Exploring the Influence of User-Generated Content Factors on the Behavioral Intentions of Travel Consumers

Guopeng Yu
Institute for Advanced Management Systems Research
Åbo Akademi University
Turku, Finland
Email: Guopeng.Yu@abo.fi

Christer Carlsson
Institute for Advanced Management Systems Research
Åbo Akademi University
Turku, Finland
Email: Christer.Carlsson@abo.fi

Deqiang Zou
Department of Marketing, School of Management
Fudan University
Shanghai, China
Email: deqiang_zou@fudan.edu.cn

Abstract

Social media have been deemed as more and more critical to modern travel consumers. These consumers often regard social media as trustworthy source that can lower the perceived risk and uncertainty throughout their travel. Though previous studies revealed that travel consumers’ participation in social media could be explained by their functional, social-psychological and hedonic needs, the factors that impact their behavioral intentions, such as purchase intention, WOM intention, and attitudes of destination brands have not been well studied. By conducting a two-phase study on Chinese travel consumers (n_posts=65; n_ratings=1668), we found that both the UGC features (credibility and interestingness) and the social media engagement of travel consumers (comment, retweet, like) can impact their behavioral intentions. In addition, compared to the credibility of a post, the interestingness could more positively influence the social media engagement of travel consumers. Our study gives a better understanding of connections between social media and the travel consumers’ behavioral intentions.

Keywords

social media, User-generated content (UGC), social media engagement, travel consumers, behavioral intentions

INTRODUCTION

Social media provide an unequaled platform for travel consumers to share their experiences and opinions online in the form of text, photographs, and videos through consumer reviews sites, social networking sites, blogs, and media sharing sites, among others. By and large, the content created by social media users is generally defined as user-generated content (UGC) or consumer-generated media (CGM) (Ayeh, Au, et al. 2013a; Xiang and Gretzel 2010). This implies that, in all social media activities, the users are the central point being not only the
consumers, but also the contributors of such content and simultaneously acting as producers as well as the consumers of the content on the Internet (Arrigara and Levina 2008).

Existing studies have established that social media play a critical role as facilitating services for consumers in many aspects of their travel. For instance, because travel products are intangible and cannot be evaluated beforehand, travel consumers tend to rely on social media as an experienced source to lower the perceived risk and uncertainty (Gretzel and Yoo 2008); social media impact travel consumers’ planning behavior as they offer information that influences their booking plans (Ayeh, Au, et al. 2013b; Cox et al. 2009); social media are essential to travel consumers as they decide destinations, accommodations and activities for their travel; therefore social media will affect their travel and purchase decision making process (Gretzel and Yoo 2008); social media are also considered to support consumers in their pre-travel phase (e.g. information search) and post-travel phase (e.g. share experiences, review hotels and destinations, and post photos and videos from the trips) (Chung and Buhalis, 2008). In addition, as social media can work as electronic word-of-mouth (eWOM) marketing, in which any consumer who has an opinion about a product or service may share his/her views and beliefs with other people, other travel consumers could be better informed as a result (Ahuja et al. 2007; Burgess et al. 2009).

In addition, though studies (e.g. Gretzel and Yoo 2008; Wang and Fesenmaier 2004; Chung and Buhalis 2008) found that travel consumers’ participation in social media is associated with their functional, social-psychological and hedonic needs, what factors influence the travel consumers’ behavioral intentions, such as purchase intention, WOM intention, and attitudes of destination brands have not been well studied. To find these factors, we carried out a two-phase study. In the study, we first invited 65 travel consumers (39 Chinese student and 26 Chinese adult travel consumers) to generate travel-related posts about one of the most impressive travel experiences they have had during the past 12 months; and then we asked another 278 Chinese consumers to rate these posts.

Our study attempts to enrich previous findings by contributing to an understanding of the factors in social media that influence the travel consumers’ behavior intentions. It also aims to contribute to our understanding of consumers’ purchase intention, WOM intention, and the impressions of destination brands. The paper proceeds as follows. In the second section, it briefly reviews the literature on UGC features, social media engagement and behavioral intentions of interest, and develops hypotheses accordingly. In the third section, it describes our methods. In the fourth and fifth section, it presents results, and discussion and conclusion respectively.

BACKGROUND AND RESEARCH HYPOTHESES

UGC Features, and Travel Consumers’ Social Media Engagement

Generally speaking, user-generated content (UGC) can be individually or collaboratively created, modified, shared and consumed, and it is deemed as the sum of all means by which consumers exploit social media (Kaplan and Haenlein 2010). Modern consumers appreciate UGC as the manifestation of individual travel experience (Law and Cheung 2010), which includes unique insights from their close friends, family members, co-workers, or even a certain stranger locates around the world, who used a particular tourism product, visited a certain destination, or patronized a property (Pan et al. 2007). Additionally, UGC takes on many forms in social media, from Twitter tweets, Facebook status updates, videos published on YouTube, to consumer-produced reviews and advertisements, and etc. (Smith et al. 2012). In this paper, we laid stress on travel consumers’ posts. The travel-related posts published on social media usually comprise of general depicts on destinations, activities,
foods, overall impression of the attractions, and etc. Therefore, they can influence the images of tourism services/products in the mind of potential travelers, who sometimes trust amateur reviews more than professional guides that published by tourism service providers (Akehurst 2009; Mack et al. 2008).

As UGC is crucial to modern travel consumers, we start to question what features that UGC holds to attract consumers to engage in social media. In this paper, we propose that credibility and interestingness are two of the essential features that influential UGC (posts) holds, and the reasons of proposing so can be explained as follows: first, many consumers tend to be cynical about the information that purposefully attempts to promote the interests of the generators of that information. Compared to the service providers, these travel consumers would rather rely on travel-related content that posted by the fellow consumers while evaluating travel products/services, as noncommercial information is perceived to be more credible (Ayeh et al. 2013b; Litvin et al. 2008; Senecal and Nantel 2004). Hence, credibility sits in the subjective nature of UGC. In a survey done by Nielsen (2012), after recommendations from friends and family, consumers’ reviews in social media are the second most-trusted resource of the brand information. Moreover, in the process of information influence, credibility has been found significantly changing a recipient’s opinion in the direction advocated by the communicator when the material was built on highly credible source (Hovland et al. 1953). Hence, the influential/popular UGC must hold the feature, credibility. Second, people tend to make choices based on popularity. In a situation that other information is absent, most people would rather stand in a queue at a crowded restaurant than try out an empty one. The attractiveness of popularity has been found significantly relying on the belief that the popularity implies the quality of product or interestingness of information (Ung 2011). In social media, information and products are often ranked according to the metrics such as the quantity of views, downloads or purchases. The aim of arranging so is to facilitate users to find out what is the most interesting or relevant of all. From the travel consumers’ perspectives, they prefer to engage in activities that they find interesting (Burgess et al. 2009). Hence, the influential/popular UGC must hold the feature, interestingness.

On the other hand, the exploitable functionalities of social media allow travel consumers to facilitate networks to engage in synchronous chat and in asynchronous photo-sharing at the same time. Consumers will achieve massive reach in an instant and their digital content can be stored and replicated (Munar and Jacobsen 2013). To encourage the users’ engagement, most of social media come along with the functions of ‘comment’, ‘like’ and ‘forward post (retweet)’ that allow users to convey their opinions or ratings towards the content. In general, ‘comment’ represents discussion, conversation, and interaction among multiple parities; ‘retweet’ means publicly agreeing with someone or validating his/her thoughts, or an act of friendship and loyalty; and ‘like’ means appreciating and supporting. Hence, the activeness of the consumers’ social media engagement can be easily interpreted, as the more ‘comments’, ‘likes’, and ‘retweets’ mean the more travel consumers being involved in social media. In other words, travel consumers’ social media engagement can be seen from how much the consumers would like to offer ‘like’, ‘comment’ and/or ‘retweet’ UGC, and more popular and influential UGC will attract more consumers to engage in social media.

Hypothesis 1: The UGC features (credibility and interestingness) positively affect travel consumers’ social media engagement (comment, like, and retweet)

**Travel Consumers’ Purchase Intention, WOM intention, and Brand Attitudes in Social Media**

*Purchase intention.* An early survey done by Channel Advisors (2010) indicates that, of the all consumers they studied, 92% of them reported that they read product reviews published by other consumers, and 83% of all
holiday shoppers were influenced by the reviews. Studies done by Floyd et al. (2014) and Ye et al. (2011) argued that potential consumers prefer to select a product that had not been in their original consideration set. This simply due to the subjectivity and polarity of the ratings in the reviews have a significant influence on online sales of products; and certain types of online reviews reduce the cognitive load of a viewer, accordingly generate higher sales (Ghose and Ipeirotis 2006). Investigative efforts made by Dickinger and Mazanec (2008) also imply that recommendations of friends and online reviews from strangers are the most critical factors that impact tourists' online hotel booking. Indeed, consumers tend to deem social media users who posted UGC as trustworthy due to they had ‘nothing at stake’ (Hyuk Jun Cheong and Morrison 2008), while the interestingness of UGC will draw consumers’ attentions to notice the travel products/services.

Hypothesis 2.1: The UGC features (credibility and interestingness) positively impact the travel consumers’ purchase intention.

WOM intention. In social media, WOM occurs when consumers generate their own information on the Internet (also known as eWOM) to share their experiences and views on the products/services they have purchased. These UGC provides not only information from the real users, but also act as WOM recommendations (Park et al., 2007). In fact, WOM was already recognized as influential in the tourism industry long time ago. In the typologies of tourists categorized by Cohen (1984), the ‘theory of allocentricity and pyschocentricity’ proposed by Plog (1974) and the ‘tourists area life cycle model’ proposed by Bulter (1980), those innovative and adventurous tourists are considered as the pioneers who discovered the new destinations and travel products, and also the ‘opinion leaders’ who would like to share experiences with the 'less brave' others (Litvin et al. 2008). In the study done by Wang and Fesenmaire (2004), most consumers in social media were found to appreciate social benefits, which implies that they hope to discuss their views or offer assistance to others (WOM intention). ‘WOM intention’ is also consider as one of the factors that can reflect the influence of UGC (Li-Shia Huang et al. 2008), and the interestingness of UGC could attract more consumers to disseminate and discuss the information.

Hypothesis 2.2: The UGC features (credibility and interestingness) positively impact the travel consumers’ WOM intention.

Attitudes of destination brands. The destination branding is the key factor that contributes to tourism service providers’ intense competitions (Go and Govers, 2000). The existence of a certain destination brand often depends on the image formation of the destination (Cai 2002). In addition, the image of the destination is the sum of beliefs, attitudes, and impressions owed by the travel consumers, and it is permeated by the social cultural and economic changes which can influence the consumers’ sensitiveness (Nadeau et al. 2008). As discussed earlier, UGC usually provides consumers with general descriptions about travel products/services. Hence, consumers’ attitudes toward destinations will be influenced (Volo 2010). Moreover, an exploratory study done by Chu and Kamal (2008) indicates that the highly credible UGC has significant effects on the consumers’ attitudes of brands, and the popular UGC will easily draw consumers’ attentions altering their opinions on a destination.

Hypothesis 2.3: The UGC features (credibility and interestingness) positively impact the travel consumers’ attitudes of destination brands.

At last, Huang's study (2010) indicates that the users' involvement of social media can affect their intention to purchase travel products as well. When consumers are particularly interested in a product, their personal association with the product grows closer. Further saying, social media users' involvement is likely to impact
their attitudes of brands, and highly involved consumers can form favorable impressions of brands more easily. Accordingly, they are more likely to inform their friends about what they believe.

Hypothesis 3.1: The travel consumers’ social media engagement (comment, like, and retweet) positively impacts their purchase intentions.

Hypothesis 3.2: The travel consumers’ social media engagement (comment, like, and retweet) positively impacts their WOM intentions.

Hypothesis 3.3: The travel consumers’ social media engagement (comment, like, and retweet) positively impacts their attitudes of destination brands

METHODS

To test our hypotheses, we conducted a two-phase study. It includes inviting one group of travel consumers to generate posts and another group of travel consumers to rate these posts based on their perceptions. We expected that, by obtaining travel consumers’ feelings towards the posts, we can find out what factors impact their behavioral intentions. The experiment was conducted between April and May 2014 in China.

To recruit participants, for the very start, we sent emails to 40 MBA students in Fundan University in China and 40 Chinese adult consumers who may or may not hold the equivalent education background but enjoy posting on social media. In the email, they were invited to kindly answer the questions, which related to their past travel experiences, on an online platform. In addition, each of them was told that he/she holds a chance to be rewarded a bottle of red wine on the condition that the content he/she generates is capable of acquiring the maxim ‘comments’, ‘likes’ or ‘retweets’ (only need to fit one criterion, randomly assigned by the system). A total of 65 participants offered answers. Among them, 39 are MBA students and the rest are Chinese adult consumers.

Additionally, with the purpose of acquiring real travel-related posts, we asked a series of questions to guide them. These questions include the name of the most impressive travel destination he/she traveled in the past 12 months; staying duration, if he/she is happy and satisfied with the travel; if the destination is good value for money; and how much he/she would like to recommend the destination to their friends. As the story unfolded, everyone was asked to generate a post based on this travel experience he/she had. They were told that the content later would be published on some Chinese social media websites (e.g. WeChat, Microblogs, travel communities/blogs).

To observe different forms of social media engagement and enhance the influence of the posts, these 65 participants were randomly divided into three groups: participants who aim to obtain a maximum of ‘retweets’ (19); participants who aim to obtain a maximum of ‘comments’ (22); and participants who aim to obtain a maximum of ‘likes’ (24).

Another 300 Chinese consumers were invited by email to take part in Phase 2, and we got 278 answers. With the aim of obtaining their peer ratings, they were informed that they would confront 6 real travel-related’ posts (from the first phase, randomly assigned), which depict some travel consumers’ very recent travel experiences. What they need to do is to offer their feelings by rating them according to the instructions. To obtain better results, series of items (see below) were taken account in our study.

<table>
<thead>
<tr>
<th>Items and scales of UGC peer rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>A tourist generated a post related to the place (same as presented in 2.1) as follows (⋯⋯⋯), do you think it is credible? (scale 0 = not credible at all, 100 = extremely credible)</td>
</tr>
</tbody>
</table>
Do you think the post (presented in 2.2), which depicts the travel experiences and feelings, is interesting? (scale 0 = not interesting at all, 100 = extremely interesting)

If you notice this post (presented in 2.2) appearing on social media applications (e.g. Microblogs, WeChat, travel communities/blogs), what is the likelihood that you will retweet it? (scale 0 = totally no, 100 = very much )

If you notice this post (presented in 2.2) appearing on social media applications (e.g. Microblogs, WeChat, travel communities/blogs), what is the likelihood that you will comment on it? (scale 0 = totally no, 100 = very much )

If you notice this post (presented in 2.2) appearing on social media applications (e.g. Microblogs, WeChat, travel communities/blogs), what is the likelihood that you will give it a ‘like’? (scale 0 = totally no, 100 = very much )

If you have no idea where you intend to travel, will you seriously take this place (same as presented in 2.1) as your alternative? (scale 0 = definitely not, 100 = definitely will)

If one of your friends is planning a travel, yet he/she has no idea where to be, will you recommend he/she go to the place (same as presented in 2.1)? (scale 0 = definitely not, 100 = definitely will)

The place (same as presented in 2.1) is an ideal travel destination (scale 1= totally disagree, 7 = totally agree).

* The study adopts a 0~100 rather than 0~10 scale: 1) we can better observe the variation across the individuals under the different treatments; 2) the 'likelihood' in the study resembles the 'probability'. In real practice, people tend to use percentage to express 'probability'. Hence, scale 0~100 is better than 0~10.

Figure 1: Items asked in the Phase 2and their scales for UGC peer rating

RESULTS

In Phase 1, the staying period of each of the 65 participants varies from minimum half day to maximum 40 days. The purpose of their travel, as depicted in their posts, can be categorized into one of the headings of recreation, holiday, heath, study, religion and sport, business, family, mission, or meeting, and they were in the mood of seeking the rational goal of educational improvement, the moral path of spiritual renewal, the scientific and/or imperialistic exploration of unknown territories. Hence, logically, they are entitled as ‘tourists’ (Goeldner and Ritchie, 2009). In addition, most of the participants consider the destination they traveled were good value for money ($M = 85.82$); most of them showed highly degree of happiness ($M = 87.09$) and satisfaction ($M = 87.60$) with the travel; and most of them are very willingly ($M = 80.32$) to recommend the destinations to their friends.

In Phase 2, as each of the 278 participants were kindly asked to rate 6 posts, we acquired 1668 sets of ratings on the very 65 posts. To test Hypotheses, the study utilizes the multiple linear regression model to find out the interaction effects of the variables.

The results of testing H.1 firstly show the fraction of the explained variance in 'likelihood of retweet' by the 'the post is credible' and 'the post is interesting' is 45%. However, the results of the IV (Independent Variable) 'the post is credible' presents negative values ($p > 0.05$), which indicates the credibility of a post cannot impact the consumers' likelihood to retweet’. On the other hand, the results of IV 'the post is interesting' ($\beta = 0.66, p = 0.000$)
implies the fact the interestingness of the post positively impact the consumers’ likelihood of retweet. Second, the fraction of the explained variance in 'likelihood of comment' by the 'the post is credible' and 'the post is interesting' is 45%. The regression coefficient B of the IV 'the post is credible' is 0.01 \( (p > 0.05) \). Therefore the credibility of post cannot affect the consumers’ likelihood to comment. Conversely, the results \( (\beta = 0.66, \ p = 0.000) \) indicate the interestingness of post positively influence the consumers’ likelihood to comment. Third, The fraction of the explained variance in 'likelihood of comment' by the 'the post is credible' and 'the post is interesting' is 53%. The results of both IV 'the post is credible' \( (\beta = 0.078, \ p = 0.000) \) and IV 'the post is interesting' \( (\beta = 0.67, \ p = 0.000) \) show the fact that both interestingness and credibility of a post can positively influence consumers’ likelihood of ‘like’.

The results of testing H.2 indicate that UGC features positively impact consumers’ behavioral intentions. The fraction of the explained variance in 'purchase intention', 'WOM intention' and 'ideal brand' by the 'the post is credible' and 'the post is interesting' is 45%, 49%, and 23% respectively. In addition, firstly (H.2.1), the credibility of a post \( (\beta = 0.32, \ p = 0.00) \) and the interestingness of a post \( (\beta = 0.43, \ p = 0.000) \) can positively affect consumers’ purchase intentions that they will take the destinations depicted in the post as alternatives. Secondly (H.2.2), the credibility of a post \( (\beta = 0.29, \ p = 0.000) \) and the interestingness of a post \( (\beta = 0.49, \ p = 0.000) \) positively affect consumers’ WOM intentions that they will recommend the destination to other consumers. Lastly (H.2.3), the credibility of a post \( (\beta = 0.31, \ p = 0.000) \) and the interestingness of a post \( (\beta = 0.22, \ p = 0.000) \) positively impact consumers’ attitudes of destination brands that they will consider the recommended place as their idea travel destinations.

The results of testing H.3 present the fraction of the explained variance in 'purchase intention', 'WOM intention' and 'ideal brand' by the 'likelihood of retweet', 'the likelihood of comment' and 'likelihood of like' is 37%, 45%, and 17% respectively. On one hand, consumers’ social media engagement positively impact their purchase intention (H.3.1) and WOM intention (H.3.2) \( (p<0.005) \). However, though the results show the consumers' 'likelihood of like' has impact on their brand attitude \( (\beta = 0.32, \ p = 0.000) \), it appears that their 'likelihood of retweet' \( (p>0.05) \) and 'likelihood of comment' \( (p>0.05) \) cannot take effects (H.3.3).

<table>
<thead>
<tr>
<th>Table 1. Regression Results of the Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H.1</strong></td>
</tr>
<tr>
<td>DV: Likelihood of Retweet</td>
</tr>
<tr>
<td>The post is credible</td>
</tr>
<tr>
<td>The post is interesting</td>
</tr>
<tr>
<td>DV: Likelihood of Comment</td>
</tr>
<tr>
<td>The post is credible</td>
</tr>
<tr>
<td>The post is interesting</td>
</tr>
<tr>
<td>DV: Likelihood of Like</td>
</tr>
<tr>
<td>The post is credible</td>
</tr>
<tr>
<td>The post is interesting</td>
</tr>
<tr>
<td><strong>H.2</strong></td>
</tr>
<tr>
<td>DV: Likelihood of Retweet</td>
</tr>
<tr>
<td>The post is credible</td>
</tr>
<tr>
<td>The post is interesting</td>
</tr>
<tr>
<td>DV: Likelihood of Comment</td>
</tr>
<tr>
<td>The post is credible</td>
</tr>
<tr>
<td>The post is interesting</td>
</tr>
<tr>
<td>DV: Likelihood of Like</td>
</tr>
<tr>
<td>The post is credible</td>
</tr>
<tr>
<td>The post is interesting</td>
</tr>
</tbody>
</table>
DISCUSSION AND CONCLUSION

Social media, which empower consumers and allow two-way information communications in travel and tourism, have produced numerous UGC on hotels, travel destinations, and travel services (Sigala 2009). Our study explores two of the UGC features (credibility and interestingness) and social media engagement (comment, like, retweet) finding out that all of them have different impacts on the travel consumers’ behavioral intentions, such as, purchase intention, WOM intention and their attitudes of destination brand. The results imply that, among all the behavioral intentions examined in our study, travel consumers’ WOM intention would be influenced the most by the interestingness and credibility of UGC ($R^2 = 0.49$) and by the social media engagement (comment, retweet, like) ($R^2 = 0.45$). In addition, compared to the credibility of travel-related posts, travel consumers’ social media engagement (comment, retweet, like) is more influenced by the posts’ interestingness. This finding is surprisingly interesting, as it is different from some studies (e.g. Ayeh et al. 2013) which state that credibility is
the travel consumers’ major concern while they seek information in social media.

Our study has some limitations. First, as this is our first step towards understanding the UGC factors that impact travel consumers’ behavioral intention, we restrained the features of UGC to two of the essential ones and behavioral intentions to purchase intention, WOM intention, and attitudes of destination brands. It is hoped that future study can explore more features of UGC and other behavioral intentions. Second, we did not specify the social media where the posts were exactly published, and this is good or bad. As discussed at the very beginning, the travel-related content is not only posted on travel-centered UGC sites but other social media sites (Xiang and Gretzel 2010). However, study done by Burgess et al. (2011) indicate that greater trust of UGC is placed on specific travel websites than when they are on a more generic social networking site. Third, both Chinese MBA student and Chinese adult travel consumers, who may or may not hold the equivalent education background, generated the posts in this study. The arrangement was based on the fact that social media allow anyone (above certain age) to engage in and be the content generator. Besides, travelling is such an activity that everyone can perform. Therefore, it results in an ambiguous situation that it is hard to tell if the most impactful posts are related to the generators’ education background. Hence, a mix arrangement of such will enhance the veracity in real practice. However, we did not intend to imply that the demographics in social media study are less important. Additionally, whether the groups we tested could represent all Chinese travel consumers needs to be further discussed.

At last, in social media context, tourists who publish posts can be deemed as WOM senders, and other travel consumers who appreciate these posts are WOM receivers. WOM senders will influence customers’ involvement, consumers’ decision-making, and in consequence products’ sale (Hennig-Thurau et al. 2004). In real practice, tourism service providers can incentivize tourists who generate posts to strengthen these UGC features in order to acquire more consumers and advertise their travel products and services. And this will be one of our future study directions.

REFERENCES


COPYRIGHT

[Guopeng Yu; Christer Carlsson; Deqiang Zou] © 2014. The authors assign to ACIS and educational and non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ACIS to publish this document in full in the Conference Papers and Proceedings. Those documents may be published on the World Wide Web, CD-ROM, in printed form, and on mirror sites on the World Wide Web. Any other usage is prohibited without the express permission of the authors.