

# e-Tourism economics: editorial for the special issue

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Information and communication technologies (ICTs) have interested the tourism sector since the emergence of Computer Reservation Systems (CRSs) in the airlines industry in the 1970s, and the introduction of Global Distribution Systems (GDSs) in the late 1980s.

Yet, it is the diffusion of the Internet since the late 1990s to have profoundly revolutionized the travel and tourism market in a way to boost the application of ICTs in all processes and value chains of tourism, thus creating the baseline for the development of the so called e-Tourism (electronic tourism) (Xiang, 2018).

e-Tourism has drastically modified the ways in which tourism products and services are produced, accessed and consumed as well as the business strategies for their customization and marketing.

e-Tourism has also facilitated the creation, exchange and processing of large amounts of information, which unavoidably involve modern ways of establishing and managing commercial relationships.

All traditional business functions (commerce, marketing, finance and accounting, HRM, R&D, etc.) and players of the tourism marketplace (airlines, hospitality, tour operators, travel agencies, etc.) have benefited from the new opportunities created by the introduction of the ICT instruments in the tourism domain. A new set of information-intensive activities and instruments have made their appearance in the market for selecting accommodation, transportation, sightseeing tours, etc., definitely changing the rules of the game. Nowadays, most of the tourism information is accessed through the Internet and websites have evolved from pages displaying static information to complex environments where tourists are directly involved in creating their own experience. Smart technologies have allowed travelers to become active co-designers, co-marketers, co-advertisers, co-promoters, co-distributors of tourism experience through user-generated content (UGC), customer review platforms, social media, blogs, and so on (Buhalis, 2019).

ICTs have reduced time lags in the information search, enabled tourists to access up to date information about the destination and operators to communicate their offers.

The use of smartphones, then, has greatly facilitated this process and improved the communication between the participants of the tourist market. In this way, e-Tourism has made the travel process far more enjoyable

and it has led to increased operational efficiency, reduced costs and improved services and customer experience (Liang et al., 2017).

This special issue deals with several economic aspects related to the introduction of ICTs in the travel and tourism domain, a topic that has received so far a fragmented interest.

Nine full papers discuss consumer's behavior and purchasing dynamics, socio-economic factors affecting tourists' expenditures and inbound flows, market strategies of the Online Travel Agencies and the business model of Daily Deal providers, tourism advertising, principal features of booking websites, and smart tourism characteristics in the new context of e-Tourism.

On the demand side, the rise of the Internet has drastically changed the way tourists prepare and book trip arrangements, travel, and share their experience. The general advantages of electronic commerce (24/7 coverage, lower prices, a wider range of services, the possibility of price comparisons, easier changes and cancellations, the use of customers reviews, etc.), the immediacy of the purchase of holiday and leisure services (hotel reservations and airline tickets, for instance), and the information-intensive characteristic of travel products have favored the consumer's adoption of e-Tourism as an information or shopping channel for tourism products (Camilleri, 2018; Ramos & Rodrigues, 2013).

The consumer's behavior in relation to the adoption of the Internet is investigated by Garín-Muñoz, Pérez-Amaral, and López, (Consumer engagement in e-Tourism. Micro panel data models for the case of Spain). The study uses cross-sectional data for the years 2008-2016 derived from the annual surveys conducted by the National Statistics Institute of Spain on Equipment and Use of Information and Communication Technologies in Households (ICT-H Survey). Results reveal that education, family size, digital skills, income, habitat, and employment are all significant for explaining the online booking of transportation or accommodation services, while gender and age are not significant, although for accommodation and for the general model being a man and being young positively affect the likelihood of buying online. Gender has also a significant effect on the use of the Internet for purchasing tourism services or searching for information (bookers vs. lookers) as the study shows that men are more inclined to buy or book tourist services online than women.

Obviously, consumer's patterns on the Internet are also strictly determined by the nature of the tourism product. In fact, the higher confidence in real sellers, the fear of making some mistake in the case of self-booking and online purchase, and fewer problems when filing a complaint make the phenomenon of buyers switching from the online information channel to the offline purchase the most frequent path observed for holiday packages. The socio-economic factors responsible for the occurrence of such Research Online Purchase Offline (ROPO) behavior in the Polish tourism market are analyzed by Dudek, Jaremen, and Michalska-Dudek (Socio-economic factors determining the ROPO-trend in the travel industry) using data collected from January 1, 2015 till December 31, 2017. Gender, age, education, financial standing, residence, and occupation along with number of all family members and minor children are the explanatory variables used for the investigation. The statistical analysis conducted with a Classification and Regression Tree (CART) confirms the correlation between age, educational level, and residence of buyers and the occurrence of their ROPO behavior. In particular holiday packages buyers under 60, presenting at least secondary education, and living in medium-sized towns are identified as more likely to retain the ROPO behavior pattern. No correlation is found between the ROPO-trend and the other socio-economic factors under investigation, instead.

For a more general analysis of the effects of ICTs on tourism demand, Kumar and Kumar (Relationship between ICT and international tourism demand: A study of major tourist destinations) present an investigation conducted in nine leading tourist destinations ranked by visitors arrivals. Two balanced panels include data for visitor arrivals, tourism prices, tourist's income, income at destination, and ICT infrastructures in China, France, Germany, Italy, Mexico, Russia, Spain, UK, and USA. Mobile and broadband subscriptions in the selected countries are used to proxy for ICT for the periods 1995-2017 and 2002-2017,

respectively. The short- and the long-run results indicate that source country income and ICT are positively associated with visitor arrivals, whereas price shows a negative association. Furthermore, the study reveals a unidirectional causality from ICTs to tourism demand and destination country's income. In other words, ICTs appears to cause tourism demand and support the technology-led growth hypothesis in the major tourist destinations.

These results are confirmed by Rehman, Liu, Rauf, Slama, and Amin (Internet Tradition and Tourism Development - A causality analysis on BRI listed countries). The study discusses how proper information and communication (ICT) structures affect tourist expenditures and inbound flows on the long- and short-run. The analysis concerns 65 countries listed in the Chinese project named "Belt and Road Initiative" (BRI) project, divided into high income and low income nations. The variables Individuals Using the internet (IU), Mobile Cellular Telephone Subscribers (MCTS), Fixed Telephone Subscription (FTS), and Percentage of Individuals using the Internet (PII) are considered to proxy ICTs over the period 1990-2017. Results show a long-run significant association between ICT proxies and tourism expenditure in developed economies. IU, MCS, FTS and PII are significant in case of Europe, MENA, South Asia and high income countries both in the long- and short-run. Instead, the low income countries or under-developed economies are getting influenced by ICTs in the short-run only.

On the supply side, the introduction of ICTs in the travel and tourism sector has clearly generated new opportunities and the need to rethink economic and business models. Two conceptual schemes of the new tourism context are discussed in this special issue: Online Travel Agencies (OTAs) and Daily Deal (DD) providers. In particular, Huang, Liu, and Lu (Proposing a model for evaluating market efficiency of OTAs: Theoretical approach) introduce a theoretical model where the matching ability and market size of the OTAs are identified as the two determinants of their market efficiency. Differently from traditional travel agencies, the OTA has adopted the long tail marketing strategy, which includes custom-made travel products, smaller and less known scenic spots tours supplemented with other non-traditional products such as accident assistance, shopping and transportation services, insurance and attraction tickets, wedding tours, and so on. Because of its anywhere accessibility, strong aggregation of travelers and travel products, and intelligent search function, the OTA has a unique competition scheme. The study provides a new theoretical explanation for understanding the operation mechanism and competition strategy of the OTA market.

Next to the OTAs, another particular business model is the one adopted by the daily deals (DD) providers. In the study conducted by Budler, Bratec, Minor, and Tomat (A business model approach towards understanding the daily deals in internet distribution systems), the business model (BM) approach is followed to identify the distinct characteristics of generic and tourism-focused niche DD providers in internet distribution systems (IDS), and to benchmark them against the OTAs. More specifically, the authors aim to uncover the DD BM dimensions and elements that allowed the DD providers to proliferate mid- and post-recession, respectively. Authors' discussion demonstrates how DD BMs unique characteristics enabled and sustained the long-term presence of DD providers in IDS. Differentiation within the industry of DD BMs and a stronger collaboration within the IDS network are identified as key elements for the DD providers to capitalize on the opportunities created by the BM transformation and compete with OTAs in the long run.

In the context of promotional campaigns, ICTs provide destination management organizations (DMOs) with a strategic tool for favoring the tourist experience before, during and after the visit, to provide information and accept reservations, coordinate the activities of local enterprises, and facilitate the expenditure of tourists. Souza, Mendes-Filho, and Buhalis (Evaluating the effectiveness of tourist advertising to improve the competitiveness of destinations) use a Destination Advertising Response (DAR) model to evaluate the effectiveness of promotional campaigns on visitor expenditure in destination, accommodations, attractions, restaurants, events, and shopping. The model uses data from a survey conducted in all regions of Brazil and involving 384 travelers divided into three groups: those intermediated by traditional agencies; those

intermediated by online travel agencies; and self-planners (i.e., those who had planned and purchased the travel components on their own). The study also explores how destinations can improve their competitiveness on tourist advertising by using new technologies. Results indicate that destination advertising influences each trip facet to varying degrees: shopping and accommodations are the two facets most influenced, whereas destination choice and events are the least influenced ones. Spending on destination and accommodations has a high correlation with total expenditure for all the groups of travelers, confirming the importance of the two trip facets for measuring the effectiveness of destination marketing campaigns. The study also explores how destinations can improve their competitiveness on tourist advertising by using modern technologies.

As a matter of fact, nowadays, most of the promotional campaigns are conveyed through web platforms, as part of a global marketing strategy, and search engines have become one of the primary tools for travel planning (Li et al., 2017).

In this context, understanding the needs of website users becomes crucial to create a favorable tourism experience and influence their intention to purchase. Foris, Tecau, Hartescu, and Foris (Relevance of the features regarding the performance of booking websites) provide an insight regarding the tourists' preferences and their interface needs, as well as which filters and options may help them achieve the most relevant results for the chosen destinations. A comprehensive performance evaluation model is developed for the classification and evaluation systems of six booking websites: three used at the international level; and three used in Romania only. The study confirms the hypothesis that complex booking websites are the most used ones for the wide range of options and the large number of tools they implement. In fact, most of the facilities made available by on-line booking platforms are considered important and are being used by the surveyed population. These results provide some useful arguments for developers to analyze their actual booking website and reflect on the possible improvements to be made in the future search engines and website design.

Finally, a last question closes this special issue: can smart tourism be considered a market segment?

Gajdošík (Smart tourists as a profiling market segment. Implications for DMOs) provides us with an answer based on a questionnaire survey conducted among 5975 tourists in Slovakia from January to March 2018. The analysis proved that smart tourism is a real market segment with different characteristics and customer behaviors, suitable in size as it accounts for more than 14% of tourists. Smart tourists are accustomed to use the information technologies during all the trip experience for collecting real-time information about the destination and its services in the planning phase; for exploring the destinations during the trip and reliving the experience by providing the descent feedback after the trip. To say it short, with the development and everyday use of ICTs by consumers a new market segment in tourism is being constructed (Jovicic, 2019). Further, for DMOs, smart tourism is an economically interesting segment as, besides the different behaviors, the article reveals that the average consumption of a smart tourist in a destination is much higher than for other segments.

All the manuscripts selected for this special issue were reviewed by experts and had to pass a double-blind review process. Thus, we could not close this editorial without having first thanked the reviewers of the journal *Tourism Economics* for the service provided and valuable comments given to further improve the quality of the manuscripts. A special word of thanks also to the authors of the studies for the interest in the special issue and thoughtful contributions to it.

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## Authors' Bio Note

**Davide Provenzano** holds a degree in Economics from the University of Palermo (Italy), a MPhil in System Dynamics from the University of Bergen (Norway), and he received a PhD in Mathematics for Economic and Finance from the University of Messina (Italy). Currently, he is an assistant professor in the Department of Economics, Business and Statistics (SEAS) at the University of Palermo, Italy. He teaches mathematics in undergraduate classes and his research interests mainly include tourism economics and management, agent-based computational economics, network analysis, and productive efficiency.

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Papers in this issue (ordered as cited)

- 1) Garín-Muñoz, Pérez-Amaral, and López. Consumer engagement in e-Tourism. Micro panel data models for the case of Spain (TEU-18-0438)
- 2) Dudek, Jaremen, and Michalska-Dudek. Socio-economic factors determining the ROPO-trend in the travel industry (TEU-18-0449)
- 3) Kumar and Kumar. Relationship between ICT and international tourism demand: A study of major tourist destinations (TEU-18-0448)
- 4) Rehman, Liu, Rauf, Slama, and Amin. Internet Tradition and Tourism Development (A causality analysis on BRI listed countries) (TEU-19-0006)
- 5) Huang, Liu, and Lu. Proposing a model for evaluating market efficiency of OTAs: Theoretical approach (TEU-19-0032)
- 6) Budler, Bratec, Minor, and Tomat. A business model approach towards understanding the daily deals in internet distribution systems (TEU-19-0048)
- 7) Souza, Mendes-Filho, and Buhalis. Evaluating the effectiveness of tourist advertising to improve the competitiveness of destinations (TEU-18-0406)
- 8) Foris, Tecau, Hartescu, and Foris. Relevance of the features regarding the performance of booking websites (TEU-19-0035)
- 9) Gajdošík. Smart tourists as a profiling market segment. Implications for DMOs (TEU-19-0026)