

# STRATEGIC APPROACHES OF THE INFORMATION AND COMMUNICATION TECHNOLOGY INTEGRATION PROCESS IN THE TOURISM INDUSTRY

## SUMMARY

The Information and Communication Technology has profound implications in the tourism industry, and the concept of E-tourism reflects the digitization of all the processes and value chains in this industry. On a tactical level, E-tourism allows organizations to manage their operations and intensely uses the electronic commerce. On a strategic level, E-tourism revolutionizes the business processes, the entire value chain, as well as the strategic relations with the interested parties.

Despite these important global transformations of the tourism industry, the scientific literature in Romania hardly covers this topic, thus one of our goals is to contribute to filling this scientific gap. The present doctoral research follows five research axes structured in five chapters, the research plan being composed of three theoretical chapters and two chapters based on empirical research.

In the first chapter, "The development of the Information and Communication Technology in the New Economy", we have set three major research directions: the evaluation of the ICT's impact on the contemporary society, the identification of the main tendencies in the global ICT development and the analysis of the Internet, as a main component of ICT.

In the first research direction, "The impact of ICT on the contemporary society", we have analyzed the way in which ICT influences certain important domains of the social activity, such as: the economic development, the geographic distribution of the workforce, the public sector, the health system, the society and culture, as well as the education.

The second research direction, "Tendencies in the global development of ICT", we have proved that there is a global growth vision of the more and more important instrumental role played by the ICT in basic domains of the social activity.

The third research direction, "The Internet- the essential component of ICT", follows two important aspects: the evolution and trends in the development of the Internet within the EU between 2004-2012, as well as the

current situation and the future developments of ICT in Romania. The main conclusion of the research is that Romania occupies, in average, one of the last positions in comparison to the other EU state members concerning the integration of ICT in current life of citizens as well as in the business strategies of organizations. However, there are positive signs that suggest a future recovery of this drawback, especially considering the national development programs implemented in this area. We consider that, at least at a formal level, the main evolutionary directions are well represented and financed and that the main public institutions and private organizations acknowledge the importance of meeting the EU requirements in the Communication sector. Therefore, we consider that the premises of a fast development of the ICT sector are made and we can expect a recovery of the disparity between our country and the other EU state members.

The second chapter entitled "E-tourism - present and future developments", was structured on two main research directions: the analysis of the ICT impact on the tourism industry and the identification of existing global trends in E-tourism. It is important to notice that the new technologies have not only become a part of the tourism industry, but have also revolutionized the way in which the journeys are planned, the manner in which the businesses are managed and the touristic services are created. This has opened new opportunities, challenges and has generated an increased potential of the domain.

The first research direction begins with analyzing the evolution of the technologies used in tourism. The conclusion of this research is that there have been three major moments in the evolution of E-tourism: the introduction of the Computerized Reservation Systems in the 1970s, followed by the Global Distribution Systems in the 1980s and the extensive use of the Internet, which began in the 1990s. Further, we have conducted an analysis of the last generation technologies used in the tourism industry. We have analyzed the intelligent web based systems, the mobile applications that have transformed the tourism industry, as well as the concept of tourism portal. We have also analyzed the potential use of wireless communication technologies in the tourism industry. The most important applications available nowadays are the mobile phones, the wireless local and metropolitan networks, the Radio Frequency Identification (RFID) and the Global Positioning System (GPS).

Another element which strongly influences the tourism industry nowadays is the "User Generated Content" (UGC), a concept which is further debated in this chapter. The main conclusion is that UGC can be a pleasant, efficient and strong way to disseminate information about products and services and, known as "e- word-of-mouth", has thus become an important marketing tool used to attract new tourists. The main websites that deliver UGC are blogs, wikis, podcasts and social networks.

The second research direction within Chapter II has as main objective the recognition of the main trends in E-tourism from the customers' perspective and from the organizations' perspective. This approach is extremely relevant for understanding the way in which the new technologies influence the tourists' decisional process, but also for identifying the strategic areas of the business where the integration of ICT is essential.

The third chapter, "Strategic approaches and models used in the ICT integration process in the tourism industry", includes three distinct research directions: the analysis of the strategic approaches in E-tourism, the identification of the main strategic business models in E-tourism and adaptation of the Balanced Scorecard Model for the performance evaluation process of ICT in the tourism industry.

By analyzing the relevant scientific literature, we have identified three main directions which organizations can follow: the consumer centric approach, the profitability centric approach and the approach based on strategic partnerships.

The second research direction within the third chapter focuses on the strategic business models used in the E-tourism industry. Generic business models identified are: E-tailing, Infomediaries, Online advertising and Brokerage.

The third research direction aims at adapting the BSC Model in order to be efficiently used as a performance measurement instrument in the E-tourism industry.

The fourth chapter, "The strategic analysis of the E-tourism industry in Romania" begins by proposing two strategic models of analysis, which have been adapted for this industry: *The Intermediation/ Dis-intermediation/ Re-intermediation Cycle* and the Five Forces Model proposed by M. Porter.

We have further developed three research directions: *the strategic analysis of the E-tourism industry in Romania by employing the PESTEL model, the research of the correlation between the Romanian tourism websites and the number of tourists in Romania and the analysis of the online communication mix of the main tourist destinations in Romania.*

The PESTEL Analysis of the E-tourism industry in Romania was conducted by identifying and evaluating the most relevant components for each of the six dimensions (Political, Economic, Social, Technological, Environmental and Legislative) concerning their potential impact on the integration strategy of ICTs in the Romanian tourism industry.

The research of the correlation between the number of Romanian Tourism Websites (RTW) and the number of tourists started by formulating three research hypothesis. The results of the research lead us to the conclusion that there is an enormous potential wasted because of the incapacity of the Romanian tourist organizations in attracting foreign tourists through the Internet. We consider that it is extremely important to address this issue and as a first solution we suggest the Romanian tourism organizations to enhance the functionality of their websites by adding multilingual versions.

The performance analysis of the online communication mix employed by the main Romanian destination websites began by creating a structured analysis grid. The research shows that the destination websites fail to offer the content and functionalities expected by an average European traveler, which means that the potential tourist cannot find the relevant information needed for planning his trip. Another conclusion of the analysis shows that the Romanian destination websites fail to respond to the practical needs of the tourists. This has a negative impact on the perceived image of the destination, which often has negative impact on the decisional process. The online communication mix of the main destination websites in Romania needs to be improved, and the Destination Management Organizations need to take into considerations all the categories of potential tourists when developing or improving their websites.

The fifth chapter of the present doctoral research, "Empirical research concerning the E-tourism development strategy; Study case the destination Clisura Dunarii", has as main scope the formulation of a development strategy for the digital competitiveness of the tourism destination

Clisura Dunarii, based on the thorough analysis of the current E-tourism situation in this region.

For attaining this scope we have first established the vision of the strategy, as well as the general and specific objectives. We have also created a methodological research framework which included five research instruments: focus group, questionnaires, semi-structured interviews, the structured analysis of the destination website – [www.clisuradunarii.ro](http://www.clisuradunarii.ro), and the analysis of the private websites of the tourism organizations in Clisura Dunarii.

The first results of the research show that there the official destination website has a low performance, above the average of the other tourism destinations in Romania. This result leads us to formulate an important priority in the E-tourism development strategy of the region: the increase in the efficiency of the regional e-Management.

The statistical analysis of the data collected through the other research instruments led us to the conclusion that there is no correlation between the size of the tourism accommodation units or the nightly charge and their E-tourism capacity. This result is surprising, considering that generally greater accommodation capacity and higher levels of customer service are directly related to a higher performance of the online distribution strategy. Thus, the current research proves that there is a low awareness among tourism managers in the region of the strategic potential of the specific E-tourism tools.

Considering the IDR Cycle perspective, our research shows that the tourism destination Clisura Dunarii is currently in the dis-intermediation stage and the current trend suggests it will further enter the re-intermediation stage in the following years.

The results of the empirical research have been operated and developed through documentary research of the destination's key aspects, in order to determine the strengths, weaknesses, opportunities and threats which the tourism organizations in this region face when integrating E-tourism instruments in their business strategy. The SWOT Analysis has followed four main aspects: the touristic potential of the destination, the population, the economic activity and the ICT potential. The results of the SWOT Analysis have been used in the formulation process of the E-tourism development strategy in Clisura Dunarii.

The development strategy includes three intervention priorities: P1. The improvement of the integrated capitalization of the destination's touristic potential through ICT, P2. The Human Resources training and P3. The efficient

integration of ICT in the business strategy of the tourism organizations. Within these three intervention priorities, we have proposed the following specific actions: the creation of a tourism cluster in the region, the creation and constant update of a web portal dedicated to the regional tourism by implementing the concept of Destination Management, the creation and management of the destination's digital brand, the development of the human resources' ICT skills through the creation and availability of a dedicated E-learning platform, the improvement of the tourism websites' performance and the integration of ICT in the tourism organizations' business operations, thus enhancing their efficiency.

The E-tourism development strategy for Clisura Dunarii represents the finality of the fifth research axes and can become a valuable strategic instrument for the tourism organizations in the region, as well as for the local and regional interested institutions.