

Success Factors of Internet use for Exporting by Greek Companies during the Period of the Financial Crisis

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Abstract

Internet seems to provide Greek companies with new opportunities to escape the ongoing financial crisis by enhancing their existing export activities or by targeting new foreign customers. The main focus of this study is twofold: a) to identify the factors of successful Internet use for exporting purposes, and b) to assess the overall influence of the financial crisis in Greece on Internet use for exporting activities. Data were gathered via a self-administered mail survey of 77 Greek exporting companies identified as having a corporate website (fully operational) for at least 18 months prior to the collection of the questionnaires. The findings indicate that the level of IT and Internet literacy within the firm have a significant positive impact on export performance of Greek companies. The level of management's entrepreneurial orientation and enthusiasm in promoting Internet use and foreign customers' need for personal contact with the firm also had a significant positive impact on export performance. Finally, the results revealed that the vast majority of the companies were already using Internet for exporting purposes before 2009, and they were either positively or not at all influenced by the financial crisis in terms of Internet use for their exporting activities.

Keywords: Internet, Exporting, Financial Crisis, Greece, Success Factors

JEL classifications: 039: Technological Change / Y90: Miscellaneous

Introduction

Ever since the second semester of 2008, Greece is facing an ongoing economic, social, fiscal and financial crisis that tested the cohesion of all fundamental structures of the country. At the end of 2009, the crisis was enhanced in such a level that help was asked from European Union and IMF in order to support all aspects of social welfare and business activities.

By the end of 2013, the financial crisis was enhanced, compared to 2009, and the situation for every Greek company turned out to be quite difficult due to a number of reasons, like for example: a) the lack of financing caused by the decrease of cash flows in the banking sector, b) the decrease of Greek consumers' activity, c) the increase of direct and indirect taxes, d) the existence of bureaucracy regarding the majority of transactions with the public sector, e) the existence of political and legal corruption, and f) the non-existence of measures supporting foreign investments and domestic economic growth.

The negative effect of this crisis was strong on both SMEs and large companies of the country. Especially for Small and Medium-sized Enterprises, the negative consequences were multiplied by the fact that they face more problems on finding new customers, on keeping prices steady and on obtaining new financial resources comparing to their larger counterparts. A possible solution for some of the main problems of Greek companies during the period of the financial crisis is potentially offered by the use of Internet.

During the last twenty years Internet literally changed the landscape of global business arena through a major penetration of companies and households in almost every corner of the planet. The twin phenomena of e-commerce and globalization pose new challenges and provide new competitive opportunities for both large firms and SMEs. The Internet has become established as a global channel through which both existing and potential customers can be targeted, and through which organizations can both publicize and present commercial offerings (Melewar and Smith, 2003).

The Internet has created a rare opportunity for companies and organizations to access global markets, from the smallest retailer in China to the largest U.S. manufacturing firm (Griffith and Palmer, 1999). According to Rosson (2004) companies, and especially SMEs, can use the Internet to support their export orientations in three main ways: i) as a global marketing tool, ii) as a cost-efficient transaction medium, and iii) as a tool for customer care.

While there is a large number of studies concerning the role of Internet in international marketing and business activities (see for example: Avlonitis and Karayanni 2000; Biswas and Krishnan 2004; Czinkota and Ronkainen, 2012; Dou, Nielsen and Tan, 2002; Eid and Trueman, 2002; Hamill 1997; Hamill and Gregory 1997; Lichtenthal and Eliaz 2003; Moen, Endresen and Gavlen, 2003; Poon and Jevons, 1997; Quelch and Klein 1996; Samiee 1998a; Shankar and Meyer, 2009), relatively little space has been devoted to the potential use of Internet in exporting, even though during the past ten to fifteen years there has been a relative increase of research attempts on the specific scientific area.

Table 1, presents the results of the literature review on the subject of Internet use for export marketing as well as for exporting purposes. The studies are grouped according to the approach that they used. Table 1 provides possible evidence of the limited research that exists and the relative increase of research attempts in this area during the past decade.

In terms of Greece, both theoretical and empirical frameworks concerning the use of Internet in export marketing are also limited and unexplored since there have been only few attempts, to investigate the theoretical background that describes the current situation, as well as some empirical studies funded and conducted either by private Greek companies (for example ICAP) or by public organizations like e-Business Forum, Go-Online and the National Observatory for SMEs. The results of these studies, though, are insufficient and of limited usability due to the fact that they simply present some basic indicators like Internet connections, use of e-mail, basic websites that Greek companies visit in order to obtain business information, and number of personal computers in the company. It is, therefore, imperative to develop a better understanding of the impact of Internet

on export performance of Greek companies by examining several factors that lead to successful Internet use.

The main focus of this research study is twofold: a) to identify the factors of successful Internet use for exporting purposes, and b) to assess the overall influence of the financial crisis in Greece on Internet use for exporting activities. This paper is organized as follows: first, based on the existing literature, it presents the main possible factors that affect successful Internet use for exporting purposes. Next, the research hypotheses are formed and discussed. Then, methodology and findings are presented respectively. Finally, discussion and some managerial implications are highlighted.

Table 1: Research Studies on the Subject of Internet Use for Exporting Purposes

Theoretical Approach	Theoretical & Empirical Approach Using the Method of Case Studies	Empirical Approach Using the Method of Questionnaires (or other)	Theoretical & Empirical Approach Using the Method of Questionnaires
1. Auger and Gallagher 1997	1. Poon and Swatman 1997	1. Bennett 1997	1. Prasad et al. 2001
2. Samiee 1998b	2. Rosson 2004	2. Pitis and Vlosky 2000	2. Freund and Weinhold 2004
3. Petersen et al. 2002		3. Moodley 2002	3. Morgan-Thomas and Bridgewater 2004
4. Fillis et al. 2004		4. Sorensen and Buatsi 2002	4. Nguyen and Barrett 2006
5. Karavdic and Gregory 2005		5. Dholakia and Kshetri 2004	5. Azaria 2010
6. Andersen 2005		6. Julian and Hortedahl 2005	
7. Lu and Rao 2008		7. Clarke and Wallsten 2006	
		8. Loane 2006	
		9. Mostafa et al. 2006	
		10. Lu and Julian 2007	
		11. Clarke 2008	
		12. Lu and Julian 2008	
		13. Hinson and Adjasi 2009	
		14. Houdeloudi 2013	

Literature Review

In order to identify the possible factors that influence the successful use of Internet for exporting activities a literature review was conducted. The first attempt to identify some variables not as determinants of successful use of Internet in exporting, but as determinants of whether firms would or would not be Web-owners with an export orientation, was made by Bennett (1997, p. 341) who used two sample-groups. The first was comprised of 148 UK exporting companies that were using their own Web sites for export marketing purposes. The second was comprised of 210 UK exporting companies without Web sites but with the same exporting target markets as the first group in terms of industry and numbers of employees. Bennett (1997) tested the possible explanatory power of eight variables as determinants of whether firms would or would not be Web owners by performing a logistic regression with the dichotomous state (0=non-owners, 1=owners) as the dependent variable. The result of the regression yielded four of the variables as statistically significant ($p < 0.05$): psychic distance, IT literacy within firms, use or non-use of foreign agents, and attitudes towards resource constraints. These variables are going to be theoretically assessed and compared with the results of other more relevant research studies in order to use them in the specific research study, because the orientation of Bennett's research was different.

The next attempt was conducted by Poon and Swatman (1997, pp. 393-400). In their paper, they investigated the preconditions-factors for Internet success by SMEs and the strategic effects resulting from its use. They used a sample of 23 small companies-case studies around Australia, from which 18 were exporters. The results of the case studies revealed six general factors of successful Internet use: internet application type (as a communication medium or as a medium of revenue enhancement), management enthusiasm in promoting Internet use, perceived benefits from Internet use, industry and product specificity, the existence or not of Internet-to Internal systems integration, and the application or not of entrepreneurship to Internet use. The results of this research study are of great importance for the purpose of this paper but there are four weaknesses. First, only a part of the sample consists of exporters. Second, there is lack of quantitative evidence provided by the participants (Poon and Swatman, 1997, p. 392). Third, the interviewees' honesty in their responses is debatable (Poon and Swatman, 1997, p. 392). Fourth, case study analysis provides more in depth results but their general application and proliferation is questionable.

The first direct approach on the subject of factors influencing the successful use of the Internet for exporting purposes was attempted by Samiee (1998b, pp. 416-423). In his fundamental and essential paper, he proposed nine important factors that affect the use of Internet in export markets: exporter type and its development stage (e.g. sporadic and regular exporter, or non-exporter and active exporter), internet application type (as a medium for business process automation or as medium for revenue generation), transaction type (intrafirm or interfirm exporting agreements and exchanges), computer literacy, access to Internet network, availability of equipment for access and for servers as well as penetration of personal computers, strict regulations about accessing and penetration of the Internet, language, and culture. The last six variables are grouped under the title of

structural constraints and environmental factors. Despite the significance of Samiees' suggestions the weakness is obvious. The approach is totally theoretical and there is no empirical or quantitative application for his guiding principles.

In his paper, Moodley (2002, pp. 644-655) focused on the subject of Internets' potential to facilitate and enhance exporting and access to global markets for South African wooden furniture producers. He based his findings on a review of the literature, on insights gleaned from an exploratory, qualitative survey of 62 South African wooden furniture firms, and on 19 open-ended face-to-face interviews with industry experts drawn from academia, the government, trade unions, employers' associations, non-governmental organizations (NGOs), the Furniture Export Council, and business, marketing and IT consultancies. Moodley (2002, p. 653) suggests four factors of successful Internet use in exporting and expansion into new markets: the degree of previous experience with serving distant markets (exporter type and stage of development), the availability of IT literate personnel, the stage of development of technical infrastructure, and level of awareness of e-commerce. The comment for Samiee's paper applies also for Moodley's paper, in the sense that the proposed factors were merely suggestions and not results of a quantitative and statistical research study.

Another related work was Rosson's (2004, pp. 4-23) effort to investigate the use of Internet in export business. Rosson's report (2004) used the same method as Poon and Swatman (1997) did (case study analysis), on a sample of 10 small and medium-sized businesses in Canada. The results revealed four factors: internet application type (as a communication medium or as a medium of revenue generation), IT literacy, how the Internet is used (Web site design and development), and management enthusiasm in promoting Internet use. Beside the fact that the sample was comprised totally of exporters, the importance of Rossons' findings is moderated by the same weaknesses that were described for Poon and Swatmans' paper.

During the same year, Morgan-Thomas and Bridgewater (2004, pp. 393-402) presented data that emerged from a quantitative research study regarding the subject of the identification of factors affecting successful Internet use for exporting purposes. Their sample was 705 British exporters with corporate Web sites, and they used logistical regression to test 14 variables and confirmatory factor analysis (CFA) to validate the multi-item measures. The results yielded eight statistically significant factors (seven factors at the level of 0.05 and one -the specialization of the products- at the level of 0.1) that influence successful Internet use in exporting: the level of Internet usage by other stakeholders in the same market (Network Effect), level of investment in Internet development and implementation, level of Internet experience, sophisticated use of Internet (how the Internet is used), exporter type, exporter experience, product specificity (specialized products), and existing channel structures (having its own export sales force). Due to the fact that the study of Morgan-Thomas and Bridgewater is directly related to the specific research and provides data from an important empirical statistical analysis, the results are going to be used thoroughly.

Next, Azaria (2010) conducted a research on the specific subject of identifying the factors affecting successful Internet use for exporting purposes by Greek SMEs. The detailed review of the

respective literature yielded a list of 20 possible success factors of Internet use for exporting activities (Azaria, 2010, pp. 270-273). In order to test the validity of those factors, Azaria (2010) conducted an empirical research on a sample of 80 Greek SMEs from all over Greece. The results revealed that 8 out of the 20 possible factors have a significant influence on the successful Internet use for exporting purposes. These 8 factors are (Azaria, 2010, pp. 419): a) the level of investment in Internet development and implementation, b) the technological infrastructure of the company, c) the security of business transactions on the Internet, d) management enthusiasm in promoting Internet use, e) the characteristics and the specificity of the product, f) exporter type (sporadic or regular), g) the level of Internet usage by other stakeholders in the same market (Network Effect), and h) the number of languages in which the firm's corporate website is translated into.

The limitations of Azaria's study are: i) the relative low sample of Greek exporting companies (even though it is quite difficult to engage Greek exporting companies in participating at scientific research studies in general), ii) the geographical coverage of the sample was not thorough since there was representation for only 18 out of the 51 Prefectures of Greece, and iii) it wasn't a longitudinal study that used repeated inflow of primary data (which is a method that includes more research capabilities. Despite the limitations, the fact that the study of Azaria was focused and conducted on the same theoretical framework as the specific research, his results are going to be used as a basis for the assessment of the results of the rest of the research studies presented above.

Finally, Houdeloudi (2013, pp. 109-111), in a similar research study like Azaria (2010) with the same advantages as well as weaknesses, revealed that there are 4 important factors that appear to have a significant influence on the successful Internet use for exporting activities: a) management's enthusiasm in promoting Internet use, b) the level of investment in Internet development and implementation, c) the level of Internet usage by other stakeholders in the same market (Network Effect), and d) the need of foreign customers for a personal contact with the key persons of the exporting company.

The findings of the literature review were assessed based on the results of the research studies of Morgan-Thomas and Bridgewater (2004), Azaria (2010) and Houdeloudi (2013), since all three were directly related and focused on the same theoretical framework as the specific research study. The findings were prioritized and grouped based on the number of times they were discussed in the literature. Factors that were mentioned sporadically and had only one reference were considered "random" and they were excluded from the framework of this study. Possible factors of successful Internet use for exporting purposes that were discussed and mentioned two, or more, times in the literature were included and they are presented at Table 2 in descending order.

In the first column of Table 2, the possible factors of successful Internet use for exporting purposes are presented, while the second column contains the number of references and the third column the respective references. The 8 possible factors presented at Table 2, are going to be used as the theoretical framework for the construction of the research hypotheses, as well as the basis for the empirical investigation and analysis.

Construction of Research Hypotheses

The existence of IT literate personnel

The literature identifies different types of organizational learning while at the same time it contends that experiential knowledge may play a significant role in order for firms to apply new technology effectively and to improve the likely success of technological introduction (Morgan-Thomas and Bridgewater 2004). Moreover, practice has identified the firm's level of technological know how as one of the most important Internet competencies (Fillis et al. 2004). Several research studies revealed that the level of IT and Internet knowledge and experience within a firm had a significant impact on export performance and Internet adoption (Bennett 1997; Dholakia and Kshetri 2004; Moodley 2002; Morgan-Thomas and Bridgewater 2004; Mostafa et al. 2006; Rosson, 2004). In addition, it is suggested that the successful use of Internet and e-commerce as a strategy for expansion into new markets is likely to be influenced by factors such as the technical infrastructure and the availability of IT literate personnel (Moodley 2002). All of the above lead to the following:

H1: The level of IT and Internet knowledge and experience within a firm has a positive impact on its export performance.

Management enthusiasm in promoting Internet use

It is important to highlight the fact that there are differences in attitude towards embracing Internet and e-business in different companies because of core owner/manager factors (Fillis et al. 2004). Two of these factors which are very important are the following: a) management's enthusiasm and b) management's level of entrepreneurship. Management's "laager" mentality, which has locked several companies into an insular, inwardly oriented way of thinking, can be a great obstacle to the diffusion and adoption of Internet use for exporting purposes (Moodley 2002).

Table 2: Possible Factors of Successful Internet Use for Exporting Purposes

Factors of Successful Internet Use for Exporting Purposes	Number of References	References
1. The existence of IT literate personnel	5	1. Bennett (1997) 2. Samiee (1998b) 3. Moodley (2002) 4. Rosson (2004) 5. Morgan-Thomas and Bridgewater (2004)
2. Management enthusiasm in promoting Internet use	4	1. Poon and Swatman (1997) 2. Rosson (2004) 3. Azaria (2010) 4. Houdeloudi (2013)
3. The level of investment in Internet development and implementation	3	1. Morgan-Thomas and Bridgewater (2004) 2. Azaria (2010) 3. Houdeloudi (2013)
4. The level of Internet usage by other stakeholders in the same market (Network Effect)	3	1. Morgan-Thomas and Bridgewater (2004) 2. Azaria (2010) 3. Houdeloudi (2013)
5. The level of exporter experience	3	1. Samiee (1998b) 2. Moodley (2002) 3. Morgan-Thomas and Bridgewater (2004)
6. Number of languages in which the firm's corporate website is translated into	3	1. Bennett (1997) 2. Samiee (1998b) 3. Azaria (2010)
7. The level of technological infrastructure of the company	2	1. Moodley (2002) 2. Azaria (2010)
8. The need of foreign customers for a personal contact with the key persons of the exporting company	2	1. Samiee (1998b) 2. Houdeloudi (2013)

Research suggests that companies with owners or managers being proactive and eager to adopt and promote Internet use for exporting purposes, are more likely to perform better results in their performance (Poon and Swatman 1997; Rosson 2004).

Accordingly, a large number of research studies support the view that entrepreneurial orientation improves a firm's financial performance in terms of sales growth and profitability (see for example: Barrett et al. 2000; Brown 1996; Namen and Slevin 1993; Wiklund 1999). Moreover, there is evidence that owners/managers of SMEs with high entrepreneurial orientation are more likely to exploit Internet enabled opportunities and lead to an improvement of the firm's financial performance via a significant growth of export sales and profitability (Mostafa et al. 2006). As such, the following hypothesis is offered for testing:

H2: The level of management's entrepreneurial orientation and enthusiasm in promoting Internet use has a positive impact on SMEs export performance.

The level of investment in Internet development and implementation

In order to set up and run a successful corporate website, companies need several investments that include financial resources for: i) the development and implementation of the website, ii) covering running costs, maintenance and upgrading, and iii) acquisition and training of the staff that coordinates the integration of the Internet with existing marketing processes (Morgan-Thomas and Bridgewater 2004). Hence, the literature hypothesizes that there is a link between resource commitment to the Internet and the success of its implementation for exporting purposes. As such, the following hypothesis is offered for testing:

H3: The level of investment on Internet within a firm has a positive impact on its export performance.

The level of Internet usage by other stakeholders in the same market (Network Effect)

Adoption of the Internet is influenced by and has an influence on other firms and customers within the market (Grewal et al. 2001). In their research, Poon and Swatman (1997) observed that if a small business has more customers and business partners using the Internet, it was itself more willing to use the Internet for its business. They stated the fact that there seemed to be a "peer encouragement" effect, particularly if all parties had convincing evidence that the use of Internet would support their business operations. In their study on the effect of the Internet on international trade, Freund and Weinhold (2004) found that growth in the number of corporate web sites in a country helped to explain export growth in the following year. Moreover, Katz and Shapiro (1994) suggest that the benefits of using the Internet increase with the number of users and the size of the network. The ways in which benefits increase with larger networks (Network Effects) include, for example, increased ability to communicate with other suppliers, partners, or customers, greater search capability, overcoming compatibility teething problems and the danger of being excluded from a business community which has switched to the new technology.

Morgan-Thomas and Bridgewater (2004) claimed that if a new technology is widely accepted as a channel of communication and/or transaction by customers and competitors within the market, other firms may have to adopt the specific technology to maintain their competitive position. Use of the Internet by a dominant competitor may encourage its use by others, as it suggests that the technology has revenue-generating potential. As such, the following hypothesis is offered for testing:

H4: The level of Internet usage by suppliers, partners, customers, and competitors in the foreign export market has a positive impact on SMEs export performance.

The level of exporter experience

There have been numerous attempts in international literature to describe and reveal the impact of export experience on export performance and market research (see for example: Ali and Swiercz 1991; Bilkey 1982; Da Rocha and Christensen 1994; Gripsrud 1990; Hart et al. 1994; Katsikeas and Morgan 1994; Ogbuehi and Longfellow 1994). On the other hand, very few research studies refer to the link between export experience and successful Internet use (see for example: Moodley 2002; Morgan-Thomas and Bridgewater 2004). Literature contends that high

levels of export experience do not appear to have a beneficial effect on exporters' ability to use the Internet effectively as a channel to market (Quelch and Klein 1996). A lack of alternative channels to international markets forces Internet start-ups and less experienced exporters to rely on technology to a much greater extent. In that way, they may generate greater benefits as they are more proactive in adopting new technologies and especially Internet (Morgan-Thomas and Bridgewater 2004). As such, the following hypothesis is offered for testing:

H5: The level of firm's export experience has a negative impact on its export performance attributable to the use of Internet.

Number of languages in which the firm's corporate website is translated into

A very interesting approach on the effect of distance on global business expansion has been made by Ghemawat (2001) through a four dimensional framework, which he called the "CAGE Distance Framework". The first dimension of the framework is called "Cultural Distance" and it is created between two countries when there are four main attributes: a) different languages, b) different social norms, c) different religions, and d) different ethnicities. These attributes can have a huge impact on international trade as well as on the adoption of new technologies as commercial mediums, like the Internet. For example, all other things being equal, trade between countries that share a language will be three times greater than between countries without a common language.

Some cultural attributes, like language, are easily perceived and understood while others are much more subtle. Social norms, the deeply rooted system of unspoken principles and common social habits that guide individuals in their everyday choices and interactions, are often nearly invisible, even to people who abide by them (Ghemawat 2001). Cultural aspects, and more specifically language and social norms have a strong influence on the comprehensiveness and the efficacy of Internet-based exporting strategies (Bennett 1997; Samiee 1998b; Azaria 2010).

Although English is the global language of business, exporters must be acutely aware that English fluency, even in developed nations, is not broad based. For customer-oriented companies who wish to overcome the problem of cultural distance, this means that they have to develop multi-language corporate websites to successfully reach their target markets and to communicate more effectively with their clients and suppliers (Samiee 1998b). As such, the following hypothesis is offered for testing:

H6: The number of languages in which the firm's corporate website is translated into has a positive impact on its export performance.

The level of technological infrastructure of the company

Although technology is not the final arbiter of success, it is important because it provides firms with the ability to enhance their activities. Due to the fact that technology evolves rapidly, firms need to perform periodic upgrades for hardware as well as software in order to offer functionality to themselves, to partners, and to customers (Rosson 2004). Therefore, it is suggested that firms with important resources and adequate infrastructure are hypothesized to be better able to adopt and use the Internet effectively (Morgan-Thomas and Bridgewater 2004).

H7: The level of technological infrastructure within a firm has a positive impact on its export performance.

The need of foreign customers for a personal contact with the key persons of the exporting company

Finally, as stated above, the successful Internet use for expediting export business processes and fulfilling revenue enhancement goals is likely to be influenced by cultural social norms. Some international transactions, particularly with high-context cultures like the Greek one, revolve around personal contacts (Samiee 1998b). International customers from high-context cultures seek personal contacts and face-to-face meetings with the firm in order: a) to retrieve as much information as possible about the products of their interest, b) to have a direct dialogue that will help them satisfy their needs in a better way, like for example expressing directly their possible complaints, or having the opportunity to return problematic products and replace them with new ones in a short period of time, and c) to build a more personal business relationship with the firm's staff that will enable them to have a higher level of trust on their business transaction (Bennett 1998).

Internet, on the other hand, is by nature an international communication medium that enables exporting firms: a) to include in their corporate websites as much information about themselves as they wish, b) to fully explain and demonstrate a product, c) to make direct sales via interactive dialogue, d) to obtain the opportunity to be local in many foreign markets through the adaptation of information to local users, thus relieving them from the obligation and the costs of seeking foreign representation, e) to collect specific information directly and to involve the visitor in a continuing dialogue, f) to offer online customer support, and g) to obtain instant reaction to its offers from distant markets (Bennett 1997; Rosson 2004). Based on the advantages described above, the use of Internet with international customers from high-context cultures may be regarded as an alternative, or a new medium, to conventional international marketing based on personal contacts (Bennett 1997) replacing foreign representation and enhancing export performance and profitability. Hence, it is suggested that Internet can help exporting companies to satisfy their customers need for personal contact in a very efficient way, resulting in an increase of their export revenues. As such, the following hypothesis is offered for testing:

H8: The use of Internet by exporting firms with international customers that have a high need for personal contact has a positive impact on its export performance.

Methodology, Sample-Data Collection and Measurement

The specific research was based on an empirical investigation of Greek exporting companies that had a corporate website (fully operational) for at least 18 months prior to the collection of the questionnaires. A written questionnaire was developed and pre-tested using a small sample of Greek exporters. The questionnaire included 23 closed questions in order to minimize invalid answers and the amount of effort and time required from respondents, thus making the all process more attractive. The final instrument was e-mailed, adjusting Dillman's (1978) recommendations in implementing mail surveys, and a cross-sectional survey was used to collect the data from a sample of 310 Greek SMEs

identified from the Greek Export Directory 2009-2010 published by the Athens Chamber of Commerce and Industry (ACCI). The research was held from January-April 2014 and generated 77 usable questionnaires, accounting for an effective response rate of 24.8 percent which is considered to be adequate (Groves 1990) as similar response rates have been achieved in prior international and export marketing research by Morgan-Thomas and Bridgewater (2004).

At this point, it is of great importance to highlight the fact that due to the difficult situation that companies are facing because of the socio-economical crisis in Greece, managers are very unwilling to participate in any kind of research. The depth and the increasing number of the ongoing problems that they have to deal with in their daily business reality are creating a hostile and defensive attitude towards any kind of non profitable, for them, activities (like for example answering the questionnaire of an academic research study). Thus, it was extremely difficult to reach out our sample and to obtain even these 77 questionnaires, which are considered a satisfying number for Greece under the current circumstances.

The dependent variable of the proposed research model is export performance. According to international literature export performance has been measured, principally, in three different ways (Lu and Julian, 2007). First, by using the economic indicators of performance, such as profit, sales and market share. Second, measurement of export marketing performance has also been via strategic outcomes, i.e. expand strategically into foreign markets or gain a foothold in the export market. Third, measurement of export marketing performance has also been undertaken via perceptual or attitudinal measures. In accordance with several previous studies (for example: Johnston and Czinkota, 1982; Cavusgil and Zou, 1994; Morgan-Thomas and Bridgewater, 2004; Azaria, 2010) the third measurement is going to be adopted for the purposes of the specific research. Thus, export performance is treated as a perceptual measure of the respondents' assessment of the Web site's effect on export sales, profits, number of foreign markets and foreign customers served, export cost reduction and overall export performance (Cavusgil and Zou, 1994; Morgan-Thomas and Bridgewater, 2004).

All the constructs in the study that examined the use of the Internet in exporting evolved from the literature (Bennett, 1997; Poon and Swatman, 1997; Samiee, 1998b; Morgan-Thomas and Bridgewater, 2004; Mostafa et al., 2006; Azaria, 2010; Houdeloudi, 2013). Almost all items were measured via a five-point scale. An exception to almost all items were only: a) "export experience" which was measured via a three-point scale in order to categorize it into three groups (limited, average, and extended experience), b) the number of languages which was measured via a seven point scale in order to be able to include a more detailed measurement, and c) the last two questions of the questionnaire (no. 22 and 23) regarding the influence of the financial crisis in Greece on the use of Internet for exporting purposes (no.22 was a dichotomous question "Yes/No", and no.23 had only three possible answers "Yes, the financial crisis reduced the use of Internet for exporting / Yes, the financial crisis increased the use of Internet for exporting / No, the financial crisis didn't influence the use of Internet for exporting"). The final reliabilities (Cronbach's Alpha) for all the scales of the five constructs of the research were greater than 0.70 (see Table 3).

Table 3: Research Constructs and alpha reliabilities

Variable Name	Cronbach's Alpha
1. IT and Internet literacy within the firm	0.792
2. Management's entrepreneurship and enthusiasm towards Internet	0.872
3. Level of investment in Internet development and implementation	0.844
4. Level of Internet usage by other stakeholders in the same market [Network Effect]	0.704
5. Export performance [Dependent Variable]	0.912

The sample includes firms spanning a size range from 1 to 248, with an average of 39 employees. More than half (55.8%) of the companies included in the sample were small companies (10-49 employees), 27.3% were medium sized companies (50-249 employees), while the rest 16.9% were very small companies (1-9 employees). Twenty two categories of industrial sectors were identified, with alcohol drinks-refreshments-wine industry to account for 15.6%, clothing and chemical industry for 9.1%, manufacturing, textile and food industry for 7.8%, industrial products for 6.5%, small industry, furniture and wholesale for 5.2%, corporations and shipping industry for 2.6%, and recycling, graphic arts, car accessories, raw materials, jewellery, seedbeds, mattresses, and foot ware for another 1.3% respectively. The vast majority of the respondents were: general managers (33.8%), company accountants (16.9%), marketing managers (14.3%), export directors (11.7%) and PA's (9.1%).

Statistical Analysis and Findings

A multiple regression was conducted to examine the relationship between the export performance attributable to the use of Internet in exporting of Greek companies as a dependent variable and the eight items discussed in the sections "Literature Review" and "Construction of Research Hypotheses" as the independent variables. Table 4 presents the results of multiple regression analysis, which indicates that the combined effects of the explanatory variables (which were not multicollinear to any damaging extent) were strongly significant ($F = 4.423$, $p < 0.001$).

Table 4: Multiple regression analysis

Independent Variables	B	Beta	t	Sig.	Hypothesis	Supported?
Constant	0,225		0,311	0,757		
IT Literacy	0,031	0,036	0,345	0,731	H1	No
Management Enthusiasm	0,257	0,292	2,316	0,024*	H2	Yes
Level of Investment in Internet	0,069	0,063	0,494	0,623	H3	No
Network Effect	0,338	0,290	2,686	0,009**	H4	Yes
Export Experience	-0,133	-0,096	-0,878	0,383	H5	No
Number of Languages	0,016	0,019	0,182	0,856	H6	No
Level of Technological Infrastructure	-0,071	-0,053	-0,431	0,668	H7	No
Need for Personal Contact	0,229	0,261	2,326	0,023*	H8	Yes

$R^2 = 0.342$ $n = 77$ $df = 8$

Notes: *Significant at $p < 0.05$; **Significant at $p < 0.01$

The analysis resulted in an $R^2 = 0.342$ suggesting that the eight independent variables explained 34.2% of the variation of export performance attributable to the use of Internet for exporting activities by Greek companies. Overall, three coefficients concerning the research hypotheses, Management Enthusiasm (H2), Network Effect (H4), and customers need for personal contact with the firm (H8), are significant at the level of 0.05 or higher. The rest of the hypotheses are not supported. In terms of the magnitude of effects, the results revealed that the Network Effect represents the strongest factor in enhancing export performance (0.338). This is followed by management's entrepreneurial orientation and enthusiasm in promoting Internet (0.257), and by international customers' need for personal contact with the exporting firm (0.229).

Finally, regarding the overall influence of the financial crisis on Internet use for exporting activities by Greek companies the results revealed two interesting findings: a) 4 out of 5 companies in the sample (80.5%) stated that they didn't adopt Internet use for exporting purposes due to the financial crisis, but they were already using it before the beginning of the crisis, and b) more than half (58.4%) of the companies in the sample stated that they are using Internet for exporting purposes during the period of the financial crisis in Greece in exactly the same way as they were using it before 2009, while 40.3% of them stated that the financial crisis forced them to use it more intensively for their exporting activities. It is very interesting the fact that only one company in the sample (1.3%) stated that the financial crisis led them to use the Internet less intensively for their exporting activities.

Discussion and Managerial Implications

This research study identifies a number of findings which make a contribution to the understanding of the extent to which Greek companies can enhance their export performance from the use of Internet. The main contributions of this paper are: a) the identification, through a review and assessment of the existing literature, of the possible factors that affect and influence the successful use of Internet in exporting, b) the generation of the set of hypotheses that were used to test the validity and the impact of the possible factors, c) the validation of the proposed hypotheses through an empirical research (one of the few of its kind in Greece), and d) an estimation of the overall influence of the financial crisis on Internet use for exporting activities by Greek companies.

More specifically, eight possible factors (IT and Internet literacy, management's entrepreneurial orientation and enthusiasm in promoting Internet use, the level of investment on Internet within a firm, the level of Internet usage by suppliers, partners, customers, and competitors in the foreign export market [Network Effect], the level of firm's export experience, the number of languages in which the firm's corporate website is translated into, the level of technological infrastructure within a firm, and international customers' need for personal contact with the exporting firm) of successful Internet use for exporting purposes were identified, reviewed and assessed. These factors are available to be tested in different industries and/or national environments. These eight possible success factors were selected as appropriate for the purposes of this research study and formed the suggested model. In order to test the validity of each factor, a set of eight hypotheses was generated.

Next, the proposed research hypotheses were validated through an empirical investigation on a sample of 77 Greek exporting companies. The results revealed that three factors play a significant role for the successful Internet use in exporting: a) IT and Internet literacy, b) management's entrepreneurial orientation and enthusiasm in promoting Internet use, and c) the level of Internet usage by suppliers, partners, customers, and competitors in the foreign export market [Network Effect]. At the same time, it seems that the vast majority of the companies were already using Internet for exporting purposes before 2009, and they were either positively or not at all influenced by the crisis in terms of Internet use for their exporting activities.

These results are broadly consistent with those of previous research in both the export marketing and Internet applications fields. Greek exporting companies need to carefully assess, chart and evaluate the level of Internet usage by suppliers, partners, customers, and competitors in the foreign export markets, while it seems that they need to reinforce and sustain a high level of management's entrepreneurial orientation and enthusiasm in promoting Internet use. Furthermore, it seems that the use of Internet can help Greek companies to satisfy their international customers need for personal contact in a very efficient way, resulting in an increase of their export sales and performance. The fact that all three significant success factors are related, in one way or another, with the subjects of human relations and attitudes reveal the importance of the human factor in international business activities and their successful outcome. Exporting companies need to invest in educating their staff and to provide high quality as well as customized educational programs that fit their own specific needs, while at the same time it is crucial to create and maintain a motivating and engaging working environment within their own firms.

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