Full Length Research Paper

The role of social media, user generated platforms and crowd sourcing in the development of tourism destinations

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The paper aims to investigate the status and progress of scientific research and innovation in the tourism industry, with special reference to studies that have been conducted on tourism destinations and social media channels. The research involved the analysis of 50 papers in the last 5 years from the highest cited journals, regarding methods and benefits of adopting new technologies on tourism destinations. This article makes an overview of the selected theme and lists the major research topics on implementing social media, user-generated contents and crowd sourcing for the development of tourism destinations. Moreover, it deliberates on the diffusion of user-generated technologies, explores most popular media channels, and names academic journals which published the selected papers in this context. The results serve to point out major trends and gaps in which to focus future research on this topic and also they might be useful in formulating public policies and strategies in the development of tourism destinations.

Key words: Crowd sourcing, DMO, social media, user-generated context, tourism.

INTRODUCTION

The tourism sector is one of the most important economic activities in most countries worldwide. Its direct economic impact has significant influences on their GDPs. Tourism’s total contribution to the global economy rose to 9.5% of global GDP (US $7 trillion), not only outpacing the wider economy, but also growing faster than other

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significant sectors such as financial and business services, transport and manufacturing. In total, nearly 266 million jobs were supported by Travel and Tourism in 2013 - 1 in 11 of all jobs in the world (Turner, 2013). Based on World Tourism Barometer (‘World Tourism Barometer.pdf’, 2014), international growth in tourist arrivals was estimated at 5% for 2013; however destinations from all over the world welcomed some 52 million additional tourist arrivals, rising in total to 1,087 million up from the estimated 1,035 in 2012. The year 2014, the UNWTO forecasts 4 to 4.5% growth (‘UNWTO Annual Report 2013’, 2014).

The growth of Internet and diffusion of new technologies has transformed the tourism sector in unprecedented ways, such as social media tools, Big Data and relevant ones. This provides unique opportunities and great challenges for National and Destination Marketing Societies, essentially, keeping pace of a constantly changing and competitive environment.

The rapid advances of ICT technologies, and their increasing consequences in tourism have led to an exponential progress of online communication opportunities. The changing context in travel and tourism should be presented in the bridge between the demanded needs and the required information to be fulfilled. The notion of context is becoming popular and relevant for economic developing areas thanks to location-based services that support decision-making on the go. The unique characteristic of tourism is that it is a place where experiences are produced and consumed simultaneously (‘IFIIT, ENTER, 2013). This makes possible the organization of a new paradigm where both external and internal tourism provides innovative ideas through crowdsourcing mechanisms (‘Open innovation’, 2014). The user integrated contents provide more reliable, up to date and useful travel required information by means of the social media and crowd based platforms (Cox et al., 2009; Prayag, 2009; Prebensen et al., 2010). The social media platforms generate consumer-generated content (CGC) through sites such as YouTube, Tumblr, TripAdvisor, Flickr, Pinterest, gaining substantial popularity among online travellers (Xiang and Gretzel, 2010).

Typically, in tourism and travelling, the amount of internal information is not sufficient to allow tourist to select a destination. The external information available to potential tourist emanates from various sources like formal and informal or social environment. The way of informal database is accumulated with the help of users while they share information on different platforms. Crowdsourcing and user-generated contents serve tourism to gain sufficient sources while categorising them into unique system. Advances of innovative social media platforms and Big Data open new possibilities of opportunities for Destination Management Organizations (DMOs), in order to make satisfactory accessible files about offered services. Moreover, officials of tourism are responsible for the responsibility of supported formal information, but data stored by user-generated platforms are hardly censored. Albeit, tourism destinations can easily accumulate necessary sources by the help of integration on one purpose.

According to Handbook on E-marketing for Tourism Destinations (‘Handbook on E-marketing for Tourism Destinations. World Tourism Organization UNWTO’, 2014), over the past two decades, Destination Manage-ment Organizations (DMOs) have explored and learned to exploit the use of Internet and other forms of electronic communication. Based on the knowledge of the UNWTO, the importance of Crowdsourcing and Social Media in tourism businesses could be classified in the following categories:

**Role of the crowdsourcing and social media in tourism businesses**

1. Transfer “hard information” into motivational content.
2. Distribute information through channels such as Expedia, Travelocity, Rough Guide, etc.
3. Engage traveller on one-to-one and one-to-many activities.
4. Make easy two-way interaction between the DMO, suppliers, and visitors, as well as between users.
5. Find out potential visitors through information content.
6. Facilitate destination or service brand, made possible by the rapid spread of broadband connections, allowing users to experience attractive imagery and animation.
7. Simplify visitors in arranging their trip by offering tools such as ideas, itineraries and route planners.
8. Associate promotional activity through internet purchasing.
9. Organize cost-effectiveness in conveying information and products on sale directly, economically and at short notice to major prospects.
10. Work in harmony with offline marketing activities so that traffic can be driven in both directions, online to offline and vice versa.

In this context, the general purpose of this paper is to undertake a review on the need of social media and crowdsourcing with the specific purposes describing and existing experience gained from previous researches related to tourism destinations. In the final analysis, it identifies major drawbacks and conclusions, as an approach to better understand the existing knowledge on tourism innovation and technology for the further investigations.

**The research on user-generated content, social media and crowdsourcing in the tourism sector**

**Goals to achieve**

Three specific goals are formulated in this study. Firstly, it
aims to identify academic research articles on the implementation of new technologies, especially on social media and crowdsourcing in the tourism destination accomplished in 5 years period, from 2009 to 2014. Followed by the analysis of recent evolution on this topic, the type of academic journals publishing manuscripts on this research topic, as well as the categories of World Tourism Organization for the usage of media tools has been considered in this research. Secondly, it undertakes a review of the results on the destinations implementing crowdsourcing adoption and social media tools in their tourism processes. Thirdly, it aims to critically analyze the conclusions formulated by previous research on this topic. Results regarding the first goal will be shown in this section, while the remaining two goals will be covered in the following sections.

METHODOLOGY APPLIED IN THE LITERATURE REVIEW
To identify recent academic research on implementation of crowdsourcing and media channels in the tourism sector, for this analysis, in April 2014, publications based on Google Scholar Metrics were categorized into date of publishing along with contribution to citation counts. The data are composed of 50 selected articles from 6 topic related academic journals in the top 20 most cited publications, according to Google Metrics in the last five years in tourism.

Four basic search criteria were defined:

(i) in meta-search, the terms “crowdsourcing”, “user-generated content” or “social media” or combination of these phases were required to be in the title, abstract or keywords, and the purpose of above mentioned keywords should be directed to tourism development;
(ii) the period of publication limited to last five years;
(iii) among document types, just articles published in academic journals were chosen; and
(iv) Results filtered the articles to only those in English language. The initial search results generated a total of 68 articles, from which 50 were finally selected for the analysis, having ruled out papers that were not properly fit to the chosen topic

GENERAL RESULTS OF LITERATURE REVIEW

Year of publication: An analysis of the most popular publications in Google Scholar metrics, according to h5-index that is h-index for articles published in the last comprehensive academic years (2009-2014) suggests the high distribution of authors, institutions, and publications at the beginning of the period, especially since 2005. Even other overall interest of topic among researches has been increasing severely, in the last five complete academic year, top publications in Tourism and Hospitality subcategory displayed the most publications in 2009, with total of 26 papers relatively with 53 institutions and 66 authors. Since 2010, 18 articles out of 50 selected in this study represented more than one third of the total papers; the next years of period, 6 academic papers listed on the top most cited articles, that is noticeable result up to 2014 academic year. Finally yet importantly, the end of the period (2012-2014) has not been listed in Top Scholar, as if, it has not gained enough citations in academic context of authors’ previous publication rated before.

Academic journal
H-indexes of journals: Journals are often considered to be reliable sources to help to foster knowledge in a specific field. We have selected academic journals according to their last five compete year distribution on Google Scholar in two category: h5 index and h5-median. Stated graph provides data about first seven academic journals among the 20 academic journals that published in mentioned issue (Figure 1). It could be seen that, for both conducted categories Tourism Management journal has the highest rates. Like second, most indexed publication see “Annals of Tourism Research” that presented 40 for h5-index and 53 for h5-median. The distribution of other periodicals showed almost the rate for h5-median, also for h5-index, they got not vast difference comparing these five journals.

Factor impact of journals
Based on Web of Knowledge Data Report impact factor, the Annals of Tourism Research has underlined a factor value of 3.683; the last five year index value is 3.616, relatively. The second highest mentioned impact factor is found in Tourism Management, maintaining a value of 2.571 currently, and, its five-year impact factor is 3.552. However, other stated journals, like Journal of Hospitality Marketing and Management and Current Issues in Tourism, have been listed with 1.692 and 1.307 impact factor, noticeable rate among Top listed journals in Social Science Edition (‘Social Science Edition (Summary 2012)’, 2014) and Journal Citation Reports based on Web of Knowledge.

Distribution of journals
It is evidently seen that, among conducted papers, Journal of Hospitality Marketing and Management has meted out 22%, which is more than other listed academic journals. On the other hand, the second most distributed periodicals are not significantly diverse according to annual rate; their papers from Annals of Tourism Research and ENTER eTourism Conference are 18%, while Current Issues in Tourism and journal of Tourism Management have allocated 16 and 15% in proportion of total number of analysis. Last but not the least, Journal of Travel and Tourism Marketing has 11 % of its share in
Table 1. Distribution of Journals.

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<tr>
<td>Current Issues in Tourism</td>
<td>30</td>
<td>59</td>
<td>91</td>
<td>134</td>
<td>187</td>
<td>202</td>
<td>180</td>
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<tr>
<td>Tourism Management</td>
<td>488</td>
<td>511</td>
<td>528</td>
<td>567</td>
<td>597</td>
<td>650</td>
<td>600</td>
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<tr>
<td>Annals of Tourism Research</td>
<td>260</td>
<td>235</td>
<td>236</td>
<td>255</td>
<td>291</td>
<td>317</td>
<td>288</td>
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<tr>
<td>Current Issues in Tourism</td>
<td>2</td>
<td>9</td>
<td>48</td>
<td>134</td>
<td>271</td>
<td>355</td>
<td>276</td>
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<tr>
<td>Tourism Management</td>
<td>1,090</td>
<td>1,621</td>
<td>2,197</td>
<td>2,595</td>
<td>2,665</td>
<td>2,862</td>
<td>2,076</td>
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<tr>
<td>Annals of Tourism Research</td>
<td>595</td>
<td>690</td>
<td>826</td>
<td>924</td>
<td>1,228</td>
<td>1,489</td>
<td>1,227</td>
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<tbody>
<tr>
<td>Current Issues in Tourism</td>
<td>0.07</td>
<td>0.15</td>
<td>0.53</td>
<td>1</td>
<td>1.45</td>
<td>1.76</td>
<td>1.53</td>
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<tr>
<td>Tourism Management</td>
<td>2.23</td>
<td>3.17</td>
<td>4.16</td>
<td>4.58</td>
<td>4.46</td>
<td>4.4</td>
<td>3.46</td>
</tr>
<tr>
<td>Annals of Tourism Research</td>
<td>2.29</td>
<td>2.94</td>
<td>3.5</td>
<td>3.62</td>
<td>4.22</td>
<td>4.7</td>
<td>4.26</td>
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</table>

Based on: Essential Science Indicators, Web of Knowledge database.

Overall. According to above-mentioned Table 1, it is obvious that Tourism Management contributed significantly in the 5-year interval, while Annals of Tourism Research received most citations in the given period. However, Figure 2, demonstrates slight differences for the Journal of Hospitality Marketing & Management, Annals of Tourism Research and Current Issues in Tourism journals.

Benefits of crowdsourcing and social media channels in tourism industry

By analysing the results achieved by the selected academic research articles on the benefits of the social media and crowdsourcing, three major types of benefits of user generated content and media tools in hospitality sector were identified: operational efficiency and
productivity, visitor interaction and brand image improvement, as well as destination management sustainability. As listed in Figure 3, most used keyword faced for “social media”, while the second most popular term were “tourist satisfaction” and “destination branding” in the conducted research. As well as, Table 2 indicates most cited articles among underlined ones in analysis, in Google Scholar platform. In fact, papers from Tourism Management and Annals of Tourism Research were cited significantly. For instance, work called “Role of social media in online travel information search” used widely and cited 319 times. However, second most interesting work- “A review of innovation research in tourism” which cited 139 times also considered as a vital investigation on this theme.

Each of these categories of benefits will be described next (Charlesworth, 2009).

a) Traveller interaction and brand image improvement; the results of the analysed studies emphasize the greater influence of tourist interaction and brand image improvement. Guests are the base of a hotel business and loyal customers are the source of a long-lasting lodging firm. New technologies can be employed to achieve numerous improvements in guest services (Namasivayam et al.,
2000). Offering new services provided by new technologies would enable firms to keep pace with the growing desires of customers and help to improve brand image. For instance, adopting internet technologies enhance guest interaction with the hotels and increase online familiarity (Hashim and Murphy, 2007). In-room technologies such as RFID (Radio Frequency Identification) solutions and wireless guest communication would improve hotel guests’ experience and satisfaction. It can directly translate into higher occupancy rates and revenue per room.

b) Information availability of destination and services: Even though the acceleration of crowdsourcing and social media mentioned as a substantial factor for tourism development (Jopp et al., 2010), it is the second popular topic amongst the analysed papers in this study. According to Zapata et al. (2011), community-based tourism could contribute to development of destination needed info through different web based and crowd technologies. Moreover, countries like other parts of the World, Canada and Australia are already has established the government tourism networks in the social media and has been transforming in web platforms (Alam and Diamah, 2012). Moreover, the role and significance of destination management need to be categorised and outlined for the development by the “Handbook on E-marketing for Tourism Destinations” (‘Handbook on E-marketing for Tourism Destinations. World Tourism Organization UNWTO’, 2014).

c) Operational efficiency and productivity: among the selected categories underlined in analyses, opera-tional efficiency and productivity was not mentioned more than previous ones. However, because globalization tourism businesses have been integrated with ITCs, high qualified tools like crowdsourcing and interactive channels are needed to maximize the efficiency and productivity of services (Hong, 2009; Minnaert et al., 2011). The use of new technologies could facilitate the need of information and variety of factors that could make further incomes for companies. Besides, the use of these instruments could meet its (perhaps growing) obligations to guests, suppliers, workers, shareholders, and governments, and still remain competitive or even improve its competitiveness in the market place (Hong, 2009; Inversini and Buhalis, 2009; Lemelin et al., 2010)

**Major conclusions by previous research on crowdsourcing and social media**

In order to provide an overview of the common conclusions, out of 50 already chosen publications on the social media and crowdsourcing related ones, twenty-five papers have been considered. After generalization of conclusions, five specific categories of conclusions are recognized as the most common among the selected academic articles.

Among the twenty five selected paper, four of them indicate the importance of the crowdsourcing and social media in the DMOs (Haugland et al., 2011; Alegre and Garau, 2010; Bosangit et al., 2009; Yoo and Gretzel, 2009). Most of the authors have modified the outcomes of social media and crowdsourcing in the performance of the tourism services (Williams and Soutar, 2009; Isaac, 2010; Lemelin et al., 2010; Canadi et al., 2010; Xiang and Gretzel, 2010; Kim et al., 2009; Dwyer, Edwards et al., 2009; Tussyadiah and Fesenmaier, 2009; Wong and Yeh, 2009; Jopp et al., 2010; Inversini and Buhalis, 2009; Tumas and Ricci, 2009). Results of the Table 3, demonstrates description of the major conclusions according authors. It is obvious that “The positive impact of social media and crowdsourcing contexts for the performance in the tourism services” stated by most of authors of the research. The way of the crowd sourcing tools and social media instruments are considered as important ones in order to push tourism services and their promotion perspectives. Therefore, the rest of covered authors listed positive feedbacks of user-generated platforms, social media tools and crowd sourcing gears toward tourism management organizations.

**Conclusions and further research suggestions**

The objective of this paper was to understand how widespread the use of ICTs especially social media, crowdsourcing and relevant ones as a tool for deployment of tourism industry. In particular, we focused on the case of some researches related to user-generated channels, crowdsourcing and social media instruments implications by analysing the strategies used on present time. This investigation describes and compares the existing related literature, and identifies the major results and conclusions as an approach to better analyse tourism innovation and technology usage (Kietzmann et al., 2011).

The outcomes of the analysis on the crowdsourcing and social media identified three major types of factors on tourism sector. The result of the analysed studies reveals that literature has emphasized more on the greater positive impact of the user generated content on tourism deployment’s level of the “Traveller interaction and brand image improvement”. To keep pace with the rising expectation of guests and to improve destination brand image, introducing new services provided by the new technologies are believed to be necessary. “Information availability of destination and services” was the second major benefit pinpointed by the selected papers. Last but not at least, “Operational efficiency and productivity” was the third major advantage of the consequence (Cantoni and Xiang, 2013).

The findings could benefit researchers seeking to
Table 2. Most cited articles among underlined ones in analysis, in Google Scholar, 2009-2013.

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<thead>
<tr>
<th>Title</th>
<th>Journal</th>
<th>Cites</th>
<th>Yr published</th>
<th>% total</th>
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<tr>
<td>Role of social media in online travel information search</td>
<td>Tourism Management</td>
<td>319</td>
<td>2010</td>
<td>21</td>
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<tr>
<td>A review of innovation research in tourism</td>
<td>Tourism Management</td>
<td>139</td>
<td>2010</td>
<td>9</td>
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<tr>
<td>Destination attachment: Effects on customer satisfaction and cognitive, affective and conative loyalty</td>
<td>Tourism Management</td>
<td>129</td>
<td>2010</td>
<td>8</td>
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<tr>
<td>Destination and enterprise management for a tourism future</td>
<td>Tourism Management</td>
<td>122</td>
<td>2009</td>
<td>8</td>
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<tr>
<td>Understanding the relationships of quality, value, equity, satisfaction, and behavioural intentions among golf travellers</td>
<td>Tourism Management</td>
<td>99</td>
<td>2009</td>
<td>6</td>
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<td>Destination brand positions of a competitive set of near-home destinations</td>
<td>Tourism Management</td>
<td>94</td>
<td>2009</td>
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<td>The attractiveness and competitiveness of tourist destinations: A study of Southern Italian regions</td>
<td>Tourism Management</td>
<td>93</td>
<td>2009</td>
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<td>Value, satisfaction and behavioral intentions in an adventure tourism context</td>
<td>Annals of Tourism Research</td>
<td>91</td>
<td>2009</td>
<td>6</td>
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<tr>
<td>Modelling perceived quality, visitor satisfaction and behavioural intentions at the destination level</td>
<td>Tourism Management</td>
<td>81</td>
<td>2010</td>
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<td>A model of destination branding: Integrating the concepts of the branding and destination image</td>
<td>Tourism Management</td>
<td>75</td>
<td>2011</td>
<td>5</td>
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<tr>
<td>Modeling roles of subjective norms and eTrust in customers'acceptance of airline B2C eCommerce websites</td>
<td>Tourism Management</td>
<td>70</td>
<td>2009</td>
<td>5</td>
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<td>Tourism and social policy: The value of social tourism</td>
<td>Annals of Tourism Research</td>
<td>53</td>
<td>2009</td>
<td>3</td>
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<tr>
<td>Trust in Travel-Related Consumer Generated Media</td>
<td>ENTER eTourism Conference</td>
<td>37</td>
<td>2009</td>
<td>2</td>
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<td>Total cites over the 15 most cited</td>
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<td>1548</td>
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Table 3. Description of main results of authors.

<table>
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<th>Major conclusions</th>
<th>Authors</th>
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<tr>
<td>The importance of the crowdsourcing and social media, affiliation in the DMOs.</td>
<td>Haugland et al., 2011; Alegre and Garau, 2010; Bosangit et al., 2009; Yoo and Gretzel, 2009;</td>
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<td>The positive impact of social media and crowdsourcing contexts for the performance in the tourism services</td>
<td>Williams and Soutar, 2009; Isaac, 2010; Lemelin, Lemelin et al., 2010; Canadi et al., 2010; Xiang and Gretzel 2010; Kim et al., 2009; Dwyer et al., 2009; Tussyadiah and Fesenmaier 2009; Wong and Yeh, 2009; Jopp et al., 2010; Inversini and Buhais 2009; Tumas and Ricci, 2009</td>
</tr>
<tr>
<td>The positive impact of the social media and crowdsourcing technologies to make facilitate tourism brand of destinations</td>
<td>Marzano and Scott, 2009; Zapata et al., 2011; Hong, 2009; Prayag and Ryan, 2011</td>
</tr>
<tr>
<td>The positive impact of the crowdsourcing and social media for the guest interaction.</td>
<td>Lau, 2010; Minnaert, 2009; Minnaert et al., 2011; Au et al., 2010; Diedrich and García-Buades, 2009</td>
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investigate in the area of the tourism industry through open innovation and other associated tools. The findings also serve as making imagination of the Crowdsourcing and Social media capacity and its opportunity to discover different services in this area of economy. It is recommended that a further study should be conducted on the use of crowdsourcing and media tools in the development of tourism board office where the need of
information is urgent. For example, a study will be performed on Silk Road World heritage destinations that possess rich history and potential of tourism, where the need of Crowdsourcing is vital to collaborate with visitors from all over the world.

Additional research paths and options could be suggested for future research. More and more, ITB Berlin and IPK’s World Travel Monitor, “The down-ward trend for traditional way of tourist integration seems to have stopped at around 20% cause of 10 % rise of online booking channels and related internet technologies” underlined future prospects and the importance of ICTs in tourism sector (Freitag, 2014). The following investigations should be conducted, the importance and growth of tourism in the world economy, together with the peculiarities of crowdsourcing and social media in the tourism industry, could also justify the design and administration of an international survey to collect data from different visitors. Secondly, there is a need to develop a greater number of theoretical frameworks that aim to explain the conditions under which countries could maximize the benefits of the new way of destination deployment in many developing countries. In that regard, results and conclusions of previous research on this topic should be considered (Della et al., 2013). Thirdly, possible associations between the new technologies adoption and innovation, as well as additional factors other than the industry could be considered, particularly the type of DMO strategies that are adopted by destinations and suppliers of tourism businesses as well.

Conflict of Interests

The authors have not declared any conflict of interests.

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IFITT, ENTER 2013_Research_Koerbitz_etal.2014.