

BOOK REVIEW

Information and Communication Technologies in Support of the Tourism Industry

Pease, W., Rowe, M. & Cooper, M., editors (2007). Idea Group Publishing, USA, UK.

The tourism system is inevitably influenced by the new business environment created by the diffusion of ICT (Information & Communication Technologies). ICT represent one of the most influential environmental factor for the tourism, travel and hospitality industries, fostering substantial tourism innovations and transformations. As ICT and tourism developments are closely interrelated, it is often difficult to identify whether ICT generate or simply facilitate changes in tourism demand and supply. For consumers, when they are planning a trip to a new destination, they face the problem of making a costly purchase without being able to experience the product before really consuming it. The ICT provides them with the means to gain immediate access to relevant multimedia information about destinations throughout the world than it was previously available. For tourism destinations and businesses, ICT offers the potential to make information and booking facilities available to large numbers of consumers at relatively low cost and it provides a tool for communication and relationship development with tourism suppliers and market intermediaries, as well as end-consumers.

Information and Communication Technologies in Support of the Tourism Industry (2007) edited by Wayne Pease, Michelle Rowe and Malcolm Cooper includes a collection of issues, applications and case studies that are closely related with the tourism industry and ICT. Issues covered in the book range from the use of the internet for information dissemination to the emerging patterns of tourists' decision making processes and firms' ICT investment decisions. Book chapters explore several technical issues such as online delivery of tourism services, the use of computers and the internet for making travel decisions by older adults as well as cutting edge technological innovations such as ontology based tourism application generation and visual tourism recommender



systems. It then investigates some critical ICT driven transformations in the tourist industry by providing cases from the airline, the tour operating, and the hospitality industries as well as the emerging location-based services and virtual reality. The book is about developing an informed appreciation of a wide range of issues arising from the growth of information technology and the internet in particular and ICT in general for the tourism industry. It covers not only geographically supportive technologies in communication, but also in terms of culture, economics, marketing, social, and regional issues.

The book is divided into three main sections, each one composed by three to eight chapters. The first section includes three chapters and it provides an overview of ICT, their development and applications in tourism. This section is designed to introduce the reader to ICT developments and applications. In Chapter 1, *Online Delivery of tourism Services: Developments, Issues and Challenges*, John W. Houghton presents an overview of recent developments in online delivery of tourism services, highlighting major ICT driven issues and challenges. Key policy issues derived from this chapter include the need to carefully monitor the competition effects of online service delivery and to exploit destination management systems for providing an integrated front-end solution to SMTE's. Chapter 2, *A Framework for Ontology-Based Tourism Application Generator*, written by Roopa Jakkilinki and Nalin Sharda, provides an overview of tourism ontology and how the latter can be used for developing e-tourism applications. This chapter presents an overview of the semantic web, introduces different tourism ontologies and some applications based on tourism ontologies and it describes in detail a framework for developing etourism applications based on ontologies. Chapter 3, *ICT and the Travel Industry: Opportunities and Challenges for New Zealand Travel Agents*, written by Vladimir Garkavenko and Simon Milne, provides an in-depth study of how ICT has influenced the New Zealand travel agent's market. The authors focus on the impact of ICT on the travel industry. Key findings from a longitudinal study of New Zealand travel agents (TA) conducted during 2000-2004 are presented. The study explores major pressure factors on TA businesses: direct airline-consumer sales, introduction of the Internet, and the emergence of the well informed tourism consumer. This chapter is probably the least interesting for the readers that have little or no interest in New Zealand - specific topics.

The second section, being the core of the book, represents a collection of 8 chapters addressing a broad range of more specific applications of ICT to tourism. By reading chapters more carefully, it

becomes evident that this section intends to focus on specific aspects of ICT, many of which are emerging and cutting-edge. Chapter 4, *The Transformation of the Distribution Process in the Airline Industry Empowered by Information and Communication Technology*, written by Patrick S. Merten, reviews the historical “r(evolution)” of the airline market and its first-generation airline reservation and distribution systems. The development and diffusion of computer reservation systems (CRS) and global distribution systems (GDS) as well as the influence of modern ICT on the airline distribution system environment are discussed extensively in order to provide a comprehensive overview of the state of business in the 1990s. Chapter 5, *Design and Implementation Approaches for Location-Based Tourism-Related Services*, written by George Kakaletis, Dimitris Varoutas, Dimitris Katsianis, and Thomas Sphicopoulos discusses design and implementation approaches for location based, tourism-related services. This chapter presents the key concepts, capabilities, and considerations of infrastructures and applications targeted to the mobile tourist, covering data and content delivery, wireless and mobile data services, positioning, systems’ interactions, platforms, protocols, security, and privacy as well as business modeling aspects. Chapter 6, *Developing Visual Tourism Recommender Systems*, written by Mohan Ponnada, Roopa Jakkilinki, and Nalin Sharda, develops this theme further. This chapter presents ways of developing visual travel recommender systems (V-TRS) and analyses the two most popular TRS that are used today (namely TripMatcher and Me-Print) by providing a related case study.

The next two chapters deal with the development of virtual reality approaches to the task of informing the potential tourist of markets and attractions. Chapter 7, *Virtual Reality Applications in Tourism*, written by Calin Gurau, attempts to identify, analyze, present and classify the existing virtual reality applications in tourism, based on different phases of tourist experience. Chapter 8, *Virtual Reality Mapping Revisited: IT tools for the Divide Between Knowledge and Action in Tourism*, written by Malcolm Cooper and Neil MacNeil, deepens this discussion by providing a brief overview of the available technologies and opportunities for the use of virtual reality in tourism marketing. The next chapter (chapter 9), *Towards Improved Business Planning Decision Support for Small-to-Medium Tourism Enterprise Operators* written by G.Michael McGrath, discusses the development and the implementation of a ‘tourism enterprise planning simulator’ (TEPS) based largely upon system dynamic (SD) constructs and technologies. Scenarios in which TEPS might be used to good effect in small business are outlined and the

potential benefits of this deployment are detailed. Michelle Rowe and Alfred Ogle take this discussion further in chapter 10, *Collaborative Commerce and the Hotel Industry*, by proposing a framework to consider the application of collaborative commerce (c-commerce) in the hotel industry followed by a discussion of the likelihood of c-commerce adoption by hotels. This area of study is in its infancy and further research is required to more fully consider these issues. The final chapter in this section, *Sex Tourism and the Internet: Information, Amplification and Moral Panics*, written by Jerry Eades, explores the theme of sex tourism and the internet implications.

The latter section (section 3) of this book is a compilation of three case studies considering the application of IT with respect to tourists' demographic features such as culture, age and innovative behavior. Chapter 12, *Digital Imaging Trek: A Practical Model for Managing the Demand of the Digitally Enabled Traveller*, written by Stephen C. Andrade and Hilary Mason provides insight into evolving technologies that will be helpful to the practitioners, students, educators and the tourist-travellers themselves. In chapter 13, *Feeling Welcome: Internet Tourism Marketing Across Cultures*, written by Wolfgang Arlt, examines to the utilization virtual sphere's features and functionality for providing potential visitors an experience of physical and cultural destinations away from tourists' homes. The volume concludes with chapter 14, *Changing Technological Trends in the Travel Behaviour of Older Tourists*, written by Ian Patterson, and points at changing technological trends in the travel behaviour of older tourists. The chapter examines the usage growth of the information technology and the internet by older adults.

Overall, the book takes a multidisciplinary perspective of eTourism and considers the role of ICT in the evolving world of tourism in the 21st century. All studies presented in this collection share the same goal; i.e. to understand and explain the field of study by defining and understanding the characteristics of the changing ICT environment with respect to tourism industry. A major strength of the book is that it has identified a number of key changes in hardware, software and networking having a significant current and future impact on the tourism industry. Book chapters are easy to read and comprehensive in relation to subjects they cover. The book has a coherent structure and it is well illustrated; figures and maps are included in a modest degree. Chapters also provide well selected and relevant references for further reading. However, book chapters are frequently descriptive analyzing already known and basic etourism issues. Consequently, this is clearly not a book that will revolutionize research in the field of etourism and ICT studies.

Nevertheless, it is an interesting book for those involved with the tourism and ICT industries and requiring an introductory textbook for tourism. In other words, the book can mainly assist undergraduate students, scholars, tourism professionals and those who come from adjacent disciplines to enhance their knowledge and understanding in terms of the use of ICT within the tourism industry rather than help readers to generate innovative approaches for further studying and developing ICT applications.

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