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Dear Dr Vir

Title: eEnabled Internet Distribution for small and medium sized hotels: The Case of Hospitality SMEs in Athens

Authors: Buhalis and Kaldis.

Thank you for your comments and the remarks of the referees
I have now revised the paper accordingly and I hope you will find it clearer and better.
As I am going away tonight for almost 2 months it will be difficult to communicate as much.

I hope that you will find it suitable for your journal

Sincerely Yours

Dimitrios Buhalis

1

eEnabled Internet Distribution for small and medium sized hotels:
The Case of Hospitality SMEs in Athens

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eEnabled Internet Distribution for small and medium sized hotels: The Case of Hospitality SMEs in Athens

Abstract

Advances in information and communications technologies (ICTs) have strategic implications for a wide range of industries.

Tourism and hospitality have dramatically changed by the ICTs and the Internet and gradually emerge as the leading industry on online expenditure. The Internet revolutionised traditional distribution models, enabled new entries propelled both disintermediation and reintermediation and altered the sources of competitive advantage. This paper explores the strategic implications of ICTs and the perceived advantages and disadvantages of Internet distribution for small and medium-sized hospitality enterprises (SMEs). Primary research in Athens hotels demonstrates the effects of the Internet and ICTs for secondary markets, where there is lower penetration and ICT adoption. Interviews and questionnaires identified a number of strategies in order to optimise distribution. The analysis illustrates the strategic role of ICTs and the Internet for hospitality organisations and Small and Medium-sized organisations in general. Most hotels employ a distribution mix that determines the level and employment of the Internet. The paper demonstrates that only organisations that use ICTs strategically will be able to develop their electronic distribution and achieve competitive advantages in the future.

Keywords: Distribution, Strategic marketing and management, Hospitality, Small and Medium-sized Enterprises, Athens, Greece, eTourism.

1 Introduction

The ICT revolution and the Internet in particular transforms the marketplace to a "virtual" or "electronic" market-space, and to "cyber-markets" (Bakos,1991). Electronic-business transforms communications, collaboration and commerce, bringing new opportunities and challenges. As interactivity between producers and consumers increases there are profound implications for the distribution of products and services. Information, speed and interactivity become part of the core strategies for all enterprises worldwide and their competitiveness will be assessed according to their ability to outperform both traditional competitors and newcomers.

Tourism and hospitality have dramatically changed by the ICTs and the Internet and gradually emerge as the leading industry on online expenditure (Buhalis, 2003, O'Connor 2001). The Internet revolutionised traditional distribution models, enabled new entries, propelled both disintermediation and reintermediation and altered the sources of competitive advantage. The reconfiguration of the distribution channels has propelled simultaneous competition and cooperation between principals and intermediaries (O'Connor and Frew, 2002). Small and medium -sized enterprises (SMEs) dominate the tourism and hospitality industries around the world (Morrison, and Thomas, 1999; Morrison, 1998). However, SMEs globally lack the expertise and resources to follow those developments (Levy and Powell, 2000, Buhalis and Main, 1998). They often find it increasingly difficult to transform their operational and strategic management to face the new realities and the challenges they introduce.

The paper draws experience from the hospitality industry in Athens, Greece that faced increased demand due to the EU presidency and the Athens 2004 Olympic Games. Athens also provided a good case as a 'secondary Internet-wave' capital city as opposed to primary wave. Secondary Internet wave can be termed as locations that Internet penetration is still between 10-40% of the local population. This indicates that only early adopters are using technology and the Internet and that there is still limited expertise in the marketplace for both consumers and traders. This is in contrast with primary wave locations, such as Northern Europe and Northern America, where penetration levels have reached 40-70% and there is a distinct transformation of services on line for a large proportion of the population. On these economies, decent Internet presence and online transactions can be safely assumed and have gradually replaced routine operations. As many secondary wave destinations aim to attract customers from the primary wave places of origin there is a gap in the marketplace, as consumers are rarely able to identify the level of eCommerce presence and interactivity that are used to in their everyday context. This generates a gap between online interactivity expectations and realities that only the most technologically advanced operators can fulfil.

This paper aims to examine the usage of technology and the Internet as a strategic tool for distribution of small and medium-sized hospitality organisations. Hospitality as an industry normally includes all organisations that offer lodging and catering, including hotels and similar establishments, restaurants, conference centres as well as catering for hospitals, institutional and travel purposes. This paper however concentrates on Small and Medium-sized independent hotels which operate with less than 250 members of staff and are not members of an international chain. It explores the strategic implications of ICTs and the perceived advantages and disadvantages of Internet distribution for small and medium-sized hospitality enterprises. The objectives of this study are therefore to examine existing practices, highlight trends, explain the reasons that drive change, identify key challenges and explore strategic management implications.

2 Literature review

A thorough literature review that includes literature strategic management and marketing, eCommerce/Internet and tourism/hospitality is essential for providing a comprehensive theoretical basis for the research. Understanding the key issues on each of those lines of inquiry is of paramount importance for addressing the needs of this market and for assessing the impacts of eCommerce on SMEs.

Internet-Enabled strategic management and marketing

The Internet has revolutionised the marketplace, transforming the strategic management and marketing of organisations as well as their distribution strategies at the micro level (Dertouzos, 1997). Porter (2001) explains that although eCommerce and the Internet do not change the competition factors, they affect the sources of competitiveness and require organisations to undertake a strategic management review in order to enhance their position (Turban et al, 2002; Porter,1985; Rayport and Sviokla,1994). Innovative organisations, that engage technology in improving their business performance and also appreciate the potential of technology for expanding, can gain several benefits from an enterprise-wide Internet and eCommerce strategy (Bakos,1991). Synergies between functions, processes and practices propel organisations to redesign their technology supported value-added chain and enhance their competitiveness. Porter (2001) suggests that ICT and Internet developments reshape the nature of competition. Businesses therefore have to rethink their products, internal procedures and structures and relationships with consumers (Whiteley, 2000; Perry and Schneider, 2001). Gaining and sustaining competitive advantage depends on understanding both the firm's value chain and how the firm fits in the overall value system (Porter, 1989, 1985, Porter and Millar,1985). SMEs around the world gradually realise that their external environment has shifted dramatically but few have the resources and knowledge to fully appreciate the emerging realities and to develop suitable strategies to strengthen their competitiveness. Only organisations that will have an ICT-enabled strategy will be able to survive and grow in the future (Turban et al, 2002; Porter, 2001; Rayport and Sviokla,1994).

eCommerce and SMEs

SMEs play a significant role in the global economy. The Internet enables innovative small organisations to build their "virtual" size and expand their reach. Low cost access to network infrastructure, ability to communicate directly with consumers and availability of new distribution channels are few of the key Internet promises to SMEs (Poon and Swatman, 1999, Levy and Powell, 2000). eCommerce can support them to trade globally, through enhancing direct distribution to consumers as well as through a global network of intermediaries (Brown and Lockett, 2004, Kalakota and Whinston, 1996).

However, the limited adoption of ICT innovation in SMEs generates considerable concern about their ability and readiness to use the ICTs and the Internet as a business tool. A number of barriers can be identified, including lack of resources, lack of skilled employees, lack of easy to use technology adapted to SMEs and also lack of awareness of the potential benefits. The European Commission (2006) has identified that to make e-business more suitable for SMES, there is a need for:

Improving their technical and management skills: training and managerial change are key issues
Making available appropriate e-business solutions for SMEs
Addressing the high cost of ownership of ICT equipment
Addressing security and privacy issues
Making available SME-specific information on the uses of e-business, to help them in their investment decisions

The adoption of Internet-based technologies can be represented as a continuous process with sequential steps of evolutions. In the early stages email and information only web presence allows SMEs to communicate and present their products online. Comprehensive eCommerce and eBusiness applications enable not only interaction with external entities but also integration with internal systems, processes and data. A certain degree of business process reengineering is required to achieve those objectives, although organisations do not need to change fundamentally. At the networking stage new business models are required to support organisations to concentrate on their core business and to develop Internetworking and partnerships with complementary organisations. Finally, the digital ecosystem supports dynamic networking and collaboration through the development of a community that shares business, knowledge and infrastructures towards maximising their collective benefit. This changes dramatically the way that businesses are constructed and operate and makes organisations much more fluid with structures being shaped dynamically by alliances, partnerships and collaboration (Nachira, 2002).

Rogers' (1976, 1995) 'diffusion of innovation' theory identified the characteristics of innovation which determine the rate of diffusion in the marketplace. These include both hard/rational and soft/personal factors, such as: complexity, trialability, compatibility and relative advantage. Although Roger's theories can be applied to many SMEs, their particular needs and requirements, as well as their perceptions need to be understood better. Lefebvre et al (1991) identified four categories of factors that influence adoption of new technologies by SMEs and their attitude towards adoption, including:

- Characteristics of the firm
- Competitiveness and management strategies of the firm
- Influences of international and external parties on the adoption decision process and
- Characteristics of new technologies adopted

It is evident therefore that SMEs in different locations and industries will have variable factors affecting their ICT adoption, since the competitive forces and industry structures differ. This also determines their potential benefits and perceptions towards the Internet and technologies.

ICT enabled strategic transformation of the Tourism and Hospitality industries

Paradoxically these developments propel both growth and competition. On the one hand, principals have the tools to promote their products directly to the consumers reducing their dependency on intermediaries (disintermediation). On the other, a wide range of intermediaries have emerged (reintermediation) enabling principals to extend their reach and to grow on a global basis (Buhalis,1998, Licata, et al, 2001). Traditional intermediaries, such as Hotel chain reservation offices, Global Distribution Systems (GDSs), third party reservation system providers and Switch companies have also introduced websites (e.g. hilton.com, Travelocity.com, UTELL, and Pegasus respectively), all with the objective of transacting business directly with customer. They have also established electronic links with other players such as Internet portals and complementary suppliers, feeding them with content and products and supporting a B2B2C marketplace. In addition, a new breed of electronic intermediaries (such as Expedia and Lastminute.com) emerged to provide a "one stop-shop" for consumers, propelling reintermediation and also requiring traditional intermediaries to rethink their strategies.

The hospitality industry has experienced the rapid development of specialised hospitality eMediaries that concentrate on the distribution of hotel stock. These include well established intermediaries, such as Pegasus/UTELL, HRS etc that were initially feeding Global Distribution Systems with hospitality stock. In addition, newly developed hotel aggregators, (such as hotels.com, worldres.com, allthehotels.com, or Active Hotels) enable small and independent properties to distribute their products through their systems. Destination Management Systems (DMSs) such as Tiscover and Gulliver, have also emerged recently to aggregate hotel stock at a regional basis. Both hotel aggregators and DMSs distribute online directly to consumers, as well as through travel portals such as Expedia, Travelocity and eBookers. In addition, they use "white labelling", i.e. they provide content and booking engines on major Internet portals, such as Yahoo!, Altavista and ask.com or mapping and Location Based Services portals such as multimap.com and whatisonwhen.com to promote hotel stock whilst maintaining the "feel and look" of the hosting portal. From the hotel's perspective, this approach is expected to bypass legacy systems (such as GDSs) and to result in faster and more cost efficient bookings by the direct-to-consumer channel (Connolly et al., 1998, O'Connor and Frew, 2002). This can increase the efficiency of internal operations and allow hotels to reduce internal transaction and processing costs. Other benefits relate to enhanced data capture about customers (Alford, 2000) and improved Customer Relationship Management (CRM) through effective use of data mining and electronic mail strategies (Price and Starkov, 2002; Min et al, 2002, Magnini et al, 2003, Marinova et al, 2002).

To the degree that new channels support the optimisation of the rate and length of stay, they can contribute to the Revenue Management of hotels (Choi and Kimes, 2002). Hotel aggregators enable hotels to distribute their product widely through a vast number of newly-formed distribution channels. At the same time they create major challenges for the management of rates, prices and brands. Multi-channel strategies therefore emerge in the marketplace to empower hotels around the world to address these issues (Starkov and Price 2001, Dombey, 1998, Reinders and Baker, 1997, Buhalis and Licata,2002, O'Connor and Frew, 2001). Tourism and hospitality organisations need to adapt their strategic management and marketing to the opportunities and challenges emerging globally.

ICTs can also transform the strategic position of organisations by improving their efficiency, differentiation, operational costs and response times. The quality of the web presence for hospitality operators can affect the information satisfaction as well as the purchase-related

behavioural intentions of consumers (Jeong, Oh and Gregoire, 2003). Service quality, enhanced profitability and efficiency, integration of departments, distribution and procurement, speedier communications, reduced costs, customer satisfaction and long-term profitability and competitiveness are beneficial outcomes of increased use of technology in the hotel industry (Van Hoof et al. 1995, Dubé et al., 2000; Leong, 2001, Collins and Malik, 1999, Dietrich et al., 1997; Cho and Connolly, 1996; Buick, 2003; Aksu and Tarcan, 2002; McCole, 2002; Ho, 2002; Namasivayam, et al. 2000). An ICT and Internet-enabled distribution strategy is therefore a prerequisite for the prosperity of tourism and hospitality organisations in the future.

Internet enabled Distribution for Hospitality and Tourism

The distribution channel system has always been a critical link between demand and supply, (Mill and Morrison, 1992). Innovative use of ICTs can improve quality and productivity, strengthen distribution channels and provide competitive advantage through cost and differentiation advantage. Prior to the early 1990s, only *linear* relationships existed between principals and intermediaries (O'Connor, 2001). Each participant undertook a specific function in the value chain and complemented the business role of other intermediaries. Participants combined their strengths to perform all activities required to link principals with end-customers (Ujma, 2001). Several studies (Buhalis and Laws, 2001; Richer and O'Neill-Dunne, 1999; Waller, 1999; Go, 1995; PricewaterhouseCoopers, 2001) have suggested that changes occurring within traditional channels in the hotel sector were mainly due to economic pressures and transformations in the industry's environment. The World Wide Web was quickly recognised as an ideal tool for a new form of distribution (Sheldon, 1997, Werthner and Klein, 1999, Inkpen, 1998, O'Connor and Frew, 2000). Electronic distribution systems use a combination of ICTs to promote the products as well as to facilitate purchases (O'Connor, 2000, Sangster, 2001, Marcussen, 2003). On average in 2006 29.7% of airline sales where online (SITA, 2006) whilst hotel reservations are also increasing rapidly (Sangster, 2001, Richer and O'Neill-Dunne, 1999).

O'Connor and Frew (2000, 2001, 2002) demonstrate that hotel distribution online becomes incredibly complex and challenging. Paradoxically although there has been a decrease in dependencies between different parties within the distribution chain, this has resulted in increased levels of competition (Dombey, 1998; Richer and O'Neill-Dunne, 1999). Hotels need to design distribution strategies that take advantage of a number of different types of intermediaries. Selecting the right combination can assist maximising the revenue per available room (REVPAR) and to strengthen their performance. However not all interemediaries are suitable for the business strategy of all organisations. Intercontintental Hotels for example have chosen not to work with Expedia as their commercial arrangements fail to ensure price parity and brand integrity. As each layer of distribution adds complexity and cost in the process, distribution decisions are becoming central in the strategic management. Not having a comprehensive online presence or failing to adopt a multi-channel strategy effectively, can mean invisibility in the marketplace or/and strategic disadvantages. Athens hoteliers therefore provide a suitable research sample for examining their understanding of online distribution and ability to deal with new challenges for a range of reasons outlined in the Methods section.

3 Method

The literature review indicated a number of challenges which lead to research questions. The primary objective of this study was to understand the transformation of the hospitality SME distribution as a result of the Internet. A further aim was to examine how hotels perceived the Internet as a distribution mechanism and how this can be best used in the future. A number of advantages and disadvantages in comparison to traditional distribution mechanisms as well as several technical and business challenges were also to be identified in the research. Few studies have been undertaken to explore hoteliers' views on the range of channels available to them for distributing their product electronically and most of those concentrate on large/chain properties.

Choosing a location – contextualising Athens

Athens was selected as the research location for a number of reasons. Due to its history the city is one of the earliest destinations in the world and has one of the richest cultural heritage on earth. A number of unique archaelogical treasures have been attracting considerable tourism for centuries. Leisure travellers admire the Parthenon and its archaeological and cultural treasures. Business tourism also represents one third of international arrivals. The city has gone through a major transformation as a result of several public projects such as the peripheral motorway, new airport and brand new metro were developed in preparation for the ATHENS2004 Olympic Games (Xenia, 2002, Buhalis, 2000). Athens has attracted a large number of visitors, all seeking accommodation and other travel information.

Athens was also selected as a secondary (in arrivals) European capital cities that is becoming more interesting for intermediaries. Since the late 1990s, most major Internet intermediaries concentrated in developing a comprehensive hospitality inventory in major/primary cities, such as London, Paris, New York and Los Angeles. The provision of a comprehensive hotel stock in all price range and location was a priority for demonstrating their competitiveness. Attracting hotel stock from lesser markets was not seen as a priority. The gradual maturity of online distribution in the primary markets, as well as the emergence of dynamic packaging, have been urging for global coverage and for stock in secondary city and vacation destinations. This generates both opportunities and challenges in these markets and requires the inclusion of electronic distribution strategies in the strategic and operational marketing of hotels. At the same it demonstrates that SMEs in those regions are not as advanced in electronic distribution as their counterparts, creating opportunities and challenges.

Athens was finally selected as a 'second Internet-wave' capital cities, taking into consideration the average level of Internet proliferation and the marketplace experience of electronic distribution. 'First wave Internet' countries include the USA, UK, Australia and Canada as well as Scandinavian countries that enjoy Internet penetration higher than 40% of their population. 'Second Internet wave' regions include areas where Internet adoption is between 15% and 40% of the local population, including the majority of the southern European Union countries. Similar to many European secondary markets, organisations in Greece and Athens can be characterised as late majority or laggards in their adoption of new technologies (Buhalis and Deimezi, 2003). The Internet utilisation in Greece has been limited, with only about 20% of the population being online and only few SMEs take full advantage of the Internet.

Research design and execution

To enable the researchers to explore the current state of the marketplace and more importantly the reasons for the observations qualitative methodologies were selected. A thorough literature review was carried out to identify prior knowledge and to suggest key issues and variables that have emerged for SMEs and in particular the hospitality/tourism industries around the world. The literature review demonstrated a number of themes and variables researched in online strategic marketing, the effects of eCommerce on SMEs and online hospitality distribution Potential benefits and both advantages and disadvantages of the Internet as a distribution channel were further investigated in the literature. Hitherto, however, most of the research output has primarily focused on "first Internet wave" markets as well as on larger/branded organisations. Since there is limited research on eCommerce for SMEs and Internet-enabled distribution for hospitality SMEs, particularly in second internet wave markets, the research design was exploratory in nature and was staged in three complementary phases, namely: a web site survey; semi-structured personal interviews with hospitality SMEs; and a panel discussion with experts. Hence the first stage of the research provided a state of the art evaluation of the marketplace; the second stage offered the opportunity to rate and rank the priorities of decision makers in the hospitality SMEs whilst the third stage enabled the researchers to elaborate on the rational behind the findings. Potential benefits and both advantages and disadvantages of the Internet as a distribution channel were investigated.

The first phase included a survey of Athens web sites that belong to Athens SMEs hotels. All 163 Athens SMEs hotels of the Lux, A and B Categories were targeted and about 60% had a web site. The researchers evaluated the web sites based on a number of criteria outlined in Table 1 under the generic headings technical and Web design, customer and content; and finally marketing. Hotels were evaluated according to a classification scheme from A (for best practice) to D (low adoption). Most importantly, notes were taken for each of the criteria to highlight best practice and also to demonstrate key challenges. This process enabled the researchers to appreciate both the level of eCommerce readiness and to evaluate the interface, content and marketing competence of Athens hotels' web sites before formulating the questions and undertake the primary research.

The second phase included semi-structured personal interviews with hospitality SMEs in Athens. An interview structure/questionnaire was developed. Predicted aspects of future channels, were adopted from Licata et al. (2001) where similar constructs were used for the assessment of the advantages and disadvantages of the Internet and also for the contribution of future channels, were adopted from Licata et al. (2001). The Licata et al (2001) research was undertaken with European ICT and Tourism experts and rated and ranked advantages and disadvantages of the Internet for tourism organisations and also predicted the key distribution channels of the future. As the context and sample of that research is significantly different, enabling direct meaningful comparisons with the hospitality SMEs targeted here cannot be supported. However, using the same constructs has enabled the researchers to compare both the ratings and the rankings of variables between SME managers and eCommerce experts and to identify whether there is broad alignment and whether SME practitioners had similar appreciation of the concepts with experts.

Table 1 Criteria for web site evaluation

Technical and Web Design	Outsourced web site development Layout and navigation Currency of links Download time Interface Effective use of html, flash animations, music and other media. Usability Traffic monitoring and assessment Reservation mechanism
Customer and content	Content and information provided Currency of information Attractiveness Number of pages Interactivity Special needs customer groups Static versus dynamic content Value added / complementary tourism service providers Reciprocal hyperlinking Languages
Marketing	Registered own domains Differentiate and brand Registration with search engines and search engine optimisation Frequently of updates Pricing

Source: Adapted from Morrison et al 1999

The research was staged in three phases and used several instruments. The first phase included a survey of web sites that belong to hotels that satisfy the sampling criteria. This enabled the researchers to appreciate the level of eCommerce and interfaces of Athens hotels.

The Second phase included semi-structured personal interviews with hospitality SMEs in Athens. An interview structure/questionnaire used during interviews was also distributed by electronic mail to hotels that preferred to respond in writing. The research instrument included both closed and open questions to allow the collection of qualitative data and also rankings of potential advantages and disadvantages, challenges and concerns. The research instrument was validated by three executives of a hospitality distribution consulting firm. It was subsequently translated into Greek, and five pilot interviews were conducted with hotel executives in order to eliminate potential misunderstandings and to ensure comprehensibility and clarity. Feedback received from the pilot interviews was used for the fine-tuning of the research instrument and few words were changed before the production of the final version.

Finally, the third stage of the research included a panel discussion with five electronic distribution experts. This followed the analysis and transcribing of the results and enabled the researchers to interpret the findings further and to elaborate on implications. Several critical issues emerged whilst strategic and tactical recommendations were produced. The total duration of the research was approximately one month.

Sampling

As this is exploratory research, judgemental sampling was used to identify knowledgeable respondents that could make informed contributions to the research. Although this limits the ability to generate generalisable results, it supports an in-depth understanding of the potential impact perceived by knowledgeable organisations. According to Sekaran (2000) sampling involves the choice of subjects who are in the best possible position to provide the information required. A sample set was drawn from the total number of hotels located in Athens. Hotels used in the study fulfilled a number of criteria including:

- Location: Athens and city suburbs;
- Category: Lux, A and B;
- Capacity: More than 70 rooms;
- Connectivity: E-mail addresses available in official guides;
- Availability: Operational all year round and not currently closed for renovation;
- Affiliation: If member of chain, only one hotel was selected per hotel chain.

The scope of this research was restricted to the examination of electronic distribution systems in the hotels that met these criteria. A total of 79 hotels fulfilled the selection criteria and were all targeted, resulting to 23 responses or a 29.1% response rate. The average hotel that participated had a total of around 55 employees. Table 2 shows the sampling process and the actual response rate.

Table 2. SAMPLING PROCESS AND RESPONSE RATE

Class	Total Hotels	≥70 rooms	Open 12 Months / Currently Operational	Responses	Respondent average number of rooms	Response Rate
Lux	21	20	18	8	252	44.4%
A	48	26	22	10	120	45.5%
B	94	45	39	5	154	12.8%
Total	**163**	**91**	**79**	**23**	**175**	**29.1%**

The majority of the respondents were Sales Directors within participating hotels. Therefore, they were knowledgeable in both offline and online distribution. Many respondents were owners, General Managers or Assistant General Managers within their respective hotels, providing an overall and strategic viewpoint. A further indication of the high quality of responses received was that respondents had an average of 13 years of experience in the industry, offering a wealth of experience.

Finally, the third stage of the research included a panel discussion with five electronic distribution experts. This followed the analysis and transcribing of the results and enabled the researchers to interpret the findings further and to elaborate on implications. Several critical issues emerged whilst strategic and tactical recommendations were produced. The total duration of the research was approximately one month.

Methodology limitations

The major limiting factor was the reluctance of some accommodation establishments to respond to the survey despite reminder emails and telephone calls. As a result the response rate was 27.8%. In addition, although the capacity limit excluded smaller properties, it was recognised that the selected hotels have sufficient capacity to justify ICT investments and require a comprehensive distribution strategy that required to take full advantage of the

eCommerce opportunities. They also have a professional management and by law have to employ at least one qualified manager. Also categories Lux, A, and B are the preferred hotel categories for accommodating Olympic Games' guests and are almost exclusively chosen for the MICE market segment. Guests of C, D and E hotel categories are primarily used by domestic customers and these properties are usually very small and almost exclusively family run. They use simple distribution channels and have a large proportion of repeat clients. Although the sample size is limited and may hinder the ability of this research to make generalisations, the researchers are confident that the respondents were the best-qualified managers in the marketplace to provide views, insights and judgement to meet the research objectives.

4 Research Findings

eCommerce hospitality SMEs representations - Web survey findings

The web survey demonstrated that eCommerce in the hospitality SMEs in Athens is still underdeveloped and that SMEs consistently underutilise the potential of the medium. The vast majority of SMEs are still at the initial Web site steps, having developed a web site. The vast majority of the hotels had outsourced their web site development to web designers who have often used piecemeal approaches to develop web sites. Most hotels had registered their own domain names whilst others were hosted by electronic travel agencies or directories. The layout of most web sites was rather unsophisticated, with limited content, information about the property and low quality interface. On average 5-6 static pages constituted a hotel site and it seemed that web designers had similar templates that were used repeatedly. Content was usually poor and frequently there were significant elements of information missing, such as location and arrival information, maps and in-room facilities, encouraging consumers to telephone the hotel. Only very rarely was there an attempt to differentiate the hotel, explain the brand and demonstrate the Unique Selling Point (USP) of the property. There was little difference between different hotel classifications as far as web design is concerned. Although size and category determine potential revenue and one would expect that larger and higher quality hotels would have a better web site, this was not always the case as often smaller properties had invested time and effort in offering a comprehensive web presence. Few innovators had actually optimised their web site and were consistently achieving higher rankings on search engines.

In some case, pages were "over-designed", with web developers trying to impress users with Flash animations, music and other media. Usability and search engine optimisation seem to be an after-thought in many sites, as many over-designed sites will block search engine crawlers whilst they can confuse users seeking straight forward interfaces. Often pages were infrequently updated and they demonstrated prices and dates that had already passed. Email and comment forms were the most common forms of interactivity whilst reservation forms were emailed to hotels for confirmation. Some web sites only displayed telephone and fax numbers though, effectively having a "yellow pages" type of entry. Real time bookings, that enable consumers to get a confirmation on the spot, were a rarity. Few websites offered any hypertext link with complementary tourism service providers (e.g. travel agency, taxis, and transfer companies) or other related service providers, such as currency converter, weather, travel books/guides and embassies. This suggests that few organisations have realised the benefits to be gained by offering value-added services to their customers and expand their value chains accordingly.

Pricing was a problem as hoteliers seem to display their rack rates, leaving discounted prices to travel trade. Hence when searching online, consumers could actually book the

same room on distributors' sites for a lower price. An interviewee from the hotel sector further commented that problems may arise if hoteliers publicise discounted own prices on their websites, as this may upset international tour operators or hotel aggregators they collaborate with. Hence, he explained that hotels were required by wholesalers to publish official rack rates on their websites, making them unattractive for direct bookings. Again this was an issue of bargaining between tour operators and hoteliers. The more advanced properties that had an extensive distribution strategy were prepared to determine their terms and conditions with their distribution partners and negotiate agreements. Others felt that they had low negotiation power and accepted the terms offered by distributors. Some of the most experienced respondents explained that gradually they aim to achieve price parity by adopting the commission, rather than the merchant model, which enables them to control the final price. Based on demand and supply the can vary the price on their own web site and also on those of partners.

Distribution channels: Customer mix and source of reservations

Athenian hotels provide hospitality to a wide range of customers including business and leisure customers. Figure 1 demonstrates that the vast majority of bookings are coming from off-line sources and each distribution channel identified (direct, corporate, travel agency, tour operator and Internet) has a significant contribution to bookings. The location of the hotel often determines the type of clientele attracted. Properties close to archaeological sites attract more leisure travellers and travel trade than those properties located in business districts. Corporate business is the source of most bookings in the Lux categories, whilst travel agencies and tour operators provide most bookings for lower category non-branded properties. Travel agencies are still important players for reservations for all hotel types in Athens. Internet reservations currently provide, on average only 8% of the respondents' total bookings. The panel suggested that overall the average percentage of bookings is much lower than that for the average Athens and Greek hotel, against a European average of about 15%. A category hotels attract more Internet bookings, as they have developed more comprehensive distribution strategies and use more eMediaries. They are less expensive than Lux hotels and also attract a larger percentage of independent and leisure travellers. Hotel managers appreciated that although the current rate of Internet bookings is limited, the growth experienced is significant, leading to a very promising contribution in the near future. However, expert respondents explained that this creates a "chicken and egg" situation: the percentage is fairly low in comparison with other cities, as the eCommerce presence of the Athenian hotels is not sufficiently developed to attract more online bookings. On the other hand, hoteliers are reluctant to invest heavily unless a significant proportion of their bookings is coming from online sources.
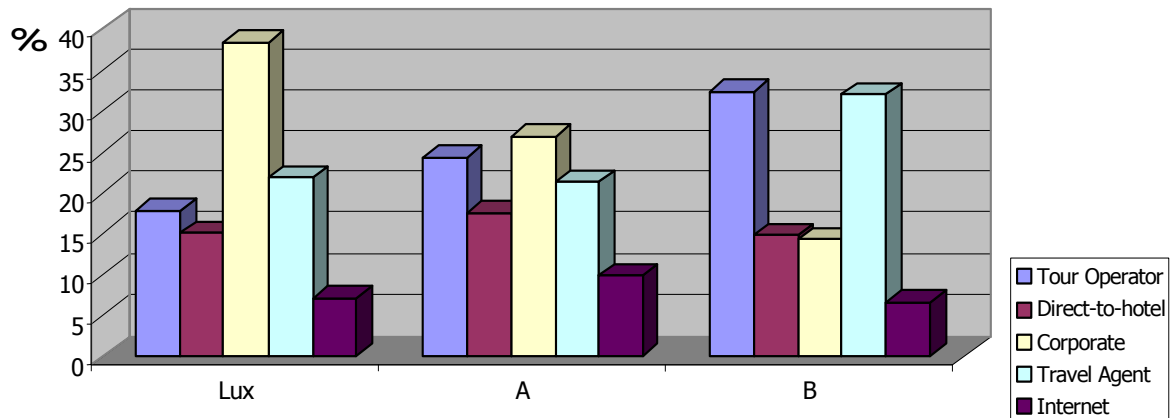
Fig. **1 –** Booking Source per Hotel Category

Connectivity was a central selection criterion, and therefore most participant hotels already had web pages, with e-mail addresses available as avenues for communications and reservations. The majority of category 'B hotels relied on an electronic form to generate reservation requests from their web page. Category 'A hotels offered both e-mail and real-time booking options, while Lux hotels make available all options to customers. About 63% of the respondents offered real-time booking access. An interesting observation was that category 'A hotels were, on average, more advanced than Lux hotels for this attribute. The latter often depended on their parent hotel-chain central reservation systems for their bookings as well as on corporate deals with local companies. A similar pattern was observed between these two groups for the use of Internet protocol for communication purposes within the company (Intranets).

Hotels practice a variety of Internet promotional activities. These activities vary by category. Category 'B hotels rely mainly on forwarding their web pages on search engines and placing e-banners on host sites. Category 'A hotels score higher than other categories on hosting e-promotions, namely offering a better price for customers who book through their web-page. Lux hotels go a step further by personalising their service through electronic mail marketing techniques. Although a number of techniques are used, it was evident from the interviews that very few properties have a comprehensive eBusiness strategy that integrate their internal operations with their reservation functions and adopt proactive and reactive measures for their strategic and tactical marketing.

Current distribution channel Mix

Athens hoteliers use a number of different channels to distribute their product. Due to the low Internet access and inertia towards eCommerce shown by the overwhelming majority of the Greek population, hoteliers felt that their web sites were predominantly used by their International markets. Hence, the most frequent languages cited were Greek and English. It is evident from the web survey that quite frequently Greek tourism entrepreneurs think and operate primarily in a fashion that serves the domestic market, whilst ignoring the international markets and their modern expectations. eCommerce is therefore in its infancy, as the majority of the sites visited demonstrated.

 Figure 2 shows overall responses related to distribution channels used by hotel category. These include both offline and online channels. Similarly with many other places in the world, the most important distribution channel cited was direct communication. There is still

a significant proportion of both individual and corporate clientele who call the hotel and make hotel reservations direct. Many repeat guests often have negotiated personal or corporate rates, or simply call the hotel and haggle for a discount on the rack rate. Travel agents also remain the most important partner for hotels. Lux and category A relied heavily on GDS, CRS and representative companies, where such systems are available. This is explained as some of these hotels are affiliated to international hotel chains.
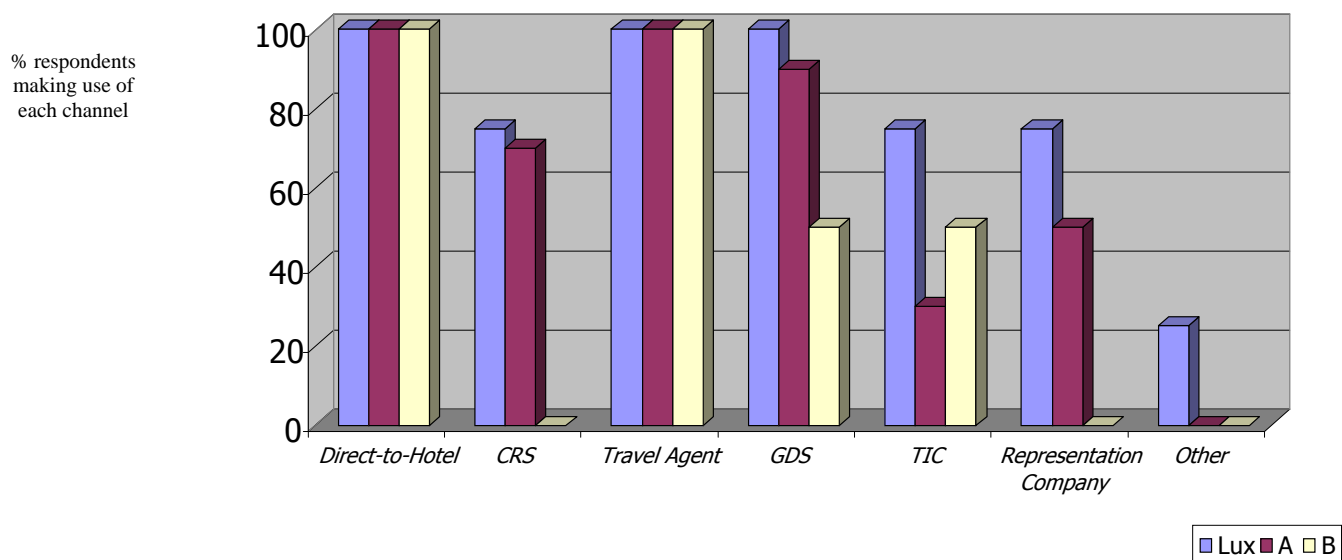
Fig.2. Distribution Channels mix used per Hotel Category

On-line presence was considered quite important for all hotels interviewed. Many have adopted several electronic routes to the customer, most frequently through travel agents and Global Distribution Systems (GDSs), in addition to having their own web sites. The influence of travel portals was found to become increasingly important. Especially category B hotels use travel portals to discount and sell distressed inventory at the last minute (Figure 3). The most frequently cited route to be adopted in the near future was aggregators and *discount web channels*, independently from hotel category. However, hotels often failed to identify the challenges emerging when hotels give up their brand control and sell rooms exclusively on price. Hoteliers felt that they can use these channels to promote distressed inventory and to reduce their lost revenues due to unsold rooms without considering longer term implications.

Fig. 3. INTERMEDIARIES OFFERING INTERNET RESERVATIONS
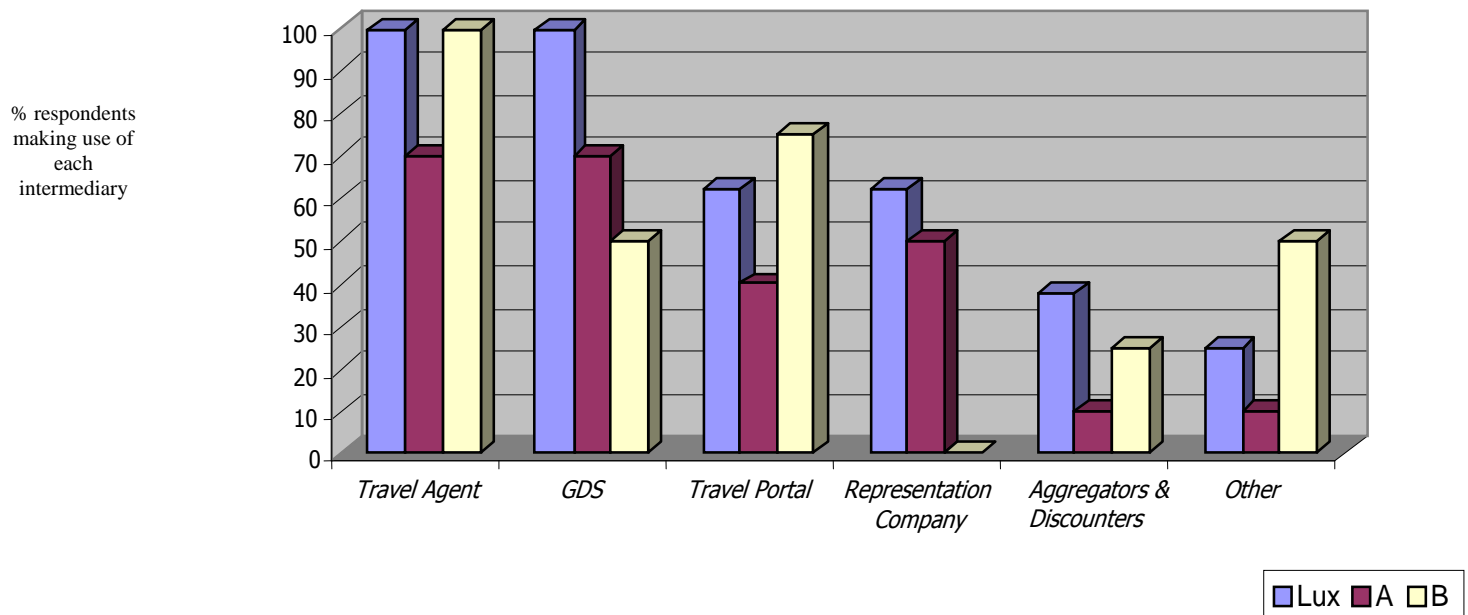
Overall, there is a favourable trend towards the adoption of Internet channels, as hoteliers realise the power of the Internet to trade online. The most important channels used currently for addressing business customers were travel agencies, direct-to-hotel communication and GDSs. Travel agencies and tour operators are more important as intermediaries than GDSs. Web channels, are regarded as important when addressing individual leisure customers, as hoteliers felt that individual tourists increasingly search and book their vacations on-line. Travel portals were also considered of strategic importance and hoteliers expressed the need to ensure that their properties are represented. Figure 4 demonstrates that a combination of simple technologies is used to support linear transactions. Experts explained that hospitality SMEs support both online and offline distributors to maximise market reach. However, the large number of partners used in combination with the low level of interconnectivity with distributors means that significant resources are often required for data entry and for rectifying human error in transactions. This demonstrates the potential for electronic-enabled distribution strategies that use technologies to allow hospitality SMEs to adopt an effective multi-channel strategy.
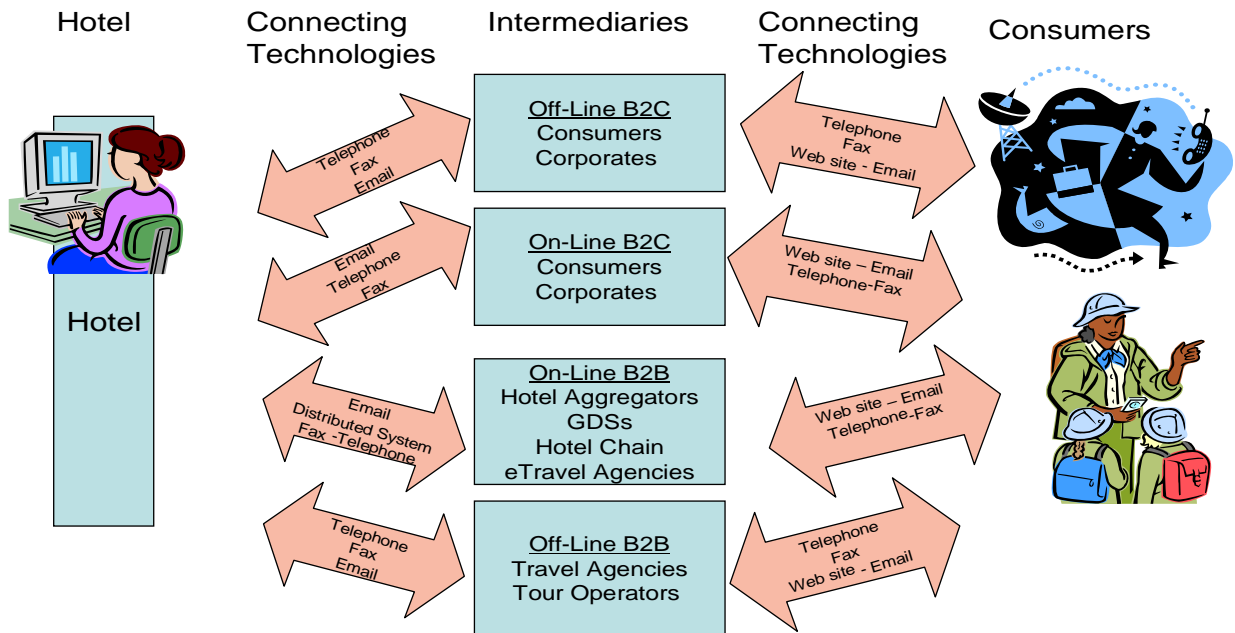
Current eDistribution for Hospitality

Figure 4: Current eDistribution Framework for hospitality

Barriers to adopting eCommerce – Perceptions and concerns among hoteliers

The pilot-testing phase revealed a number of concerns among hoteliers. Overall, transaction costs were identified to be a central issue, as it was felt this rendered some of the electronic distribution channels unapproachable. Also, regular updating of on-line records was a crucial, but tedious task that required more human resources. For most other issues, each hotel type assigned different priorities to different concerns as demonstrated in Figure 5. The spider web charts demonstrate the mean value per hotel category. For Lux hotels the most significant concern was the ability to formulate a coherent and complete overall strategy. The availability of multiple routes to end-customers, as well as the need to effectively evaluate and manage a vast range of web channels were also causes of concern. Many hotel-chain members identified having to protect their brand name and to ensure brand consistency across channels as key issues. Category 'A hotels reported registration cost as one of the issues that concerned them most, in addition to operational costs. Paradoxically, Lux and B category hotels seem to be closer in their concerns that those of the A category.

**Fig. 5.** Concerns for Hoteliers by Hotel Category
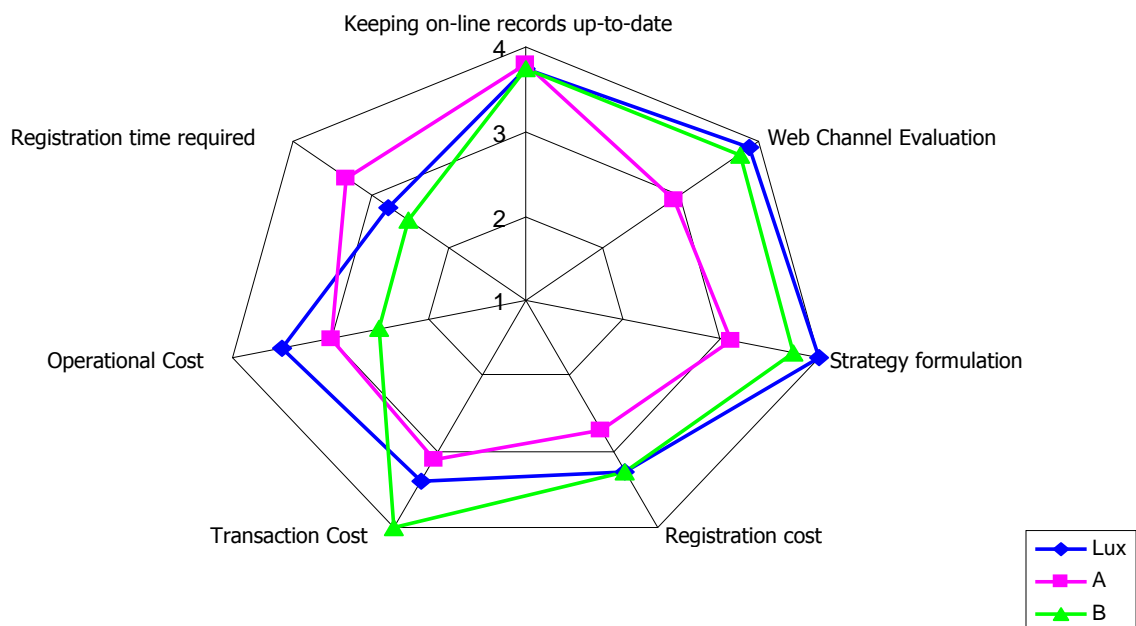
Note: A 5-point Likert scale. Attributes from 1=Very Unimportant to 5=Very Important.

Internet as a distribution channel

Overall, respondents have a high regard for the Internet as a communication and reservation medium. Most respondents had a thorough understanding of the potential of this medium as a means of gaining competitive advantage and promoting themselves effectively. This medium is also viewed as an effective tool for optimising customer interaction, minimising distribution costs, and reducing dependency on third parties (Figure 6). Little variation was evident between different categories. This is in accordance with the findings of the eBusiness W@tch (2006) which confirms that tourism organisations are pioneers in using the internet for promoting and selling their offerings.

**Fig. 6.** Advantages of Internet as a Distribution Channel
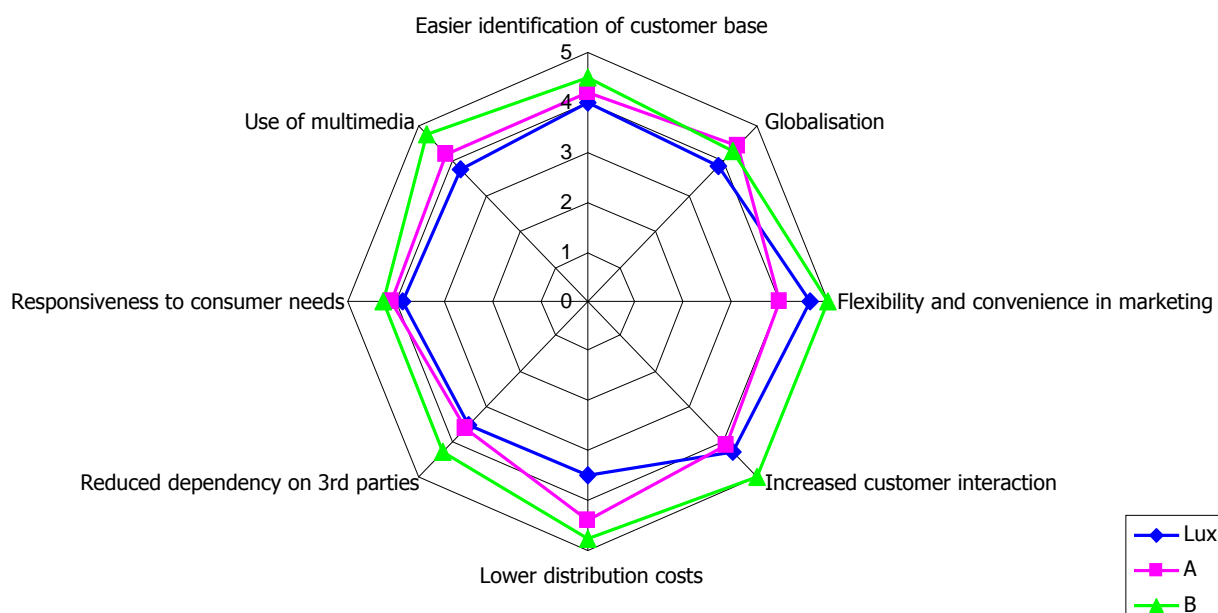
Note: A 5-point Likert scale. Attributes from 1=Very Unimportant to 5=Very Important.

Hoteliers were concerned that in order to take advantage of the Internet, they will either have to invest heavily in technology or they should promote their products through web discounters and hence increasing their distribution costs. They were instead more interested in the advantages gained from expanding their market. The Internet is mainly regarded as a marketing and promotional medium, rather than one for gaining competitive advantage through reduction of distribution costs or promotion of differentiation. Thus, hoteliers need to explore the extended benefits of Internet distribution, such as reduction of distribution costs and control of own distribution, which means control over price, image conveyed to end-customer and reduction of dependency in third parties as strategic benefits.

However, a number of disadvantages of Internet distribution were identified and rated, as shown in Figure 7. Security issues and sustaining a coherent pricing policy were the key disadvantages identified, whilst product standardisation and lack of human contact were emphasised. The threat of standardising and commoditization of the hotel product was perceived similarly by all categories. Hotels rated pressures on prices and brand erosion as average threats. Category 'B hotels generally scored highly perceived disadvantages of the Internet as a distribution channel, demonstrating that they are more fearful. Such concerns included issues of security and maintaining a coherent pricing policy. The most important disadvantage for Lux hotels was security issues, and also the lack of human contact during on-line reservations, which was associated with the lack of opportunity to up-sell products or to negotiate favourable terms for the hotel. Volatility of customer base and the threat of alienation of potential customer groups ranked lower in importance, as Athenian hotels expected the Internet to open new markets for them.

Fig. 7. DISADVANTAGES OF INTERNET AS A DISTRIBUTION CHANNEL
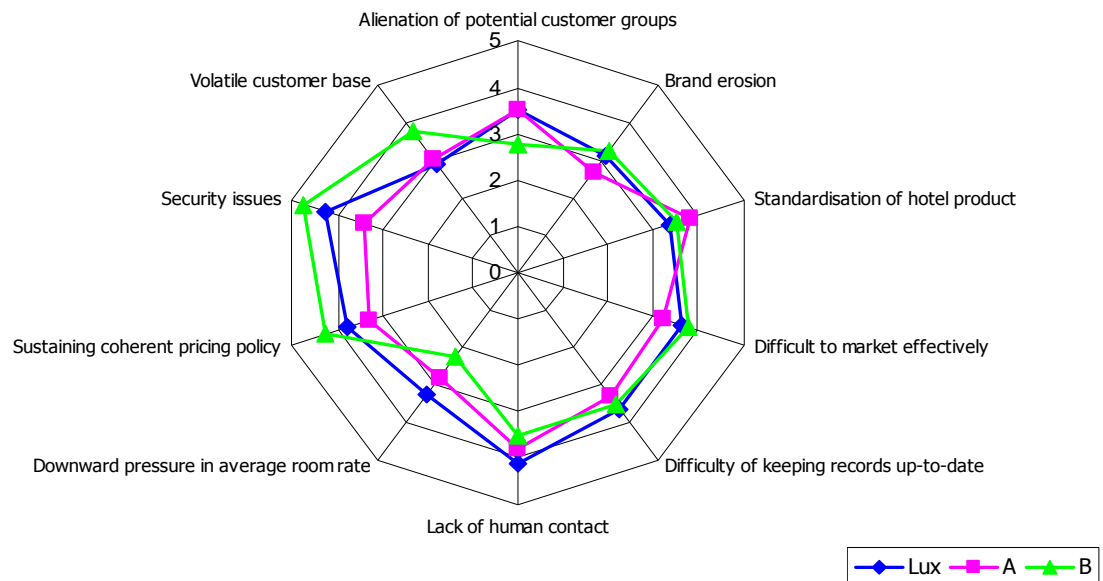
Note: A 5-point Likert scale. Attributes from 1=Very Unimportant to 5=Very Important.

Overall, however, respondents felt more strongly about disadvantages brought from the Internet. Respondents placed greater importance to security issues. Lack of human contact remained a central issue as well as many hoteliers felt that this was both a core part of their business as well as a. Volatility of customer base and the threat of alienation of potential customer groups were also major concerns. Security seems to have assumed more importance since major viruses and online fraud in recent years increased awareness. Overall hotels in Athens seem cautious about disadvantages emerging from the Internet as a distribution channel. This is attributed to the low utilisation of the Internet in the Greek economy and the relevant immaturity of the eCommerce marketplace which made many of the respondents uncomfortable with many of common practices experienced in Northern European and American economies.

Future distribution channels

Hospitality SMEs in Athens seemed still unsure about the future of electronic distribution channels. Interviewees felt that traditional intermediaries such as GDSs and travel agencies will still dominate distribution in the future and they had to continue supporting offline channels. The Internet was, however, cited as the medium with the highest potential, relative to mobile phones and other portable devices. It is predicted that with such tools, hotels will be in position to practise location-based marketing. While devices such as self-service kiosks were not viewed as having a significant impact, it is envisaged that GDS will continue to play a vital role in the short-term. Interactive TV is not considered as having significant future potential as yet in Athens, principally because this medium is still largely unknown in Greece. Hotels have started recognising the gradual reduction in the roles of traditional travel agents and conventional telephone reservations, as higher Internet penetration is observed in their key markets. Some interviewees also predicted that bookings from mobile phones and portable devices will be on the increase soon. These media have high potential of further increases in momentum as electronic distribution channels.

5 Analysis, Discussion and Critical Challenges

Athens and secondary city hoteliers are gradually grasping the significance of electronic distribution. It is evident that some innovators have already started to develop strategies and tactics to take advantage of the emerging trends. This research demonstrates that Athens hoteliers are positive towards the new distribution technologies. The Internet is viewed as significant contributor in customer communications and service. Although hotels are enthusiastic about the potential of electronic distribution channels they are also cautious and restrained in adopting new channels. In many 'second Internet wave' regions, hospitality SMEs still use the Internet primarily as an electronic directory. They disseminate information regarding hotel rooms, facilities and services that are typically accessible in their brochures. Hoteliers in these regions are often concerned about the range of eCommerce solutions on offer. They regularly complain about not receiving objective information, to determine criteria for effective assessment of options. The effect is reluctance to adopt such technologies, despite initial enthusiasm about prospective benefits. Both hoteliers and experts identified a number of key challenges that emerge for hospitality organisations, namely:

- Partnership relationships in the distribution channel
- Pricing and price control
- Branding and brand integrity
- Differentiation vs communication
- Hotel property-hotel chain relationships
- Search engine optimisation
- Small and Medium-sized Enterprises (SMEs)

Hoteliers' fear disruption of well–established partner relationships with traditional distribution channels, such as travel agencies and tour operators. This may disturb both personal and professional relationships and result in loss of revenue. There is also uncertainty as hoteliers have little experience in handling new electronic distribution channels. Pricing is a major concern due to the transparency introduced through the Internet. The hospitality business environment in Athens is marked by high competition levels, the market has reached maturity stage and profit margins are low. There is a propensity towards adoption of discount channels as a mechanism to increase occupancy levels. This may result in online price wars between local hotels, leading to the deterioration of the brand image of Athens and to a decrease in RevPAR (Revenue per Available Room). In addition, price transparency can alienate existing premium markets and can lead to a further decrease of rates. This issue has emerged through the adoption of the merchant model which allows distributors to purchase hotels at net rates and charge variable profit margins on net hotel rates, effectively controlling the price per room displayed online. Merchant models allow distributors to add an average of 30% mark-up, in comparison to 10% on achieved rates paid in the commission model. Hitherto, pricing policies were defensive, and hotels displayed rack rates on their own web sites, whilst discounting through aggregators. This led to further confusion in the marketplace and mistrust on the hotel information. Pricing concerns lead to branding issues. Hotels find it increasingly difficult to determine their pricing online and to achieve price parity. This affects the way they project themselves in the marketplace and the audience they attract. Frequently, a 5 star property is sold at the price of a 3 star property, during low demand periods, raising questions about the quality of service and product as well as the types of clientele targeted. Many interviewees were unhappy with the fact that online intermediaries not only pressurise

their prices but also fail to respect their pricing policies, damaging their profitability. In addition, a number of aggregators have "high-jacked" significant hotel brands such as Hilton and Intercontintental, and use them as keywords to direct Internet traffic to their own websites, also damaging hospitality brands. Brand integrity and product values should therefore be protected through a comprehensive eBusiness strategy that enables hotels to project a clear and consistent image globally.

A major threat related to branding is also that of <u>standardisation and commoditisation</u> of products as intensified competition is often based solely on price. Many interviewers were complaining that price was the only factor that online intermediaries are interested in and therefore many added value services were under-represented. Hotels therefore need to develop comprehensive strategies to promote their product qualities and <u>differentiation</u> elements; without having to compromise their brand integrity and to jeopardise their pricing. <u>Hotel Chain-property relationships</u> can also be affected. Many general managers adopt strategies and tactics that are relevant to the local market conditions but may contradict the global strategies of a chain and vice-versa. Global co-ordination of brands becomes increasingly difficult due to Internet transparency and the ability of clientele to switch distribution channels. <u>Search engine optimisation</u> was also identified as a major challenge, as many hotels find that their own website is often ranked much lower than their entry in hotel aggregators' sites. This jeopardises their opportunity to communicate directly with their clientele and forces them to pay distribution costs. Finally, most <u>SMEs </u>find it increasingly difficult to adopt a comprehensive online strategy as they lack the resources and expertise to develop their own online presence or develop suitable partnerships with aggregators. As a result, they either have to pool resources together, collaborate even with competitors to expand their virtual size or risk to gradually 'disappear' from the global marketplace. However, a small percentage of innovative SMEs have managed to develop their online presence and to expand their virtual size, attracting considerable benefits. The current environment poses significant opportunities for those hotels willing to build a comprehensive online distribution strategy. Hoteliers have just realised that exploiting new technologies and tools and exploring online distribution can optimise customer interaction and enhance the competitive position of innovative hotels.

New ICT developments have changed the competitive environment and precipitated the need for hospitality SMEs to adapt to the new realities in order to remain competitive. The Internet and emerging electronic distribution channels offer opportunities and challenges as well as affecting all three sources of competitive advantage, namely cost, differentiation and time. This research clearly demonstrates that hotels around the world need to familiarise themselves with the opportunities and challenges emerging and to develop strategies to address these key opportunities and challenges. Analysis of qualitative data collected in the field of research as well as in the panel discussion with the European distribution experts demonstrates a number of inferences for strategic and tactical management.

Based on Rogers (1976; 1995) 'Diffusion of Innovation' Theory, it is evident that tourism and hospitality SMEs are climbing slowly through their evolution of eAdoption. The vast majority of hospitality SMEs can be characterised as laggards. However many of the respondents have started to adopt e-mail communications and have developed an informational website, often supplied by a third party. "Late and early majority" adopter hotels have developed their transactional website and are collaborating with online distributors. Early adopters include hoteliers that have developed transactional web sites, integrated their systems through Enterprise Resource Planning (ERP) and have adopted dynamic ICT-enabled marketing. Finally, innovators have already started experimenting with mobile commerce and interactive digital television. Tourism SMEs around the world are

therefore required to re-evaluate their position and prepare strategies that will assist them to converge their technologies to serve a multi-channel environment. Figure 8 demonstrates that they need to develop an eEnabled infrastructure that will integrate Intranets, Extranets and Internet, as well as an off-line support centre to empower electronic distribution through B2C, B2B and B2B2C transactions. Intranets should ensure that the organisation uses ICTs to deal with data and processes effectively, coordinate all internal departments and delivery and assist strategic and operational management. Extranets will ensure efficient communications with trusted partners, whilst the Internet representation should include comprehensive information and transaction mechanisms to enable customers to interact effectively with the organisation.

Figure 8 Future eDistribution framework for hospitality
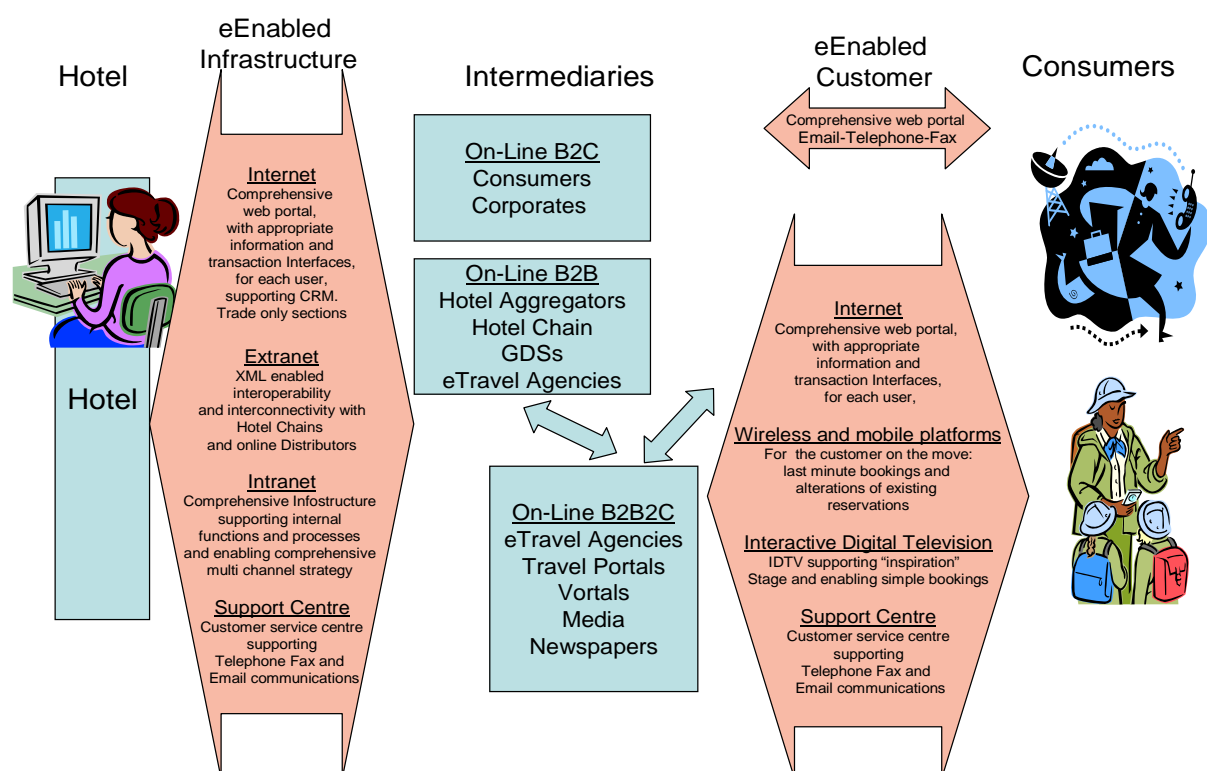
Although direct distribution should be high on the agenda, realistically independent tourism and hospitality SMEs that have no recognisable brand name should be able to capitalise on distributors' experience and expertise and take advantage of bookings emerging through a number of different platforms. Strong vertical partnerships with tour operators, travel agents and online distributors enable hotels to expand their distribution network and to balance the power between various types of clientele. Horizontal partnerships with competitors can improve collaboration locally for pulling resources towards arranging extra business that could not have been served by individual properties (e.g. large conferences) or for purchasing negotiating larger quantities of supplies. Collaboration on over-bookings and other unexpected events are also beneficial. The development of extranets facilitates communication and transaction flows with external business partners. Hence, both vertical and horizontal ICT-enabled partnerships can be developed considerably. Hospitality SMEs should develop interoperability and interconnectivity mechanisms for distribution partners to collaborate electronically with. This will enable them to build multi-platform distribution

mechanisms and support distribution through the Internet, IDTV, as well as wireless and mobile platforms.

6   Conclusions

This study has revealed that although hospitality SMEs in Athens still rely heavily on traditional distribution channels, hospitality executives and management have realised the potential benefits attainable through adoption of technology based distribution channels. This realisation has shifted the trend towards adoption of a range of electronic distribution channels. The primary research confirmed the growing significance of the Internet as a marketing tool and distribution mechanism. Increasingly, hotels realise the opportunities emerging through the development of Internet strategies and utilise new media to support the distribution of their product. Hotels are, however, reluctant to move towards immediate adoption of such new technologies and strategies for fear of respective disadvantages (known and unknown) and also for avoiding risks associated with disrupting well-established relationships with off-line intermediaries. The paper suggests therefore that hospitality SMEs should integrate their systems to allow effective communications with consumers and distributors in order to enhance their market reach and expand their virtual size in the marketplace. Similar conclusions can be drawn for a wide range of SMEs that are still in the early stages of their eCommerce and face a steep learning curve.

References

Aksu, A.A. and Tarcan, E. (2002). The Internet and five-star hotels: a case study from the Antalya region in Turkey, International Journal of Contemporary Hospitality Management, 14(2):94-97

Alford, P. (2000). E-business models in the travel industry. EIU Travel and Tourism Analyst 3: 67-86.

Bakos, Y. (1991). A strategic Analysis Electronic Marketplaces, MIS Quarterly, 15(3):295-310.

Brown, D. Lockett, N. (2004). Potential of critical eApplications for engaging SMSs in e-Business: A provider perspective. European Journal of Information Systems. 13(1):21-34.

Buhalis, D. (1998). Strategic use of information technologies in the tourism industry. Tourism Management. 19(5):409-421.

Buhalis, D. (2000). Athens. TTI City Reports, 4:5-22.

Buhalis, D. (2003). eTourism: Information Technology for strategic tourism management. Prentice Hall, London.

Buhalis, D. and Deimezi, O. (2003). Information Technology penetration and eCommerce developments in Greece, with a focus on Small and Medium-sized Enterprises. Electronic Markets, 13(4):309-324.

Buhalis, D. and Laws, E. (eds.) (2001). Tourism Distribution Channels – Practices, Issues and Transformations. London: Continuum.

Buhalis, D. and Licata, M. (2002). The future eTourism intermediaries. Tourism Management. 23(3):207–220.

Buhalis, D. and Main, H. (1998). Information Technology in small and medium hospitality enterprises: Strategic analysis and critical factors, International Journal of Contemporary Hospitality Management, Special Theme Issue: Small hotels: The peripheral tourist sector. 10(5):198-202.

Buick, I. (2003). Information technology in small Scottish hotels: Is it working?, International Journal of Contemporary Hospitality Management. 15(4):243-247.

Cho, W. and Connolly, D. J. (1996). The impact of information technology as an enabler on the hospitality industry. International Journal of Contemporary Hospitality Management. 8(1):33-36.

Choi, S. and Kimes, S.E. (2002) Electronic distribution channels' effect on Hotel Revenue Management, Cornell Hotel and Restaurant Administration Quarterly, 43(2):23-31.

Collins, G. R. and Malik, T. (1999). Hospitality Information Technology: learning how to use it. 4th ed. Iowa: Kendall/Hunt Publishing Company.

Connolly, D.J. Olsen, M.D. and Moore, R. G. (1998). The Internet as a distribution channel, Cornell Hotel and Restaurant Administration Quarterly. August, 42-54.

Dertouzos, M. (1997). What Will Be: How the New World of Information Will Change Our Lives, Piatkus Books, London.

Dietrich, B. L. Snowdon, J. L. and Washam, J. B. (1997). The promise of information technology in the travel industry, Tjoa A. M. (ed.), Information and Communication Technologies in Tourism 1997. Austria: Springer-Verlag Vienna.

Dombey, A., (1998). Separating the emotion from the fact – the effects of new intermediaries on electronic travel distribution. Buhalis, D., Tjoa, A. M. and Jafari (eds.), Information Communication Technologies in Tourism, Austria: Springer-Verlag Vienna.

Dubé, L. Enz, C. A. Renaghan, L. M. and Siguaw, J. A. (2000). Managing for excellence: conclusions and challenges from a study of best practices in the US lodging industry, Cornell Hotel and Restaurant Administration Quarterly, 41(5):30-39.

eBusiness W@tch (2006). Executive Summary: ICT and e-Business in the Tourism Industry - Interim Report, Brussels, http://www.ebusiness-watch.org/resources/tourism/Tourism_Sum06.pdf accessed 26 April 2006.

European Commission, (2006). SMEs and the ICT challenge: a "think small first" approach, http://europa.eu.int/information_society/ecowor/smes/index_en.htm accessed 26 April 2006.

Go, F. and Pine, R. (1995). Globalisation Strategy in the Hotel Industry. New York: Routledge.

Ho, J.K. (2002). Easy-to-use multilingual communication over the Internet, Facilitating "E-Business" for the hotel industry, Cornell Hotel and Restaurant Administration Quarterly. 43(2):18-25.

Inkpen, G. (1998). Information Technology For Tourism Travel And Tourism. 2nd ed. Essex: Longman.

Jeong, M. Oh, H. and Gregoire, M. (2003). Conceptualizing web site quality and its consequences n the lodging industry. Hospitality Management. 22:161-175.

Kalakota, R. and Whinston, A. (1996). Frontiers of Electronic Commerce. Addison-Wesley. London.

Lefebvre, L. Harvey, J., Lefebvre, E. (1991). Technological experience and the technology adoption decisions in small manufacturing firms, R&D Management, 21(3):241-249.

Leong, C. (2001). Marketing practices and Internet marketing: a study of hotels in Singapore. Journal of Vacation Marketing. 7(2):179-187.

Levy, M. and Powell, P. (2000). Information Systems strategy for SMEs: an organisational perspective. Journal of Strategic Information Systems. 9(1):63-84.

Licata, M. Buhalis, D. and Richer, P. (2001). The future of the travel e-mediaries (CRS, GDSs, Switch Companies, Videotext). Sheldon, P. J., Wöber, K. W. and Fesenmaier, D. R. (eds.), Information and Communication Technologies in Tourism 2001 Austria:Springer-Verlag Vienna.

Magnini, V.P. Honeycutt, JR. and Hodge, S.K. (2003). Data mining for hotel firms: Use and Limitations, Cornell Hotel and Restaurant Administration Quarterly, 43(2):94-105.

Marcussen, C. (2006). Trends in European Internet distribution -of travel and tourism services) http://www.crt.dk/uk/staff/chm/trends.htm accessed 26 April 2006.

Marinova, A. Murphy, J. and Massey, B.L. (2002). Permission E-mail Marketing as a means of targeted promotion. Cornell Hotel and Restaurant Administration Quarterly. 43(1):61-69.

McCole, P., (2002). The role of trust for electronic commerce in services, International Journal of Contemporary Hospitality Management, 14(2):81-87.

Mill, R.C. and Morrison, A.M. (1992). The Tourism System: An Introductory Text, 2nd ed. London: Prentice-Hall International.

Min, H. Min, H. and Emam, A. (2002). A data mining approach to developing the profiles of hotel customers. International Journal of Contemporary Hospitality Management. 14(6):274-285.

Morrison, A. (1998). Small firm statistics: a hotel sector focus. Service Industries Journal. 18(1):132-142.

Morrison, A. and Thomas, R. (1999). The future of small firms in the hospitality industry, International Journal of Contemporary Hospitality Management, 11(4):148-154.

Morrison, A.M. Taylor, J.S. Morrison, A.J. Morrison, A.D. (1999). Marketing small hotels on the World Wide Web, Information Technology and Tourism, 2(2):97-113.

Nachira, F. (2002). Towards a network of digital business ecosystems fostering the local development, Discussion Paper, DG IST, European Commission, Brussels.

Namasivayam, K. Enz, C. A. and Siguaw, J. A. (2000). How wired are we?. Cornell Hotel and Restaurant Administration Quarterly. 41(6):40-48.

O'Connor, P. (2000). Using Computers in Hospitality. 2nd ed. London: Cassell.

O'Connor, P. and Frew, A. (2001). Expert Perceptions on the Future of Hotel Electronic Distribution Channels. Sheldon, P.J. Wöber, K.W. and Fesenmaier, D.R. (eds.). Information and Communication Technologies in Tourism 2001. Austria:Springer-Verlag Vienna.

O'Connor, P. and Frew, A. (2002). The future of hotel electronic distribution, expert and industry perspectives. Cornell Hotel and Restaurant Administration Quarterly. 43(2):33-45.

O'Connor, P. and Frew, A. J. (2000). Evaluating electronic channels of distribution in the hotel sector. Fesenmaier, D.R. Klein, S. and Buhalis, D. (eds.). Information and Communication Technologies in Tourism 2000, Austria: Springer-Verlag Vienna.

O'Connor, P., (2001). The changing face of hotel electronic distribution. EIU Travel and Tourism Analyst. 5:61-78.

Perry, J. Schneider, G. (2001). New perspectives on eCommerce. Thomson Learning – Course Technology. Boston.

Poon, S. and Swatman, P. (1999). An exploratory study of small business Internet commerce issues. Journal of Information and Management. 35(1):9-18.

Porter, M. (1989). Building competitive advantage by extending information systems, Computerworld, 23(41):19.

Porter, M. (2001). Strategy and the Internet. Harvard Business Review. March. pp.63-78.

Porter, M. and Millar, V. (1985). How information gives you competitive advantage. Harvard Business Review. July August, 63(4):149 160.

Porter, M., (1985). Technology and competitive advantage, The Journal of Business Strategy. 6(1):60 70.

Price, J. and Starkov, M. (2002). Developing a total email marketing strategy. June 21. Accessed on-line: www.eyefortravel.com accessed 26 April 2006.

PricewaterhouseCoopers, (2001). New Europe and the Hotel Industry. PricewaterhouseCoopers.

Rayport, J. and Sviokla, J. (1994). Managing in the marketspace, Harvard Business Review. 72(6):141-150.

Reinders, J. and Baker, M. (1997). The future of direct retailing of travel and tourism products: the influence of information technology. Tjoa A. M. (ed.), Information and Communication Technologies in Tourism 1997. Austria: Springer-Verlag Vienna.

Richer, P. and O'Neill-Dunne, T. (1999). Distribution technology in the travel industry strategies for marketing success. London: Financial Times-Retail and Consumer.

Rogers, E. (1976). New product adoption and diffusion. Journal of Consumer Research. March 2. 290-301.

Rogers, E. M. (1995). Diffusion of Innovations. The Free Press. New York.

Sangster, A. (2001). The importance of technology in the hotel industry. EIU Travel and Tourism Analyst. 3:43-56.

Sekaran, U. (2000). Research Methods for Business: A Skill Building Approach. 2nd ed. Chichester: John Wiley.

Sheldon, P., (1997). Information Technologies for Tourism. CAB. Oxford.

SITA, (2006. IT Trends survey: executive Summary. http://www.sita.aero/NR/rdonlyres/7D4B9E97-F208-44CA-95B8-72CCF702BD33/0/AirlineIT_Booklet06.pdf, accessed 26 April 2006.

Starkov, M. and Price, J. (2001). Independent Hoteliers: eBusiness Levels the Playing Field, EyeforTravel, http://www.eyefortravel.com/papers/Recommendation_Technology_in_Travel.doc accessed 26 April 2006.

Turban, E. Lee, J. King, D. Chung, H. (2002). Electronic Commerce: A managerial Perspective. Prentice Hall. New Jersey.

Ujma, D. (2001). Distribution channels for tourism: theory and issues. Buhalis, D. and Laws, E. (eds.), Tourism Distribution Channels – Practices, Issues and Transformations. London: Continuum.

Van Hoof, H.B. Collins, G.R. Combrick, T.E. and Verbeeten, M.J. (1995). Technology needs and perceptions: an assessment of the US lodging industry. Cornell Hotel and Restaurant Administration Quarterly. October 64-69.

Waller, F. (1999). The Distribution Revolution, Hotels, March, 103.

Werthner, H. and Klein, S. (1999). Information Technology and Tourism – A Challenging Relationship, Springer. New York.

Whiteley, D., (2000). eCommerce: Strategy, Technologies and applications, McGraw-Hill. London.

Xenia (2002). Athenian hotels in crisis, Monthly Bulletin of the Greek Hotel Chamber (in Greek), 200, March. Athens.