# ELECTRONIC TOURISM

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**Summary**

The constant development in technology, communication and particularly the Internet, has revolutionized the entire tourism industry, by generating new business models, restructuring the distribution channels, reshaping the production process involved in tourism industry and last but not least has influenced the suppliers of touristic services as well as the stakeholders.

In this work I have tried to enhance the implications of electronic tourism for the visitors, the tourism operators, highlighting the informational systems which serve the touristic services. E-tourism comes to support the tourists by providing specialized sites and software which reduce the time necessary for the touristic destinations , making easier the process of booking or renting a car or help planning the trip and making a decision.

One of the most common problems associated with the developing distribution is the large amount of information available for the client and to be able to explore it, I have presented intelligent agents with all the advantages this new artificial technology brings along.

Electronic tourism or e-tourism is part of electronic trade, which encompasses the fastest developing technologies, such as communication and information industry, hospitality and management\marketing of strategic planning industry. The "e" stands for the electronic and represents the e-marketplace, where the e- business meets e-consumers, e-governing, e-partners and other e-business on e-platforms.

The specific activities of e-tourism must rely on tourism operators, tourism agencies and other organisms directly interested in virtual tourism using a specialized website. The phenomenon itself involves both the consumer and the provider of tourism.

### *Tourism in the dot com era*

According to elaborate European studies, of the International Institute IPK, in 2007, over 30 million Europeans have used the Internet to set their future holiday destinations, and about 8 million have booked their tickets online. By the end of 2008 the world income of e-tourism has been up to 40 billion EURO.

The 2007 reports of The European Travel Monitor present a growth of 47% of people who have booked online tickets, whereas 80% from the Internet users are interested in booking on their own by web.

According to the American research, the whole amount coming from personal or business travels booked by tourists all over the world using the Internet raises up to 13 bill. Euro in 2004 and in 2007 it was 75 bill. Euro.

The conclusion is that no other technology, except the television has had such great impact on travellers as the Internet.

**The tourism portal**

A tourism portal can be seen as an infrastructure of a business community which offers a transparent environment to promote tourism business. It joins the providers of tourism service (hotels and pensions, holiday resorts), tourism agencies and the consumers of services in the virtual environment of the World Wide Web. All the participants are transparent by using the tools of the Internet.

Tourism portals offer the most diverse services: Tourists can-t only book their stay online, but they will be provided with all the necessary information by e-mail and may pay on-line by using their credit card.

**The implications of e-tourism for visitors**

E-tourism involves the following aspects for the final consumers-information, e-reservation (transport and accommodation) as well as e-payment.

**↓ E-information**

This means the tourists are provided with information from specialized touristic sites, by e-brochures, audio touristic guides, photo albums , real or virtual images, video clips, even travel journals, reading blogs or by accessing virtual communities, such as *Virtual Tourist* , and why not *The guides* of *virtual cities.*

**↓ E-booking**

This means is mostly used by the hotel, air travel and rent-a -car sector-booking, as informational services, must submit to the legal requirements which are mentioned in the settlement of laws referring to the Internet services the e-trade and distance individual contract signing.

**↓ E-payment**

The consumers can use credit cards, e-checks, digital cash or micro cash, when they only have to pay few cents. Many of the electronic payments are the equivalent of everyday operations and payments, such as credit cards, checks. Even the digital cash are available.

The credit or debit card may have different functions such as that of covering certain risks and assurances, or assistance in certain situations.

**The implications of e-tourism for the providers**

Most e-business technologies are centered on the communication among the clients, the providers and the employers. The large variety of hardware- software systems and solutions make it very hard for the managers to decide what to choose.

Developing an e-business in tourism allows the consumers to express their e-needs, increases the number of commercial markets, implicitly the efficiency, reduces the cost and raises competition. Furthermore, allows the agencies and providers to analyze their potential clients and to manage their resources efficiently.

Regarding the e-business management, the strategies, the new techniques and the instruments must be permanently revaluated, and updated. The strategy is to be in constant evolution and movement as the agency grows (lunching-out, consolidation, growth, maturity) as well as the environment it functions in. A real challenge for the tourism companies is re-organizing and raising productivity by using the internet on a competition market and to find their name on the world market.

The electronic systems play an important part in the management of any e-business in tourism, as in the services sector it represents 90% of all operational information.

Therefore, the management systems are designed to have multiple tasks, as storing or planning, researching and implementing.

**Electronic capabilities in e-tourism**

Electronic capabilities are a subset of the overall e-business strategy of the company; enable companies to link their internal and external data processing systems more efficiently and flexibly.

Electronic systems used in tourism are split in two categories: front-office and those which use the Internet.

➢ *Front-office systems*

Are used to process data and offer written or visual reports, and are present in both the medium and large receiving structures, as well as in tourism agencies. They register the tourists and manage the accommodation, retail the products and manage the income. Two of such systems are Fidelio and SITEL, applications that deal with complex services: spare time management, profit growth, billing, mailing and tourist arrivals and departures.

➢ *E-systems for booking*

They can be operative for both individual tourists as well as for agencies, by encompassing the selling, informing and informing functions. Their modular structure allows them to connect the sectors of ticketing, outgoing, incoming and internal with accounting and financial sectors from the receiving structures or from the agencies. Amongst other things, they can also allow the shipping and receiving of data from and to the global distribution systems, such as World span and Amadeus.

**Spare time, travels, hospitality and the technology of information**

E-tourism comes to help the tourists by providing specialized sites and informatics tools which reduce the time needed to find out about the destinations, facilitates the booking process in the hotels or renting a car and helps planning the trip and making the decision.

World Wide Web is like a great crater where little craters are found such as detailed information on opera festivals, touristic offers, and information on the local agro tourism in certain unknown areas. Is fairly difficult for the users to access certain information and connect it with the offers made by the great tourism providers.

One of the problems associated with these growing distribution channels is that they increase the available information for the client, and considering the fact that we are overloaded with information, the client finds it hard to choose the best solution for his choice. A solution can be considered intelligent search agents, which is only experimental, but which can help make our choices easier. Within this context, intelligent search agents, or semantic systems for Internet search become very important.

✓ Semantic systems

Their function is to connect the incomplete information in order to reduce the search and comprehension of the source, facilitating thus the tourist's access to touristic offer. Within the systems, the web data is stored as meta-data, and can be accessed by the computer. The search, integration and connection servers are based on semantic description.

✓ Intelligent search systems

The agents are an important component in the business environment, as there are assurance agents, tourism agents. Human agents are people who serve the population using their work for specialized and skilled knowledge.

Most of the agents know the individual and his customs well therefore, searching for personalized services. A new form of artificial intelligence is called intelligent search agent which offers services and products necessary for the individual, a new technique, IA, the intelligent agent performs the same functions but in the IT environment.

An intelligent agent is an artificial intelligence system which gravitates around the user's computer or network, performing certain independent activities, adjusting to its necessities.

The agent usually has a background activity, searching on the Internet every morning certain information about a certain person, the favourite football team, music and news. It encompasses modern software technologies like: expert systems, neural networks, genetically algorithms and object oriented programming. The functions are:
-acting like a real person;
-searching the data base of the company;
-searching the networks.

Soft bots are important for e-business and implicitly for e-tourism, offering help in searching the Web, helping potential tourists compare the offer or announcing the users on recent events. Using the intranet, Internet or extranet, data is spotted and scanned. The best known bots are browsers, search engines and RSS readers.

The bots are software programs acting like virtual assistants hardly serving the user. Naturally they know a lot about the user, the preferences relations, and obligations interfere in the decisions agents make daily. Therefore, the user first has to give him the necessary information for the decision process. Though, by using artificial intelligence, the boot will get used to the users actions, preferences and will be able to take the decisions by itself. In the future, the agents will be connected with other agents, using an upgraded version of the Internet, and with agents representing the providers and social organizations.

Purchasing decisions will be taken by agents by connecting to each other to find the best match to the individual desires and the available products and services.

In touristic distribution, there was created scenery according to which the boots can be used inside the Internet to collect, compare and filter the booking process. Intelligent search agents may be set to search appropriate data for the user. Filtering agents may be set to filter the data coming from the searching agents. Service agents will have to collect data according to the user-s needs. Once the algorithm is set, an automation agent will get back in the Internet to book and return the confirmation to the user.

### Internet and Extranet

While the World Wide Web was given a lot of attention in the touristic distribution, another set of technology, the Intranet and Extranet, may have a greater effect in the future, particularly in the profitable touristic sector. Both the Intranet and Extranet, use the same media channels, protocols and browsers as the Internet, but are different in ownership and the closed user groups.

Intranets are owned and governed by a single organization and have a special privacy allowing the users inside the organization to access their pages. These users can be spotted in a single building or in opposite directions around the world, but only

nominalised persons can have access to the system. When it is extended, including outside users, as providers and clients, the system is called Extranet.

Internets and Extranets have the potential of replacing the processing systems, authorized transactions within and between the companies, being cheaper, easier to use and independent. Furthermore, they are available to selected users, are more secure and faster. As a result, are more appropriate for the e-commercial transactions and more and more implemented in different industrial transactions. Touristic companies have the opportunity to have pages of their own on the Intranet. According to *The American Express,* the travel and costs are the third great controllable spending in the largest companies. In spite of that, such spending was decentralized so that within a single company many agencies can book.

That makes it almost impossible for the companies to use the buying power to get discounts for the services. Although many companies have developed common formal policies to help solve this problem, in practice it-s a difficult problem they are still facing.

The Intranet/Extranet technology can connect the company with a certain, proffered tourism agency, where all the booking can be made. Inside the Intranet, when the employees access the "Travelling" option, are directly connected to the partner agency page where they can introduce the details on the touristic service they need. The request is then sent to the automatization, and further on to be processed by the tourism agencies, thus making the process more practical and cheaper.

Common formal policies can be incorporated in the system, the company being able to negotiate the discounts and profits.

Most of the systems can also electronically announce the accounting department when the tickets were sent and certain information was emitted also gives important data helping the company efficiently manage the travelling budget. Considerable economies are made of 30-40 dollar per ticket as the data is introduced by the user, the documents are all automates and common policies are applied everywhere in the system.

The Web Travel Mega systems have immediately admitted this opportunity and ready to approach it and to share their experience with the Internet and touristic distribution. For instance, internet Travel Network has given a new product on the market, Internet Travel Manager (ITM), which helped common booking and touristic management. Likewise, Microsoft and American Express have joined to develop AXI, which allowed the users to make flight reservations, hotel reservations and ret-a car, along with the American Express Round Trip product. Therefore, as such systems become more and more common, the agencies will have a lesser importance, as even nowadays many of these systems are able to contact the providing systems and to make reservations without using a tourism agency. The printed tickets will become less important, all that we'll need is the confirmation numbers returned by the system. Many tourism providers, including the hotels, car renting companies and RTO are already experimenting by allowing the operators and great corporations to access touristic information and make reservations by using the Extranet.

Such a company is Marriot International, instead of exposing itself on the overcrowded Web market, has chosen to have a place on the large corporations' Intranet pages having their traditional old clients. The high performance of this strategy is hard to defeat. The Extranet channel goes a little far from the traditional GDS, touristic agents' route, thus exempting the company from fees and transaction tax, a saving which can be shared with the client in a better price.

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