Experiences of E-Commerce Use and Perceptions of Export Barriers among Jordanian Businesses

Hani H. Al-Dmour, Haitham Al-Shibly and Faroug Aljarery

ABSTRACT

This study investigates the Electronic Commerce (EC) usage profile of services and industrial companies in Jordan as well as the factors affecting their willingness to EC usage. The study draws on the data obtained from a sample of 112 firms who were a priori identified as being involved in direct exporting, yielding 60 usable questionnaires being returned. It was discovered that the most useful EC applications in exporting are: EC websites, online show rooms, online payments, e-banking transactions, videoconferencing, as well as online meetings. The major export barriers are: fears of intense competition of foreign markets, lack of experience in exporting, lack of time management of that time devoted to export matters, and lack of security of online payments. The analysis shows that EC made it feasible for firms to undertake significant export opportunities and get faster, cheaper and easier access to world markets. Industrial companies were more concerned about the lack of security of online payments than people in service firms. Industrial companies consider online meeting to be more useful for exporting activities and they were less concerned about the dependency on foreign agents.

Keywords: Electronic commerce, Export Marketing, World Wide Web-based technologies.

INTRODUCTION

The two most influential forces affecting international commerce today are the increasing rate of globalization and advances in information and communication technologies (ICTs). The exponential growth in ICTs and the resulting rapid emergence of EC have significantly been reshaping the business world. It was pointed out that EC now has reached a phase of change where a revolutionary idea becomes more evolutionary in nature (Lee et al., 2000). At the same time, the formation of various trade agreements and the establishment of liberal trade policies by both the developed and the developing countries has resulted in the abolition of protectionist measures and the removal of most trade barriers. As a result, virtually all firms, irrespective of size, industry or national origin, are now confronted with the consequences of this new commercial reality, and have realized that choosing not to participate in global markets may no longer be an option (Prashantham, 2003).

Naturally, an increasing number of firms have seen in these sweeping developments using EC an effective tool to expand their operations internationally, achieve their growth objectives, raise their sales and profits, diversify their business options, and even retaliate to the entry of foreign competitors into their domestic markets (Leonidou et al., 2002; Lu and Julian, 2007). Consequently, Using EC in exporting has been a popular approach adopted by firms in their endeavors to enter and penetrate foreign markets, as it requires less commitment of resources, has minimal effect on the ordinary operations of the firm, and involves low investment and financial risks (Leonidou et al., 2002). It has been estimated that annual online spending will reach 105 billion $ by 2007 according to Jupiter research. Commensurate with this trend, the volume of...
worldwide EC activities grew from $5,520 billion in 2001 to $11,999 billion in 2004.

The empirical study undertaken is significant for two reasons. First, it presents new data and insights into EC usage in export marketing. Second, this study focuses on a relatively unexplored research area in Jordan – export marketing.

The remainder of the paper is set out in the following way. The background literature on the conceptualization of EC as well as the EC use in export marketing and its perceived benefits and limitations are discussed in the following section. The research design for the study is provided in the third section. The forth section provides the data analysis conducted in our research. The fifth section provides conclusions and recommendations. The study Limitations and future research directions are stated in the last section.

LITERATURE REVIEW

In this section, the most relevant literature domains on which this research is based on and derived from are briefly presented. First, the conceptualization of EC is developed. Second, the fundamentals of EC in exporting are looked at in more details with the aim of integrating the EC with the export marketing.

Conceptualization of Electronic Commerce (EC)

The term EC has been given many different descriptions in literature where the phenomenon has been regarded from different, yet overlapping, perspectives. Therefore, it seems useful to put this phenomenon into context before getting into issues of EC evaluation. According to the New Shorter Oxford English Dictionary (1993), the word “electronic” means “anything relating to the transference of electrons” and “electronic medium” is any “medium that transmits electrons to deliver information”. The term “commerce” denotes some transaction, an exchange of goods and/or services for money or other goods and services (The New Shorter Oxford English Dictionary, 1993).

Thus EC implies any form of commerce activity conducted via electronic connection or medium. Choi et al. (2003) believe that EC existed from the time when the telegraph was launched. Senn (2000) believes EC has existed since 1965 and the introduction of Automatic Teller Machines. This was followed, according to Molla and Licker (2001), by information systems that crossed organizational boundaries and made possible the exchange of information between firms by electronic means. Such systems were generally known as Electronic Data Interchange Systems (Molla and Licker, 2001). Until the advent of the Internet in the early 1990s, the expression EC was almost synonymous with inter-organizational systems and/or Electronic Data Interchange (EDI) (Molla and Licker, 2001; McKay and Marshall, 2004).

The deployment of Internet and the World Wide Web-based technologies changed this, to the point that the Organization for Economic Cooperation and Development (OECD, 2003) defined EC as “The sale or purchase of goods or services, whether between businesses, households, individuals, governments, and other public or private organizations, conducted over the Internet”. This definition is restrictive not only because it considers only Internet transactions, but also because it excludes web-based activities such as product design and marketing; which are vital in supporting a transaction, irrespective of whether the transaction occurs over digital media. Rudnicka and Madey (2001:463) said that, “Electronic commerce is a dynamic set of technologies, applications and business processes that link enterprises, consumers and communities through the electronic exchange of goods, services, transactions and information primarily via the Internet”.

The Internet has been claimed to be more flexible and accessible than the early mediums of EC because it is a system of systems, each system consisting of computers connected by heterogeneous networks (e.g. wire and wireless connections) (Peterson et al., 1997). The Internet can be used as a medium to exchange electronic products (e.g. information, music, remote assistance, online services, and software) and conduct internal and external communication and computing. The user property of friendliness to Web browsers has
made it possible for all linked systems to be content and information providers rather than being simply content and information receivers (McKay and Marshall, 2004). These characteristics and benefits have helped the uptake of the Internet as a medium for commerce (Rudnicka and Madey, 2001).

Given the above, it appears that EC stands for commercial exchanges mediated via the Internet (McKay and Marshall, 2004), consisting of all those computer and system-mediated activities implicated in supporting business activities aimed at revenue generation (Molla and Licker, 2001; Rudnicka and Madey, 2001). Thus, the direct sale of goods and services that occur over the Internet would be regarded as EC, including the sales of goods and services from supplier to a firm as well as sales from the firms to their end consumers. Also, considered as EC would be the advertising and marketing activities that take place over the Internet to support such sales, the provision of information and after-sale services over the Internet, and any other Internet-based activity that supports or enables the transaction to take place. Internet technologies including the Web, Web browsers, and search engines, together enable the creation of EC. Thus, Molla and Licker define EC as “Internet based [information systems] that use World Wide Web-based application solutions in order to perform one or more of the business functions; such as information provision, communication, buying, selling, distribution, (consumer) service, delivery, and payment processing among producers, suppliers and their (consumers”) (Molla and Licker, 2001:133).

2-2 Electronic Commerce Use in Export Marketing

The crucial importance of exporting for the economic prosperity of national economies and individual firms alike has stimulated increased attention among academic researchers, who have attempted to investigate the key issues involved in the development and implementation of successful export marketing strategies; in order to offer sufficient support to corporate and public policy makers confronting today’s hostile global business conditions (Katsikeas, 2003; Balabanis et al., 2004; Prasad et al., 2001). While a review of the existing export literature indicates that previous studies have addressed a wide range of topics, including export stimuli; export barriers; export promotion programs; foreign market selection, entry and expansion; export marketing strategy; export development models; and export performance (Balabanis et al., 2004). Yet, little is known about the impact of EC on exporting performance (Prashantham, 2003).

Information technology (IT) including the EC will be one of the main forces shaping export marketing in the new millennium (Holden and O'Toole, 2000). However, there does not seem to be a consensus in the literature about EC technologies role in export marketing.

Two opposite positions can be synthesized from the literature about the impact of EC in exporting. Firstly, some scholars argue that there is minimum contribution of technology to export marketing because technology may be incompatible with high levels of human involvement in exporting relationship development (Fisk et al., 1993). That is, only people create relationships, and close relationships may suffer through technology (Barnes, 1997). For example, technology in service may deliver less personal service, thus less satisfaction and commitment (Silver and Laine, 1996). Therefore, the relationship concept should be confined to human interactions (Lehtinen, 1996).

The next reason that the internet empowers buyers to find lower cost suppliers at lower search costs. The internet is a relatively cost-effective alternative form of information gathering and communication for businesses (Hoffman and Novak, 1996). Traditional electronic commerce relied on value-added networks, while private networks are characterised by relatively high costs and limited connectivity (Pyle, 1996). Compared with local networking systems such as EDI systems, up-front costs are negligible, particularly for the firm retrieving information via another firm’s web site (Boyle, 2001). Indeed, very few small-to-medium businesses would join a value-added network to undertake EDI benefits if none of their business partners were using such a service
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(Ratnasingham, 2000). However, a company can employ internet technologies even before it has identified its ultimate trading partners (Poon, S and Jevons, C, 1997) and the dependency on a single supplier or a single buyer could be reduced (Ratnasingam, 2000).

The next reason why the internet may influence dependence is why the internet may facilitate replacability in an exchange relationship. That is, communication efficiencies via the internet may also increase the number of suppliers with which a buyer firm can effectively and efficiently exchange. From this perspective, the internet serves to create a cybemarketplace whereby switching costs are reduced to the point that ad hoc shopping for suppliers becomes attractive (Heide and John, 1988). Indeed, emerging internet-based inter-firm networks would reduce supplier power (Bakos 1991). Indeed, bargaining and power-dependence relationships have been strongly impacted by information technology. Many of the efforts of channel members to administer less adversarial channel relationships are facilitated by the use of IT (Stern and El-Ansary, 1992). In addition to reduced search costs, information availability has exponentially increased in many industries due to internet adoption. Further, the power that a large company has over a small one, which forces the small business to use a proprietary EDI environment (Webster, 2001), does not exist in the internet environment (Poon and Jevons, 1997).

Users of the internet may have high levels of distrust in the medium as an exchange mechanism (Novak and Hoffman, 2000). The scant literature appears to focus on one theme; that the lack of trust in an internet environment poses an obstacle to greater use of the internet for transactions (Liu, 2005). This lack of trust is created in three ways. Firstly, the physical distance between two parties usually leads to a low trust level (Henning-Thurau and Hansen, 2000) and provides challenges to initiate and develop these business relationships (Alshibly et al., 2006). The internet environment also presents relatively few cues by which trust can be assessed, for example, body language and having sight of products being offered are absent (Porter, 2001). Finally, uncertainty regarding unknown future events and trading partners’ responses to these future events reduces a firm’s confidence in the reliability of B2B transactions over the internet and, more importantly, in the trading partners they are dealing with (Houston, 2001).

Firms often find the adoption of internet-based EC a more complex process than traditional inter-organization information systems because this process involves integration with existing ways of doing business (Chan and Swatman, 2000). Consequently, when businesses begin to adopt a new technology such as the internet in their business operations, they often experience distrust, ambivalence and resistance to change (Chan and Swatman, 2000). This effect may in turn lead to disequilibrium of business relationships (Alshibly et al., 2004) which reach equilibrium when the benefits of using the new technology are realised and efficiency achieved. That is, there is speculation in the literature that internet adopters experience short-term disruptions but long-term strengthened relationship bonding (Vlosky et al., 2000).

On the other hand, although internet-facilitated services enhance customer service and service quality (Webster, 2001), it may not necessarily increase customers’ satisfaction due to its lack of capacity for direct personal interaction (Kolesar and Galbraith, 2000). Instead, customers only experience no dissatisfaction (Patterson and Smith, 2003). While customers value the convenience, accessibility and efficiencies offered by the internet, they also place value on the interpersonal, emotive aspect of off-line relationships (Barnes and Cumby, 2002).

The second position in the literature is that EC may facilitate the full implementation of export marketing as the dominant expression of marketing thought and practice (Hamill, 1997). IT is not only an important facilitator in streamlining operational efficiencies, but also in rearranging business relationships to deliver superior products and services (Zhu, K and L K Kraemer, 2002). For example, firms using internet
technology may be able to transform existing weak ties into stronger, long-term arrangements through customization and personalization of the technology (Alshibly, 2006). Such technology-facilitated relationships may not be close, but are probably closer than those that transaction marketing can achieve (Coviello et al., 2001).

EC has been identified as one of the most significant marketing tools in the global marketplace (Rodgers and Sheldon, 2002), for its enormous potential use for businesses. According to Hamill (1997), an internet connection can substantially improve communications with actual and potential customers, suppliers and partners abroad, generate a wealth of information on market trends and developments worldwide, including the latest technology and R&D, and be a very powerful promotion and sales tool.

EC allow customization and personalization. This may enhance rather than hinder export relationships. That is, EC can affect business activities and relationships in many different ways and EC has a positive effect on firm relationships (Hamill, 1997). Without the effective use of EC, relationship marketing may not be an effective strategy (Zineldin, 2000). For instance, it can influence communication and coordination processes within a network with alliances and other collaborators. In particular, EC is becoming the cornerstone of many relationships (de la Torre and Moxon, 2001) and may facilitate dialogue and interactivity between business parties and result in more customized services and better relationships (Alshibly, 2006). EC make it easier for organizations to have direct and different levels of interaction with their customers (Zineldin, 2000).

Trust in an exchange partner could be developed on the EC. Most literature is concerned with how to develop trust on EC in business-to-consumer (B2C) context. Variables are identified in the consumer markets and ways that internet firms can use to build trust in consumers (Urban et al., 2000), for example, product guarantees, and secured web site transactions. Many variables are experience-related. Repeated exposure to the internet as a means of conducting transactions increases users’ perceptions of trust in the medium because differences in overall trust and issues of data privacy were found between infrequent and frequent users of the internet (Papadopoulou et al., 2001). That is, for trust to occur, a consumer may first participate in an exchange and then make judgements regarding the level of trust. This suggests that only customers who had some kind of offline relationships with the company would be willing to initiate online relationships (Alshibly, 2006). Further, in a business-to-business (B2B) context, trust based on similarity could be created by operational linkages such as computerized inventory and just-in-time delivery that have seen increased popularity because of the development of the internet (Reichheld and Schefter, 2000). For example, Dell computers has built process-based trust with its corporate customers by providing web hosting, and IT consulting services through the internet.

The EC is “completely reshaping the way we communicate with others, conduct our business, target customers or distribute products and services” (Schlegelmilch and Sinkovics, 1998, p. 169). The internet has been known to fundamentally change the dynamics of the global economy (Singh and Kundu, 2002), leading to a profound impact on the world of international business (Park and Jun, 2003). The explosion of international marketing activity on the internet has provided a fundamentally different environment for international marketing (Eid and Trueman, 2002). Not only has the marketing mix and the adopted marketing strategies been transformed (Strauss and Frost, 2001), the efficiency of traditional marketing functions has also increased (Strauss and Frost, 2001). The internet serves as a vehicle that accommodates the process of conducting export business as well as a tool deployed for promotion, information and export revenue enhancement (Farhoomand and Lovelock, 2001).

As such, the impact of the EC in export marketing has not been fully examined. In addition, these previous studies have been conducted predominantly in the USA (Samiee, 1998) and Europe (Bennett, 1997). EC is often touted as a global phenomenon. Despite this, most studies of EC have focused predominantly on the developed Western countries. While it is extremely important to understand EC in the context of more advanced countries, it also impacts the
developing countries (Van Slyke et al., 2005). Additionally, Prashantham (2003) suggested that much of the early literature was based on lessons learnt from trial and error, rather than from robust empirical enquiry. Furthermore, both the size and the importance of EC have changed significantly since these studies were undertaken. Such rapid developments lead to a relatively high risk of obsolescence in research findings in this field (Fisher and Reibstein, 2001) requiring further investigation into the use of EC in export marketing.

RESEARCH DESIGN

This paper reports the results of a survey of the characteristics and experiences of a sample of publicly and privately held Jordanian exporting businesses possessing EC Websites. The study was based on an empirical investigation of firms that used the internet and were involved in exporting products to foreign countries from Jordan. The sample of firms came from a wide cross section of industries and service was provided by a state government department.

In order to obtain valid and reliable measures of the variables, previously validated scales were used to measure export marketing performance and the uses of the EC (Cavusgil and Zou, 1994; Julian, 2003; Julian and Holtedahl, 2004). All items were measured with five-point scale consisting of scale poles ranging from 1 (not important) to 5 (extremely important). (Cavusgil and Zou, 1994).

The instrument contained items identified by the literature as to the use of the EC in export marketing (Bennett, 1997; Julian and Holtedahl, 2004), together with items intended to measure export marketing performance (Cavusgil and Zou, 1994; Julian, 2003).

The study focused on respondents’ perceptions of; first, the most useful EC application, second, the severity of various export barriers identified in the relevant academic literature (Bennett, 1997; Julian and Holtedahl, 2004), and third, the contributions of the Internet to firms’ export marketing success. Respondents’ levels of satisfaction with the EC as a marketing weapon were evaluated; finally, differences in responses between industrial and service companies were examined.

EC applications were measured via items that identify the most important application used under EC transaction by firms, such as, websites, e-banking, online showrooms.

Exports barriers were measured via items that identify the most important barriers that hinder the use of EC in exporting; these barriers were classified into: legal, security, and technology barriers.

EC benefits were measured via items that tapped the extent to which the EC helps a firm increase its sales volume, is an effective sales tool for foreign markets, creates sales leads, helps the firm sell anywhere in the world and whether the internet makes it easier for foreign customers to order goods, the extent to which the EC helps introduce new products, makes it easier to serve niche markets, helps penetrate unfamiliar and secondary markets, generates international awareness about the business and creates a good business image (Bennett, 1997), identifies the extent to which the EC helps lower the costs of international marketing, makes exporting easier and helps to avoid bothering about foreign cultures and practices, foreign market representation and having to set up foreign branches (Bennett, 1997; Lu and Julian, 2007). In addition, it specifies the extent to which the EC gives the company a competitive advantage over competitors and has an effect on the competitive intensity in the foreign market (Bennett, 1997).

The first draft of instrument was pre-tested by five researchers and experts in the fields of EC and export marketing, each one with practical and/or academic experience from two Jordanian universities. Each expert was provided with a working definition of the construct being measured, and was asked to rate: how well they felt individual statements reflected the stated definition; their opinion of whether the questions were likely to accurately measure each dimension; whether the questions were vague, ambiguous, difficult to understand, or had contradictions; whether there was incompatibility between any item and the dimension it was supposed to measure; and whether there were any set of items that did not fully capture the dimension it was supposed to measure. The aim
was to detect and remedy errors in the instrument design (Cavana et al., 2001). A tabulation format for collecting this information was used because it reduced the length of the instrument and enabled the expert to write any comments or suggestions next to the instrument items.

Following the pre-test, the final survey was distributed to 112 firms who were a priori identified as being involved in direct exporting, yielding 60 useable questionnaires being returned accounting for an effective response rate of 54.0 per cent and considered adequate (Straub et al., 2005). To maximize the response rate, and therefore reduce the possibility of no response bias, recommendations of Fink (2006) were followed. Thus, to minimize the respondent costs, the instrument was designed so that it would be easy to answer. The use of sensitive or demographic questions was kept to a minimum. To establish trust with the respondent, the introduction to the survey explained why the study was important, and promised confidentiality. In addition, the researchers’ universities were named as the sponsors of the study, to provide legitimacy. Finally, attention was given to minimize the difficulty of instrument, through wording of the item, using Arabic language, and pre-testing, as discussed above.

Research Sample

As indicated above, the final survey was distributed to 112 firms. Of the 75 questionnaires collected, 15 were considered unusable because over 25 percent of these instruments’ questions were not answered (Fink, 2006). It was assumed that those respondents had been unwilling or unable to co-operate fully. A total of 60 usable questionnaires were obtained, representing a 54.0 per cent response rate from the form which had been distributed to 112 firms.

Industrial firms represented a slightly higher percentage of the complete sample (33 firms) compared to service firms (27). The majority of the firms were small firms that have only 10-20 or 21-30 employees. 30 firms obtain an exporting yield that accounts for 6-20% of their total sales. The majority of the firms (45) had more than 5 years experience in exporting (Table 1).

<table>
<thead>
<tr>
<th>Firm Type</th>
<th>Industrial</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>10-20</td>
<td>12</td>
<td>36.4</td>
</tr>
<tr>
<td>21-30</td>
<td>14</td>
<td>42.4</td>
</tr>
<tr>
<td>31-40</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>41-more</td>
<td>5</td>
<td>15.2</td>
</tr>
<tr>
<td>Percentage of exports from total sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5%</td>
<td>9</td>
<td>27.3</td>
</tr>
<tr>
<td>6%-20%</td>
<td>15</td>
<td>45.5</td>
</tr>
<tr>
<td>21%-35%</td>
<td>5</td>
<td>15.1</td>
</tr>
<tr>
<td>Up to 36%</td>
<td>4</td>
<td>12.1</td>
</tr>
<tr>
<td>Export experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5 Years</td>
<td>7</td>
<td>21.2</td>
</tr>
<tr>
<td>5-10</td>
<td>19</td>
<td>57.6</td>
</tr>
<tr>
<td>11-20</td>
<td>7</td>
<td>21.2</td>
</tr>
<tr>
<td>More than 20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100.0</td>
</tr>
</tbody>
</table>
ANALYSIS

The data were analyzed using the equality test for groups’ means, were generated through SPSS 11.0 software package.

4-1 EC Applications

We started the analysis by listing all the means of each EC applications. In studying the 7 EC applications, we found that all the respondents in average, on a Likert scale from 1 (Not at all useful) to 5 (Very useful), value the following EC applications as the most useful EC applications in exporting: EC websites (4.3), online show rooms (3.5), online payments (4.2), e-banking transactions (3.2), EC applications (3.6), Videoconferencing (2.7), as well as Online meetings (2.9). On the contrary, IT consultation (2.4) was the least useful compared to the factors above. It is worth noticing that there was only one application found to be perceived less useful for industrial companies compared to the service companies.

Statistically significant differences between the average responses of firms service vs. industrial were observed (using the equality test for groups means available on SPSS) in relation to eight items. Industrial companies considered Online meeting to be the less useful for its exporting activities. The results are shown in Table (2).

<table>
<thead>
<tr>
<th>Type of sector</th>
<th>Both sectors</th>
<th>Industrial</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Ranking</td>
</tr>
<tr>
<td>1. EC websites</td>
<td>4.3</td>
<td>1.00</td>
<td>3</td>
</tr>
<tr>
<td>2. online show rooms</td>
<td>3.5</td>
<td>1.23</td>
<td>1</td>
</tr>
<tr>
<td>3. online payments</td>
<td>4.2</td>
<td>1.12</td>
<td>2</td>
</tr>
<tr>
<td>4. e-banking transactions</td>
<td>3.2</td>
<td>1.46</td>
<td>5</td>
</tr>
<tr>
<td>5. EC applications</td>
<td>3.6</td>
<td>1.29</td>
<td>6</td>
</tr>
<tr>
<td>6. Videoconferencing</td>
<td>2.7</td>
<td>1.40</td>
<td>7</td>
</tr>
<tr>
<td>7. Online meetings</td>
<td>2.9</td>
<td>1.40</td>
<td>10</td>
</tr>
<tr>
<td>8. IT consultation</td>
<td>2.4</td>
<td>1.44</td>
<td>8</td>
</tr>
</tbody>
</table>

Perceptions of Export Barriers

Respondents were asked to indicate the extent to which they regarded various export barriers (identified from a review of relevant academic literature) as representing significant problems (1 = very minor problem, 5 = very major problem) as far as their companies were concerned. The results are shown in Table (3), which suggest (in line with previous research—see for example Leonidou et al., 2002; Bennett, 1997; Lu and Julian, 2007) that Intense competition in foreign markets (4.3), lack in experience in exporting (3.5), lack of management time to devote to export matters (4.2), tax problems (3.2), lack of security of online payments (3.6), documentation problems (2.7), different regulations (2.9), political risk (2.4), lack of export experience (3.0), need to research foreign markets (2.8), exchange rates (2.2), and the inability to read, speak and understand the languages of potential foreign markets (3.0) were the main difficulties perceived by respondents.

Statistically significant differences between the average responses of firms service vs. industrial were observed in relation to export barriers. Industrial companies were more concerned with the lack of security of online payments, this result was supported by other studies such as Bennett, 1997. The results are shown in Table (3).
### Table 3: Perceptions of Export Barriers

<table>
<thead>
<tr>
<th>Type of sector</th>
<th>Both sectors</th>
<th>Industrial</th>
<th>Services</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intense competition in foreign markets</td>
<td>4.3</td>
<td>2.8</td>
<td>3.2</td>
<td>2.28</td>
<td>.136</td>
</tr>
<tr>
<td>2. Lack of experience in exporting</td>
<td>3.5</td>
<td>3.0</td>
<td>2.7</td>
<td>.838</td>
<td>.364</td>
</tr>
<tr>
<td>3. Lack of management time to devote to export matters</td>
<td>4.2</td>
<td>3.4</td>
<td>3.0</td>
<td>2.03</td>
<td>.159</td>
</tr>
<tr>
<td>4. Tax problems</td>
<td>3.2</td>
<td>3.5</td>
<td>3.1</td>
<td>3.97</td>
<td>.051</td>
</tr>
<tr>
<td>5. Lack of security of online payments</td>
<td>3.6</td>
<td>3.4</td>
<td>2.9</td>
<td>4.63</td>
<td>.036</td>
</tr>
<tr>
<td>6. Documentation problems</td>
<td>2.7</td>
<td>3.6</td>
<td>3.4</td>
<td>1.38</td>
<td>.244</td>
</tr>
<tr>
<td>7. Different regulations</td>
<td>2.9</td>
<td>3.7</td>
<td>3.4</td>
<td>1.01</td>
<td>.318</td>
</tr>
<tr>
<td>8. Political risk, credit risk, failed payments</td>
<td>2.4</td>
<td>3.6</td>
<td>3.4</td>
<td>.445</td>
<td>.507</td>
</tr>
<tr>
<td>9. Lack of export experience</td>
<td>3.0</td>
<td>3.8</td>
<td>3.7</td>
<td>.283</td>
<td>.597</td>
</tr>
<tr>
<td>10. Need to research foreign markets</td>
<td>2.8</td>
<td>4.0</td>
<td>3.6</td>
<td>3.49</td>
<td>.067</td>
</tr>
<tr>
<td>11. Exchange rates</td>
<td>2.2</td>
<td>3.3</td>
<td>3.4</td>
<td>.305</td>
<td>.583</td>
</tr>
<tr>
<td>12. Inability to read, speak and understand the languages of potential foreign markets</td>
<td>3.00</td>
<td>3.8</td>
<td>3.3</td>
<td>3.22</td>
<td>0.078</td>
</tr>
</tbody>
</table>

### Perceptions of EC Benefits for Exporting

Next, respondents were requested to indicate on five-point Likert scales their assessments of the contributions that the use of EC had made to their companies’ export marketing efforts. The results are given in Table (4), from which it can be seen that respondents generally held extremely favourable views of the EC contributions. Table (4) suggests (in line with previous research – see for example; (Bennett, 1997; Lu and Julian, 2007) that EC was regarded as especially valuable for:

- Lowering the cost of exporting
- Reducing cultural differences where electronic deals take place
- Helping the firm sell anywhere in the world
- Penetrating new markets with online catalogues
- Making exporting easier
- Giving the firm a competitive edge over rivals
- Creating a good business image
- Reducing the dependency on foreign representatives/agents
- Avoiding having to set up foreign branches
- Generating sales leads
- Easy export activity transactions
- Easier for foreign customers to order goods

All these contributions are relevant to the processes whereby firms internationalize their activities; implying faster, cheaper and easier access to world markets than has previously been possible. Hence, significant export opportunities may become available to a wider range of companies than in the past. Arguably, moreover, use of the Internet can mean that the export marketing function is more readily integrated into a firm’s overall marketing effort: customer (and supplier) search is facilitated; niche markets can be served more easily.
Table 4: Perceptions of EC benefits for exporting

<table>
<thead>
<tr>
<th>Type of sector</th>
<th>Both sectors</th>
<th>Industrial Services</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Ranking</td>
<td>Mean</td>
<td>Ranking</td>
<td>Mean</td>
</tr>
<tr>
<td>1. Lowers the cost of exporting</td>
<td>4.4</td>
<td>1.16</td>
<td>1</td>
<td>3.0</td>
<td>2</td>
<td>3.15</td>
</tr>
<tr>
<td>2. Helps the firm sell anywhere in the world</td>
<td>3.7</td>
<td>1.3</td>
<td>2</td>
<td>3.4</td>
<td>3</td>
<td>3.3</td>
</tr>
<tr>
<td>3. Makes exporting easier</td>
<td>3.8</td>
<td>1.6</td>
<td>6</td>
<td>3.7</td>
<td>6</td>
<td>3.8</td>
</tr>
<tr>
<td>4. Creates a good business image</td>
<td>3.9</td>
<td>1.2</td>
<td>8</td>
<td>3.8</td>
<td>6</td>
<td>3.9</td>
</tr>
<tr>
<td>5. Avoids having to set up foreign branches</td>
<td>4.2</td>
<td>1.8</td>
<td>10</td>
<td>3.8</td>
<td>8</td>
<td>3.8</td>
</tr>
<tr>
<td>6. Easy export activity throw electronic transactions</td>
<td>4.4</td>
<td>.97</td>
<td>10</td>
<td>3.9</td>
<td>7</td>
<td>3.9</td>
</tr>
<tr>
<td>7. Ignore cultural differences where electronic deals take place</td>
<td>3.9</td>
<td>1.8</td>
<td>5</td>
<td>3.9</td>
<td>4</td>
<td>3.4</td>
</tr>
<tr>
<td>8. Penetrate new markets</td>
<td>3.6</td>
<td>1.46</td>
<td>3</td>
<td>3.60</td>
<td>3</td>
<td>3.1</td>
</tr>
<tr>
<td>9. Gives the firm a competitive edge over rivals</td>
<td>3.1</td>
<td>1.2</td>
<td>7</td>
<td>3.7</td>
<td>5</td>
<td>3.6</td>
</tr>
<tr>
<td>10. No need for foreign representatives/ agents</td>
<td>2.5</td>
<td>1.5</td>
<td>4</td>
<td>3.6</td>
<td>1</td>
<td>3.0</td>
</tr>
<tr>
<td>11. Create sales leads</td>
<td>4.2</td>
<td>1.7</td>
<td>9</td>
<td>4.0</td>
<td>7</td>
<td>4.0</td>
</tr>
<tr>
<td>12. Makes it easy for foreign customers to order goods</td>
<td>3.3</td>
<td>1.37</td>
<td>8</td>
<td>4.1</td>
<td>6</td>
<td>3.8</td>
</tr>
</tbody>
</table>

CONCLUSIONS AND RECOMMENDATIONS
This study was founded on the premise that EC as a business tool has experienced amazing growth in recent times, and whilst previous research had attempted to determine the relationship between EC usage and different marketing activities. However, the investigation of EC impact on export marketing is scant. Further, there appears to be no investigation of this phenomenon within the context of Jordanian industries. As such, a robust empirical inquiry into the effect of the EC on export marketing by studying EC applications used in export marketing, perceptions of export barriers, perceptions of EC benefits for exporting was needed. Thus, this research attempts to bridge the gap that exists between academia and practitioners by investigating internet-facilitated relationship marketing.

The results are broadly consistent with those of previous research in both the export marketing and EC applications fields. As with past studies, the most useful EC applications in exporting perceived by respondents included: EC websites, online show rooms, online payments, e-banking transactions, EC applications, videoconferencing, as well as online meetings. The major export barriers perceived by respondents included fears of intense competition in foreign markets, lack of experience in exporting, lack of management time to devote to export matters, tax problems, and lack of security of online payments, documentation problems, different regulations, political risk, lack of export experience, need to research foreign markets, exchange rates, in addition to the inability to read, speak and understand the languages of potential foreign markets (cf. Bennett, 1997; Lu and Julian, 2007).

In relation to the perceptions of EC benefits for exporting, the study concludes that the EC made it feasible for firms to undertake significant export opportunities and get faster, cheaper and easier access to world markets. Not only does EC furnish firms with a low-cost gateway to global markets, its benefits also extend to communication, networking, market research, image enhancement, providing a firm with a competitive advantage and the improvement of sales volume. As far as cost reduction is concerned, the study findings demonstrate that by using the EC the firms are able to avoid obtaining foreign market representation, to avoid having to set up foreign branches, to lower the cost of international marketing, to avoid having to bother about foreign cultures and practices, by making exporting...
easier and by reducing the costs of market information this will have a positive impact on export marketing performance. The managers of export firms need to be aware of this use of the internet for export marketing activities.

Finally, respondents from industrial companies were more concerned about the lack of security of online payments than people in service firms. Respondents from industrial companies considered online meeting to be more useful for exporting activities and they were less concerned about their dependency on foreign representatives/agents.

The main novelty of the present study is its recognition of the importance of employing EC on export marketing and examines EC use in export marketing in relation to EC applications used in export marketing, perceptions of export barriers, and perceptions of EC benefits for exporting. Second, the variables studied here can serve as a foundation for further research into EC and export marketing performance. Third, evidence has been provided that EC can provide several benefits for exporting. This study has contributed to a more comprehensive understanding of the role the EC plays in exporting.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The present study outcomes may help firms to develop metrics for assessing effectiveness of EC in the exporting environment, provide export marketing managers and EC developers with a better basis for assessing the use of their EC applications in exporting. However, related to the research methods, there are several limitations of the research methods used in this study. The acknowledged limitations of this study have led to suggestions for further research.

Firstly, the current study is localized and uses sample from two sectors in a single country. This may raise the opportunity to ‘globalize’ this research across multiple sectors and countries. A logical extension of this study would be to test the study factors based on a sample of export market ventures located in a different national setting.

Secondly, the sample size was smaller than desired and the risk of misinterpreting the results due to sampling error increases with small sample sizes.

Despite these limitations, the present study provides valuable insights into the study of EC in exporting context.

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135-40.

The consumption and quality factors in the Jordanian manufacturing companies in the electronics trade. *Shehairy Al-Shabli* and *Yahya Al-Gariry*. **Al Balqa Applied University**.

The objective of this study is to examine the use of electronics service in Jordanian manufacturing companies, in addition to the factors influencing the service.

The study adopted a research sample of 112 companies involved in the trade, which amounted to 60% of the companies in the electronics sector. The study results showed that the service is of great importance to the trade companies, especially those working abroad, as they are interested in the performance and quality of the services they offer. This interest is reflected in the case of the main company, and the branch abroad, which is of great importance to the trade companies in the world market.