The study of the interactive effect of culture and e-commerce in Iran

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Abstract

In this study, it has been tried to identify cultural factors influencing on understanding, acceptance and replacing older methods with electronic commerce and through a basic hypothesis(there is a significant relationship between the culture and e-commerce) and five sub-hypotheses(examining the relationship between learning English, teaching how to use computers and search engines, traditional shopping ways, the impact of thoughts and attitudes of reference groups, friends, relatives, family and competitive phenomena and finally the distance between the class and e-commerce). As it is found from the research topic, research scope was related to the whole parts of Iran but since the culture of tendency toward e-commerce does not exist in a large amount in Tehran, therefore, we consider only Tehran as our population and statistical sample obtained through the cluster sampling method. The primary and secondary data were collected through library method and questionnaire as a survey method of research was distributed in computer sales centers in Tehran like Computer Center of Raza, capital, Ala al-Din, Shahrake Ekbatan, Shahrake Gharb, café nets and some major computer sales centers in different parts of Tehran. Among them, people having computers and information about computer and computer science were regarded as the main participants. Finally, the results of this research indicated that there is a significant relationship between culture and e-commerce.

Keywords: culture, e-commerce, training, class distance

Introduction

In current century, many changes have taken place in commercial affairs that it can be replaced by the new methods of trading to traditional methods. The features of current world namely, human's approaching to each other and borders is becoming meaningless leading to the birth of a new form of trading and commerce with the name of electronic-commerce that is able to create such a change that can bring the enormous potential opportunities and threats in path of communities' movement. In this regard, along with advancement of different technologies such as computer science and spread of the World Wide Web, the idea of using computer networks technology for commercial activities such as buying and selling goods and services was welcomed. In this position, buyers do not search for their shopping from one store to the next or street to street, but this is the seller who is looking for buyers, but according to all potential opportunities that can be created by using this technology in commercial affair communities are constantly involved in problems and complexities in the area of culture, consumer's behavior, culture of e-commerce application. In this regard, the main objective of the research is to design a model to identify cultural factors effect on e-commerce in Iran in order to consider various cultural factors influencing consumer's behavior which itself is a factor of the people's tendency or lack of tendency towards e-commerce. In this regard, various aspects of cultural factor and specially consumer's behavior have been seriously discussed.

Literature Review

The relationship between culture and technology has been constantly discussed. In third world countries, it is said that their incorrect understanding of the relationship between culture and technology made insufficient efforts by these countries to

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transfer technology to reconcile the imported technology with specific needs and relationships. So, it creates rupture in cultural-social system (Unesco, 1997). Thus, although technological change increases the relationship and interaction between cultures, but cannot claim that the result of technological change and cultural exchange is necessarily useful. Thus, by looking at the history, it can be found that it has had positive and negative aspects (Rao, 2011, as cited in Adas, 1989).

Inglehart argues that each culture indicates the people's approach in accordance with environment. Generally, these trends respond to economical, technological and political changes in the long-term and if they do not respond, they change and in its turn shape the environment (Ardalan, 2000). So, the universal condition for the countries, especially in third world countries and its dependent organizations can be sensitive. Satellites, internet and communication giants simply and widely saturate space with information and news and as many local languages are being destroyed, the traditional ways of life are discarded and Western-style fast foods are replaced by local foods. Western pop music and entertainment forms and those who were engaged in local performing arts had lost their jobs by more Americans and their skill is removed from memories. According to critics, globalization leads cultural domination with of features of violence, greed. On the other hand, globalization fades the local and indigenous cultures and based on the power of global and communication media shapes a kind of global culture which is usually dominance of consumerism (Kazemi, 2001). In this way, most dominant countries export certain types of their products such as fashion, styles and their specific methods that are certain to their culture to other dependent markets and this led to creation of specific patterns in the area of consumption and demand and therefore, provide areas for acceptance of the values, statistics and cultural experience of origin countries and thus the local cultures of developing countries are at risk of invasion to varying degrees and displace. Apart from this, the growth of universal "mono-culturalism" has been a concern for most people. As it is mentioned before, the culture that is inspired to people by the western world media, dictate them what to wear, what to eat, how to live, what to learn and how to think (Kazemi, 2001).Some scientists believe that, unlike the local cultures, that are being destroyed, these cultures are reshaped in the future world.

As a positive point, it can be pointed that in many parts of the world, the increasing cultural exchange, has increased the people's awareness of identities and cultural diversity and similarities and this are a lead to awareness raising and even is used to enhance sensitivities to injuries and cultural problems (Azadeh, 2001). Kodia and Bahagat consider cultural diversity at the national level as an important factor in the success or failure of technology transfer. For example, Jankewesk's study shows that, because of cultural differences among African countries and exporting countries, information technologies should be revised according to the conditions of host countries for successful establishment of information systems in these countries (Shore &Venkatachalam, 1996, as cited in Jankewsk, 1992). Unfortunately, an appropriate model has not been presented to analyze the relationship between culture and establishment of information technology and e-commerce. Given the importance of information technology and electronic commerce, the problem is that how and in what process culture effects on establishment of these technologies.

Research hypothesis

In this study, a major hypothesis and five sub-hypotheses were tested:

Hypothesis 1: There is a significant relationship between the culture and e-commerce.

Sub-hypothesis 1-1: There is a significant relationship between learning English and e-commerce.

Sub-hypothesis 1-2: There is no significant relationship between teaching how to use the computer and search engines and e-commerce.

Sub-hypothesis 1-3: There is a significant relationship between the traditional shopping ways and trend towards e-commerce.

Sub-hypothesis 1-4: There is a significant relationship between the effect of thought and attitudes of reference groups, friends, family and relatives and competitive phenomena and trend towards the e-commerce.

Sub-hypothesis 1-5: There is a significant relationship between the class distance and e-commerce using.

Methodology

This research is a survey type which is carried out by descriptive method. So, the literature were considered by reading articles on the Internet and

studying library books mostly English books and limited number of the Persian book and based on that the model of cultural factors affecting on e-commerce were prepared and then tested. A questionnaire method was used to test the model. The cluster sampling was used in this method because this method is used when selection of a group of people is defined more possible and easier than choosing individuals in a community. This situation comes when we cannot prepare and gather the list of individuals or community members because this study needs individuals having a computer and with information on computer area. In this study, the sample was obtained from the following relation:

$$n = \frac{Z^2_{/2} * P * q}{e^2}$$

With placement of each of these numbers in the formula of determining the sample size, n was equal to 96, and other 15 samples were added and sample size raised to 111 cases.

In this study, the ratio test method was used to data analysis and hypothesis testing. It should be mentioned that the SPSS software, the binomial test method is used for sample size of less than 30 and standard Z for a sample size of more than 30.Validity or reliability of the questionnaire was tested and evaluated based on alpha Chronbach and the results showed the reliability of .72,indicating the reliability of questionnaire. Two series including five questionnaires with time interval were distributed to test the validity of questions and then the existed deviations were removed and the questionnaire with validity was prepared.

Descriptive statistics of the demographic characteristics of the study

This section considers the presentation of descriptive statistics on the demographic characteristics of the sample. Recognition of demographic characteristics of the sample is useful to specify the overall characteristics of the sample and their general characteristics for other researchers. Furthermore, this recognition causes the generalization of the results to other populations, or uses this information in designing the future research questions for other communities.

Males included 67.6 % of the respondents, and 32.4% of the respondents were female. 6.30% of respondents had diploma degree, 45.9% with B.A. degree and 23.4% with M.A. degree and Ph.D. Respondents who were younger than 30 years old-were43.2% and between 30 and 40 were38.7% and above 40 years old were 18%.

Descriptive results obtained from the questionnaire

51.4% of respondents had the ability to talk and understand. 52.3% of language learning was introduced as a motivating factor. About 48% of respondents believed that there is arelationship between language and electronic shopping. About 39% of respondents had little control on electronic shopping. 54% believed that the trend to e-commerce can be increased via training.55% of respondents predicted the relationship between online learning and electronics shopping. 53.2% of respondents had very high sensitivity to closely seeing, touch the goods, etc.

Approximately 32.4% of respondents considered shopping as an entertainment. About 44% did not like electronic shopping. 55% of respondents used the internet to search for information. About 47% of the people's shopping is because of competitive phenomenon. About 52% considered electronic shopping as a new, modern and distinctive method. Approximately 37% considered dishonesty in traditional and electronic shopping.

The sensitivity to purchase TV through electronic shopping is high and equal to 46.8%.The sensitivity to purchase tape recorder through electronic shopping is high and equal to47.7%.The sensitivity to purchase camera through electronic shopping is high and equal to 37%.The sensitivity to purchase home furniture through electronic shopping is high and equal to34.2%The sensitivity to buy clothes via electronic shopping is high and equal to 38%The sensitivity to buy foods via electronic shopping is low and equal to 29%The sensitivity to buy book via electronic shopping is very low and equal to 37%.A lot of individuals namely 40.5 % are emulator of their friends A lot of individuals namely 41.4 % are emulator of their own friends' method from one site with specific conditionsAbout40 % believe that the effect rate of their parents' attitudes is low on them about 49% consider the role of the reference group as a high tendency towards electronic shopping. About 59% believed that there is high relation between income and electronic shopping. About 56% believed that there is high relation between places of residence in city and electronic shopping. About 62.2% believed that there is very high relation between education level and electronic shopping.

Table 1. Descriptive results of the hypotheses testing.

	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
H1	111	1.00	5.00	419.50	3.7793	.78243	.612
H2	111	1.00	4.67	356.00	3.2072	.69056	.477
H3	111	2.00	4.73	375.64	3.3841	.54953	.302
H4	111	1.25	4.50	357.25	3.2185	.65982	.435
H5	111	1.67	5.00	464.67	4.1862	.74628	.557
BH	111	2.35	4.31	394.61	3.5551	.40430	.163
Valid N (listwise)	111						

Table 2. Paired sample t-test for research hypotheses.

Hypothesis	Asymp.sig	Results
H1	0.000	Less than 0.05, and thereforeaccept H1 (thus confirm the existence of a relationship)
H2	0.569	More than 0.05 and thus reject H1 (thus confirm the lack of relation)
H3	0.000	Less than 0.05, and therefore accept H1 (thus confirm the existence of a relationship)
H4	0.057	More than 0.05 and thus reject H1 (thus confirm the lack of relation)
H5	0.000	More than 0.05 and thus reject H1 (thus confirm the lack of relation)
Total hypothesis	0.000	More than 0.05 and thus reject H1 (thus confirm the lack of relation)

Results and Conclusion

Based on the hypotheses presented in this study, the following results were obtained:

1. There is a significant relationship between learning English language and e-commerce. In this regard, among the respondents, the ratio of opponents was 32 subjects and 79 subjects believe the existence of relationship between language and the EC. This relationship was confirmed with reliability level of 0.95. The mean of this relationship is 3.8, in which hypothesis H1was accepted with standard deviation of 0.8 and variance of 0.6.

2. There is no significant relationship between teaching how to use the computer and search engines and e-commerce. The ratio of opponents was 52 subjects and the supporters' ratio was 59 subjects which the ratio between these two is negligible and with reliability of 0.95lack of relationship was confirmed. The mean of this relationship was 3.2 and SD was 0.7 and variance of this hypothesis was 0.5 and ultimately the hypothesis H1 was rejected.

3. There is a significant relationship between the traditional shopping ways and trend towards e-commerce. The opponents' ratio to this relation was 25 subjects and the supporters' ratio was 86subjectsand with reliability of 0.95,the existence of relationship was confirmed. The mean of this relationship was 3.4 and the SD was 0.55 and variance of this hypothesis was 0.30 and ultimately the hypothesis H1 was accepted.

4. There is a significant relationship between the effect of thought and attitudes of reference groups, friends, family and relatives and competitive phenomenon and trend towards the e-commerce. The opponents' ratio to this relation was 45 subjects and the supporters' ratio was 66,in which the difference of these two ratios is negligible with reliability of 0.95lack of relationship was confirmed. Finally, the hypothesis H1 was rejected with the mean of 3.2, SD of 0.66 and variance of 0.43.

5. There is a significant relationship between the class distance and e-commerce using. The opponents' ratio was 13 subjects and the supporters' ratio was 98, in which the existence of relationship was confirmed with reliability of 0.95.Finally, the hypothesis H1 was accepted with the mean of 4.2, SD of 0.75 and variance of 0.56.

6. There is a significant relationship between the culture and e-commerce. In fact this hypothesis is the main hypothesis and other hypotheses were presented as secondary hypotheses. The opponents' ratio was 11 subjects and the supporters' ratio was 100 that isa great difference which confirmed the effect of culture on e-commerce with reliability of 0.95. The mean of this relationship was 3.6 and the SD of 0.40 and variance of 0.30 and ultimately the hypothesis H1 was accepted.

Recommendations and Suggestions for further research

Based on the research findings, the following suggestions can be mentioned :

It can be seen that even some organizations have very good and interesting sites to buy and sell. But, in this area, any advertisements cannot be seen by them and this itself decreases the individuals' self-awareness rate, motivation and eventually the decline trend will be seen. It means that organizations themselves have ignored making the culture of this matter. The payment way must be facilitated and they should advertise and sell those goods and services that people have less sensitivity to them.

Regarding the suggestions for further research, students are less interested in conducting research in the area of EC which indicate the lack of culture of this matter. Meanwhile, due to the lack of Persian books in this area, the people's motivation rate is reduced. Therefore, it is recommended for students, researchers and writers to look at this matter actively and in nationalistic form. People can take good models and create new researches by reading articles and dissertations in this area and compensate for the shortcomings of previous studies. Universities should open the way for students in this area and consider special privileges for individuals who want to work in this area perhaps be successful as a motivating factor. Also, the following suggestions can be raised:

• Learning English language, at least in three level of EC language

• Participating in Language classes, during high school and skill acquisition in this area in older ages.

• Participating in Internet and computer training classes

• Reading books related to computers and IT and EC

• Personal consideration of each individual from advantages and disadvantages of traditional and electronic shopping

• Organizations activities on the role of reference groups

• Organizations good utilization of important competitive matter of individuals in society

• Organizations and groups' activities on different class levels existed in individuals in the society etc.

References

Azadeh, Kh. (2011). *National media and international information crisis,* 9, 6.

Ardalan, A. (2000). Globalization and Cultural Rights. *Foreign Policy,* 483-488.

Rao, J. M. (2001). *Culture and Economic Development*, No. 22348, Monday, October 28, p. 11.

Kazemi, M. (2001). Globalization in perspective of the pros and cons, *Citizen, 9,* 2488, 6.

Unesco (1997). *Culture and the development, anthropological development approaches* (H.Nematallah and M. Fazeli, Trans.). Tehran: Ministry of Culture and Islamic Guidance Press.

Shore, B and Venkatachalam, A.R. (1996). Role of national culture in the transfer of information technology, *Strategic Information System, 5,* 19-35.