

Title of the Paper:

**Determinants of Successful Internet Use for Exporting
Purposes**

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Abstract

Despite the very short life and history of the Internet, it was only fifteen years ago when Tim Berners-Lee invented and released the World Wide Web (WWW) in CERN, a large number of opportunities and pitfalls lies in its commercial use. One great opportunity that Internet has created is the possibility for exporters to serve international markets via WWW. Even though, there is a growing volume of research studies on the role of the Internet in international marketing, little space has been devoted on the subject of Internet use for exporting purposes. The aim of this paper is to review and assess the existing relevant literature in order to: a) identify the factors that influence success in using the Internet and WWW to export, and b) create a theoretical framework for the creation, implementation and evaluation of a model describing the determinants of successful Internet use for exporting purposes.

Key Words – Exporting, Internet, International Marketing.

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Introduction

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, p. 363). For the purposes of this paper, the term Internet will have the meaning of the worldwide network of computers and the global information system that: i) is logically linked together by a globally unique address space based on the Internet Protocol (IP) or its subsequent extensions; ii) is able to support communications using the Transmission Control Protocol/Internet Protocol (TCP/IP) suite or its subsequent extensions, and/or other IP-compatible protocols; and iii) provides, uses or makes accessible, either publicly or privately, high level services layered on the communications and related infrastructure (Ainscough and Lockett, 1996, p. 36; Alridge *et al.*, 1997, p. 161; Breitenbach and Van Doren, 1998, p. 558; Palumbo and Herbig, 1998, p. 253; Federal Networking Council, 2006; Webopedia, 2005).

Modern communication and information technologies can enable change in organization structures and business processes, and they influence the competitive advantage of firms. The widespread use of personal computers, coupled with the proliferation of telecommunication networks and the Internet, as well as their joint integration, has made paper-free trading a reality, even for common citizens (Wigand, 1997, p. 1). The Internet

does more than permit one-to-one communication among consumers; it also facilitates one-to-many and many-to-many communications. Moreover, this phenomenon is achieved at extremely low cost and independent of distance and time (Hoffman and Novak, 1997, p. 44; Pitt *et al.*, 2002, p. 8).

The Internet is unique because it is both a market and a medium. This means that it can efficiently assume a multi-channel role by serving as a computer-mediated market in which sellers and buyers access each other, and as a medium to conduct and execute business functions such as marketing, sales, and distribution (Ngai, 2003, p. 24). Another important consideration in the business analysis of the Internet as a media environment is to recognize that it possesses unique characteristics that distinguish it in important ways from traditional commercial environments (Hoffman and Novak, 1997, p. 43; Kiani, 1998, p. 185).

These characteristics are: i) the shift from the conventional “One-to-Many” communication model to the “Many-to-Many” model (Hoffman and Novak, 1997, p. 44), ii) the flow in computer-mediated environments (Hoffman and Novak, 1997, pp. 44-45), iii) the existence of goal-directed and experiential navigation behaviours (Hoffman and Novak, 1997, pp. 45-46), iv) the shift from “one-way” to “two-way” information flows between producers and consumers (Kiani, 1998, pp. 185-186), and v) the shift from “supply-side” to “demand-side” thinking (Rayport and Sviokla, 1995, p. 85).

More and more companies, regardless of size, are using Internet and the WWW for communication purposes in order to conduct daily business and to promote awareness (Illingworth *et al.*, 2002, p. 292). On the one hand, large enterprises are using the Internet as an important tool through which they communicate internally with their business partners and externally with their customers, while at the same time smaller companies are discovering the Internet to be a cost-effective communications means through which they can conduct

research activities relating to their products, customers, and markets, as well as conduct efficient product sales transactions (Pallab, 1996, p. 29; Illingworth *et al.*, 2002, p. 292).

The Internet is not only a tool for business, but also a form of entertainment. If a Web page is static and never changing, once it has been visited one time there is no reason to return. An effective site should be guided by its visitors and change with their suggestions and comments (Wilson and Abel, 2002, p. 90). Another aspect of the Internet is the great impact of the Web in the areas of research related to the Management and the Economics of Information, mainly due to the fact that Internet has drastically changed the acquisition, processing and management of information (Biswas, 2004, p. 724).

The Internet can easily be used as a customizable marketing tool, as long as its real value comes from matching the marketing power with an operational structure designed to maximize electronic efficiencies (Boyer, 2001, p. 54). Marketing on the Internet is a very different process from traditional marketing where the target market is aimed with an advertising message via various media (television, radio and publications) (Angelides, 1997, p. 407). The key to a more successful marketing effort on the Internet will be the creation of a dynamic, highly interactive and customized to the audience website in order to attract new and maintain old customers (Wilson and Abel, 2002, pp. 89-90). The unique interactivity of the Internet (Avlonitis and Karayanni, 2000, p. 442) and the advantages that derive from its use, led many companies, regardless of size, to use it for the expansion of their marketing efforts to foreign markets.

This paper first describes how the commercialization of the Internet took place, followed by a brief and concise analysis of Internet use in exporting. Next, based on the results of a review of the existing literature, the identified factors of successful Internet use for exporting purposes are presented. Then, a set of hypotheses to be tested at a later stage is

also presented. Finally, a summary and the conclusions are discussed, as well as some suggestions for further research.

Commercialization of the Internet

Since the Internet was initially funded by the government, it was originally limited to research, education, and government uses (Angelides, 1997, p. 405). In the years just prior to 1991, a year that changed the course of Internet's history due to the development of the World Wide Web by Tim Berners-Lee at CERN, if you wanted to hook your computer up to the Internet, you had to agree to abide by an Acceptable Use Policy, which expressly forbade any commercial activity (O'Brien, 1998). Commercial uses were prohibited unless they directly served the goals of research and education. This policy continued until the early 90's, when independent commercial networks began to grow.

During only one decade, from 1993 to 2003, the Internet has grown from a tool of science to a major new economic resource. Given the continuing, still accelerating rate of expansion, there is no telling where the frontiers of this new medium may lie. It is not surprising that all sorts of attempts have been started to turn the potential of the Internet into private monetary revenue, which is exactly the definition of the process of commercialization (Hutter, 1999, p. 75). It is that decade, where the Internet entered the lexicon of daily conversation and became a dominating and ubiquitous presence on the business landscape.

From 1993, the Internet began to transform domestic and global markets by shaping and reshaping relationships in the supply chain and by creating systematic changes in the way consumers shop, organizations buy, prospects are reached, transactions are completed, customers are serviced, and commerce is conducted (Leong *et al.*, 2003, p. 555). The opening of the Web as a tool for commercial activities has ushered in a stream of research on the

potential impacts of the Internet on traditional theories of marketing, economics and other fields of business management (Biswas, 2004, p. 724).

Until 2003, the rapid adoption of the Internet as a commercial medium had resulted in more innovative ways of marketing to consumers in computer mediated environments. The Internet had facilitated the ability of firms to reach target audiences more efficiently, displacing undifferentiated mass marketing techniques for more customised practices (Melewar and Smith, 2003, p. 364). Whereas back in 1994 companies may have asked themselves whether or not to move their business to the Internet, almost ten years later firms were obliged to answer that question in a very simple way: there was no room for the company to exist without somehow being on the Internet (Lichtenthal and Eliaz, 2003, p. 4).

Another side of the commercialization of the Internet has to do with retail commerce. A number of academic studies have focused on the commercial adoption of the Internet from retailers (Cockburn and Wilson, 1996; Hoffman *et al.*, 1996; Auger and Gallagher, 1997; Spiller and Loshe, 1997; Griffith and Krampf, 1998; O’Keefe *et al.*, 1998; Jones and Biasiotto, 1999) but provided limited contribution to the structure or scale of adoption. Hart *et al.* (2000, p. 955) highlighted the fact that Internet could fundamentally alter the way that consumers shop and thus revolutionize the retail environment, transforming the local high street into a global cyber high street. They also suggested that the greatest commercial potential of the Internet probably lies in its power to fully integrate retail marketing activity, as opposed to using it as an alternative channel for direct sales.

According to Greenstein (2006, p. 1), the commercialization of the Internet was successfully developed due to four main reasons. First, commercializing Internet access did not give rise to many of the anticipated technical and operational challenges. Entrepreneurs quickly learned that the Internet access business was commercially feasible. Second, Internet access was malleable as a technology and as an economic unit. Third, privatization fostered

attempts to adapt the technology in new uses, new locations, new market settings, new applications, and in conjunction with other lines of business. These went beyond what anyone would have forecast by examining the uses for the technology prior to 1992. Fourth, and not trivially, the National Science Foundation was lucky in one specific sense. The Internet access industry commercialized at a propitious moment, at the same time as the growth of an enormous new technological opportunity, the World Wide Web. As it turned out, the Web thrived under market-oriented, decentralized, and independent decision making.

For further and more detailed study of the Internet's commercialization, it is useful to distinguish three different kinds of goods and services: i) the service of using the Internet itself, ii) goods and services that make the Internet or are transmitted through it, and iii) goods and services that are advertised, ordered or executed using the Internet (Hutter, 1999, pp. 75-76). The potential of Internet's commercialization, as with all trade, is affected by demand from users and supply by businesses or other organizations. Demand is affected also by three key factors: i) the number of people using the Internet now and in the future, ii) the characteristics of those users, both individuals and businesses, and iii) their purchasing behaviour on the Internet, which is probably the most important of the three (Foley and Sutton, 1998, p. 23).

Internet and Exporting

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, p. 3). Despite the fact that Internet commerce is promoted by academics and practitioners as a major business revolution that will change the future and the nature of individual businesses, markets, and indeed of entire economies in a profound manner, many Internet companies have gone out of business, prompting everyone to treat the

Internet boom with caution (Poon and Swatman, 1999, p. 21). Overall, the mood in the e-business circle has swung from extreme exuberance to one of extreme caution (Biswas and Krishnan, 2004, p. 681). Beside the opportunities, Internet can also be a nightmare for firms that are not aware of the challenges that it creates (Palumbo and Herbig, 1998, p. 253).

Samiee (1998a, pp. 413-416), in a really progressive paper, was the first to suggest a conceptual framework and six fundamental axioms in order to explain the role of the Internet in exporting. His conceptual framework and the six fundamental axioms are presented in Figure 1 and Table 1, respectively.

INSERT FIGURE 1

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According to Rosson (2004, pp. 4-5) 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. One advantage of the Internet as a marketing tool is that because it is available 24 hours a day in all time zones, it gives companies a global presence. It also provides many opportunities for the exporter to learn more about the interests of visitors, to collect specific information directly, and to involve the visitor in a continuing dialogue. The Internet is also a medium for carrying out transactions, including ordering procedures (direct or through resellers), pricing transparency, delivery options, electronic payment methods and security. Another use of Internet in exporting is as a tool for customer care, including a variety of approaches like developing Web site content that will help buyers install and use the product, providing information on new and complementary products, listing answers to frequently asked questions, publishing a newsletter that is electronically distributed to interested persons, and providing online questionnaires that invite customers to give feedback on the company and its offerings.

Internet has made possible international transmission of services on a scale that was not possible via fax and telephone. Today, consumers and firms are using the Internet to buy many back-office services such as electronic publishing, hotel reservations, mailing list management, on-line technical support and website design and management. Beside back-office services, several products such as books, CDs, movies and computer programs, can be transmitted electronically via Internet throughout the world. Through the Internet, businesses are able to find suppliers and buyers, conduct valuable market research, and post information on their products and services. At an even more sophisticated level, exporters can use the Internet to do everything from submitting documentation to booking a container on a ship (Larson, 1996, p. 13).

The proper, and under the right circumstances, use of the Internet has the potential of resolving some of the serious long-standing impediments associated with exporting. The major exporting obstacles that the use of Internet can eliminate or minimize are the following: information acquisition (concerning suppliers, competitors, foreign market characteristics, and foreign customers and their buying behavior), access to foreign markets, export promotion, communication with foreign suppliers or customers, export paperwork, documentation, the costs associated with the above activities, inadequate foreign representation and psychic distance (Bennett, 1997, p. 328; Hamill, 1997, p. 312; Hamill and Gregory, 1997, pp. 20-21; Bennett, 1998, p. 29; Samiee, 1998a, p. 413; Sorensen and Buatsi, 2002, pp. 481-482).

The main problems in this new environment regarding the internationalization and export marketing process of companies are lack of security, lack of privacy, lack of censorship, absence of unified international law, lack of protection of the intellectual property, cultural aspects (such as different languages, different perception of images, gestures and colors), telecommunication infrastructures (excluding USA and some other

developed countries), personal computers' availability (especially for developing countries), the different popularity of credit card use across nations (Palumbo and Herbig, 1998, p. 253; Melewar and Smith, 2003, pp. 366-368), the reduced selectivity of audience since websites can be accessed by anyone on the Internet, the intense competition generated by the existence of thousands of other homepages, all of which are trying to attract and retain visitors, the existence of choice for Internet users (the user must actively decide to visit the website), unlike radio and TV (Breitenbach and Van Doren, 1998, p. 562), the existence of high cost for common users, and the accessibility (Pallab, 1996, pp. 32-34).

Internet-based market structures and, more broadly, the extension of global telecommunication networks appear to offer producer firms in developing countries new exchange mechanisms that will enable them to compete on a more equal basis in world markets (Paré, 2003, p. 123). While there are several research studies denoting that the Internet has the potential of neutralizing some existing advantages of bigger corporations and thus creating a level playing field for almost any interested SME to obtain a presence on the Internet and to list its address on various directories and Internet search engines (Quelch and Klein, 1996, p. 60; Hamill and Gregory, 1997, p. 9; Hoffman and Novak, 1997, p. 49; Wilson and Abel, 2002, p. 88; Moen *et al.*, 2003, p. 129), there are other researchers expressing a different point of view by underlining the fact that large firms still enjoy a substantial competitive advantage because of larger resources, more visibility among prospective customers worldwide, more elaborate and extensive Internet-based activities, better image, more recognizable brand names, and relationships that have been developed over many decades (Samiee, 1998a, p. 425; Samiee, 1998b, pp. 18-19; Arnott and Bridgewater, 2002, p. 94; Moodley, 2002, p. 652; Eid and Trueman, 2004, p. 25). In addition, they continue to support and develop their non-Internet marketing activities at full force. Even their Internet-based activities are more elaborate and extensive than those of smaller firms. For example, larger firms maintain many sophisticated Web sites in several languages

(Samiee, 1998a, p. 425). Consequently, it can be said that the use of Internet for exporting and international marketing purposes has the potential to enhance the internationalization process of SMEs, but the playing field is by no means level (Samiee 1998b, 19).

The Internet is affecting most international and exporting companies, driving many to develop Web sites, even though they appear very uncertain about the future state of their industries. The firms see the Web as important and they are taking steps to be in the game, even though they do not know what the rules or outcomes will be (Tiessen *et al.*, 2001, p. 231). Sometimes, organizations create Web pages simply because their competitors have Web pages. Thus, they are utilizing a me-too approach or, at best, they are imitating the leader's strategy. As a result, these organizations are failing to have solid and clear business objectives when using the Internet (Czuchry *et al.*, 2002, p. 42). Furthermore, a company that neglects its Web site may be committing commercial suicide. A Web site is increasingly becoming the gateway to a company's image, products and services, even if the firm does not sell online. In either case, a useless Web site suggests a useless company, and a rival is only a mouse-click away. But even the coolest Web site will be lost in cyberspace if the right people cannot find it. Therefore, companies have to ensure that their site appears high up in internet search results.

Factors of Successful Internet Use for Exporting Purposes

Although much is made of the business activities and market expansion possibilities made possible by the Internet, and many companies are realizing international sales in this manner, the literature dealing with Internet-based exporting is very limited (Samiee, 1998a, p. 413; Moodley, 2002, p. 641; Morgan-Thomas and Bridgewater, 2004, p. 393; Rosson, 2004, p. 4). The fact that little space has been devoted to the potential role of the Internet in exporting leads to two contradictory implications. On one hand, there are extremely few substantiated

theories and empirical research studies to provide a solid and comprehensive theoretical framework, while on the other hand, the challenge to discover and establish the future of this new medium in exporting is big and attractive.

The main focus of this paper is i) to identify, through a review and assessment of the limited existing literature, the factors that affect the successful use of Internet in exporting, and ii) to generate the basic set of hypotheses that will be used to test the validity and the impact of these factors in the next phase of this research effort.

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 (owners of a company Web site on the Internet) 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 proposed model of factors, 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 (1998a, pp. 416-423). In his truly 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.

Finally, Morgan-Thomas and Bridgewater (2004, pp. 393-402) presented data from the first 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 this is the only study which provides empirical statistical analysis, the results are going to be used as a basis for the proposed model and the assessment of the results for the rest of the research studies.

A number of the factors presented above are of qualitative nature. These are psychic distance, attitudes towards resource constraints, perceived benefits from Internet use, management enthusiasm in promoting Internet use, and the application of entrepreneurship to Internet use. However, due to limitations of space in this paper, we choose to exclude qualitative factors, the inclusion of which will be done at a later stage of this research effort. Another important issue regarding the next phase of the research is the focus on small and medium-sized enterprises (SMEs). The latter means that factors like the existence of Internet-to Internal systems integration, and transaction type (intrafirm exporting agreements and exchanges), which concern mainly large companies (Samiee, 1998a, p. 420), are also going to be excluded.

The rest of the identified factors are more or less common in all the studies so they are going to be included in the model. The appropriateness of the Internet for an exporter should be viewed primarily in terms of incremental revenue attributable to the use of Internet in exporting (Poon and Swatman, 1997, p. 392; Samiee, 1998a, pp. 413-414; Moodley, 2002, p.

654; Morgan-Thomas and Bridgewater, 2004, p. 398; Rosson, 2004, pp. 1-2) and secondarily in light of its direct and indirect costs and benefits (Samiee, 1998a, p. 414; Moodley, 2002, p. 654; Rosson, 2004, pp. 1-2). Thus, the dependent variable in the suggested model is going to be measured in terms of incremental revenue.

Based on the review and assessment of the existing literature, the proposed model of thirteen identified factors affecting the successful Internet use for exporting purposes is the following:

$$IER = (NE, II, IE, SI, ITL, IAT, ET, EE, PS, ECS, FS, NL, ISS)$$

where, *IER*=Internet Export Revenues as a percentage of total export revenues, *NE*=Network Effect, *II*=level of Investment in Internet, *IE*=level of Internet Experience, *SI*=Sophisticated use of the Internet, *ITL*=Information Technology Literacy, *IAT*=Internet Application Type, *ET*=Exporter Type, *EE*=level of Exporter Experience, *PS*=Product Specificity, *ECS*=Existing Channel Structures, *FS*=Firm Size, *NL*=Number of Languages used, *ISS*=availability of Internet Specialized Staff. In order to confirm the validity of each factor, the following hypotheses are going to be tested in Greek reality during the next phase of the research:

H₁: The higher the level of Internet use in its market (*NE*), the greater benefits to the exporter (Katz and Shapiro, 1994; Samiee, 1998a; Morgan-Thomas and Bridgewater, 2004).

H₂: Exporting firms with higher level of Internet investment (*II*) get higher revenues than do exporting firms with lower Internet investment (Quelch and Klein, 1996; Bennett, 1997; Samiee, 1998a; Morgan-Thomas and Bridgewater, 2004).

H₃: Exporting firms with higher level of Internet experience (*IE*) get higher revenues than do exporting firms with lower Internet experience (Moodley, 2002; Morgan-Thomas and Bridgewater, 2004).

- H₄: Exporting firms making more sophisticated use of the Internet (*SI*) get higher revenues than do exporting firms making less sophisticated use of the Internet (Morgan-Thomas and Bridgewater, 2004; Rosson, 2004).
- H₅: Exporting firms with higher level of Information Technology literacy (*ITL*) get higher revenues than do exporting firms with low level of Information Technology literacy (Bennett, 1997; Samiee, 1998a; Moodley, 2002; Rosson, 2004).
- H₆: Exporting firms that use the Internet as a medium for revenue generation (*IAT*) get higher revenues than do exporting firms that use the Internet as a communication or business process automation medium (Poon and Swatman, 1997; Samiee, 1998a; Rosson, 2004).
- H₇: Regular or intensive exporting firms (*ET*) get higher revenues from the use of Internet than do sporadic or passive exporting firms (Samiee, 1998a; Moodley, 2002; Morgan-Thomas and Bridgewater, 2004).
- H₈: Exporting firms with low level of export experience (*EE*) get higher revenues from the use of Internet than do exporting firms with higher level of export experience (Quelch and Klein, 1996; Samiee, 1998a; Moodley, 2002; Morgan-Thomas and Bridgewater, 2004).
- H₉: Exporting firms with more specialized products (*PS*) get higher revenues from the use of Internet than do exporting firms with less specialized products (Poon and Swatman, 1997; Morgan-Thomas and Bridgewater, 2004).
- H₁₀: Exporting firms with direct market channels (*ECS*) get higher revenues from the use of Internet than do exporting firms with agents and distributors (Bennett, 1997; Samiee, 1998a; Morgan-Thomas and Bridgewater, 2004).
- H₁₁: Medium-sized exporting firms (*FS*) get higher revenues from the use of Internet than do small exporting firms (Samiee, 1998a; Samiee, 1998b; Arnott and Bridgewater, 2002; Moodley, 2002; Eid and Trueman, 2004).

H₁₂: Exporting firms with more Web sites in different languages (*NL*) get higher revenues than do exporting firms with one Web site in one language (Samiee, 1998a).

H₁₃: Exporting firms with more Internet specialized staff (*ISS*) get higher revenues from the use of Internet than do exporting firms with less Internet specialized staff (Bennett, 1997; Samiee, 1998a; Morgan-Thomas and Bridgewater, 2004).

The data necessary to test the above hypotheses will be collected at the next stage of this research effort with the use of a questionnaire, which will be designed, developed and sent to a sample of Greek exporting small and medium-sized enterprises.

Conclusions

The Internet represents one of the most successful examples of the benefits of sustained investment and commitment to research and development of information infrastructure. Beginning with the early research in packet switching, the government, industry and academia have been partners in evolving and deploying this exciting new technology. The Internet has revolutionized the computer and communications world like nothing before. The invention of the telegraph, telephone, radio, and computer set the stage for this unprecedented integration of capabilities. The Internet is at once a world-wide broadcasting capability, a mechanism for information dissemination, and a medium for collaboration and interaction between individuals and their computers without regard for geographic location (Cerf, 2003).

Despite the short span of Internets' life, its commercialization process, that started in 1993 and is still taking place, was rapid and quite impressive. With the advent of the Internet and WWW, a new medium for commercial activities has emerged whose potential is more dynamic than colour printing, radio, or television. The appeal of such universal connectivity and access was, and still is, driving firms to the Internet, while the WWW has become a

viable part of firms' long-range strategic plans. The Internet phenomenon is indeed a paradigm shift governing both business and information systems (Wigand, 1997, p. 2).

Any company eager to take advantage of the Internet on a global scale must select a business model for its Internet venture and define how information and transactions delivered through this relatively new medium will influence its existing model. The company must also assess who its diverse Web audiences are, what specific customer needs the medium will satisfy, and how its Internet presence will respond to a changing customer base, evolving customer needs, competitor actions, and technological developments (Quelch and Klein, 1996, p. 74). For international marketers, achieving a balance between the new medium's ability to be customised and the desire to retain coherence, control and consistency as they go to market worldwide, will be a major challenge.

The main contribution of this paper is the identification, through a review and assessment of the limited existing literature, of the factors that affect and influence the successful use of Internet in exporting, and the generation of the set of hypotheses that will be used to test the validity and the impact of variables in the next quantitative phase of this research effort. More specifically, twenty factors 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. Thirteen of these 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 thirteen hypotheses was generated.

During the next stage of this research, the validity of the proposed model will be measured in the Greek business sector through the hypothesis testing. The results of the survey will be of significant usefulness to researchers because they will provide statistical evidence about the validity of these factors. Finally, we aspire to provide intelligence to management at exporting SMEs, as well as to SMEs that contemplate engaging in exporting,

about how to improve their exporting performance by acquiring and/or developing the resources, skills and competencies that are necessary to use Internet efficiently in exporting.

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Tables & Figures

Table 1: The Six Fundamental Axioms (Samiee, 1998a, pp. 414-416)

1. Sustainable competitive advantage cannot be solely derived from access to the Internet or developing a Web site.
2. Non-exporting firms cannot expect to become exporters overnight by virtue of developing and maintaining a Web site.
3. Inasmuch as industrial demand is derived from consumer demand, regardless of the penetration of the Internet in exporting or other commerce, the level of consumer spending is not affected.
4. Though some solutions have been offered, data security will remain one of the main concerns for any firm that wants to integrate the Internet in its exporting business.
5. Some structural impediments in using the Internet are gradually removed.
6. Although some applications of the Internet apply equally to all firms, exporters can be divided into two groups in terms of their priority needs from the Internet: <ul style="list-style-type: none"> a. manufacturers and wholesalers that primarily wish to sell their products in large quantities to other manufacturers and/or channel members, and b. businesses that primarily wish to sell to end-users (consumers or industrial customers) in very small quantities.

Figure 1: The Conceptual Framework that Explains the Role of Internet in Exporting (Samiee, 1998a, p. 414)

