E-COMMERCE BARRIERS FOR SMALL AND MEDIUM SIZED ENTERPRISES (SMES) WORLDWIDE AND TURKISH TRAVEL AGENCIES

ABSTRACT

This study aims both to serve as a stable base and to become a model for further barrier researches on different countries and industries, firstly investigates the prominent barrier components for SMEs worldwide and discloses them in a simple form by being purged from different grouping diversities. Then the barrier components are grouped again under six broad barrier categories which can be found in the literature: (1) supply, (2) demand, (3) legal & regulatory, (4) security & privacy, (5) resources, and (6) system barriers. Thereby a standard rubric is devised to use in the analysis of different sectors such as Turkish Travel Agencies. In conclusion, this research, having a distinctive research approach different from in the previous ones, confirms only one of the broad barrier categories for Turkish Travel Agencies. Concordantly, it and concordantly advances a set of tangible supporting activities and efforts to overcome the barriers notably by sustaining the recommendations regarding the permanent solutions in the studied countries.

Keywords: E-commerce, Barriers, SMEs, Travel Agency, Turkey.

ÖZET

Farklı ülke ve endüstriler üzerine yapılacak başka çalışmalar içinde hem bir model hem de satış bir temel olarak hizmet sunmayı hedefleyen bu çalışma, ilk olarak dünya çapında KOBİ’ler için öne çıkan bariyerleri araştırır ve farklı gruplama açıklamalarından arındırarak ortaya serer. Daha sonra bu bariyerler, alan yazında bulunabileceği gibi, (1) arz, (2) talep, (3) Yasa&duzenlemeler, (4) güvenilik&gizlilik, (5) kaynaklar ve (6) sistem bariyerleri olarak alt temel kategori altında yendi gruplandırılır ve böylece Türk Seyahat Acenteleri gibi farklı sektörlerin analizinde kullanmak için standart bir yönerge oluşturulmuş olur. Sonuç olarak, önceki gerçekleştirilmiş çalışmalarındaki farklı özgün bir araştırma yaklaşıması sahip olan bu çalışma, altı temel bariyer kategorisinden sadece birini Türk Seyahat Acenteleri için onaylar ve buna uygun olarak daha önce çalışılmış ülkelerdeki önerileri de dikkate alarak onların üstesinden gelmek için birtakım destek ve çabalara ilişkin önerilerleri sürer.

Anahtar Kelimeler: E-ticaret, Bariyer, KOBİ, Seyahat Acentesi, Türkiye.
1. INTRODUCTION (GİRİŞ)

Many experts in the field suggest that internet-based technologies have changed and transformed the traditional approach of conducting business. In fact, technologies enhance productivity and flexibility for SMEs (Small and Medium Sized Enterprises) by increasing capability, decreasing costs, and improving on the service provided [1, 2, 3 and 4], and furthermore, it enables them to decode business with millions of individual travelers who are increasingly more savvy in using internet-related technologies [5, 6, 7 and 8].

The internet is the most popular source to find the best prices for travel services. Indeed, although not all statistics are consistent, travel reservations are one of the largest and fastest growing segments of e-commerce in the world [5 and 9]. For example, online bookings are over 50% in certain European markets for specific sections of any trip [10].

The literature on the role of the intermediaries in the new era indicates that notably, travel agencies’ services are well suited for the interactive and automated nature of e-commerce. Their role has also continued to expand, and have become more specialized. All these trends run parallel to the increase in size and complexity of the marketplace with advances in communication and information technologies [11, 12, 13, 14 and 15]. According to Koch and Cebula [16], travel agencies may become “endangered species” if they cannot use the internet effectively. This is due to the fact that the travel industry is very fragmented and requires ample and up-to-date information, which makes it especially appropriate for the benefits the internet offers.

It can be asserted, considering the advocates of the previous researches, that the adoption and successful deployment to e-commerce may help provide competitive advantage in global markets to many SME-dominated sectors like travel and tourism which incorporates approximately 99% of firms [17]. By using internet-related technologies, travel agencies must provide market services in a variety of effective ways ranging from information dissemination to substantial transaction, but on the other, hand many previous researches (see subsection 2.1) demonstrate SMEs worldwide benefit insufficiently from internet-based technologies because of significant and unique barriers in embracing e-commerce.

Embracing the above comments, regardless of the country or industry difference, this study first investigates the barrier components in adoption to e-commerce for SMEs worldwide. In doing so, it notably refers to the extensive and highly relevant literature. As appropriate for the limited scope of this research, the study focuses especially on the top (first) three rated barrier issues in the all previous studies. These are merely considered in an attempt to analyze the e-commerce barriers for Turkish Travel Agencies using the internet simply as an additional mode of communication, and also those whose web sites do not possess the interactive features required by internet business [18, 19 and 20].

2. RESEARCH SIGNIFICANCE (ÇALIŞMANIN ÖNEMİ)

The distinctive research approach and the findings in this study are important in terms of bringing a new evolution to e-commerce studies regarding the barriers for SMEs. Some of the propositions put forward for Turkish Travel Agencies sector by the study can be eligible for different SMEs dominated-sectors worldwide. Indeed, they
can generate different views on the barriers paradigms associated with the competitive success of the countries worldwide.

3. BARRIERS FOR SMEs (KOBİLER İÇİN BARIYERLER)

Needless to say that is possible to find many studies on e-commerce barriers for SMEs. Some present several approaches on classification of the barrier factors such as internal-external [21 and 22] technological-non technological barriers [23] and economic, sociopolitical and cognitive barriers [24]. Moreover, for example in Hadjimanollic’s study [21], external and internal barriers were further categorized and subdivided into supply, demand and environmental barriers with resource and system barriers. Also, Kapurubandana and Lawson [22] classified the following external factors relating to the adoption to e-commerce: cultural barriers, infrastructure barriers, and political barriers, social barriers and legal and regulatory ones. As distinct from the above examples, the Canadian chamber of commerce (2001) identified four broad categories of the barriers for SMEs in Canada - information & education, cost & benefits, e-business resources, and security [25].

The truth remains that some authors have employed certain approaches to categorize the barrier components while a small number of authors have recognized separately the barrier components addressing the broad categories. That is to say that there are diversities in phrasing of the barrier components and broad categories. Therefore, a barrier component can be positioned under different group names in various research studies. Because of these reasons, to convey an integrated analysis on SMEs worldwide without performing a grouping study yet again according to the general accepted view of broad categories might be unproductive. In this context, this research opens the way for more comprehensive researches on SMEs in different countries and industry sectors. As seen in table 1, in which the previous researches were introduced as references of this assignment, the prominent components have been grouped according to six broad barrier categories which can be found in the literature: (1) Supply barriers; (2) Demand barriers; (3) Legal and Regulatory; (4) Security & Privacy (5) Resources, and (6) System Barriers.

Table 1. The prominent top three barrier components in adoption to e-commerce for SMEs worldwide

<table>
<thead>
<tr>
<th>BROAD CATEGORIES</th>
<th>BARRIER COMPONENTS</th>
<th>RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESOURCE BARRIERS</td>
<td>-Limited information on options and knowledge of available technology</td>
<td>-Cloete (2001)</td>
</tr>
<tr>
<td></td>
<td>-Shortage of skilled human resources (Knowledgeable /qualified staff)</td>
<td>-CRITO (2002)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Stansfield and Grant (2003)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Kaynak, Tatoglu and Kula (2005)</td>
</tr>
<tr>
<td>DEMAND BARRIERS</td>
<td>-Customers not being familiar with this trade mode</td>
<td>- CRITO (2002)</td>
</tr>
<tr>
<td></td>
<td>-E-commerce does not fit with products/services (For example, hard</td>
<td>- European Commission (2002)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- MacGregor and</td>
</tr>
</tbody>
</table>
In addition to the information contained within the table, it was deemed necessary to introduce the previous studies and their research findings on the top three prominent barriers for SMEs in their own countries; therefore they were introduced in the following subsection.

### Studied Countries (Daha Önce Çalışılmış Ülkeler):

- Walczuch et al.’s (2000) study states the reasons for not having a personal web site of the small firms in the Netherlands. When the top three (highly rated among all reasons) prominent components are categorized according to the six broad categories, it is understood that all of them are composed of “Supply Barriers” [26].
Cloete’s (2001) empirical research projects the barriers in acceptance and adoption of e-commerce for SME’s in South Africa. When three prominent factors are categorized according to the related categories among six broad groups, it is seen that first barrier was related to “Supply Barrier”, whereas the second and third is tied with “Resource Barriers” [27].

The report of Canadian Chamber of Commerce (2001) states the barriers to Canadian SMEs adoption of e-business. As pinpointed in this report, the top three prominent barriers are categorized respectively as: 1- Security Barrier 2- Supply barrier 3- Legal & Regulatory [25].

The CRITO’s global e-commerce survey (2002) investigates the barriers which influence e-business for SMEs in three non-OECD countries; Singapore, Brazil and China.

In Singapore, the categories for the first three prominent barriers which are highly rated include: 1- Security Barrier 2- Supply Barrier 3- Legal & Regulatory

In Brazil: 1- Demand Barrier 2- Security Barrier 3- Legal & Regulatory

In China: while two barriers in the top three are related to “Legal & Regulatory” the other is tied with “Resource Barriers” [28].

European Commission’s (2002) report covers SMEs of 19 European countries (15 EU member states plus Iceland, Liechtenstein, Norway and Switzerland). According to this study, the reasons for not using the internet for marketing SMEs in Europe are specified as follows: 1- Demand Barrier 2- Resource Barrier 3- System Barrier [17].

Heung’s (2003) exploratory study identifies the potential barriers of implementing e-commerce, as perceived by the travel agencies in Hong Kong. The prominent barriers of implementing e-commerce for travel agencies are: 1-Supply Barrier 2- Resource Barrier 3- Security Barrier [29].

Stansfield and Grant’s (2003) paper highlights some of the important issues identified by SMEs managers relating to the adoption of the internet for SMEs within West Central Scotland. In this study, two barriers are related to “Resource Barrier”, whereas the third is tied with “Supply Barriers” [30].

Lawson et al.’s (2003) study presents the research results from Australia (two regional areas: SW Sydney and SE Melbourne) which indicates the major barriers in e-commerce adoption of most manufacturing SMEs and reflects the perceptions of top managers. According to this study, three prominent barriers are: 1-Security Barrier 2- Supply Barrier 3- Legal & Regulatory [31].

Kim’s (2003) study presents the list of barriers adopting e-commerce for SMEs (hotels and travel agencies). In Korea, two barrier components are related to “Resource Barrier”, whereas the third is tied with “Supply Barriers” [32].

MacGregor and Vrazalic’s (2004) report presents the findings of a study of e-commerce adoption of SMEs in diverse industry sectors of Wollongong (Australia) and Karlstad (Sweden). This study identifies the following shortcomings:

In both the Australian and Swedish framework the prominent barriers which inhibit SMEs from adopting and using e-commerce
include all three prominent barriers are related to "Demand Barriers" [33].

- Kaynak, Tatoglu and Kula’s (2005) study draws on the data obtained from manufacturing SMEs in Turkey which are the factors affecting their willingness to adopt EC/e-commerce usage. According to this study, two prominent barriers are related to “Resource Barrier”, whereas the third is tied with “Legal & regulatory” [34].

- Vrana and Zafiropoulos’s (2006) study investigates travel agents' perceptions on internet/e-commerce issues in Greece. According to this study, the disadvantages of internet distribution for travel companies are "Security Barrier" and "System Barrier". Two prominent issues are related to system, whereas one is tied with security [35].

- Bolongkikiti et al.’s (2006) exploratory research on the usage level of e-commerce among SMEs in the West Coast of Sabah in Malaysia states top three barrier components in adoption of e-commerce for SMEs: 1- Security Barrier 2- System Barrier 3- Supply Barrier [36].

- Kapurubandara and Lawson’s (2006) research investigates the barriers to adoption of ICT and e-commerce in SMEs of Sri Lanka. According to the study whose findings are based on the perceptions of the SME owner/managers, all prominent (top three) barriers for using or extending use of e-commerce technologies are related to “Legal & Regulatory” [22].

4. RESEARCH METHODOLOGY (ARAŞTIRMA YÖNTEMİ)

It is obvious, as the evidence reviewed in the above studies show, that there are a number of pertinent barrier factors for SMEs worldwide on the other hand; there are differences among the barrier priorities of some countries. For example, the barrier factors for SMEs in Sweden and Australia are related to only “Demand Barriers” conversely, the barriers for SMEs in Brazil are composed of both “Demand Barriers” and “Security” and “Legal and Regulatory”. From this viewpoint, in order to test which the prominent barrier components are valid or not for Turkish Travel Agencies, this study employed four stages of research procedures; research design, data collection, data analyses, and conclusions. First, secondary data regarding adoption to e-commerce for SMEs worldwide was collected. Based on these data, a survey design was developed for confirming some prominent barriers faced by SMEs for Turkish Travel Agencies. Second, a questionnaire method was implemented, based on the perception of Regional Chapters Delegates (RCs) of the Association of Turkish Travel Agencies (TURSAB).

By developing the evaluation instrument, the main focus concentrated on the prominent barriers which were ranked in the top three of the barrier lists in previous researches on e-commerce barriers for SMEs worldwide. In this way, a list of prominent barriers was created including 14 different components underlying the six broad categories.

The questionnaire was divided into two sections; in the first section, the respondents were asked to rate the 14 barrier components in adoption to e-commerce for Turkish Travel Agencies on a 5-point- likert scale ranging from 5 (Strongly agree) to 1 (Strongly disagree). The second part of the questionnaire was designed to collect information about the respondents.
As previously mentioned, the findings are based on the perception of Regional Chapters Delegates (RCs) of the Association of Turkish Travel Agencies (TURSAB). The association, which presently incorporates 5184 travel agencies, including branch offices all over Turkey, has 21 RCs throughout the country. RCs are the governing organs within the TURSAB’s organizational structure. Every RC has nine delegates elected among the travel agencies in a particular region for an office term of two years. At present, a total of 189 selected delegates are officiating at the association’s RCs. The main aims of the association are development of travel agency profession which complement with the country’s economy and tourism sector, and the protection of professional ethics and solidarity. The main task of the RCs is to deal with local issues by establishing a relation and cooperation with local authorities and other organizations concerned [37].

Attached by a covering letter explaining the purposes of the study and a self-addressed return envelope, the questionnaire form was sent to each delegate. During the 1-month survey period, 78 completed questionnaires were returned, generating a response rate of 41%. The latter were used for the analysis.

The data obtained from the rating system were coded, verified and keyed into a computer data file. The descriptive statistics of mean, and standard deviation were computed from the ratings for each item. As seen in Table 2, the ratings of respondents for the barrier factors were presented in order of priorities.

5. DISCUSSION OF THE FINDINGS (BULGULARIN TARTIŞMASI)

This exploratory study states that there are fourteen prominent barrier factors/components for SMEs worldwide gathered under the mantle of six broad categories beyond the dipole grouping methods like internal-external or technological-non technological. Additionally, according to the conjunctive conclusions derived from the findings of all previous studied countries, two major categories, “Resources” and “Supply Barriers”, come to the fore (see Figure 1).

![Figure 1. Dispersion of Three Prominent Barrier Components for SMEs Worldwide (17 Studied Countries) According to the Broad Categories](image-url)
The findings of the research in this study (see table 2) show that the top three prominent barrier components for Turkish Travel Agencies are 1- Limited knowledge of available technology; 2- Shortage of skilled human resources for e-commerce; 3- Lack of confidence in the benefits of e-commerce.

Table 2. The e-commerce barriers for Turkish travel agencies
(Tablo 2. Türkiye Seyahat Acenteleri için e-ticaret bariyerleri)

<table>
<thead>
<tr>
<th>Rank</th>
<th>SIX BROAD CATEGORIES WITH THIRTEEN BARRIER COMPONENTS</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RESOURCE BARRIERS</td>
<td>3.55</td>
<td>0.96</td>
</tr>
<tr>
<td>2</td>
<td>-Limited information on options and knowledge of</td>
<td>3.53</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>available technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>-Shortage of skilled human resources (Knowledgeable</td>
<td>3.44</td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td>/qualified staff)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>-Lack of confidence in the benefits of e-commerce</td>
<td>3.13</td>
<td>0.75</td>
</tr>
<tr>
<td>5</td>
<td>DEMAND BARRIERS</td>
<td>3.33</td>
<td>1.09</td>
</tr>
<tr>
<td>6</td>
<td>-Customers not being familiar with this trade mode</td>
<td>3.37</td>
<td>0.91</td>
</tr>
<tr>
<td>7</td>
<td>-E-commerce does not fit with products/services</td>
<td>3.10</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>(For example, hard to manage travel data as it has</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>too many factors)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>SUPPLY BARRIERS</td>
<td>3.37</td>
<td>1.02</td>
</tr>
<tr>
<td>9</td>
<td>-E-commerce does not lead to more lower costs owing</td>
<td>3.33</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>to cost of securing skilled human resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>-Insufficient e-commerce infrastructure as to</td>
<td>3.03</td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>protection and regulations for e-commerce strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>LEGAL AND REGULATORY</td>
<td>3.35</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>-Lack of government and industry association’s</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>incentives, and supports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>SECURITY &amp; PRIVACY</td>
<td>3.19</td>
<td>1.05</td>
</tr>
<tr>
<td></td>
<td>-Security concerns corresponding to privacy of data</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>with preventing hacking and viruses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>SYSTEM BARRIERS</td>
<td>3.37</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td>-Resistance to adoption of e-commerce (E-commerce</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>is not fitting with the current business practice</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>because of absence of face-to-face up sell/cross-</td>
<td></td>
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<tr>
<td></td>
<td>sell opportunities and human contact during the</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>transaction)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>-Fear of changes in corporate culture</td>
<td>3.01</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Notes: The mean is the average on a scale of 5=strongly agree to 1=strongly disagree.
It can also be easily noticed that all refer to the one broad category, "Resources Barriers". As such, this research confirms only resource issues as being barriers for Turkish Travel Agencies (See figure 2). However, as can be seen in Table 2, the respondents considered none of the barrier component as trivial (or strongly disagree) in adoption to e-commerce in their business processes and transactions. The findings manifest some peculiar Turkish feature. That is to say that even though Turkey has adopted the major politics on accelerating to e-commerce concurrently with official participation to the e-Europe initiative of the European Union in 2001 [38], no remarkable advance in practice has been witnessed. The results, in one sense, confirm the failure of e-Turkey initiative which has started in 2001 for promoting the setting up and helping SMEs to take part in the e-marketplace. The findings of this research approximately tally with Kaynak and others’ research results [34] on manufacturing SMEs in Turkey.

6. CONCLUSION (SONUÇ)
At first, by analyzing deeply the literature regarding the barrier factors and the supporting activities in adoption to e-commerce of SMEs worldwide, this study noticed that prominent barrier factors refer to six broad barrier categories/groups which can be found in the literature: (1) Supply Barriers; (2) Demand Barriers; (3) Legal and Regulatory; (4) Security & Privacy; (5) Resource Barriers; (6) System Barriers. On the other hand, the findings of this particular research confirm only one broad category “Resource Barriers” as being a prominent barrier for Turkish Travel Agencies. In itself it covers three components namely, 1- Limited knowledge of available technology; 2- Shortage of skilled human resources for e-commerce; 3- Lack of confidence in the benefits of e-commerce.
In the light of these findings, it can be accepted without any hesitation that the best measures lie in the educational support for training current personals in SMEs, and increasing the needed number of skilled and semi-skilled labor beyond the casual efforts by creating a general awareness on e-commerce. Education and training have been already viewed as being crucial to addressing the lack of readiness of SMEs in adopting and developing their e-commerce capabilities [39]. As projected in Kozak' study (2007)[40], the benefits and importance of e-commerce incorporating Turkish Travel Agencies, there is no question of the lack of awareness as being barriers to the uptake of e-commerce.

As a result, the following proposals and suggestions linked with this study could be delineated as follows:

The chambers of commerce and industry, and associations of SME-dominant sectors, or their sub organizations at a general and regional level should be a major contributor at this juncture by teaching e-commerce skills to its members in vocational training and in ongoing lifelong learning. Concordantly, project-based learning activities would enable the understanding of basic rules such as internet tools, new business and income models, design for easy-to-manage web sites and intranets, content management and so forth.

On the other hand, the field of training shouldn’t be left solely on the dynamics of the market and initiative of a few organizations. Internet/web-based technologies and content management should also be an integral part of school curricula. To achieve a success in the medium term, all schools in higher education should play a major role in providing e-commerce skills in response to the growing need for university graduates skilled in online technologies. Strategies comprising of the following skill and cognitive-based clusters; understanding principal activities for creating a Web site, quality and online security in an extensive overview of e-commerce applications and operations.

In sum, while this study's findings confirm that it is crucial to addressing the lack of readiness of SMEs in adopting and developing their e-commerce capabilities, it also emphasis that university/high school managements need to be aware of the necessity of well-qualified persons for an absolute solution in middle-term and strategic thrusts related to e-commerce education.

As a result, the present study can serve as a good base and a model for new e-commerce barrier researches as well as confirming to the propositions by previous researches concerning SME-dominated sectors.

REFERENCES (KAYNAKLAR)


