting on the establishment of e-commerce in the industrial sector of Kermanshah Province.

Moshbeki et al. (2013), in the research entitled "analyzes of the barriers over the use of e-commerce in Iran food industries",

concluded that barriers of customer level is of more important than commerce level, from the perspective of studied population; as well as, comparing both customer and commerce level showed that economical barriers are of most important. However, cognitive barriers are of more important than social-political barriers in customer level while this state was conversely reported in commerce level.

Faqih Nassiri & Goudarzi (2004), in the research entitled "the impacts of e-commerce on economical growth using panel data", got involved with studying this issue for 208 countries within 1999-2001. In this study, correlation between "gross domestic capital formation", "enrollment in universities", and "phone lines" variables and "internet host" variable were calculated. Results showed that capital index -physical and human- has a significant and positive effect on the economic growth, in the used growth model. Also, negative significant coefficient of dummy variable indicates that lower level of development has negative effect on GDP.

Kafashpour & Dehnavi (2012), in the research entitled "affect of culture on e-commerce", found that avoiding ambiguity and collectivism are two important factors

affecting the behavior of e-commerce users.

Hashemi (2009), in the research entitled "to study the impact of using e-commerce on the export level of oil, gas, and petrochemical products", found that the use of e-commerce is effective in improvement of export performance, reduction of export cost, increasing revenue, and export efficiency.

Poon (2008) done a research entitled "Users adoption of e-banking services in Malaysia". Results showed that ease of use, accessibility, bank management, security and privacy, speed and cost features are effective on e-banking.

Allen et al (2010), in their studies concluded that e-commerce technologies have resulted in reduction of asymmetric information. The main cause of this process is that costs of communication, calculation, and data processing have decreased; and buyers and sellers are allowed to have access to the same information.

Rason (2007) in his research indicated that the most important challenge of B2C companies is to receive order. Custom problems and transportation costs take into account as the major obstacles in the way of e-commerce in international and global level. Some companies use local distributors

to fix this problem so they can sell their products in foreign markets (Sabaq Kermani & Esfidani, 2006).

According to above, research hypothesis is as following:

H 1. Cultural factors affect the use of e-commerce in Transportation Company.

H 2. Environmental factors affect the use of e-commerce in Transportation Company.

H 3. Market factors affect the use of e-commerce in Transportation Company.

The variables in hypothesis are shown in figure 1 as a conceptual framework.

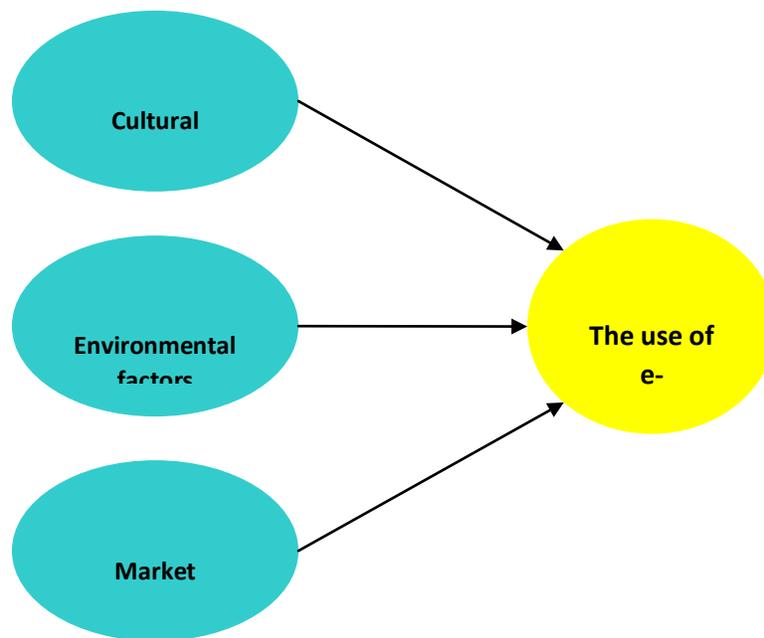


Figure 1: Conceptual Framework of Research;Ref: Mohamadifar (2011)

6. METHODOLOGY

This study is applied research in terms of goal and it is descriptive-survey research type in terms of data gathering. It has been used field method to gather data. In this study, statistical population consisted of all the employees working in International Teen

Transport Co., the numbers of which were 32 until December 2014, all of whom were tested. Tool of data gathering was questionnaire. To achieve the necessary reliability and validity in design and use of questionnaire, it was begun to study completely accomplished researches in this

field and their results after preliminary study on the subject. Then, it was designed a questionnaire. This suggested questionnaire was submitted to advisor professor and the relevant experts. After involving their reform ideas, final questionnaire was developed. It was delivered to the employees of International Teen Transport

Co. However, Cronbach's Alpha was used to determine stability and reliability of the questionnaire. As shown in table 1, Cronbach's Alpha of all variables as well as total Cronbach's Alpha were higher than 0.7 which indicated high stability of the questionnaire.

Table 1: Amount of Cronbach's Alpha

| Variable Name | Cultural factors | Environmental factors | Market factors | Total Alpha |
|------------------|------------------|-----------------------|----------------|-------------|
| Cronbach's Alpha | 0.727 | 0.834 | 0.865 | 0.978 |

7. ANALYSIS OF THE DATA

A summary of the results obtained from the perspective of the respondents to determine the status of external organizational factors

affecting the use of e-commerce is shown on Table.2, which demonstrate following central parameters.

Table 2: Description of external organizational factors

| Factor | Number | Lower | Upper | Mean | Std. Deviation | Median | Mode |
|-----------------------|--------|-------|-------|------|----------------|--------|------|
| Cultural factors | 32 | 1.6 | 4.8 | 3.33 | 0.908 | 3.5 | 2.4 |
| Environmental factors | 32 | 2.2 | 5 | 3.44 | 0.883 | 3.5 | 3.6 |
| Market factors | 32 | 2 | 4.71 | 3.39 | 0.72 | 3.5 | 4 |

As seen in Table.2, the mean of factors affecting the use of e-commerce in International Teen Transport Co. in all dimension is above the average level (3). This represents the effectiveness of each identified factors on the use of e-commerce in the studied sample.

distribution of data gathering to use statistical techniques. If distribution of gathered data is normal, it could use parametric tests to test hypothesis; and if distribution of gathered data is not normal, it could use nonparametric tests to test hypothesis. For this reason, I engaged to assess the results of Kolmogorov-Smirnov test for each variable, in this stage. Result was shown in Table.3.

8. TO STUDY THE NORMALITY OF HYPOTHESIS

First, it should be determined a type of

Table 3: Results of Kolmogorov-Smirnov test

| | Cultural factors | Environmental factors | Market factors |
|-------------|------------------|-----------------------|----------------|
| Asymp. Sig. | 0.400 | 0.268 | 0.821 |

As shown in Table.3, it can consider data as normal with high confidence because the significance level of Kolmogorov-Smirnov test for data is more than 0.05. Thus, it was used T-Test to test each hypothesis in this research.

In this stage of study, the responses provided by statistical sample were analyzed using T-Test to assess factors affecting the use of e-commerce in International Teen Transport Co. The tool of data gathering has been designed in such a way that each studied variables have been presented in Likert

Scale template along with its indicator items. Since, suggested questions are intended to identify what studied variables are, and we are only faced with one series of data, thus T-Test is the most appropriate test. For this reason, it was used T-Test to analyze statistical data.

7.1. The first hypothesis: Cultural factors affect the use of e-commerce in Transportation Company.

It was used one sample T-Test to study above test, of which results was shown in Table 4.

Table 4: Results of One Sample T-Test for testing first hypothesis

| 95% Confidence Interval of the Difference | Test value= 3 | | | | | |
|---|---------------|----|-----------------|-----------------|---|-------|
| | t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
| | | | | | Lower | Upper |
| cultural factors | 2.024 | 31 | 0.042 | 3.335 | -0.0025 | 0.653 |

Regarding data in Table 4, obtained T value test evaluation is equal to 2.024. Since, this amount is higher than the critical value ± 1.96 , H_0 will be rejected, and H_1 will be accepted in 95% confidence interval (Sig: 0.042). Mean of answers provided by statistical sample of organizational factors on the increased use of e-commerce in this company is 3.45 out of 5 based on Likert Scale. If this mean is generalized to the population, the mean of answers will be set in the range of -0.0025

and 0.653. Since, upper limit of the range (0.653) is positive, thus it is more than average level (3), it can be argued that cultural factors will be led the use of e-commerce in International Teen Transport Co. to be increased. Therefore, according to obtained data in Table 4, our hypothesis will be confirmed in 0.042 significance level with 95% confidence interval.

7.2. The second hypothesis: Environmental factors affect the use of e-commerce in Transportation Company.

Table 5: Results of One Sample T-Test for testing second hypothesis

| 95% Confidence Interval of the Difference | Test value= 3 | | | | | |
|---|---------------|----|-----------------|-----------------|---|-------|
| | t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
| | | | | | Lower | Upper |
| Environmental factors | 2.801 | 31 | 0.009 | 3.44 | 0.119 | 0.756 |

Regarding data in Table 5, obtained T value test evaluation is equal to 2.801. Since, this amount is higher than the critical value ± 1.96 , H_0 will be rejected, and H_1 will be accepted in 99% confidence interval (Sig: 0.009). Mean of answers provided by statistical sample of managerial factors on the increased use of e-commerce in this company is 3.44 out of 5 based on Likert Scale. If this mean is generalized to the population, the mean of answers will be set in the range of 0.119 and 0.756. Since,

upper limit of the range (0.756) is positive, thus it is more than average level (3), it can be argued that environmental factors will be led the use o e-commerce in International Teen Transport Co. to be increased. Therefore, according to obtained data in Table 5, our hypothesis will be confirmed in 0.009 significance level with 95% confidence interval.

7.3. The third hypothesis: Market factors affect the use of e-commerce in Transportation Company.

Table 6: Results of One Sample T-Test for testing third hypothesis

| 95% Confidence Interval of the Difference | Test value= 3 | | | | | |
|---|---------------|----|-----------------|-----------------|---|-------|
| | t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
| | | | | | Lower | Upper |
| Environmental factors | 3.082 | 31 | 0.004 | 3.393 | 0.133 | 0.653 |

Regarding data in Table 5, obtained T value test evaluation is equal to 3.393. Since, this amount is higher than the critical value ± 1.96 , H_0 will be rejected, and H_1 will be accepted in 99% confidence interval (Sig: 0.004). Mean of answers provided by statistical sample of managerial factors on the increased use of e-commerce in this company is 3.393 out of 5 based on Likert Scale. If this mean is generalized to

the population, the mean of answers will be set in the range of 0.133 and 0.653. Since, upper limit of the range (0.653) is positive, thus it is more than average level (3), it can be argued that market factors will be led the use o e-commerce in International Teen Transport Co. to be increased. Therefore, according to obtained data in Table 6, our hypothesis will be confirmed in 0.004 significance level with 95% confidence interval.

9. DISCUSSION AND CONCLUSION

The first hypothesis of the study was that cultural factors affect the use of e-commerce in International Teen Transportation Co. It was used one sample T-Test to test this hypothesis, of which results indicate that mentioned hypothesis is confirmed. It can be said with 95% confidence interval that cultural factors affect the use of e-commerce in International Teen Transport Co. This type of trade due to advantages such as costs reduction, eliminating intermediaries, creating direct connection between the buyer and the seller, purchase order via internet, companies negotiating with buyers, and establish a search preference via web has provided a bed that vendors could compete by offering their goods to millions of buyers with the lowest cost in global markets. All of these advantages will be changed the nature in traditional commerce, which is more occurred face-to-face, and they will be appeared as a restriction, because most activities are done as the presence of transaction parties in the traditional system. Thus, it is necessary to change managers' attitude to this way of transactions through holding courses and seminars. As long as, the old thought of doing transaction does not change, any advantages of e-commerce will

not be available. Since, all studied matters in this research are in some way influenced by cultural factors. The result of this hypothesis is consistent with the results of Mohamadifar (2011), Hashemi (2009), Rason (2007), and Allen et al. (2001).

The second hypothesis of the study was that environmental factors affect the use of e-commerce in International Teen Transportation Co. It was used one sample T-Test to test this hypothesis, of which results indicate that mentioned hypothesis is confirmed. It can be said with 99% confidence interval that environmental factors affect the use of e-commerce in International Teen Transport Co. What has been always important in trade areas is the security of transactions and fulfilling obligations of the parties to the transactions. However, if these transactions are occurred in the virtual environment, security will be taken reduplicated importance; and it is very important that judicial bodies protect the parties to the transactions. In the subject of interested customers, dynamics of customer will be led to company's tendency to use e-commerce so that as much more dynamic as, the more tendency. Change in customers needs is also caused external pressure that will lead the company toward the use of e-

commerce. The result of this hypothesis is parallel with the results of Mohamadifar (2011), Faramarzifar (2013), Hashemi (2009), Rason (2007), and Allen et al. (2001).

The third hypothesis of the study was that market factors affect the use of e-commerce in International Teen Transportation Co. It was used one sample T-Test to test this hypothesis, of which results indicate that mentioned hypothesis is confirmed. It can be said with 99% confidence interval that managerial factors affect the use of e-commerce in International Teen Transport Co. Competitive pressure will be led to company's tendency to use e-commerce so that as much more competitive rate as, the more tendency. The use of e-commerce due to competitors' pressure indicates a passive approach to use this technology. The result of this hypothesis is consistent with the results of Mohamadifar (2011), Hashemi (2009), Rason (2007), and Allen et al. (2001).

10. SUGGESTIONS BASED ON HYPOTHESIS

Following suggestions are made based on results:

1. To design a long-term program to change behavioral and cultural patterns of people in

business area, because changing these behavioral patterns is a time consuming and long-term work; and it cannot deal with it cross-sectional.

2. To compile codified and documented rules in department of justice, which will be always updated based on changes taking place in this area.

3. To hold continuous training courses for judges in the country's judicial system who can dominate over crimes, which occur in this domain, and make a true decision.

4. Relatively, significantly match country's law with international law regarding the use of information technology.

5. Today, business is more customer-centre rather than product-centre, so it is necessary that companies design private websites for further interaction with customers and identifying their needs. Implementation of customer relationship management (CRM) system to improve marketing performance helps enterprise management to act successful in setting factors shaping customer requests in the field of sales, after-sales services, and production quality, as far as, ultimate satisfaction of beneficiaries and customers to be achieved.

11. LIMITATIONS OF RESEARCH

1. Researcher tried to study all factors

affecting the use of e-commerce, but it is possible that there are other factors over the use of e-commerce, which were not mentioned here (such as political factors resulted of government decisions, international sanctions, etc.)

2. Non-cooperation of companies' managers and employees to fill the questionnaire, as well as, individual mental state while answering the questions will be led to face researcher with unfriendly or incompletely, faulty information; and he/she may be not to get desired results. So, there is not complete and 100% confidence to the accuracy of provided answers.

3. Because this research was done in a small company, thus, other companies and organizations should carefully benefit from its results.

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