

## Reviews in tourism

## What do we know about social media in tourism? A review



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## ABSTRACT

The growing role of social media in tourism has been increasingly an emerging research topic. Social media plays a significant role in many aspects of tourism, especially in information search and decision-making behaviours, tourism promotion and in focusing on best practices for interacting with consumers. Leveraging off social media to market tourism products has proven to be an excellent strategy. This study reviews and analyses the research publications focusing on social media in tourism. Through a comprehensive literature review, this paper identifies what we know about social media in tourism, and recommends a future research agenda on the phenomenon. The paper suggests that research on social media in tourism is still in its infancy. It is critical to encourage comprehensive investigation into the influence and impact of social media (as part of tourism management/marketing strategy) on all aspects of the tourism industry including local communities, and to demonstrate the economic contribution of social media to the industry.

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## Contents

1. Introduction . . . . .	27
2. Methodology . . . . .	28
3. Results of bibliometric analysis . . . . .	28
3.1. Distribution of publication year . . . . .	28
3.2. Distribution of publication sources . . . . .	29
3.3. The frequency of keywords . . . . .	29
3.4. Coverage of research regions . . . . .	29
3.5. Research methodologies . . . . .	29
4. Research progress of social media in tourism . . . . .	29
4.1. Social media and tourists' behaviours . . . . .	29
4.2. User-generated content and its implications . . . . .	31
4.3. Social media in marketing and destination management . . . . .	32
4.4. Social media and crisis management in tourism . . . . .	32
4.5. Impacts on tourism culture and knowledge . . . . .	32
4.6. Issues in social media use in tourism . . . . .	33
5. Discussion and conclusion . . . . .	33
5.1. Limitations of this research . . . . .	34
5.2. Recommendations for future research . . . . .	34
References . . . . .	34

## 1. Introduction

Social media, as one of most powerful online networking tools, has been integrated into social and economic life in the real world.

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Wikipedia defines social media as “the means of interactions among people in which they create, share, and exchange information and ideas in virtual communities and networks” (Wikipedia, 2013a). Kaplan and Haenlein (2010) define social media as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content”.

There has been much discussion about the definition of social media. As social media continues to evolve and its uses change and expand, so does the definition of social media. Cohen (2011) summarized 30 different definitions of social media, from different perspectives. Some important characteristics and natures of social media have been identified in these definitions. They include: 1) social media are online tools, applications, platforms and media, and therefore depend on information technology; 2) social media are peer-to-peer communication channels, which enables the interactive web's content creation, collaboration and exchange by participants and the public, facets which introduce substantial and pervasive changes to communication between organizations, communities and individuals; and, 3) social media link users to form a virtual community by using cross-platforms, and therefore affects people's behaviours and real life.

The term "social networking" has to be considered alongside the term "social media". Wikipedia (2013b) defines a "social networking" service as "an online service, platform, or site that focuses on facilitating the building of social networks or social relations among people who, for example, share interests, activities, backgrounds, or real-life connections". While social media are considered as the "tools" or "means of communication", allowing one to broadcast, reach and influence people widely, social networking is considered as the use of "social media tools" to interact and communicate directly with people you're already connected to or with whom you wish to be connected with (Wells, 2011).

Social media includes social networking sites, consumer review sites, content community sites, wikis, Internet forums and location-based social media. Social media has emerged as the new way in which people connect socially, by integrating information and communication technology (such as mobile and web-based technologies), social interaction, and the construction of words, pictures, videos and audio. It is actually more than a new way to communicate; it is an entire online environment built on participants' contributions and interactions. Social media growth has been exponential over recent years. By December 2012, the leading social media icon, *Facebook*, had over 1.2 billion members (Statistic Brain, 2012). Social media plays an increasingly important role in many aspects of tourism, especially in information search and decision-making behaviours (Fotis, 2012), tourism promotion (Bradbury, 2011; SoMeTourism, 2011; Think Social Media, 2012; VTIC, 2012), and in focusing on best practices for interacting with consumers via social media channels (e.g. social sharing of holiday experiences). Leveraging off social media to market tourism products has proven to be an excellent strategy (Fotis, 2012). Many countries regard social media as an important tool to promote their tourism industries.

Social media in tourism has been researched as an emerging topic. We noticed that a literature review on social media in tourism and hospitality had been published very recently (Leung, Law, Hoof, & Buhalis, 2013). Forty-four studies published in academic journals by 2011 were included in that review. Recent years have seen a quickening in the number of publications and the coverage of research topics. It is important to have a further review of the progress of research on social media (and/or social networking) in tourism, with all major publication sources included. Consequently, this study covers a much broader range of literature and takes a different approach to review extant research achievements.

## 2. Methodology

Considering the close association of the two terms, in this study it was necessary to review both the literature on "social media" and on "social networking". To catch more literature, we also added "web 2.0" and "user-generated content" as keywords in the search. On 22 November 2013, we searched two major database collections "Web of Knowledge" and "EBSCOHost", and one search engine "Google

Scholar". We used the combination of keywords "'social media' OR 'social networking' OR 'web 2.0' OR 'user-generated content'" AND "tourism OR tourist\* OR travel\* OR hospitality", in "Topics" for Web of Knowledge, or in "Subject" for EBSCOHost (including all 32 databases), respectively. There were 240 publications from Web of Knowledge and 145 from EBSCOHost collected. Google Scholar was used to identify any literature that might have been missed from the above databases. The Google Scholar search terms included the keywords "tourism OR travel OR travelling OR tourist OR tourists OR hospitality", "social media OR social networking OR web 2.0 OR user-generated content\*" in "in the title of the article". A total of 130 results came out of this search.

The literature from the three different sources was imported into Endnote. After removing the duplicates and some publications that did not principally focus on social media in tourism and hospitality, 279 publications were reviewed in this paper. We rechecked all the literature recorded in the Endnote against the availability of abstracts and keywords. If not available, we used URL recorded or did Google search, using the paper titles to amend such information on Endnote. This total dataset was then re-established on Excel, recording attributes including author, paper title, publication year, publication source, keywords and abstract. Based on a review of the abstracts, a more detailed analysis of the research topics, methodologies and research regions was conducted and this was accompanied by recourse to the full texts to better identify the key findings.

In drawing up the list of literature, the study depended on self-selection by the items' authors as to what was their principal concern, using keywords as stated below. Nonetheless, we were aware of a need to recognize that there is an active current discussion on definitions of social media and the difference between social media and social networking. Our research method is thus dependent on our selected authors' 'self-definition' of social media and social networking. It should also be noted that, obviously, only a part of the literature to be published in 2013 was collected in this study.

## 3. Results of bibliometric analysis

### 3.1. Distribution of publication year

Publication of social media-related research in tourism and hospitality has only a very short history (Fig. 1). The first publications were in 2007. Among the 279 publications we identified, four were published in 2007, 16 in 2008 and 17 in 2009 respectively. From 2010, the number of publications has increased quickly. In 2012, there were 81 publications. In 2013 until late November, 58 publications were collected.

There has been a change in focus over this period. In the early years, the research primarily focused on the industry's concern about the

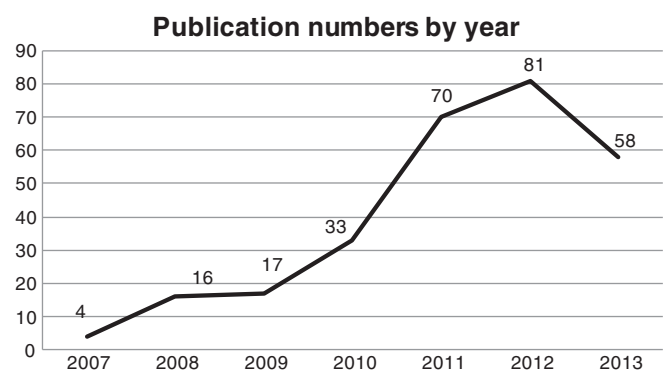


Fig. 1. Publication numbers by year (to November 2013).

impacts of social media. Three papers published in 2007 paid attention to the unexpected influences of the use of social media on tourism businesses and the industry. They indicated that both the industry and businesses were losing control over what got written about them online (Dwivedi, Shibu, & Venkatesh, 2007), and that the industry was faced with consequences that – if not managed properly – blogs had not only positive impacts but also negative ones (Thevenot, 2007). The authors concluded that the growth and impact of the social media on travel and hospitality couldn't be ignored or simplified. In addition, social media required monitoring and response or interaction by the hotel/tourism business (Grant-Braham, 2007). In latest years, the research focuses have been more and more on how social media is being used to inform tourism participants, to enrich tourist experiences and to market tourist destinations and services, as reviewed in this paper.

### 3.2. Distribution of publication sources

The research on social media and tourism has been published in all major publication sources. The greatest proportion of publications were journal articles (165, i.e. 59.1%), followed by conference papers (82, i.e. 23.4%) and research degree theses (23, i.e. 8.2%). Other sources included electronic articles (4, 1.4%), books (3, 1.1%) and reports (2, 0.7%).

More and more journals have started to give attention to this emerging topic, including some leading journals, such as the *Annals of Tourism Research* and *Tourism Management* (Table 1). In total 165 papers were published in 90 peer-reviewed journals. The *Journal of Travel & Tourism Marketing* tops the journals by publishing 13 papers, mostly attributable to its special issue in early 2013.

Since 2010, twenty-three research degree theses have been published by research students in universities and research institutions. Most of these theses (15 out of 23, i.e. 65.2%) have been produced in European universities. By country, Finland has published most theses (7 in total), followed by USA (6) and Sweden (3). Among 82 conference papers, one third of them (28, i.e. 34.1%) were presented at the “International Conference on Information and Communication Technologies in Travel and Tourism” in 2010, 2011 and 2012 respectively.

### 3.3. The frequency of keywords

In all 165 journal articles, totalling 965 ‘keyword’ counts were collected and analysed. We categorized and combined similar keywords and excluded the keywords defining the research subject broadly, such as “tourism”, “social media”, “web 2.0” et al. The most frequently occurring keyword was “marketing” (including “internet marketing” or “place marketing”), followed by “customer/consumer behaviour”, “user-generated content”, “information/information search” and “destination management/DMO” (Fig. 2). The keywords statistics suggests that the research was mainly focusing on topics such as social media

in tourism marketing, tourist behaviours, tourism management, as well as information creation and sharing.

### 3.4. Coverage of research regions

At least 42 specific countries have been covered by the research we collected. The United States was the most researched country (identified in 21 publications), followed by China, Spain and Australia (identified in 15, 10 and 7 publications, respectively). The regions researched were mainly in Europe, Asia and North America (Fig. 3).

While some large emerging economies, such as China and Brazil, are drawing attention from researchers, developed western countries are the primary research focus. This result roughly accords with the scale of social media users in different countries and continents. For example, the Asia-Pacific, Europe and North America have the highest numbers of social media users (Table 2). Combined with the fact that most of research degree theses considered here were produced in European universities, it leads to the conclusion that western – especially European – countries have been leading the research of social media in tourism.

### 3.5. Research methodologies

There are multiple methodologies involved in the research of social media in tourism, including qualitative and quantitative methods. Online survey has been a major approach to collect data, especially targeting on the social-media users or tourists (e.g. Ayeh, Au, & Law, 2013; Kang & Schuett, 2013; Senders, Govers, & Neuts, 2013). Case study and/or empirical research approaches have been applied in many studies. These approaches mainly focused on identification and analysis of the social networking and knowledge creation capabilities and affordability of social media's application in the tourism industry (Chalkiti & Sigala, 2008), tourists' creation and use of various types of online content (Munar & Jacobsen, 2013) and the tourism business's engagement with tourists through social media (Kang, 2011). In-depth interviews have been commonly used to explore practitioners' perceptions regarding social media and to examine the strategies being applied in engaging social media to influence consumers' decision-making (Ayeh, Leung, Au, & Law, 2012). It is noticed that some researches explored how to mine effectively and analyse sensibly the data from social media resources for tourism research and marketing purposes (e.g. Akehurst, 2009; Johnson, Sieber, Magnien, & Ariwi, 2012).

Although few in number, studies using quantitative methods have been applied, especially in the assessment of the economic impacts of introducing social media as marketing tools in tourism. Crofton and Parker (2012) used panel techniques for data across the different areas and different times to estimate models of tourism-related economic activity. Through statistical analysis, this research quantified the positive economic contribution (particularly in leading to more local consumer demand) of introducing social media as marketing tools in the tourism websites of the provinces of Atlantic Canada. Vasiliiki and Kostas (2010) used multivariate statistics on a network adjacency matrix to locate core travellers groups and in finding groups of the most influential travellers. Structural equation modelling (SEM) was used by researchers to test conceptual models based on survey data (Huang, 2012; Kang, 2011; Senders et al., 2013).

## 4. Research progress of social media in tourism

### 4.1. Social media and tourists' behaviours

The advent of Internet-based social media technologies has enabled travellers to share their travel experiences. Shared information on social media sites is recognized as an important information source that may help tourists' travel planning or even eventually influence potential travellers' travel decision-making. The engagement of social media has

**Table 1**  
Numbers of journal articles by journal.

Journal title	Article number
Journal of Travel & Tourism Marketing	13
Tourism Management	9
Cornell Hospitality Quarterly	8
Journal of Hospitality Marketing & Management	6
Annals of Tourism Research	5
Computers in Human Behavior	5
E-review of Tourism Research	5
Information Technology & Tourism	5
International Journal of Hospitality Management	5
Journal of Vacation Marketing	5
Other 80 journals (published 1–4 articles each)	99
Total (90 journals)	165

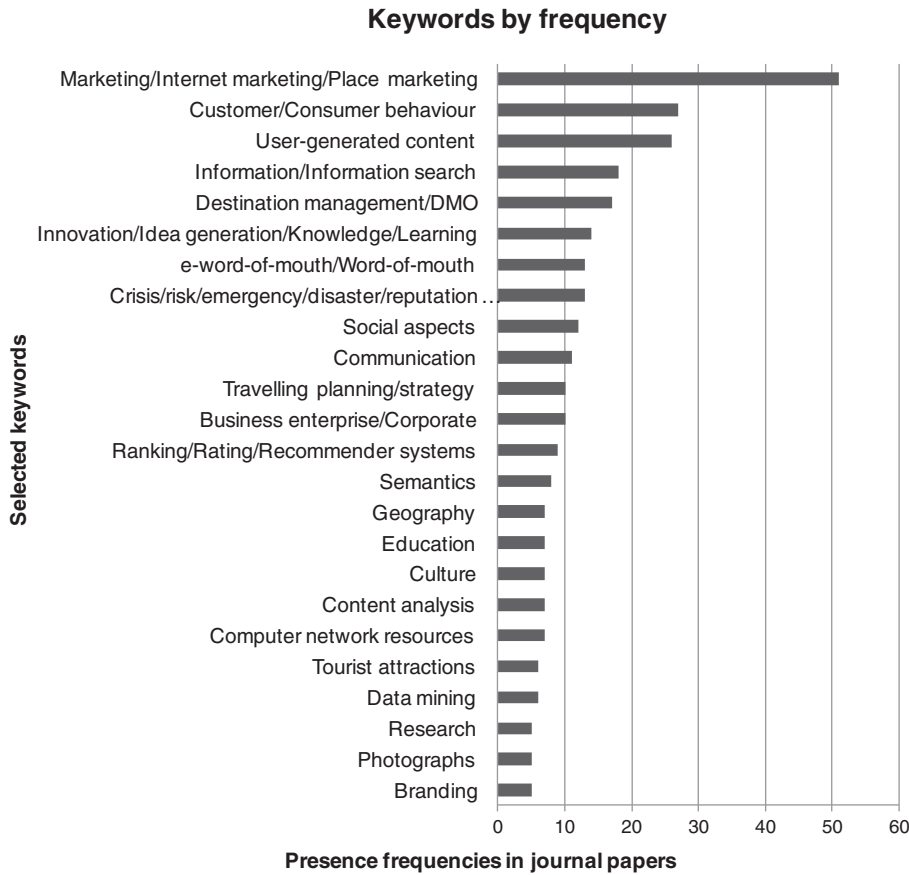


Fig. 2. Frequency of keywords in journal papers.

fundamentally changed the way individuals plan and consume travel (Gretzel & Yoo, 2008; Hudson & Thal, 2013). Potential tourists can rely on others' experiences for their decision-making, due to the experiential nature of tourism products (Litvin, Goldsmith, & Pan, 2008). Social media tools are used throughout the travel planning process and after holidays for experience sharing. Influence from social media, particularly in reputational areas, will strongly affect final decisions in holiday plans (Fotis, Buhalis, & Rossides, 2012).

Social media would decrease uncertainty and increase the exchange utility on one hand, and provide users by storytelling a sense of belonging into virtual travel communities on the other hand (Gretzel, Fesenmaier, & O'Leary, 2006; Wang, Yu, & Fesenmaier, 2002). In the former case, social media may most likely contribute directly to an

increasing destination visitation. However, in the latter case, social media might contribute to brand building of tourist destinations in the long run but be less likely to lead an immediate increase in tourist visitation. Social media can reflect and influence tourists' perceptions and attitudes towards "green" or "eco" activities. Social networking users seem likely to increase awareness of the impact of travel behaviours and of more sustainable alternatives. Kane, Chiru, and Ciuchete (2012) indicated that *Facebook* represents an effective and innovative environment that could build the necessary links between green attitudes and consumers' hearts and minds. This may not lead to a direct change in travel behaviours, but it potentially influences attitudes and values that could change travel behaviours in the longer term. Some even suggested that tourists who post pictures on a social media site of their trip (known as "trip picture posters", or TPPs) would have different travel and consumption behaviours, e.g. being more prone to purchase local and regional specialty items than non-TPPs (Boley, Magnini, & Tuten, 2013).

The intention of consumers to participate in online community has positive effects on their intentions to use the firm products/services and their intentions to recommend the host firm to others (Casaló, Flavián, & Guinalú, 2010). The research suggested that the intentions to use social media are directly influenced by the perceived benefits or risk of that use (Kang, 2011; Nusair, Bilgihan, Okumus, & Cobanoglu, 2013; Parra-López, Bulchand-Gidumal, Gutiérrez-Taño, & Díaz-Armas, 2011). It is also shown that there is a series of incentives, such as altruism, availability, individual predisposition or trust in the contributions of others, which facilitate and promote the use of this type of technology when organizing and taking tourist trips (Parra-López et al., 2011). Leung and Bai's (2013) online survey suggested that travellers' motivation and opportunity have positive relationships with their involvement in hotel social media pages. Travellers' social media involvement also positively impacts their intention to revisit pages. The relationships

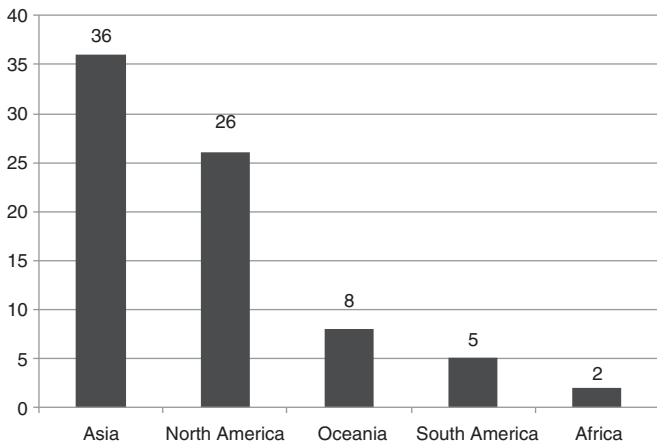


Fig. 3. Research regions by continent.

**Table 2**  
Social media users by region (Q2, 2013).<sup>a</sup>

World's 10 largest social platforms	Number of social media users by region (million)					
	Asia Pacific	Europe	North America	Latin America	Middle East and Africa	Total
Facebook	269.97	137.1	113.15	64.00	13.57	597.79
Google +	204.11	48.39	29.05	29.24	7.60	318.39
YouTube	155.03	57.47	50.97	29.81	7.49	300.77
Twitter	165.19	49.09	47.75	27.06	7.84	296.93
LinkedIn	67.71	15.88	18.36	13.74	4.36	120.05
Instagram	40.03	12.64	18.06	11.12	2.27	84.12
Pinterest	31.71	8.13	31.75	5.22	1.90	78.71
Myspace	37.83	7.39	7.54	6.10	1.30	60.16
Tumblr	36.40	6.58	10.40	4.82	1.32	59.52
Badoo	26.54	8.03	1.75	7.89	1.30	45.51
Total	1034.52	350.70	328.78	199.00	48.95	1961.95

<sup>a</sup> Data source: Bullas (2013). 12 Awesome Social Media Facts and Statistics for 2013: #9. Asia Pacific region dominates the social media landscape. Available online: <http://www.jeffbullas.com/2013/09/20/12-awesome-social-media-facts-and-statistics-for-2013/>. Accessed on 5 December 2013.

between motivation, opportunity, social media involvement, and revisit intention were not different between *Facebook* and *Twitter*, suggesting that hotel managers can employ the same marketing strategy via different social media channels (Leung & Bai, 2013). Kang and Schuett (2013) proved that, mediated by perceived enjoyment, identification and internalisation are critical determinants that positively increase actual travel experience-sharing on social media.

Different types of tourists have different behaviours in using online tools including social media in their travel management. An investigation by Verma, Stock, and McCarthy (2012) suggested that business travellers most often follow their company's recommendation for a hotel, although many of them use search engines or online travel agents to learn more about available hotels. In contrast, recommendations of friends and colleagues are most important to leisure travellers, followed by travel-related websites and search engines. Different users of social media have different impacts on potential tourists. The research suggested that "travel opinion leaders" or "central travellers", although a small proportion, more likely have a significant impact on the provision of information to be reached by others (Vasiliki & Kostas, 2010; Yoo, Gretzel, & Zach, 2011). This is because that they have greater travel experience and greater trust in official sources (Yoo et al., 2011), and are more active in providing information, as well as more accessible by others through a series of incoming links (Vasiliki & Kostas, 2010).

#### 4.2. User-generated content and its implications

Social media is important for consumers to acquire information but also for generating their own content to communicate with others (Drews & Schemer, 2010). The user-generated content (UGC) on social media platforms and product search engines is changing the way consumers shop for goods online. Trip characteristics seem to play a key role when it comes to travellers' engagement with UGC for travel planning. Simms (2012) found that a higher percentage of travellers turned to user-generated content when visiting a destination for the first time, as well as when visiting an international destination. A lower percentage of those who travel on their own engaged with social media.

People's attitudes, motivations and types of online social networks for posting their UGC will be affected by their nationalities (Wilson, Murphy, & Cambra Fierro, 2012). This, presumably, is associated with different cultural, social and even economic backgrounds. A chief implication for travel and hospitality managers is that, in fact, people from different countries have diverse reasons for posting, and the hospitality industry must take into account these differences in posting behaviours (Wilson et al., 2012). Despite the growing enthusiasm about social media, empirical research findings suggest that the majority of Internet users are not using UGC for travel planning. So little is presently known about the relevant factors determining UGC usage for the specific purpose of travel planning (Ayeh et al., 2013).

The trustworthiness, subjectivity and credibility of online travel information, especially UGC, are always topical. Munar and Jacobsen (2013) critically analyse technological mediation through electronic word-of-mouth and factors related to virtual dissemination of travel narratives. To some extent, UGC is perceived as similar to recommendations provided by friends, family members or even "like-minded souls" (Bray, Schetzina, & Steinbrick, 2006; Fernback & Thompson, 1995; Wang et al., 2002; Yoo, Lee, Gretzel, & Fesenmaier, 2009). It is therefore becoming a vital information source to potential tourists (Chung & Buhalis, 2008) and is seen as more trustworthy than information provided by the destination or tourism service provider; this can subsequently be considered as substitute for word of mouth (Fotis et al., 2012; Yoo et al., 2009).

The credibility reposed in UGC will determine its influence upon tourists' decisions as well as in their use of social media platforms. And this credibility will be influenced basically by previous knowledge readers may have of the UGC writer, the traveller's experience in travelling, and experience in the use of ICTs or social media platforms. Hence, it is very important that platforms are perceived as both reliable and containing quality content platforms, in order to attract potential tourists. Around this point significant generational differences were identified. The younger generation of users attribute more credibility to and are more influenced by UGC, compared to older generations (Rodríguez, 2009). Other research on inclination to share online information suggested that young travellers would be more likely to publish their UGC on their own social media than on a commercial supplier/intermediary website (Murphy, Gil, & Schegg, 2010).

A study in Australia suggested that there are differences in the level of trust in online travel information from different sources. Respondents 'tended to agree' that they trusted information provided by travel agents, information from commercial operators and comments made by travellers on third party websites. However, the highest level of trust was afforded to information provided on State government tourism websites. These results suggest that greater trust is placed in online travel comments when they are on a specific travel website than when they are on a more generic social networking website. However, respondents were 'not sure' that they trusted comments made by travellers on weblogs and on social networking sites. Some 88% of respondents that had not visited UGC websites (or were unsure if they had) indicated that they thought that UGC would be useful in the future – suggesting that they feel that any concerns they may have in relation to legal and social problems resulting from its use will be resolved (Burgess, Sellitto, Cox, & Buultjens, 2011).

Images and photographs uploaded by tourists have been one of the most attractive UGC on social websites. TPPs create pictorial UGC to express their perceptions of a destination (Stepchenkova & Zhan, 2013). It is possible to group similar destinations based on UGC visual components, represented by the contents of the pictures, and the

related tag descriptions (Inversini, Eynard, Marchiori, & Gentile, 2012; Inversini & Eynard, 2011).

#### 4.3. Social media in marketing and destination management

As argued by Sigala, Christou, and Gretzel (2012), social media is challenging existing customer service, marketing and promotional processes throughout the tourism sector. Fotis, Rossides, and Buhalis (2010) suggested that the presence of social media seems to have caused an increasing mistrust for traditional marketing tactics, as well as diminishing the effect of traditional mass media. Although social media is not a panacea, it is an effective marketing channel able to be wisely used in integrated communications and marketing of tourism services (Sotiriadis & van Zyl, 2013; VTIC, 2012).

Social media does provide new means for tourism organisations including destination marketing organisations (DMOs) to reengineer and implement their business models and operations, such as development of new services, marketing, networking and knowledge management. Tourism Australia is encouraging the Australian tourism industry to positively embrace social media in promoting their businesses. Australian operators are being offered the chance to promote their tourism business or region using Tourism Australia's record breaking fan base, by listing themselves in a 'things to do' section on its *Facebook* page (Tourism Australia, 2012). Meanwhile, the Australian National Online Strategy Committee developed the "Tourism e-kit" tutorial package, in which "Social Media for Tourism" is the major component (Tourism Queensland, 2012). The Slovenian Tourist Board established an online presence which included successful initiatives such as a series of *Facebook* Campaigns for key markets, and a joint social media platform named DiscoverSlovenia (STB, 2012). Crofton and Parker (2012) provided preliminary measurable evidence that adopting social media as marketing tools may have significantly contributed to tourism in Atlantic Canada by increasing local tourist numbers and consumption. There are differences between different countries in using social media in tourism. For example, according to Milwood (2013), while the United States' DMOs in recent years have begun to introduce various social media tools to their websites, Swiss DMOs appear to have been more cautious as they implemented comparatively fewer social media tools.

Social media allows tourism practitioners to provide customised information for the individual tourist. There is a great opportunity to deliver to travellers' customised information that addresses personal needs and preferences and which could build a base towards an Open Global Destination Marketing System (OGDMS) as a solution to destination marketing challenges (Matloka & Buhalis, 2010). Valls, Ouro, Freund, and Andrade (2013) suggested that the application of social media might provide a new online marketing strategy for tourism firms which aims not so much at sales support, but focuses more upon exploiting a new interactive relationship with users and consumers in general. Social media establishes a new relationship between companies and users, which could generate sales by simplifying the value chain (Valls et al., 2013), also might be counterproductive in building customers' loyalty (Senders et al., 2013).

The integration of social media with more traditional forms of online marketing, along with cooperative promotional initiatives, contributes to an improved destination management partnership (Bilbao & Herrero, 2009; Tham, 2013). The most prevalent trends in partnership activity have emerged primarily in two areas: a shift of offline activities to online, and the creation of new opportunities through innovative and affordable online media (Ružić & Biloš, 2010). These can respond to changes in the way tourists interact with DMOs with Internet development (Buhalis, 2008). Social media enhances the business websites' popularity. In addition, cases in Italy (Milano, Baggio, & Piattelli, 2011) suggested that online social networks (OSNs) like *Facebook* and *Twitter* have positive impacts on tourism website views. The websites referred to by OSNs received more visits in total.

Researchers do notice the differences in using social media in tourism marketing between small–medium enterprises and large companies (e.g. Hardesty, 2011; Pesonen, 2011). This is partly because smaller companies normally have fewer activities than do larger companies. However, whether or not there exists some correlation between business scale and success in using social media, or between numbers of tourist activities events and success in using social media, remains unclear.

There are some challenges for DMOs using social media, such as the conflicting relationship between corporate and social media cultures, the challenges innovative communication tools present for traditional management structures, poor levels of formalization and the lack of a knowledge base, which results in ad-hoc decision making (Munar, 2012). The challenges derived from the growing importance of social media in the online tourism domain are also faced by the traditional providers of travel-related information (Xiang & Gretzel, 2010). National Tourism Organisations (NTOs) haven't yet fully taken advantage of social media in tourism management (Dwivedi, Yadav, & Venkatesh, 2011; Stankov, Lazić, & Dragičević, 2010). Internationally about half of the NTOs do not have an official presence on *Facebook*. Besides the insignificant *Facebook* presence, NTOs do not use all the advantages that are offered by user-generated content (Stankov et al., 2010).

#### 4.4. Social media and crisis management in tourism

The role of social media in crisis communications is an embryonic area of research in tourism. There is limited but emerging corpus of research into the use of social media for crisis management, especially based on some recent cases such as the Deep Water Horizon Oil Spill in the Gulf of Mexico in 2010, which caused major disruptions to the region's peak tourism season (Pennington-Gray, London, Cahyanto, & Klages, 2011). Some researchers argued that, in some countries, the drivers of social media use were actually the risk perceptions associated with crime, disease, health-related issues, physical equipment failures, weather, cultural barriers, and political crises. When controlling for nationality, as well as the use of a smart phone during past travel (Schroeder, 2013). Sigala (2011) identified cases that showed that both tourism suppliers/organizations and tourists used and were affected by social media use in crisis management in tourism. It has even been suggested that tourism organizations should exploit the inbound and outbound communication, networking, and collaboration capabilities of social media for incorporating several other stakeholders into their crisis management strategies and activities (Pennington-Gray et al., 2011; Sigala, 2011). Other research studies have focussed upon the impacts of social media in reputation management (Horster & Gottschalk, 2012) and brand management (Barreda, Nusair, Bilgihan, & Okumus, 2013; Barwise & Meehan, 2010; Hede & Kellett, 2012).

#### 4.5. Impacts on tourism culture and knowledge

Social media is changing the tourism culture. Paris (2011, 2012a, 2012b) has concentrated on backpackers using social media, and even coined a new word "flashpacker" to describe a backpacker who relies heavily upon social media in his/her entire travel process including before, during and after travel. He suggested that social media usage has tended to contribute to the formation of a new tourism culture, and the continuing convergence of physical travel with information and communication technologies (Paris, 2012a). Common themes emerged from social media research, such as the conceptualisation of connection and disconnection, the impact of technologies on the traditional physical spaces of backpackers' social interaction, and the increasing fluidity between 'tourist' and 'non-tourist' experiences (Paris, 2012b). The environment of the tourism is going to change permanently through the influence of the social web on media landscapes, media consumption and the construction of tourism imaginations (Amersdorffer, Bauhuber, & Oellrich, 2012).

Social media use can also contribute to tourism knowledge creation. Chalkiti and Sigala (2008) revealed that because of the knowledge creation capability and affordability of online networking platforms, online networking positively contributes to information sharing, knowledge creation and idea generation capabilities of peer-to-peer virtual communities. Social media and online information including UGC would affect valuation and assessment systems, e.g. the ranking system of tourism industry participants such as hotels (Ghose, Ipeirotis, & Li, 2012) and the recommender system (Bustos, Lopez, Julian, & Rebollo, 2009; Fenza, Fischetti, Furno, & Loia, 2011). Social media has become a research tool conducting academic studies of tourism and hospitality. In particular engaging research targets and collecting data through social media protocols of tourism business websites and online travel communities have provided new tourism research opportunities (Fjelstul, Wang, & Xu, 2012; Illum, Ivanov, & Liang, 2010). Using social media in tourism education is also an emerging topic, based on the fact that students are one of the main users of social media, particularly of Facebook (Zehrer & Grabmüller, 2012). However, there have been some challenges, such as intellectual property and data quality control for the development and dissemination of such social-media-sources-involved research (Liburd, 2012).

#### 4.6. Issues in social media use in tourism

From the perspective of technology, some issues associated with the innovation potential of social media platforms have been raised. As for any other media, language is obviously a constraint on direct information sharing between social media users. In an English-dominated world, tourists and tourism practitioners from non-English language countries are at a disadvantage in the use of social media in either international travel planning or international marketing (Hsu, 2012). Multiple language platforms or websites for tourism participants might be beneficial for both supply and demand. On the other hand, current product search engines fail to effectively leverage information created across diverse social media platforms. This requires research on how to design and innovate in IT or website design, to adapt data management to evolving social media development and to share information across different media sources (Ghose et al., 2012).

From the perspective of management of social media use in tourism, there are some downside risks in using social media for either travel planning and tourism management. Due to a huge UGC published, social media can be a powerful 'word-of-mouth' source which can be a source of negative influence from dissatisfied customers. Therefore, the tourism industry today is faced with the possibility that social media, if not managed properly, may have not only positive impacts but also negative consequences (Hede & Kellett, 2012; Thevenot, 2007). On the other hand, the trustworthiness of UGC has concerned many researchers (e.g. Bray et al., 2006; Burgess et al., 2011; Chung & Buhalis, 2008; Fotis et al., 2012; Munar & Jacobsen, 2013; Tham, 2013), which has also been an important issue for social media use in tourism.

### 5. Discussion and conclusion

The use of Internet and other information communication technologies is leading to a new era for the global economy. Social media continues to grow and increasingly influence many social and economic aspects of the tourism and hospitality industry. Social media is fundamentally changing the way travellers and tourists search, find, read and trust, as well as collaboratively produce information about tourism suppliers and tourism destinations. Social media is also challenging existing customer service, marketing and promotional processes throughout the tourism sector, and providing new ways for tourism organisations to reengineer and implement their business models and operations, such as new services development, marketing, networking and knowledge management.

The research into social media in tourism has been increasingly broadening and deepening its interests. At the early stage, the research focused mainly on general discussion about social media's impacts on the tourism industry, in particular on tourist businesses and practitioners (e.g. Dwivedi et al., 2007; Grant-Braham, 2007; Thevenot, 2007). Since then the research has already touched most aspects of tourism, such as tourism demands, supply and marketing. The role and use of social media in tourists' travel planning, tourist destination management and tourism marketing have been widely analysed. Consumer-centric studies generally focused on the use and impact of social media in the research phase of the travellers' travel planning process, although there has been some discussion of traveller's behaviours. Supplier-related studies have concentrated closely on marketing and management, as indicated by D. Leung et al. (2013).

This review provides an overall picture of the researching of social media use in tourism, and shows how tourists and practitioners use social media in tourism participation. It suggests that in recent years, all major publication sources have published related researches contributed by a large number of researchers around the world. Although the research of social media in tourism has been increasingly broadening and deepening its interests, research on social media in tourism is still in its infancy. Notwithstanding the exponential growth of social media used in tourism, related studies seem to lag the phenomenon, either in regard to the number of publications, the broadness of related research topics, or the coverage of research regions.

Mill and Morrison (2009) created a tourism system model, which included four major, interrelated components: destination, marketing, demand, and travel. Leiper (2004, p44) added an emphasis on people's perspectives of the tourism system, indicating that "Tourism comprises the ideas and opinions people hold which share their decisions about going on trips, about where to go and where not to go and what to do or not to do about how to relate other tourists, locals and service personnel." Moreover, many studies suggested that the local community associated with the tourist destination is one important part of the tourism system, especially with regard to tourism impacts (e.g. Zeng, 2008). Within this systematic framework we can identify obvious gaps in the current research literature, in particular in regard to social media's implication for and impacts on travel behaviours during the trip, the local community's social and cultural aspects, and the different impacts of social media between social media users and non-users.

The tourism industry is primed to take advantage of social media outlets, as the industry has long relied largely on destination reputation, consumer opinion, spread of information, and positive word-of-mouth advertising. However, different countries and businesses have different realities regarding the social media used for tourism management. On one hand, the importance of online marketing has not been fully recognised in tourism management. It is estimated that only 1.55% of the total destination media expenditure was spent on Internet advertising in 2008 (Nielsen, 2009). In 2010, only 28% of travel agencies in the Asia-Pacific region were using social media (Abacus, 2010). On the other hand, the tourism industry is facing challenges in managing future incorporation of social media, such as in developing a clear and measurable strategy, demonstrating a viable return of investment and integrating social media into business processes (Gonzalo, 2012).

There has been a debate whether or not UGC can be trusted. While most researches confirmed its trustworthiness, several studies were sceptical, proposing caveats such as: that trusting such electronic word of mouth relies on source-receiver relationships, channel variety and presentation of contents, opportunities for information solicitation, message retention capabilities, and content provider motivations for disclosure (Tham, 2013). We noticed that extant researches discussed the trustworthiness of UGC mainly from tourist perspectives. More focus is needed on the use and value of UGC for informing future tourism enterprise management strategic perspectives. Businesses would benefit if they used social media in relationship management and improvement of products and services based on UGC. In this regard,

more concerns and assessment of the impacts and consequences of UGC on destination management and brand building are important and necessary.

Social media's presence in tourism is influential, especially on information search and share and the way tourists and tourism businesses participate in tourism. However, little research provided solid evidence to prove its direct contribution to product distribution and/or tourist sales. In this regard, there is no surprise in the argument that the impact of social media on tourism management might be less important than has been thought (Eyefortravel, 2011).

There have been few quantitative studies on the measurable impact of social media in tourism, compared with most of current studies focusing on qualitative explorations. For example, claims that social media play an important role in holiday planning and booking are always supported by the increase in the number of visits to a tourism website (Lu, 2012; Milano et al., 2011). This approach lacks solid evidence – derived from econometric analysis – to demonstrate a positive economic contribution of social media to the tourism industry, such as by boosting the number and length of visits, as well as visitor satisfaction and the number of return visits.

Similarly, while the marketing potential of social media has been widely studied, there is a lack of research looking at the effectiveness of social media used for marketing and management. Generally, social media has been discussed as a strategy alone, thus always failing to find out the reasons as to why social media did not increase direct visitation. Although in some cases, the increase in website visitation most likely did lead to an increase in destination visitation (e.g. Crofton & Parker, 2012), we must be conscious that this is not always the case. An example is Queensland Tourism's 2008 "Best Job in the World" campaign. This campaign attracted to its website over 7 million visitors and 200,000 new visitors in just a few weeks. However, it could not prevent a drop by 8% in the number of international holidaymakers travelling to Queensland in the 2008–09 financial year (Schneiganz, 2009). Although many reasons behind this result were proposed, an imperfect integration of multiple components of marketing strategy was believed to be the key issue. It taught us to use social media as part of integrated marketing strategy. This might also suggest that social media marketing and promotion need targeting specific niche tourist groups rather than general social media users. This is a further call for the customised information-based social media tourism marketing strategy as discussed by Matloka and Buhalis (2010). Integration of social media into a comprehensive marketing strategy for each destination is the probable best strategy.

While case studies focusing on qualitative discussion of the impact of social media in tourism are still needed, it is critical to encourage comprehensive investigation into the influence and impact of social media on all aspects of the tourism industry, and to demonstrate the economic contribution of social media to the industry. Future research will have to provide solid evidence to demonstrate the impacts of social media on a range of tourism components, such as tourist numbers, travel patterns, spending behaviours, stakeholder' perspectives, destination images, and economic return of investment in social media usage of tourism industry. More economic studies need to be encouraged. Notably, almost all current studies employ a micro-approach, focusing only on particular aspects of the issue, such as the social media type, its specific application and at travel planning or decision-making process stages (Fotis, 2012). There is a need for a comprehensive macro-approach to explore the overall impact and role of social media, focusing equally on each stage of the travel planning process, and attempting to cover all stages of the decision making process.

### 5.1. Limitations of this research

This review did not include social media sources in the literature, such as *blogs*, *micro-blogs*, *Facebook*, and *Twitter*. Thus, some useful discussions and observations, especially from tourists and tourist

businesses, were excluded. The dilemma here is that while the discussion of social media and its application in tourism is not always published in academic journals and books but mostly on social media websites and/or online travel communities, although the publication volume is very large, the online discussion always provides only dot points or specific cases, rather than logically structured academic arguments. How to properly utilise this online information in research remains as an issue to be addressed. Another limitation of this research is that only literature in English was collected and analysed. A further review on non-English research literature would be helpful to fully understand the perspectives from non-English speaking academics on social media in tourism.

### 5.2. Recommendations for future research

Research into social media in tourism might find new interests in four main directions: community engagement, comprehensive marketing strategies, differentiated destination management, and the legal and ethical issues arising from using social media in tourism. Social media in tourism research will have to deal with the issues associated with local communities such as socio-economic and cultural impacts (either positive or negative) of social media on local residents.

Another important direction, from a tourist practitioners' perspective, would be an assessment of social media as a part of comprehensive marketing strategy. Many practitioners have their social media websites and allow their customers to create UGC; however, practitioners do not interact enough with customers through these platforms. The e-WOM contributes significantly to the reputation of tourist destinations and practitioners, and the e-WOM will spread over the entire travel cycle (before–during–after travel). Therefore, the entire travel cycle management is becoming more and more important. It would be helpful if practitioners timely attend and feedback on UGC, in terms of either building tourist trust and brand loyalty (for return visitation), or spreading more positive messages (attracting potential tourists). A tailor-made social media marketing approach targeting specific market segments would be critical to attract potential tourists, not only to the social media websites but also eventually to visit the destinations. Giving its mobility and facility for instant interaction, social media can be expected to play a more important role in tourism destination management, particularly in crisis management and relationship management.

Differences in destinations and business scales of social media use in and impacts on tourism may suggest that future research could delve deeper into some special cases, such as remote/isolated tourist destinations, where social media might provide an advantage in tourist marketing and destination management, as other conventional management tools may have limited applicability. Thus, research in developing countries may provide productive research environments. Beyond the trustworthiness and credibility of information provided and created, related legal and ethic issues will be raised by the exponential growth of social media use in tourism. This points to another direction for academic research.

Regarding methodology, quantitative analysis needs to be encouraged to explore the measurable impacts of social media on tourism development. From the perspective of research methodology, unconventional publication sources, social media sources particularly in this case, must be strategically included for research data collection and analysis.

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