

E-COMMERCE AND ITS CONCEPTION BY GAZIANTEP INDUSTRY

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Abstract

21. century is called as Knowledge and Communication Age. In this age, countries develop some policies about electronic structuring which enable them to be a knowledge society. Given these developments states start to cast their classical bureaucratic structure and tend to work 'E-Commerce' structure which is easier, speeder and cheaper. So, the nature of local enterprises started to modify. The main aim of E-Commerce activities is to satisfy consumer needs. Thus, the private sector has a chance and obligation to provide some important subsets of e-commerce activities to the consumer.

The main aim of this study is to show that how industrial undertaking use knowledge and communication technologies to provide expansion in Gaziantep industries. Survey data was analyzed using SPSS (Statistical Package for Social Sciences) 13.0 statistics program in order to reach at this aim.

Key Words: Knowledge and Communication Technology, E-Commerce, Knowledge Economy

Introduction

Tecnological revolution of the past quarter century not only has effected daily life but also has started to restructure business life and all fields of economic activities. In resent years, booms at knowledge-communication technology have initiated the multi-faceted exchange-transform process, and composed consciousness on computer using at all fields of daily life as a necessity. Electronic commerce (e-commerce) has gained a strategic importance for economic growth, competitive advantage and providing social welfare.

E-commerce is considered as a concept symbolized and enclosed all these developments. Furthermore, e-commerce has started to find acceptance as a process of commercial practices, and economies were restored with tecnology. Both small and large commercial units attended to this process have started to gain a brand new efficiency, infinite market area and competitive power.

Globalization process has got to loom enterprises which can harmonize customer choices, and techonological amendments put e-commerce another way. 21. centruy enterprises can

respond to amendments at customer choices rapidly by changing components of marketing.

To become commonplace the internet has rapidly fetched e-commerce to a new and effective instrument at executing commercial operations. E-commerce has arisen as an output of technological developments which enable knowledge/communication at last 10 years with affinity of feeling relieved world trade. Accordingly, e-commerce will provide ascendancy and affluent society will close. The main factors of developed economies that have performed economic growth beyond expectations are degree of knowledge-communication technology, evolution of capabilities with using computer, and using e-commerce at all areas frequently. This paper analyzes this issue in terms of industrial activities in Gaziantep, which is one of the leading industrial areas in Turkey.

1. Development of E-commerce

E-commerce, or commercial interaction through the internet is a kind of universal method which has been developing for more than ten years and bringing in a different size. Thanks to this, people and institutions can get across with their counterparts at different places of the world whereby computer is available (Varol, 1998: 35).

As internet technology has been developing rapidly, the fact that a new economic order has taken commonplace is observed. Geographical borders has disappeared, common markets where buyers and sellers meet, has attained a different size and sellers have elicited coming up web economics by adopting all world as a customer and by switching activities to web based systems (Camp and Sirbu, 1997: 17). Marketing activities have been done in electronic form today and this new marketing model has been called as electronic commerce, internet marketing, e-work, etc. This concept blight has been emanating cursory definitions by nonspecialist (Kartal, 2007: 65).

E-commerce involves trading goods and services between individuals and groups. Thus, marketing has also been including advertisement, presentation, presale and after sale activities, developing long-term relations (Karafakioglu, 2000: 11). Both organizational buyers and consumers have been attending to electronic mediums. Classical marketing functions also cover activities started before producing product, and involves after sale activities. In this process, marketing activities are buying, selling, carrying, storing, standardization and grading, risk imposition, financing, attaining marketing knowledge and training buyers (Islamoglu, 2006: 14). Who fulfills these functions have been determined at classical marketing system, in local, regional, national and international levels, partially or completely.

Accordingly, e-commerce is not a commercial procedure system, it is an innovation enabled commerce, and arisen in parallel with developing communication and knowledge processing (Ince, 1999: 2). E-commerce enables potential buyers to be well grounded in products proffered at all corners of the world and enables new producers penetrate world market. Penetrating to market with more quality and low price has increased competition and reduced transaction cost (Strauss-Frost, 2000: 15).

Increasing extend of e-commerce has drawn special interest on investing in related fields. Looking at this issue from this aspect, it is observed that developed countries, most notably the USA and some others have made intensive investments in this field lately. (Kepenek, 2000: 27)

E-commerce has also affected international trade, employment, education, cultural and social life, and made a lot of fast and hard to anticipate innovations possible. This developments which elicit some advantages and disadvantages for developing countries have also given hands for Small and Medium Size Enterprises (SME) which is the backbone of developing countries. (Bozkurt, 2000: 65).

2. An Empirical Research on the Extend and Importance of E-commerce

2.1. Problem

Determining how important e-commerce for the purposes of industrial enterprises in Gaziantep is the case of our research. Developments in internet and e-commerce, and their effects on the performance of this industrial area were searched using the data obtained through a survey conducted for this study.

2.2. Assumptions and Method

The basic assumptions are as follows:

- i. Participators response the survey correctly and candidly, and can represent and evaluate the business environment.
- ii. Provided data reveals the importance and effects of e-commerce for businesses.

Data gathered through the survey were transferred to the data file in SPSS, and then they were analyzed and assessed in accordance with the purposes of this study.

2.3. Findings and Interpretation

Here, we share the outcomes of the statistical analysis following the order of information gathering process.

Table-1. Dispersal of Participators According to Gender

| Gender | Frequency | Percentage |
|---------------|------------------|-------------------|
| Man | 20 | 66,7 |
| Woman | 10 | 33,3 |
| Total | 30 | 100,0 |

Sample size for this study was 30. As Table-1 indicates, 66.7 per cent of participators were men, while women constitutes 33 %.

Table-2. Dispersal of Participators According to Age

| Age Interval | Frequency | Percent |
|---------------------|------------------|----------------|
| 15-20 | 4 | 13,3 |
| 20-25 | 8 | 26,7 |
| 25-30 | 13 | 43,3 |
| 30-+ | 5 | 16,7 |
| Total | 30 | 100,0 |

Table-2 shows that participators are relatively young people: 13.3 % is between 15-20, 26.7 per cent is between 20-25. The largest proportion is between 25-30 which constitutes 43.3 per cent of the sample. Remaining 16.7 per cent is 30 and above.

Table-3. Dispersal of Participators According to Marital Status

| Marital Status | Frequency | Percentage |
|-----------------------|------------------|-------------------|
| Married | 17 | 56.7 |
| Sigle | 13 | 43.3 |
| Total | 30 | 100,0 |

In terms of marital status, as can be observed from Table-3, % 56.7 of the participators are married, and the rest are single.

Table-4. Dispersal of Participators According to Implementing Commercial Transactions via E-commerce

| Case | Frequency | Percentage |
|----------------|------------------|-------------------|
| Taking part in | 18 | 60,0 |
| Ambivalent | 4 | 13,3 |
| Standing aloof | 8 | 26,7 |
| Total | 30 | 100,0 |

According to implementing all commercial transactions through E-commerce, 60 % of participators is taking part in, while 40 % of participators is standing aloof.

Table-5. Dispersal of Participators According to their Beliefs that E-commerce Diminishes Commercial Costs

| Cases | Frequency | Percentage |
|----------------------------|------------------|-------------------|
| To Take part in completely | 9 | 30,0 |
| To Take part in | 13 | 43,3 |
| To stand aloof | 6 | 20,0 |
| Dead set against | 2 | 6,7 |
| Total | 30 | 100,0 |

One of the most important outcomes expected from e-commerce practices is diminishing costs. Our sample indicate a large admission in the direction of cost reduction thanks to e-commerce. According to the survey results presented in Table-5, 73.3 % of participators shares the belief that marketing costs will diminish with e-commerce, whereas 26.7 % of participators does not admit this belief .

Table-6. Dispersal of Participators According to Reliability of E-commerce

| Cases | Frequency | Percentage |
|----------------------------|------------------|-------------------|
| To Take part in completely | 8 | 26,7 |
| To Take part in | 13 | 43,3 |
| Ambivalent | 1 | 3,3 |
| To stand aloof | 6 | 20,0 |
| Dead set against | 2 | 6,7 |
| Total | 30 | 100,0 |

Reliability is another important aspect of e-commerce practices. As Table-6 shows, according to the survey results 70 % of participators takes part in the reliability of e-commerce, but 30 % of participators stands aloof.

Tablo-7. Dispersal of Participators According to their Opinion about Market Territory of E-commerce

| Cases | Frequency | Percentage |
|----------------------------|------------------|-------------------|
| To Take part in completely | 1 | 3,3 |
| To Take part in | 21 | 70,0 |
| Ambivalent | 1 | 3,3 |
| To stand aloof | 5 | 16,7 |
| Dead set against | 2 | 6,7 |
| Total | 30 | 100,0 |

When we examine dispersal of participators according to their opinion about market territory of e-commerce, 73.3 % of participators is seen to take part in, and 26.3 % is seen to stand aloof.

Tablo-8. Dispersal of Participators According to their beliefs on the Needs for Information and Infrastructure

| Cases | Frequency | Percentage |
|----------------------------|------------------|-------------------|
| To Take part in completely | 5 | 16,7 |
| To Take part in | 18 | 60,0 |
| To stand aloof | 7 | 23,3 |
| Total | 30 | 100,0 |

In order for e-commerce to be effectively used, information and communication related infrastructure is of prime concern. Dispersal of participators according to their consideration about information and infrastructure that e-commerce necessitates shows that 76.7 % of participators takes part in this idea, and 23.3 % of participators stands aloof.

Table-9. Dispersal of Participators According to their Consideration about the Affects of E- commerce on Retail and Wholesale Market

| Cases | Frequency | Percentage |
|----------------------------|------------------|-------------------|
| To Take part in completely | 2 | 6,7 |
| To Take part in | 21 | 70,0 |
| Ambivalent | 2 | 6,7 |
| To stand aloof | 4 | 13,3 |
| Dead set against | 1 | 3,3 |
| Total | 30 | 100,0 |

Affects of e- commerce on retail and wholesale transactions are widely accepted. As shown in Table-9, 76.7 % of participators considers that e-commerce effects trade in retail and wholesale levels, and 23.3 % thinks otherwise.

Table-10. Dispersal of Participators According to their Idea on the Importance of Invesment Area as a Set for Using E-commerce

| Cases | Frequency | Percentage |
|-------------------------|------------------|-------------------|
| Take part in completely | 10 | 33,3 |
| Take part in | 15 | 50,0 |
| Stand aloof | 2 | 6,7 |
| Dead set against | 3 | 10,0 |
| Total | 30 | 100,0 |

When they were questioned if the investment area would set with using e-commerce, as indicated in Table-10, 83.3 % of our sample replies positively, 16.7 % thinks otherwise.

Table 11. Dispersal of Participators According to Affects of E-commerce on their ability to Communicate in the Global Markets

| Cases | Frequency | Percentage |
|----------------------------|-----------|------------|
| To Take part in completely | 2 | 6,7 |
| To Take part in | 17 | 56,7 |
| Ambivalent | 1 | 3,3 |
| To stand aloof | 6 | 20,0 |
| Dead set against | 4 | 13,3 |
| Total | 30 | 100,0 |

When we analyze data in terms of looking at common conception of participators according to their attitudes towards the effects of e-commerce on their ability to communicate in the global markets, we can see that 63.4 % of participators thinks that they will communicate better but 36.6 % of participators does not think so. Details are presented in Table-11.

Table-12. Dispersal of Participators about whether E-commerce will Enable a Trade Model in the Future.

| Cases | Frequency | Percentage |
|----------------------------|-----------|------------|
| To Take part in completely | 1 | 3,3 |
| To Take part in | 21 | 70,0 |
| Ambivalent | 4 | 13,3 |
| To stand aloof | 4 | 13,4 |
| Total | 30 | 100,0 |

As it is shown in Table-12, according to survey result 73.3 % of participators takes part in the idea about e-commerce will enable a trade model in the future while 26.7 % of participators stands aloof.

Tablo-13. Dispersal of Participators about the Speed affect of E-commerce

| Cases | Frequency | Percentage |
|----------------------------|-----------|------------|
| To Take part in completely | 10 | 33,3 |
| To Take part in | 12 | 40,0 |
| Ambivalent | 1 | 3,3 |
| To stand aloof | 4 | 13,3 |
| Dead set against | 3 | 10,0 |
| Total | 30 | 100,0 |

Developing computer and e-commerce technology makes contributions to the capacity of business practices. As indicated in Table-13, the idea that the speed of carrying on business increases with e-commerce is admitted by 73.3 % of participators and it is refused by 26.7 % of participators.

Tablo-14. The Effect of E-commerce on Competitive Advantage

| Cases | Frequency | Percentage |
|----------------------------|-----------|------------|
| To Take part in completely | 8 | 26,7 |
| To Take part in | 13 | 43,3 |
| Ambivalent | 1 | 3,3 |
| To stand aloof | 6 | 20,0 |
| Dead set against | 2 | 6,7 |
| Total | 30 | 100,0 |

According to survey results presented in table-14, dispersal of participators for their consideration whether companies practising e-commerce would get a competitive advantage indicates that 70 % takes part in, 30 % stands aloof.

Tablo-15. The Impact of having a Web Site on the Capacity of E-commerce

| Cases | Frequency | Percentage |
|----------------------------|-----------|------------|
| To Take part in completely | 7 | 23,3 |
| To Take part in | 19 | 63,3 |
| To stand aloof | 2 | 6,7 |
| Dead set against | 2 | 6,7 |
| Total | 30 | 100,0 |

For about a quarter century, it is an increasing trend for businesses to have web sites. This enables various types of companies to reach out their customers all over the world fast and easily, but necessitates a suitable infrastructure. As shown in Table-15, 70 % of

participants takes part in the idea that having a web page is necessary for a business and 30 % of participants stands aloof.

Table-16: One-Sample Statistics

| | Test Value = 0 | | | | | |
|---|----------------|----|-----------------------|--------------------|---|--------|
| | t-value | df | Sig. (2- tiled) | Mean Difference | 95% Confidence Interval of the Difference | |
| | | | | | Lower | Upper |
| Gender | 16,551 | 29 | ,000 | 1,53333 | 1,3439 | 1,7228 |
| Age | 15,545 | 29 | ,000 | 2,63333 | 2,2869 | 2,9798 |
| Marital Status | 17,026 | 29 | ,000 | 1,56667 | 1,3785 | 1,7549 |
| Implementing all commercial transactions through e-commerce | 16,521 | 29 | ,000 | 2,66667 | 2,3365 | 2,9968 |
| Diminishing costs | 9,761 | 29 | ,000 | 2,30000 | 1,8181 | 2,7819 |
| Reliability of e-commerce | 10,186 | 29 | ,000 | 2,36667 | 1,8915 | 2,8419 |
| Enlarging trade area | 13,321 | 29 | ,000 | 2,53333 | 2,1444 | 2,9223 |
| Component | 12,324 | 29 | ,000 | 2,30000 | 1,9183 | 2,6817 |
| Retail and wholesale | 13,971 | 29 | ,000 | 2,36667 | 2,0202 | 2,7131 |
| Setting investment area | 9,265 | 29 | ,000 | 2,10000 | 1,6364 | 2,5636 |
| Opening up to global market | 12,116 | 29 | ,000 | 2,76667 | 2,2996 | 3,2337 |
| To be a trade model | 16,947 | 29 | ,000 | 2,36667 | 2,0811 | 2,6523 |
| Effect on the speed of sales and marketing | 9,283 | 29 | ,000 | 2,26667 | 1,7673 | 2,7660 |
| Contribution to the competitive advantage | 10,186 | 29 | ,000 | 2,36667 | 1,8915 | 2,8419 |
| Contribution of web page to e-commerce | 10,832 | 29 | ,000 | 2,10000 | 1,7035 | 2,4965 |

Significance levels, t-tests and standard deviations of variables used are given in Table-16. As a general evaluation, all variables are significant.

CONCLUSION

Information technologies have been raising as an important and indispensable component of the remarkable evolution of this age. With developing and ranging internet usage, applications of e-government and e-commerce have been increasing rapidly. As a result, e-

commerce has been a development which provides opportunities elicited using resources more efficiently for the purposes of micro and macro levels in developing countries. Making use of this opportunities in developing countries requires abolition of legal and institutional bottlenecks.

Gaziantepis a city, where we observe relatively high capacity of innovation and ability to adapt changing business environment. As indicated by the findings of this study, majority of industrial enterprises included in our sample acknowledges the importance of e-commerce. E-commerce is considered to be contributing in enlarging target market, diminishing, at least, transaction cost, providing competitive advantage, and so on. Yet, some fundamental governmental regulations, such as those related to infrastructure, reliability, etc are expected. An effective collaboration will create synergy.

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Appendix: Questionare Form

Dear Participator,

Increases in computer and communication technologies have been imposing new rules to the business world. Nowadays, increasing global competition, requires engagement in new communication technologies for business purposes, and brings about new measures and instruments, one of which is e-commerce.

With this questinaire, we only aim to reach at some insights about the opinions and attitutes of Gaziantep industrial enterprices towards e-commerce. In order to enable us to obtain the most accurate results, please indicate the most suitable answer. The data collected will be used only for academic purposes. Thank you, for your kind interest and valuable contribution.

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Assistant. Prof. Dr. İbrahim ARSLAN

Res. Assistant Pelin KARATAY

| | | | |
|---|----------------|---------------------------------------|----------|
| 1 | Sex | • Man | , Woman |
| 2 | Age | • 15-20 , 20-25 <i>f</i> 25-30 " 30 + | |
| 3 | Marital Status | • Married | , Single |

| | To Take part in completely | To Take part in | Ambivalent | To stand aloof | Dead set against |
|--|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 4. All commercial transactions can be done as e-commerce. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. E-commerce obtains access to world markets cheaply with diminishing costs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Do you believe reliability of e-commerce at present day? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Market territory of existing markets get larger thanks to e-commerce. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. In order for e-commerce work efficiently, there is a need for information and infrastructure component. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Does e-commerce suit the needs of retail and wholesale transactions? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. New investment areas arises with electrical commerce. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Accessing global markets is easier with e-commerce. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. E-commerce is the trade model of the future | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. Speed of carrying on business increases with electoronical commerce. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Will businesses engaged in e-commerce get a competitive advantage? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. Having a web page will provide contribution to e-commerce. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |