eWOM & Referrals in Social Network Services

Abstract:

If a few decades ago the development of the Internet was instrumental in the interconnection between markets, nowadays the services provided by Web 2.0, such as social network sites (SNS) are the cutting edge. A proof of this trend is the exponential growth of social network users. The main objective of this work is to explore the mechanisms that promote the transmission and reception (WOM and referrals) of online opinions, in the context of the SNS, by buyers of travel services. The research includes some research lines: technology acceptance model (TAM), Social Identification Theory and Word-of-Mouth communication in virtual environment (eWOM). Based on these theories an explicative model has been proposed applying SEM analysis to a sample of SNS users' of tourist service buyers. The results support the majority of the hypotheses and some relevant practical and theoretical implications have been pointed out for tourist managers.

Keywords: Tourism, online social networks, TAM, Social Identification, e-WOM, Referrals.

1. Introduction

Even in an economic crisis environment, the feature that best defines the world nowadays is globalization. And it is here to stay. Globalization means markets, institutions, firms and consumers interrelations at a worldwide level (Elg and Johansson 2001). Although there is not only one factor that explains this, there is a consensus to emphasize the homogeneity of patterns of consumer behavior as one of the most important. This fact is likely motivated by the development of tourism and information technology (Ohmae, 1989). If in the last decade the Internet was the cornerstone of market interrelationships, nowadays Web 2.0 and social network services (SNS) are essential. The huge figures generated show these worldwide trends. In 2010, more than 935 million of international tourists were registered, according to the World Tourism Organization from the United Nations (UNWTO, 2011), and 2011 data promises to be even better. On the other hand, in 2010, the number of Internet users all around the world is over 2 billion people, 1.2 billion being in developing countries, according to the United Nations agency for information and communication technologies (ITU, 2010). If we only focus on SNS Facebook, the world´s leading social network has 750 million of active users (Facebook, 2011). These figures indicate that both processes are quite significant in our society.

There are strong relationships between tourism and new information technologies. Tourism is doubtless one of the economic sectors where the repercussion of advances in information and communications technology - especially the development and increasing penetration and use of the Internet - has been extensive. The internet and its most recent evolution in terms of interactivity or the Web 2.0, has had an innovative impact on all aspects of the tourism value chain. Such a change in the overall operating environment has resulted in a complete transformation of the conventional customer acquisition model. The traditional attention, interest, desire and action (AIDA) marketing model according to which consumers' acquisition went through the phases of AIDA (prior to purchase) has been substituted by a new model which recognizes the role of the internet in all the phases of the acquisition process: attention, interest, search, action and sharing (AISAS). When applied to the tourism sector, the last step has become particularly important (Carvão, 2010). Sharing holiday comments, diaries, tips or photos has become a frequent practice for a growing number of travelers. Though the percentage of travelers that share their experiences at a global level may be relatively small (many will do the same online but with their circle of friends only in social networks such as Facebook or Twitter), a much higher percentage of users do read such comments and take them into account when making holiday decisions.

In this way, new technologies have revived an old topic of marketing: word-of-mouth (WOM) communication. The development of the Internet and SNS causes users to share tips, reviews and recommendations in the new virtual environment, leading to an emerging type of communication called eWOM (Hsueh and Chen 2010). Previous tourism and marketing literature proved that WOM is one of the most effective ways of advertising, more than the mass media such as the radio or the television. Moreover, "eWOM" can overcome traditional limitations of WOM, such as the fact that WOM often involves private conversations and can be difficult to track (Hsueh and Chen 2010). It is interesting to analyze the relationship between SNS adoption and use with eWOM communication made or received by buyers of tourist services.

Although the first SNS appeared in 1997 it was not a worldwide phenomenon until 2006 (Boyd and Ellison, 2007). Because of its novelty, it is interesting to study the process of adoption and acceptance of this technology in the context of the buyers of tourist services. To do so, in the numerous investigations aimed at explaining the acceptance and use of new technologies, the value of the Technology Acceptance Model (TAM) has been repeatedly demonstrated (Davis, 1989; Davis et al., 1989; Bernadette, 1996; Harrison et al., 1997; Hu et al., 1999; Venkatesh and Davis, 2000; Venkatesh et al., 2003). TAM has also been applied successfully by different authors to explain many new technological developments, for

example, website usage (e.g., Bhattacherjee, 2000; Pavlou, 2002, 2003; Pavlou and Fygenson, 2004; Gefen et al., 2003; Sanchez and Rondan, 2005) or to explain the adoption of learning systems (Arenas et al., 2011). According to its previous successful applications, we think that TAM is an adequate tool to explain the use of SNS by tourism buyers.

However, we believe that given the social component that defines SNS, an explanation based on individual aspects provides a partial view of the phenomenon. In particular, the decision of using online social networking technologies represents a social phenomenon that depends to a great extent on the interactions among users and the use of social technologies. And, this is only possible when a group of individuals are willing to repeatedly use the technology together (Cheung and Lee, 2010). The inclusion of Social Identification Theory provides an explanation: people develop a sense of themselves from the groups to which they belong (Hogg and Terry, 2000) and a collective identity that contrasts with other circumstances in which the individual is unique and separate. This theory is an appropriate complement to TAM in the context of SNS (Casalo et al., 2010; Kwon and Wen, 2010).

In this work, several research lines converge in the context of the purchase of travel services. The first one includes the adoption of new SNS technology in online travel marketing issues or purchase behaviors, most literature focused on the Internet (Frias et al., 2008; Wu et al.,

2008), Webs (Law, Qi, and Leung, 2008; Nysveen and Lexhagen, 2001), or e-commerce (Oorni, 2003; Wu, 2004). Web 2.0, a developing and essential marketing channel in the tourism industry, remains less studied due to its novelty (Huang et al., 2010). This work is in line with others such as Casalo et al. (2010) or Kwon and Wen (2010). As a second major line of research, this paper addresses the word-of-mouth communication in the online context provided by the SNS. The topic of eWOM is discussed among buyers of travel services. The majority of works on this subject has used the point of view of post-purchase behavior (eg. Hui et al., 2007; Chi and Qu, 2008; Hutchinson et al., 2009; Huang et al., 2010). This work addresses the phenomenon of eWOM communication from a perspective more akin to technology and the social behavior of individuals. Some authors (Hennig-Thurau et al. 2010; Libai et al, 2010) have claimed the necessity of making research about eWOM and SNS in the service marketing context.

The main objective of this work is to explore the mechanisms that promote the transmission and reception (WOM and referrals) of online opinions, in the context of the SNS, by buyers of travel services. This general aim can be divided into three more specific objectives or sub-goals. As the first sub-objective, we address the process of acceptance of SNS technology by travel buyers. To do so, we have based ourselves on TAM models. Secondly, we analyze the social component involving participation in SNS, so we have adopted the theory of social

identification. Thirdly, we address eWOM communication. For this task, we distinguish two points of view. On the one hand, we study the willingness to broadcast eWOM communication, and on the other hand we analyze the relative importance of eWOM received.

To achieve the above objectives, this paper is structured as follows. It begins with a literature review of the main theoretical contributions related to these topics. This review provides a basis for developing a set of hypotheses that results in the research model proposed. To test the model proposed, PLS technique is used, a methodology for estimating structural equation modeling (SEM). The results section shows the appropriateness of scales of measurement used and the support received by each hypothesis. The work is completed by addressing the main findings, discussion and implications of the results; raising the main limitations of the study and proposing future research.

2. Literature review

In this section, we present the theoretical bases that support the research undertaken. First, we analyze previous contributions on Web 2.0 and SNS. Then, we address the social identity theory; third, we explain briefly the TAM literature in the context of social networks and

tourism. After this, the topic of WOM communication is pointed out. Finally, we address the

online purchase behavior of travel buyers.

2.1. Web 2.0 & Social Networks Services (SNS)

Web 2.0 media like online photo albums, personal blogs, specialist travel blogs and social

network sites (SNS), have transformed social interaction from family and friends to one that

is in the public domain (Boyd, 2008; Miller and Edwards, 2007; Qian and Scott, 2007; Lo et

al., 2011). In fact, the most radical change brought about by Web 2.0 technologies is the

introduction of networked media, a platform which facilitates the aggregation of information

from a huge array of disparate sources (Goodman, 2007), that enables an unlimited number

of individuals to potentially join virtual networks and gain valuable market intelligence about

places visited (Lo et al., 2011). Importantly, people who post images online also tend to

search for travel information from others who engage in similar activities (Akehurst, 2009).

This development has had and will continue to have a dramatic impact on destination image

development. Marketing and promotion for online media further extend the reach of the

information search process to other key informants who have visited the destination, but who

do not have any obligation to promote it (Pan et al., 2007). Indeed, many users now see this

type of information as more reliable, and unbiased than materials posted by some destination

marketing organizations or tourist firms (Mack et al., 2008; Zheng and Gretzel, 2010). The full impact of Web 2.0 is still being determined.

Within web 2.0 there are many tools: wikis, blogs and social networking services (SNS). All these new technologies are characterized by the ability of users to produce content collaboratively, whereas most of what exists on Web 1.0 is provider-generated (Ritzer and Jurgenson, 2010). SNS have been particularly successful, largely because the social networks already existed since the dawn of humanity. These new technologies make it possible for these networks to exceed the temporal and geographical limitations. The essence of an SNS site is a collection of user profiles where registered members can place information that they want to share with others. For the most part, users are involved in two kinds of activities on the site: either they create new content by editing their profiles (e.g., adding pictures, uploading music, writing blogs and messages), or they consume content that others create (e.g., looking at pictures, downloading music, reading blogs and messages). On most SNS sites, users can add other users to their networks of "friends". Usually, one user initiates the invitation, and the other user accepts or rejects it. When accepted, the two profiles become linked (Trusov et al., 2010). Bagozzi (2007) argued that "Much of human behavior is not best characterized by an individual acting in isolation (p.247)". In particular, the decision to use online social networking technologies represents a social phenomenon that largely depends

on the interactions among users and the use of social technologies can make sense only when

a group of individuals are willing to repeatedly use the technology together (Cheung and Lee,

2010).

2.2. Social Identity Theory

Social Identity Theory has been used in the field of tourism and technology, as Casalo et al.

(2010) explained. Prior research uses Social Identity Theory to explain how a person

identifies with others (Akkinen, 2005). Broadly speaking, this theory proposes that people

develop a sense of self from the groups to which they belong (Hogg and Terry, 2000) and a

collective identity that contrasts with other identities in which the individual is unique and

separate (Bhattacharya et al., 1995). A social identity thus implies that the person believes

that he or she belongs to a certain social group and that this membership has a significant

value (Hogg and Terry, 2000; Tajfel et al., 1971). As a result, a sense of unity among group

members is developed. Different from personal identity, social identity means the

individual's position in a social group (Viktor et al., 1973). Strong social identity is known as

an important variable for self-goal setting. Social identity helps those with low self-esteem

establish self-conception and also helps to avoid low goal-setting (Baumeister, 1993;

Brockner et al., 1998; Festinger, 1954). This implies that social identity may influence the

actual use of social network services (Kwon and Wen, 2010).

For example, a friend plans to use an instant messenger for doing group projects together. However, the use of an instant messenger for group projects depends on whether other friends are willing to use it. In addition, their usage experiences will create a norm for them to continuously use it for their other group projects. Thus, it would be more appropriate to examine the decision to use online social networks using the intentional social action perspective (Cheung and Lee, 2010).

2.3. Technology Acceptance Model

Technology Acceptance Model (TAM) is based on the Theory of Reasoned Action (TRA) originated by Fishbein's study (Fishbein and Ajzen, 1975) and Theory of Planned Behavior (TPB). TAM, initially proposed by Davis, Bagozzi, and Warshaw (1989), has been used extensively and successfully to explain the acceptance of new information technologies and related applications in services (Kim, Kim, and Shin, 2009; Falk et al. 2007). In just the past decade, TAM has helped predict Internet adoption (Moon and Kim, 2001), e- commerce acceptance (Gefen and Straub, 2000; Weijters et al, 2007) or, focusing on the travel sector, the use of information technology by hospitality organizations (Kim et al., 2008).

According to the Theory of Reasoned Action, humans are rational enough in their attitudes and subjective norms affect behavior intention, which in turn has a high correlation with actual behavior. Thus, TAM proposes that the adoption of a given system depends on: (1) the attitude toward using the system and (2) the perceived usefulness of using the system (Wu and Chen, 2005). In addition, attitude appears as a direct function of perceived usefulness and perceived ease of use, and perceived usefulness is also affected by perceived ease of use (Casaló et al., 2010). Perceived usefulness is a belief that the target information technology or system will help the user in performing his or her task. Perceived ease of use is a belief that it would be easy to acquire the knowledge for using the information technology or system. In the past three decades, TAM has had many references, which supports the model's validity and correctness (Adams, Nelson, and Todd, 1992). Then, there have been major expansions of the initial model, including intrinsic and extrinsic factors. The most popular developments have been TAM2 (Venkatesh and Davis, 2000) and TAM3 (Venkatesh and Bala, 2008).

In this paper, we focus on testing the social network service as novel systems by extending the conventional TAM with the new perceived constructs and external variables. The selected perceived and external variables are described in detail in Section 3.

2.4. Word-of-Mouth and referrals

In the marketing literature, word-of-mouth (WOM) is a widely studied topic, but nowadays it is particularly important for its application in Web 2.0 and online social networks (Trusov, et al. 2009). "eWOM" can overcome the traditional limitations of WOM, such as the fact that WOM often involves private conversations and can be difficult to track (Hsueh and Chen 2010)

Arndt (1967) was one of the earliest researchers digging into the influence of WOM on customer behavior. He characterized WOM as oral, person-to-person communication between a receiver and a communicator whom the receiver perceives as non-commercial, regarding a brand, product or service. Customers normally engage in WOM communications for multiple reasons, e.g., anxiety reduction, advice seeking, product involvement, and altruistic motives (Sundaram et al., 1998). Earlier research suggests that WOM is more effective than information from commercial sources (e.g., TV advertising) because it is perceived as being the most relatively unbiased source of information (Richins, 1983) for any product or service. WOM is still considered the most powerful form of communication (Kim and Cha, 2002) and is defined by Dick and Basu (1994) as "volitional post-purchase communications by consumers". Consequently, WOM communications take place when a customer has strong feelings toward an experience with a supplier, which may motivate him/her to tell other people of their experience (Werthner and Ricci, 2004). WOM has a

significant influence on consumers' decision to change the attitudes and behaviors of friends and relatives (Opermann, 2000). Therefore, WOM has been described as one of the important post-purchase behaviors (Harrison-Walker, 2001). WOM is even more important and influential in the services context because of their intangibility and, therefore, greater perceived risk (Casaló et al 2008). Furthermore, Garnefeld et al (2011) argues that recommending a service provider improves the current customers' loyalty to the provider and that positive WOM is not only effective for gaining but also for keeping customers.

In relation to WOM, communication is addressed from the communicator perspective. A referral or a recommendation represents one form of favorable WOM that is passed on by a customer about a certain product or service (Wheiler, 1987). Another question is the importance given by the receiver to the message received. The "desirability" of referrals is related to the benefits to the referrer (the party that takes the initiative) and the receiver of the referral (Rigopoulou et al., 2008).

The social network setting offers an appealing context in which to study WOM and referrals. The sites provide easy-to-use tools for current users to invite others to join the network. The electronic recording of these outbound referrals opens a new window into the effects of WOM (Trusov, et al. 2009). Though still a relatively new phenomenon, online social

networking sites have begun to attract the attention of marketing scholars. For example, Ansari et al., (2008) have developed an approach for modeling multiple relationships of different types among users of a social networking site. Dholakia et al., (2004) study two key group-level determinants of virtual community participation: group norms and social identity. Trusov et al., (2010) propose a model that enables managers to determine which users are likely to be influential and, therefore, important to the business for their role in attracting others to the site.

WOM recommendations are especially critical in tourism marketing because they are considered to be the most reliable, and thus are one of the most sought-after information sources for potential tourists (Nusair et al., 2011).

3. Hypotheses Formulation and Proposed Model

Consistent with TAM formulations, we adapt their proposed relationships to the context of SNS users that are service tourist buyers. TAM (Davis, 1989; Davis et al., 1989) have been well documented and widely accepted (e.g., Kim et al. 2008; Casalo et al. 2009). As has been explained above, the TAM basis is built on the relationship between the use of social

networks by buyers of travel services, if they perceive it is useful (PU) and easy to use (PEOU). We thus propose the following set of hypotheses:

H1: PU of tourist products' purchasers is positively related to their USE in adopting SNS.

H2: PEOU of tourist products' purchasers is positively related to their USE in adopting SNS.

H3: PEOU of tourist products' purchasers is positively related to their PU in adopting SNS.

Moreover, there are a significant number of studies that relate the theory of social identification and TAM (Casalo et al. 2009, Kwon and Wen, 2010). The main assumption of the social identity theory is that people are motivated to maintain and improve self image as a member of the group (Ely, 1994). Clément et al. (2001) found that communication support is needed for those with social identity who collaborate with each other. This implies that a SNS would be perceived as a useful tool for them if the tool is usable. Previous research found that social identity has a significant impact on attitude (Terry et al., 1997). Boyd and Ellison (2007) indicate that SNS provide an opportunity for users to articulate and make their social connections visible. Moreover, Song and Kim (2006) proposed social identity as a crucial determinant that affects intention to use SNS. Hence, we suggest that social identity (SI) in the social network service will positively influence perceived ease of use (PEOU), perceived usefulness (PU), and use of SNS (USE). We thus propose the following set of hypotheses:

H4: SI of tourist products' purchasers is positively related to their PU in adopting SNS.

H5: SI of tourist products' purchasers is positively related to their PEOU in adopting SNS.

H6: SI of tourist products' purchasers is positively related to their USE in adopting SNS.

Social identity (SI) brings about individual behaviors for the benefit of group members with the expectation of self-enhancement through a boost in self-esteem that is both personal and collective (Bagozzi and Lee, 2002). Social identity is an important indirect determinant of group behavior (Bagozzi and Dholakia, 2006). They proved that customer communities organized in small groups around a brand engender greater social identification, when compared to similar communities of customers organized more generally around the product category. In the case of virtual communities, WOM has two main functions related to social identity. Firstly, consumers may use WOM as a way to manage others' impressions of them. Secondly, WOM can be a means of expressing concern about others and helping virtual communities' members to make better choices (Ryu and Feick, 2007). Okazaki (2009) showed that, among other elements, social identity is an important antecedent affecting desire (individual-level driver) and social intention (group-level driver) to engage in eWOM. According to these ideas, we propose the following hypothesis:

H7: SI *of tourist products' purchasers is positively related to their WOM in adopting SNS.*

Consumer behavior within SNS, such as Facebook.com, represents a complex, multi-layered, iterative process that includes learning, alternative evaluation, and posting feedback, all of which focus on the sharing of diverse set information (Jane et al., 2007). And these virtual communities have very easy access to direct communication allowing consumers to post their experiences of products and services (Park and Feinberg, 2010). Therefore, it is easy to argue that SNS use is an antecedent to provide information about products and services, WOM, and receive recommendations (REF) about products and services. Consequently, we present the following hypotheses:

H8: USE *of tourist products' purchasers is positively related to their WOM in adopting SNS.*

H9: USE *of tourist products' purchasers is positively related to their REF in adopting SNS.*

Finally, although there are works that include among their constructs or latent variables WOM and referrals (REF), (e.g. Huang et al., 2011), we have not found any that specifically examine this relationship. In the context of SNS, although there are many types of users, we understand that those more involved and participatory, who make important contributions in the form of WOM, are also attentive to the recommendations and comments that others post. Comments and support from other users to their WOM communication may act as a social reward. Following the argument above, the following hypothesis is developed:

H10: WOM *of tourist products' purchasers is positively related to their REF in adopting*

SNS.

Figure 1 shows our conceptual model and graphically presents our research hypotheses.

4.   Research methodology

4.1. Sample and data collection

The empirical research is based on a non-probabilistic and self-selection sampling method, therefore it is a convenience sample. Specifically, the data was collected in Chile and Spain from a sample of on-line questionnaires from January 14, 2011 to March 15, 2011. The exclusion of invalid questionnaires due to duplications or empty fields provided a final sample size of 603 respondents, who bought tourist services in last year and are SNS. The fact that 81.1% of this sample bought the tourist service through the Internet is notable. Also, 61.9% of the sample were women and the rest men. The majority of respondents were Spanish and Chilean and marginally from other countries, such as Germany, Brazil, Argentina, USA, etc. The age of the participants in the sample is close to the SNS users' average, ranging from 18 to 62 years old, predominantly younger people around 25.

4.2. Measurement

The measurement scales applied have been widely tested in other investigations. Specifically, to measure the TAM constructs the scales proposed by Venkatesh and Bala (2008) have been adapted. Measurement for social identity (SI) was adopted from Song and Kim's study (Song and Kim, 2006). To measure the Word-of-Mouth (WOM) the scales proposed by Walsh and Beatty (2007) have been adapted. Referrals (REF) were operationalized by asking the respondents, "Recommendations I received from my social networks' contacts were important when I bought the trip". All items were measured using a 7-point Likert-type scale with anchors from ''Strongly disagree'' to ''Strongly agree''.

A pilot study of a sample size of 50 was conducted to ensure the reliability and user-friendliness of the questionnaire designed. All travel buyers and SNS users responding to the questionnaire commented on its clarity, readability and ease of understanding. As a result, no amendment in terms of rewording of items was made.

4.3. Statistical tools

Partial Least Squares (PLS) was chosen to conduct data analyses in this study. Unlike LISREL-type structural equation modeling (SEM), which is based on the covariance structure of the latent variables, PLS is a component-based approach. PLS aims to examine

the significance of the relationships between research constructs and the predictive power of the dependent variable (Chin, 1998). Thus, PLS is suitable for predictive applications and theory building. PLS also does not place a very high requirement of normal distribution on the source data (Chin, 1998; Gefen and Straub, 2005) and has the ability to handle a relatively small sample size (Barclay et al., 1995; Chin, 1998). Because PLS considers all path coefficients simultaneously, it allows analysis of direct, indirect, and spurious relationships. PLS estimates multiple individual item loadings in the context of a theoretically specified model rather than in isolation, so it also enables researchers to avoid biased and inconsistent parameter estimates for equations (White, Varadarajan, and Dacin, 2003). Therefore, PLS is an appropriate choice for testing a research model (Hutchinson et al., 2009). SmartPLS 2.0 M3 was specifically used in this study.

5. Results

The SEM analysis was conducted by constructing a measurement model and a structural model. The measurement model analyzes relationships among a set of observed variables and a predetermined number of latent variables. Reliability was tested using construct reliability and item reliability. Having ensured that the scale is reliable, the next step was to check

construct validity. Then the measurement model was evaluated and finalized before the structural model was evaluated.

5.1. Measurement model

To assess the constructs, we conducted confirmatory factor analysis (CFA) using PLS. Based on the CFA results, we analyzed convergent validity, discriminant validity, and the reliability of all the multiple-item scales, following the guidelines from previous literature (e.g., Fornell and Larcker, 1981; Gefen and Straub, 2005). The measurement properties are reported in Table 1.

Reliability was assessed in terms of composite reliability and Cronbach's Alpha, which measures the degree to which items are free from random error and therefore yield consistent results. Composite reliabilities in our measurement model ranged from 0.884 to 0.926 (see Table 1), Cronbach's Alpha ranged from 0.825 to 0.880, in both cases the scores are above the recommended cutoff of 0.70 (Fornell and Larcker, 1981; Nunnally and Bernstein, 1994).

Convergent validity was assessed in terms of factor loadings and average variance extracted. Convergent validity requires a factor loading greater than 0.70 and an average variance extracted (AVE) no less than 0.50 (Fornell and Larcker, 1981). As shown in Table 1, all

items had factor loadings close to or over 0.70 (p < 0.01). AVEs ranged from 0.656 to 0.807, suggesting adequate convergent validity.

Discriminant validity was assessed by comparing the AVE of each individual construct with shared variances between this individual construct and all the other constructs. Higher AVE of the individual construct than shared variances suggests discriminant validity (Fornell and Larcker, 1981). Table 2 shows the inter-construct correlations off the diagonal of the matrix. Comparing all the correlations and square roots of AVEs shown on the diagonal, the results indicated adequate discriminant validity.

5.2. The structural model

Assessment of the structural model involves estimating the path loadings and the R^2 values. Path loadings indicate the strengths of the relationships between the independent variables and dependent variable, while R^2 values measure the predictive power of the structural models. Interpreted as multiple regression results, the R^2 indicates the amount of variance explained by the exogenous variables. Using a bootstrapping technique, we calculated path loadings and t-statistics for hypothesized relationships. The results are shown in Figure 2.

As indicated by path loadings and the associated significance levels, the influence of Perceived ease of use (PEOU) on USE (0.085) was not significant at the 0.05 level, and the influence of USE on Referrals (REF) (0.107) was not significant either, suggesting the rejection of H2 and H9.

Rejection of H2 affects the TAM sub-model used, built by PEOU, PU, USE, and the relationships hypothesized among these constructs. In another way, PEOU results as a valid antecedent of PU, and PU shows a strong relationship to SNS use. These results support hypotheses H1 and H3. In general, the use of the TAM model is sustained. In addition, analyses show that Social Identity (SI) has a significant influence on variables related to technology: PEOU, PU and USE. There is a strong relationship between IS and PEOU, SI and PU and SI and USE. These results support hypotheses H4, H5 and H6.

Furthermore, WOM communication is deeply influenced by SI. According to these analyses hypotheses H7 and H8 are sustained. In addition, to begin WOM communication is affected significantly by taking into account referrals (REF) coming from social networks. Thus, H10 is supported.

As shown in Figure 2, our model has a relatively good prediction power. The model explained 41.5% in USE of SNS and 22.3% in Perceived usefulness (PU). For the communication variables, our model explained 17.8% of the variance in Word-of-mouth (WOM) and 14.5% of the variance in referrals (REF). In contrast, only 7.1% of the variance in Perceived ease of use (PEOU) was explained.

6. Discussion and conclusions

This work tries to explain eWOM communication in the context of the SNS users who are travel service buyers. This objective is achieved through three more specific objetives, which we call sub-goals.

In the first sub-objective, we address the process of acceptance of SNS technology by buyers of travel services. To do so, TAM model has been used. According to the explained variance of the endogenous variables, PLS results showed an appropriate goodness of fit. Hypotheses H1 and H3 have been supported but not H2. In general, results show that TAM is a good model to explain the acceptation of SNS users who are buyers of travel services.

The fact that H2 was not supported is noteworthy. This result suggests that use of SNS by travel service buyers is more related to perceived utility than to perceived ease of using these technological tools. We believe that users of these tools do not perceive problems with their use, despite their novelty. This is consistent with the high degree of internet penetration in the tourism sector, for all its value chain. From the point of view of technology acceptance, the key for using SNS is utility, that is to say, to provide useful information to individuals or, as a form to be distinguished on their network. Also, our results suggest that other factors may influence PU in an SNS context. For example, the findings of Lin and Lu (2011) show the number of members, the number of peers and perceived complementarity have a stronger influence on usefulness.

In the second sub-objective, the social component implicit in SNS based on the Theory of Social Identification is dealt with. Hypotheses H4, H5 and H6 capture the relationship between social identification (SI) and TAM variables. In all cases the relationships have been strong. The same occurs with H7, that reflects the relationship between social identification and WOM communication. These results indicate the key role played by social identification in the context of SNS. This idea is consistent with Cheung and Lee (2010) who noted that the use of SNS is basically a social phenomenon that largely depends on the interactions among users. And the use of social technologies can make sense only when a group of individuals

are willing to use and continue to use the technology together. Among other reasons, tourist service buyers announce eWOM as a type of social activity: it is a way of offering signs and getting noticed among their group of contacts.

The third and last sub-objective is about eWOM communication. Concerning this, we have distinguished two views. On the one hand, we have collected a willingness to publish eWOM communication. On the other hand, we analyzed the relative importance of received referrals (REF). Hypothesis H8 deals with the relationship between the use of SNS by travel service buyers' and eWOM communication emitted by them. And, hypothesis H9 brings together the relationship between USE and importance given to referrals (REF) received by respondents. Both hypotheses are not supported. However, hypothesis H10 proposes that emitting eWOM communication is an antecedent of REF, and in this case the hypothesis is sustained. This means that tourist service buyers are more interested in publishing messages for their net of contacts about services bought and experiences lived than in taking into account information from others that help them to decide about future purchases. But, these individuals are interested in comments made by their network to its previous submissions, which is consistent with the social vision of using SNS.

In short, buyers of travel services use SNS for their utility, especially to provide signs and information, to their contacts, about tourism services consumed and experiences lived. Our results do not support SNS as a means of gathering information, but rather reinforce the position that individuals occupy in their social network.

Theoretical and practical implications

From the standpoint of theory, this work makes several significant contributions. First, it supports the line begun by other authors (e.g., Casal et al. 2010; Kwon and Wen, 2010) showing a backup of using TAM as a tool for studying the adoption of social networks by individuals. Second, we highlight the role of social identification as the soul, the heart, which operates SNS. Third, it analyzes the development of eWOM communication in the new context provided by SNS. Fourth, eWOM communication is studied from two perspectives, not only from the standpoint of the communicator, but also the receiver. Fifth, the sample is composed essentially of SNS users and travel buyers from Spain and Chile. Two countries that share important similarities and also differences (Arenas et al., 2011).

With regard to practical implications, this work provides several elements that must be considered. Results explain the use of SNS technology due specifically to the perceived utility of users. This utility is closely related to the importance of the individual's social

position. From the point of view of management, to provide travel buyers with the opportunity to share with their networks their participation in activities and other tourism services is crucial for hotel and restaurant managers. For example, a holiday-oriented hotel can take pictures at parties and celebrations (such as sports tournaments), and invite their customers to be labeled in these photos, which allows its customers to show their contacts their participation in the events. Adventure companies can do something similar (diving, rafting, canyoning, etc.), showing pictures of their customers at key moments, and inviting them to be labeled. Thus, companies achieve positive eWOM communication of their clients, and the latter can show their experiences to their net contacts, reaffirming their status.

Moreover, tourism firms should have mechanisms for obtaining information on what social network users say about them to have this valuable information. The development of "community managers" is essential to build a communication strategy to try to convert all these flows of information, which users put into social networks about the company, to positive attitudes and a good overall image of the firm.

Even public institutions responsible for managing the places or tourist locations should monitor and manage this information. Because the client´s choice of the location is often prior to deciding on accommodation and tourist services that will be required. To get good

opinions and discredit the bad ones about a destination is more a task of public institutions

responsible for the promotion of tourism than a responsibility of enterprises located in these

destinations, although of course it must be a common task.

Finally, this work has some limitations. The model is based on an adaptation of the original

TAM; later versions have appeared as TAM2 and TAM3. We recommend that future

research could include some of them. Also, we have used a non-random sampling method

and it is necessary to validate and generalize the results using random sampling methods in

future investigations. Furthermore, we must point out that the majority of individuals who

participated in the study are living in a Latin culture. The sample size did not enable us to

make generalizations, and it may not hold for different nationalities. To develop cross-

cultural studies is an important future research line.

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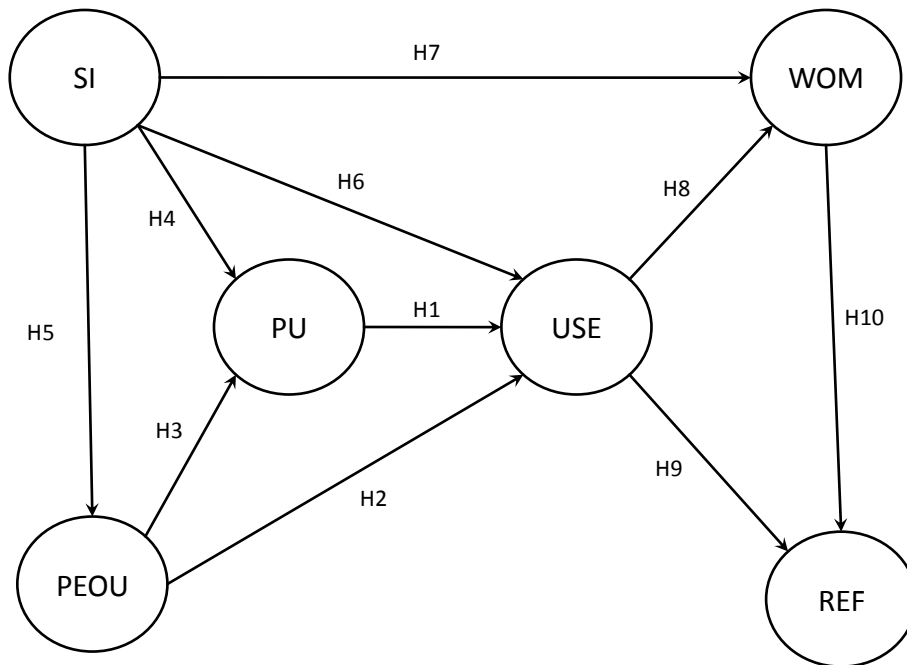
Figure 1: Model Proposed

Table 1: Reliability and Validity

|	Loading	
Social identity (SI)		AVE: 0.807008 Composite reliability: 0.926133 Cronbach's Alpha: 0.880553
SI1	0.875928	
SI2	0.926281	
SI3	0.892064	
Perceived ease of use (PEOU)		AVE: 0.709035 Composite reliability: 0.906018 Cronbach's Alpha: 0.862599
PEOU1	0.877749	
PEOU2	0.886647	

PEOU3	0.900024	
PEOU4	0.685209	
Perceived usefulness (PU)		AVE: 0.656915 Composite reliability: 0.884360 Cronbach's Alpha: 0.825347
PU1	0.815045	
PU2	0.819857	
PU3	0.845144	
PU4	0.759556	
Use of SNS (USE)		AVE: 0.747464 Composite reliability: 0.898697 Cronbach's Alpha: 0.830545
USE1	0.834789	
USE2	0.898277	
USE3	0.859429	
Word-of-Mouth (WOM)		AVE: 0.804610 Composite reliability: 0.925095 Cronbach's Alpha: 0.878425
WOM1	0.887962	
WOM2	0.918783	
WOM3	0.883850	
Referrals (REF)		AVE: 1.000000 Composite reliability: 1.000000

		Cronbach's Alpha: 1.000000

Table 1: Discriminat validity

	IS	PEOU	PU	Ref SNS	USE	WOM
IS	**0.89833624**					
PEOU	0.267029	**0.84204216**				
PU	0.403487	0.343343	**0.81050293**			
Ref SNS	0.175381	0.117535	0.251735	**1.00000**		
USE	0.483614	0.309927	0.577866	0.222991	**0.86456**	
WOM	0.372735	0.164010	0.382897	0.367511	0.352759	**0.89700056**

Figure 2: The structural model
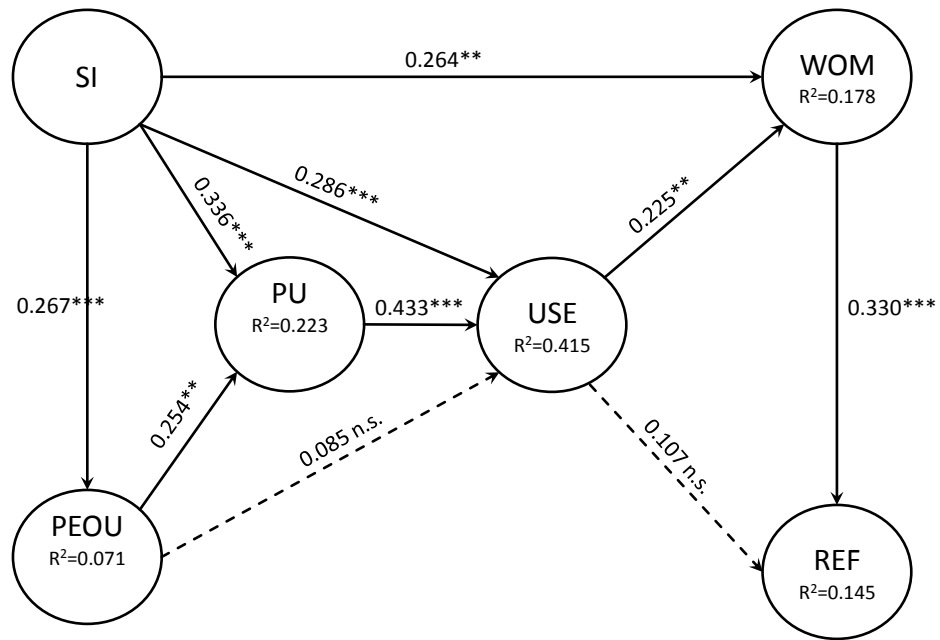
Statistically significant: n.s. non-significant ; * p<0.05; ** p<0.01; *** p<0.001