

Toward a holistic understanding of continued use of social networking tourism: A mixed-methods approach



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ABSTRACT

The trend of social networking tourism connects millions of tourists to others while traveling that may provide benefits such as information, tour guides, or alternative accommodations. Success of such networks depend on the continued use by its members. The current paper uses a mixed-methods approach to qualitatively identify motivations for participation and empirically test a causal model evaluating continued use intention. Motivations identified include networking and economic value that were used in the quantitative study that includes social capital, trust, attitude, and satisfaction as factors influencing continued use intention.

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1. Introduction

Tourism is de facto international in scope and one of the main economic drivers of many nations around the world today. Advances in information and communication technologies (ICTs) have been a key enabler to grow tourism globally as their applications have changed the ways information about leisure travel and its experiences are collected, shared, and used by tourists [32]. In recent years, the notion of smart tourism has emerged, and now well established, within the tourism practice and research communities. Boes et al. [11], Buhalis and Amaranggana [14], Gretzel et al. [21], Gretzel et al. [22], Koo et al. [31], and Werthner et al. [62] have been pioneers in developing conceptual, theoretical, and research foundations of smart tourism. The increasing rise of social networks and mobile devices in recent years has helped the creation of collaborative networks, which are associated with sharing resources while focusing on the economics of collaboration and the efficiencies of networks. Leisure tourists are a major participant in and beneficiary of social networking tourism (SNETT) sites. With this new trend of tourism mixed with social technologies, tourists are now directly sharing products and services with each other, bypassing traditional institutions. Through these networks, tourists can share a plethora of travel artifacts such as time, knowledge, responsibilities, objects, and spaces. Social platforms are providing alternatives to standard

travel services such as lodging through sites like CouchSurfing (CS) and AirBnB or taxi services through Uber. Although users of these social tourism sites may benefit from low cost or even free services through a community of users, businesses and locations that rely on tourism spending are losing revenues. Soliciting services for lodging and travel from a community of users that are not verified has its economic benefits but also have risks due to the inherent dangers of accepting services from strangers. This phenomenon has implications to both academics studying human behaviors and practitioners working in the tourism industry.

Tourists use these niche social networking sites (SNSs), called SNETT, to meet and interact with other tourists for traveling. SNETT sites and mobile applications allow members to develop and maintain social and economic relationships, and to explore new opportunities [27]. The success of SNETT communities are pivoted on a deep understanding of their member participation and degree of participation in the community. As the presence and potential impact of SNETT communities continue to rise, it becomes critical to understand the motivations influencing participation and the factors that affect the continued use of SNETT communities. Although smart tourism and social tourism are gaining increasing attention in academic- and practitioner-oriented research, there is a lack of work committed to understanding the motivations and use of these niche communities.

The current research uses a mixed-methods approach to explore the motivations for participation and the antecedents to the continued use of SNETT sites. As such, this study combines qualitative and quantitative research methods to develop holistic insights into the factors that influence users' intentions for continued use of SNETT sites. With this sequential mixed-methods

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research approach [54,56], the qualitative method allowed us to extract potential key constructs, which were then applied to the quantitative study. Because of lack of research in this area and a plethora of possible motivations that could be applied, a qualitative study was necessary to identify the motivations relevant to the current research context. Interviews were conducted with current users of the popular SNETT site called CS to elicit motivations for participation that could then be applied in a quantitative study evaluating continued use. Drawing on the theory of planned behavior (TPB), self-determination theory (SDT), and social capital theory, we propose a research model in a bid to gain insights on the factors that influence the continued use of the members of SNETT sites. Social capital, an important construct reoccurring in social networking research, refers to the intangible benefits one gains through social interaction [18]. The current study is driven by three primary research questions: (1) What motivations influence the continued participation in SNETT sites? (2) What are the effects of social capital in the context of SNETT? (3) What influences people to continue to use these specialized or niche social networks?

This study's contributions include a deeper understanding of critical factors related to SNETT continued use; an example of benefits gained through mixed-method approaches combining exploratory and theoretical advancement; and actionable knowledge that can improve practitioner understanding of SNETT's continued usage. This paper serves as a foundation for future research in the context of SNETT. This research begins with a review of relevant literature to establish a theoretical foundation for developing a research model. Subsequently, a qualitative study is conducted to explore specific motivations that can be applied to a research model evaluating continued use intention of SNETT sites. Afterward, the research model is formulated with empirical analysis followed by an analysis of the results. The current research concludes with a discussion of the findings and the theoretical and practical implications of the research being conducted.

2. Theoretical background

It is important to point out the difference between SNSs such as Facebook and a niche SNS such as SNETT sites. An example of a SNETT site is CouchSurfing.org. SNETT sites and SNSs have many similar features, however, the goals and outcomes from these sites are different. Facebook users connect to friends and family to maintain relationships with strong ties, whereas SNETT site users seek to connect to other tourists whom they previously did not know at remote locations with the intention of traveling and meeting off-line. Therefore, niche SNSs such as SNETT sites connect tourists together, but with weak ties among them.

This study evaluates SNETT sites, such as CS, to explore antecedents to the continued use of these sites. An array of theoretical underpinnings including the TPB, social capital theory, and SDT have been applied to systematically formulate a research model explaining this phenomenon. The remainder of this section will describe these theories in terms of how they fit within the context of the study.

2.1. Theory of planned behavior

The TPB is a well-established theory in behavioral research used for explaining human behavior. It predicates that intention to perform an action and the perceived behavioral control amalgamate to influence the actual performance of said action [3]. The action of consequence in the current study is the continuous use of SNETT sites with the intention to perform said action being the variable of observation. According to TPB, the intention to perform an action significantly influences the likelihood of the action being performed. The intention to perform the action in question has

been shown as the result of attitude toward the given behavior, subjective norms, and perceived behavioral control.

Attitude refers to the favorable or unfavorable feelings toward the behavior being performed, resulting in a positive correlation with the intention to perform the given action [4,43]. There is an inherent risk when connecting to and meeting unknown individuals from the Internet while traveling to remote destinations. As a result, it can be postulated that individuals who possess an unfavorable attitude toward social tourism SNSs would likely have a low intention toward use of these networks. Behavioral control refers to the ability of the individual to control the environment and get the outcome they desire. Subjective norms refer to social pressures one might experience influencing their behavior to perform an action. Because of the voluntary nature of social tourism and the focus of weak tie connections between individuals, it is likely that behavior controls and subjective norms play an insignificant role in the intention to use them. To understand continued use, which is a postadoption behavior, the current research will incorporate social capital theory and SDT to understand social influences and user motivations.

2.2. Social Capital

Social capital refers to the intangible benefits gained through social interactions [18], and is embedded in the relationships among members of a group or community [52]. There are two facets of social capital that are referred to as bonding social capital and bridging social capital [48,64]. Bridging social capital involves the connection of individuals from different backgrounds, whereas bonding social capital revolves around building stronger relationships and providing emotional and substantive support between the connected individuals. As with other forms of capital, social capital results from the investments provided by the user leading to expected future benefits [1].

In essence, SNETT sites target individuals who like to travel and seek to meet others at their travel destination. These connections are typically between individuals who previously did not know each other with the intent of information or resource exchange. The expected benefits gained from SNETT sites may include friendship, information about the intended travel destination, or alternative lodging accommodations. Bridging and bonding social capital are likely to play a role in the connection and development of relationships among members. Bridging social capital is concerned with connecting individuals together, which would be the primary purpose of SNETT sites, while bonding social capital is concerned with creating a deeper connection between individuals and stronger ties between the connections made. Although both forms of social capital would be influential for continued use of the SNETT site, it is likely that the motivations influencing each are different. SDT will be used to understand motivations for connecting with others through SNETT sites.

2.3. Self-determination theory

SDT is an empirically based theory of human motivation that focuses on the degree to which an individual's behavior is self-motivated and self-determined. Motives act as a trigger that causes an individual to perform actions or behaviors voluntarily [49]. Based on an individual's personal values, motives can affect perceptions, emotions, and behaviors. This results in motivations, which serve as a source of inspiration that stimulates individuals to perform specific actions [51,66]. SDT identifies and explains motivations that result into actions being performed.

SDT has been used to differentiate between intrinsic and extrinsic motivations along with identifying motivations for specific behaviors such as information system (IS) use [66].

Intrinsic motivations refer to the internal desire to perform an action based on the inherent needs resulting in pleasure, satisfaction, or interest [51,57,28]. Extrinsic motivation refers to the motivations external from the individual causing a task to be performed to gain rewards or avoid punishment [17,51,57,28].

There exist various motivations that can be evaluated both intrinsically (i.e., need to gain knowledge or independence) and extrinsically (i.e., money, prizes, and acclaim) depending on the action being performed. SNETT users have a variety of motivations and desires resulting in adoption and continued use for various reason [13]. It also stands to reason that motivations influencing bridging and bonding social capital would differ depending on the goals of the user. The current research uses a qualitative approach to identify motivations for connecting with other and using SNETT sites that can then be applied to a research model to empirically evaluate antecedents for continued use of these specialized networks.

3. Methodology

The current research uses a mixed-methods approach to qualitatively identify motivations for participation on SNETT sites followed by an empirical analysis implementing the identified motivations in a research model to determine factors influencing continued use intention [23]. Surveys with previously validated measures were used to test the research model and generalize the findings.

Following the approach for conducting mixed-methods research [12,23,54,56], the current study uses a qualitative analysis using interviews followed by a quantitative analysis implementing a survey instrument. Because of lack of theoretical foundation for identifying motivations in the context of SNETT sites, study 1 uses structured interviews to identify the appropriate motivations for using SNETT sites that result in an increase in bridging and bonding social capital. Based on the motivations identified and the theoretical foundation used in the current study, a research model is formulated describing the antecedents for continued use of SNETT sites. Study 2 consists of an empirical analysis following guidelines for construct development and validation [34] and SEM [15]. A survey instrument was developed to validate the research model and generalize the findings. Two raters were used to evaluate the qualitative data using interrater reliability. Instances where coding of textual data from the respondents did not match and the raters did not agree were dismissed from the study. Only motivations identified and agreed upon by the raters were used. Structural equation modeling was used to validate the measurement model and test the hypotheses outlined in the current research.

3.1. Study 1: qualitative research—interviews

Motivations for connecting to others and using SNETT sites were identified through a qualitative methodology consisting of interviews with self-reported CS users. Participants in the study were identified through a convenient sample and networking by first contacting CS users that the researchers were familiar with and having those connections reach other CS users to solicit participation. CS users are identified as individuals who have created an account, filled out information on their profile, and communicated with at least another CS user through the site. All participants in the study have interacted with other CS users they met on the site but not all participants have met others off-line from whom they have interacted. Motivations were identified through two questions asking about their reason for joining and if they met others that they were in contact with through the SNETT website while traveling. A follow-up question was then asked for

those who indicated they have met others from the SNETT website when traveling. The responses to each question will be discussed below using aliases to protect the identity of our participants. Aliases used and basic demographic information for the participants can be found in Appendix A.

The interview began by asking the participants “Why did you join CouchSurfing?” The users were asked to write down their responses on the paper provided to ensure accuracy of their responses. Two coders were used to evaluate the responses and identify motivations based on their answers. After coding of the responses was completed, the evaluators’ coding was compared to identify instances where they matched and further discuss instances where their coding did not match. Instances where the evaluators could not agree on a coding were dismissed and not included in the classification. After this evaluation, a consensus was reached that produced a list of motivations for participating in CS. The list of motivations identified can be found in Table 1.

There were four motivations identified based on the analysis. All motivations that were listed by a single participant were considered nonsignificant and were not used for further analysis. Networking (meeting people) was the most significant motivation identified for joining CS followed by curiosity as a close second. However, the current research seeks to identify motivations related to continued use as a postadoption behavior. Curiosity has been previously described as an exploratory behavior motivating an individual to discover something new [37]. Based on this conceptualization, it can be argued that curiosity is a preadoption motivation influencing an initial adoption of the SNETT site, but would not be significant in determining continued use once that curiosity has been satisfied. Based on this reasoning, curiosity will not be used as a motivator in the research model being developed. A few examples of quotes related to networking are as follows:

Charley: Meeting people from a variety of different backgrounds.

Jeremy: I had just moved to Korea and was looking for ways to meet new people.

Michael: To meet people in countries that I wished to travel to in the future.

The third motivation identified is information sharing. Information sharing is concerned with exchanging information between individuals connected through the SNETT site. However, each instance of information sharing identified in the transcripts was connected with networking. It is evident from the respondents that networking and information sharing are complimentary of each other rather than being mutually exclusive. It can be argued that in order to share information, the user must network and meet others. As a result, these motivations influence the user simultaneously and are likely to be highly correlated. For instance, Michael responded by saying “Make new friends, and to learn more about different cultures.” A similar response was given by Walter who stated “To know more about the culture in other countries and of course change ideas and experience with different people.” As demonstrated here, networking and information exchange form an

Table 1
Motivations for Joining CouchSurfing.

Motivation	Time Mentioned	# of people
<i>Networking/Meeting people</i>	10	8
<i>Curiosity</i>	8	7
<i>Information Sharing</i>	5	5
<i>Economic Benefit</i>	3	3
<i>Belonging</i>	1	1
<i>Social Capital</i>	1	1
<i>Expectation</i>	1	1
<i>Pay it forward</i>	1	1
<i>Unique/Novelty</i>	1	1

inextricable knot that would reduce the likelihood of discriminating between the two. Because of this high correlation probability, information sharing is likely a submotivation under networking and will not be evaluated in study 2.

The fourth and final motivation identified from the study is economic benefit. Economic benefit is identified by the ability to save money or create a cost-effective means of traveling through the use of SNETT sites. A few quotes from question one pertaining to economic benefits are as follows:

Amber: Originally I was looking to save money on lodging.

Charley: I was beginning a 3 month hitchhike around the Balkans and wanted to find a way of living for free.

Karen: The “free place to crash” part definitely helped motivate me.

Although the motivations identified are useful for understanding adoption of SNETT sites, the current research seeks to extend the understanding of these websites by exploring motivations that result in continued use, a postadoption behavior. Follow-up questions asked if the participants had ever traveled to a remote destination to meet someone they met through CS and their motivations for seeking a host at their travel destination. The responses further demonstrated the validity of the motivations identified in the first question. Networking and economic benefits were identified as reasons for seeking out a host at the intended travel destination. Some examples of networking identified from participants' response are as follows:

Frank: Even when the accommodations are cheap, I still seek out CS for the contacts.

Jeremy: You can make a life-long friend in just a few days.

Karen: I wanted to meet someone either from the country or someone who had been living there for some time.

Michael: I found that the experience was greater with someone FROM the area that could talk about their culture and what it means to them.

Several respondents provided responses indicating the economic benefits of using SNETT site when traveling to remote destinations. A few quotes pertaining to the motivation of economic benefits are as follows:

Amber: If I am looking for a couch it would be to save a few bucks.

Frank: Japan and Rio are expensive.

Jeremy: Meeting people is always great, but in Europe especially cost is a factor.

The motivations identified in study 1 are useful for understanding reasons why individuals use and connect to others through SNETT sites. There are various types of meetings that could take place ranging from finding a tour guide to seeking a host to stay with. The focus of the current research is to understand motivations and antecedents for continued use of SNETT sites

rather than the type of meetings that take place (i.e., coffee, tour guide, friendship, host, etc.). Two distinct motivations were identified in the analysis of study 1, which were then be applied to study 2 as motivating factors for connecting with others. A research model is developed with an empirical analysis identifying antecedents to continued use and validating the inclusion of the motivational constructs identified in study 1.

3.2. Study 2: quantitative research—surveys

The empirical research conducted in study 2 integrates the findings from study 1 and the relationships among factors identified in the theoretical foundation. By using the theories adopted for the current research and the motivations identified in study 1, a research model was established to test factors that influence the continued use of SNETT sites. Fig. 1 displays the research model with hypotheses being evaluated in the empirical study of the current research. Although SDT was used as a motivational theory supporting the current research, the explicit motivations that apply to this research context have not been studied. The qualitative study identified the motivations that fit the current research that were then applied to the research model being tested in empirical analysis of study 2. By using previously developed scales when possible, a survey instrument was developed and data were collected to test the validity and reliability of the measurement model. Finally, the structural model and hypotheses were tested and validated.

3.2.1. Development of Hypotheses

Social capital is the intangible benefits gained through social interaction within a community [18], and is embedded among relationships between actors within a group [52]. Social capital can be categorized as either bridging social capital or bonding social capital [2,46]. Bridging social capital is concerned with connecting individuals from different backgrounds, whereas bonding social capital is concerned with building deeper relationships with individuals that provides substantive or emotional support. It is argued that the desire to increase social capital is fairly obvious, while the motivations to seeking these benefits may vary [46,2].

There is limited research evaluating motivations that result in an increase in social capital, particularly in the IS community. The qualitative analysis conducted in study 1 provided motivations that can be linked to psychological factors identified in seminal research on social capital. Portes [46] characterizes motivations for social capital as either consummatory or instrumental. Consummatory motivations are related to experiences that individuals have through connections made with others. Instrumental motivations are concerned with social exchanges between

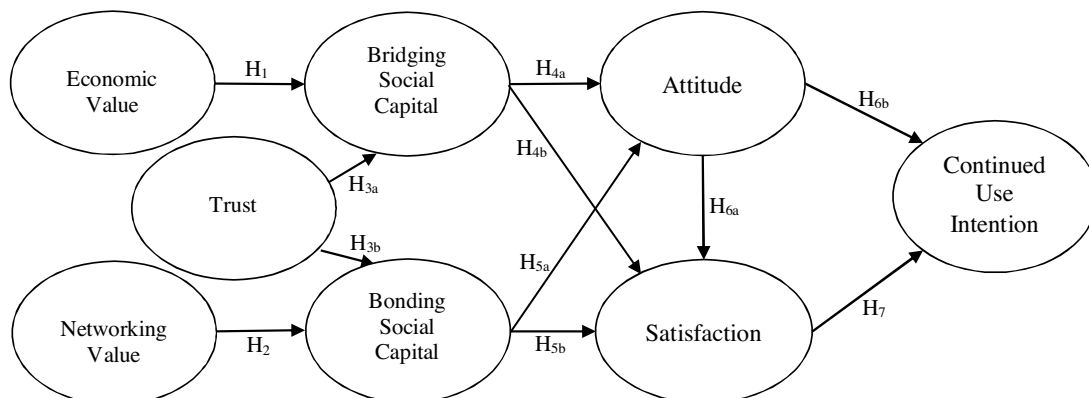


Fig. 1. Research Model and Hypotheses.

individuals and tend to be more extrinsic in nature. Motivations from this perspective tend to be concerned with rational calculations that can result in an increase in social capital. Economic benefit was identified in study 1 as a significant motivation for using SNETT sites to meet others when traveling to remote destinations. Under the assumption that users make the calculative decision to connect to others motivated by the extrinsic desire to save money, it is hypothesized that economic benefits will positively influence bridging social capital.

H1. Economic benefits will positively influence bridging social capital within social tourism websites.

Social capital has also been shown to be motivated by reciprocity, where an actor will perform an action for another actor with the assumption that the favor will be reciprocated sometime in the future [46,47]. Reciprocity is visible within SNETT sites as users serve as both host and hosted. One user acts as host to others with the understanding that they will be hosted sometime in the future when they travel to a remote destination. This motivation would likely be linked to bonding social capital due to the need to develop stronger relationships before traveling to the intended destination where the meeting will occur. Based on this assumption, it is hypothesized that the motivation of networking value will positively influence an individual's bonding social capital.

H2. Networking will positively influence bonding social capital within social tourism websites.

Another key motivational factor that has been shown to significantly influence social capital is trust [2]. Although trust was not identified as a motivation factor for SNETT or a factor influencing usage by the participants of study 1, it has become one of the most studied concepts within social capital theory. It has been studied within the relational dimension of social capital [41] with some models portraying it as the primary relational feature of social capital [16]. In social capital theory, the relational dimension is concerned with expectations and obligations of members within the community [24,63]. This concept is especially important with SNETT sites due to the risk of meeting others at remote destinations whom the traveling actor previously has not met.

Related research on trust and relationship exchange has been conducted in marketing through the mediation of relationship commitment [39]. The relationships between trust and relationship exchange has become known as the key mediating variable (KMV) model. The KMV model shows that trust positively influences relationship commitment, which in turn positively influences relationship exchange. Based on this relationship and social capital theory, it is hypothesized that higher levels of trust will result in higher levels of bridging and bonding social capital.

H3a. Trust will positively influence bridging social capital within social tourism websites.

H3b. Trust will positively influence bonding social capital within social tourism websites.

There is a lack of research connecting social capital to attitudes toward objects. However, it was shown that anticipated reciprocal relationships have a positive effect on attitude toward knowledge sharing in an organizational context [10]. Although the context may differ, reciprocity is a fundamental concept within social capital and information sharing, which is the foundation of the relationship between actors ultimately resulting in meeting off-line. Because of social capital being the intangible benefits gained through social interaction, it is predicted that an increase in social capital through the SNETT site will positively influence the users'

attitude toward the website. Bridging social capital relates to the connections made through the SNETT website. If the SNETT users are able to meet many others as they use the site, then they are likely to have a higher sense of bridging social capital that will in turn positively influence their attitude toward the site. Bonding social capital relates to the development of a deeper relationship as two actors continue interacting over time. As users interact with others through the SNETT site, they may get to know other members more intimately resulting in higher levels of bonding social capital, which in turn is predicted to positively influence their attitude toward the SNETT site. Therefore, we predict that both bridging and bonding social capital independently influence one's attitude toward the social tourism website.

H4a. Bridging social capital will positively influence attitude toward social tourism websites.

H5a. Bonding social capital will positively influence attitude toward social tourism websites.

Few studies have evaluated the relationship between social capital and satisfaction in general without any SNS studies to date displaying a direct relationship between these constructs. However, a positive relationship between social capital and satisfaction has been evaluated in other contexts such as job satisfaction [50], life satisfaction [9], and technology service delivery [53]. Satisfaction in general has been stated to be the sum of one's feelings in a given situation that are influenced by the factors that affect that situation [6]. This conceptualization of satisfaction has served as the foundation for user satisfaction in IS research. In the current study, the factors that affect satisfaction include interaction with other members and the sum of one's feelings from those interactions. Following the underlying definition of satisfaction and previous relationships between social capital and satisfaction in other contexts, it is hypothesized that this relationship will also be significant in the context of SNETT websites.

H4b. Bridging social capital will positively influence satisfaction with social tourism websites.

H5b. Bonding social capital will positively influence satisfaction with social tourism websites.

Attitude, as evaluated in the current research refers to the attitude toward an object and is behavioral in nature. Satisfaction is the result of an emotional state that is based on interaction with the object. Although there is limited research evaluating the direct effects between attitude and satisfaction, it has been shown that object-based attitude will ultimately result in an increase in behavioral attitude [65]. Based on this assumption, it is hypothesized that attitude toward the SNETT site will positively influence the user's satisfaction toward interactions through the website.

H6a. Attitude will positively influence satisfaction with social tourism website.

The relationship between attitude and intention has been well established in the literature beginning with the TPB [3] and a countless number of other research papers have followed it. This theory proposes that attitude directly influences the intention to perform a behavior, which in IS research is often evaluated as the intention to use an IS. This theory has been extended to include the intention to reuse an IS [59] and, furthermore, continue using an IS [26]. Kim [30] demonstrates the importance of attitude as a postadoption behavior [30]. The current research evaluates the continued use of SNETT sites, which is a postadoption behavior. Based on the study conducted by Kim [30] and a well-established stream of research displaying this relationship, it is hypothesized

that attitude toward the SNETT site will positively influence continued use intention in this context.

H6b. Attitude will positively influence continued use of the social tourism website.

There is a plethora of research evaluating satisfaction as a predictor of IS success and more specifically system use, reuse, and continued use. In a study conducted by Petter et al. [44], it was shown that 17 out of 21 empirical studies showed a positive relationship between user satisfaction and use. User satisfaction has also been shown to be positively related to the postadoption decision to continue using an IS [8]. Based on the history of this relationship, it is hypothesized that user satisfaction will positively influence continued use intention in the context of SNETT websites.

H7. Satisfaction will positively influence continued use of the social tourism website.

3.2.2. Survey instrument

To increase measurement reliability, most of the constructs were adapted from preexisting instruments based on previous research with slight rewording where needed for the current research context. Trust was measured using items from Morgan and Hunt [39]. Bridging and bonding social capital measures were modifications of those developed by Williams [64]. Attitude was adapted from the studies by Angst and Agarwal [5] and Venkatesh et al. [58]. User satisfaction was measured using items from Lin [36]. Intention to use was adapted from the studies by Venkatesh et al. [57] and Venkatesh et al. [55]. Economic value (five items) and networking value (three items) are two motivations identified in the qualitative study. There were no preexisting constructs to borrow from the scales, which had to be developed and then validated for the current study. Items were developed based on the definition of the construct and then evaluated for content validity using a panel of 10 researchers from various universities in the United States. Five panel members are experts in social networking research with five other panelists who are subject matter experts in statistical methods and scale development. The feedback from the panel resulted in five items and three items for economic value and networking value, respectively, which could then be validated using statistical tools.

3.2.3. Study design, procedure, and participants

A pretest was conducted before data collection. While doing so allowed us to validate and refine the survey instrument. A small sample size of 100 college students was used. Based on pretest validation and the experts' reviews of the instrument items, the finalized survey with validated scales was established and ready to begin data collection. Potential respondents were solicited from couchsurfing.com, which is the most prevalent of all SNETT sites. All participants in this survey were contacted through the website and stayed anonymous to researchers. The front page of our online survey gave the informed consent to potential survey respondents, informing them about the purpose of the study and the voluntary nature of their participation. On the second survey page, they were requested to answer a filter question about whether they have used the website for SNETT. As we are interested in factors motivating users' continued intention to use the SNETT website, only those who answered "Yes" to the filter question could proceed to answer the rest of the questions in the online survey.

We collected a total of 593 valid responses spanning 56 different countries. The respondents have different ethnical background, and their ages are mainly in the range of 18–37 years. As shown in Table 2, most respondents have some college up to masters' level education and are white. In total, 54.47% of the

respondents are male and 45.02% are female. The average number of months using the website is approximately 30 months with an average number of friends per respondent being approximately 15 connections. All these suggest that our sample is quite heterogeneous, which increases the external validity of our study.

4. Data analysis and results

4.1. Measurement model

The measurement model was tested with confirmatory factor analysis using LISREL 8.72. The overall model fit was assessed using goodness-of-fit indices (GFIs) such as χ^2 /degree of freedom, comparative fit index (CFI), GFI, adjusted GFI (AGFI), and root mean square error of approximation (RMSEA). The results of these indices suggest satisfactory with the data as shown in Table 3.

4.2. Validity and reliability

Before testing the research model, we first assessed the measurement quality of all scales based on their convergent validity, reliability, and discriminant validity. Convergent validity is suggested if factor loadings are ≥ 0.60 and each item loads significantly on its latent construct [20]. All items load significantly (p -value < 0.001) on their corresponding latent construct with loading values well above the minimum threshold (Table 4), indicating sound convergent validity of the measurement model. Reliability was assessed using composite reliability (CR), Cronbach's alpha, and average variance extracted (AVE). All scales were found to be reliable as all their CR and alpha values are > 0.7 threshold and AVE > 0.5 threshold recommended by Bagozzi and Yi [7]. To check discriminant validity, we examined the correlation matrix (Table 5) to ensure that the square root of the AVE of each construct was higher than the interconstruct correlations, i.e., the correlations between that construct and any other constructs [19]. The measurement model exhibits sound reliability and validity necessary for further testing of the research hypotheses.

4.3. Common method variance

As with other cross-sectional studies that measure independent and dependent variables using the same survey over the same set of subjects, common method variance (CMV) may be a source of biases influencing the results of our study. Podsakoff et al. [45] suggested that a check of CMV is necessary for all self-reported data. To test the

Table 2
Descriptive Statistics of Sample Population.

Variable	Freq. (%)	Variable	Freq. (%)
Sample Size	593	Gender	
Age		Male	323 (54.47)
18–22	103 (17.37)	Female	267 (45.02)
23–27	184 (31.03)	NR	3 (0.51)
28–32	123 (20.74)	Education	
33–37	81 (13.66)	High School	52 (8.77%)
38–42	38 (6.41)	Some College	95 (16.02)
>42	63 (10.62)	College Graduate	217 (36.59)
NR	1 (0.17)	Masters	187 (31.54)
Ethnicity		Doctoral	20 (3.37)
White	441 (74.37)	Other	17 (2.87)
Hispanic	5 (0.84)	NR	5 (0.84)
African-American	56 (9.44)	Avg. Days Per Week	3.32
Asian	47 (7.93)	Minutes Per Day	23.16
Other	41 (6.91)	Avg. Months Using	29.96
NR	3 (0.51)	Avg. Friends	14.54
		Avg. # Met from Site	16.63

Table 3
Goodness-of-fit Indices (GFIs) for Model Fit.

GFIs	Value
Sample size	593
χ^2 /degree of freedom	2.13
GFI	0.92
Adjusted GFI (AGFI)	0.90
Normed fit index (NFI)	0.98
Comparative fit index (CFI)	0.99
Root mean square error of approximation (RMSEA)	0.044

degree of CMV, we first performed Harman's single-factor test, in which all measurement items of those latent constructs were loaded into a principal component factor analysis. Any single factor could not explain the majority of the variance, suggesting that the data set does not have substantial amount of CMV. We then applied the

marker-variable technique suggested by Lindell and Whitney [35] to estimate the magnitude of CMV and its impact on correlation coefficients among those latent constructs. We used the second smallest positive correlation among the manifested variables as a more conservative estimate of the influence of CMV (or r_m), which was found to be 0.018. CMV-adjusted correlations among those latent constructs were then computed by partialing out r_m from the uncorrected correlations. The CMV-adjusted correlations were only slightly lower than the unadjusted correlations and their significance levels all remain the same, suggesting that CMV is not an issue of concern for our data set.

4.4. Full model and Hypotheses testing

Results of the hypothesis testing are summarized in Fig. 2 with standardized path coefficients displayed on each path. As seen in

Table 4
Reliability, Variance, and Confirmatory Factor Analyses.

Construct	Item	Loading	t-value	SMC	Alpha/CR
Economic Value	EB1	0.86	26.04	0.75	0.935/0.935
	EB2	0.85	25.17	0.71	
	EB3	0.82	23.79	0.66	
	EB4	0.89	27.45	0.79	
	EB5	0.89	27.30	0.79	
Networking Value	NET1	0.92	29.28	0.86	0.942/0.940
	NET2	0.93	29.80	0.87	
	NET3	0.90	27.80	0.80	
Attitude	Att1	0.82	23.80	0.67	0.926/0.928
	Att2	0.85	25.15	0.72	
	Att3	0.90	27.75	0.81	
	Att4	0.85	25.44	0.73	
	Att5	0.82	24.07	0.68	
Trust	TR1	0.85	25.19	0.71	0.932/0.933
	TR2	0.87	26.33	0.76	
	TR3	0.91	28.30	0.82	
	TR4	0.81	23.62	0.66	
	TR5	0.86	25.75	0.73	
Satisfaction	SAT1	0.87	26.35	0.76	0.918/0.917
	SAT2	0.90	27.59	0.81	
	SAT3	0.89	27.10	0.79	
Continued Use Intention	CUI1	0.96	31.60	0.92	0.970/0.970
	CUI2	0.95	31.22	0.91	
	CUI3	0.96	31.56	0.92	
Bridging Social Capital	BRSC1	0.78	21.51	0.60	0.834/0.870
	BRSC2	0.86	25.11	0.75	
	BRSC3	0.85	24.36	0.72	
Bonding Social Capital	BOSC1	0.68	17.53	0.46	0.829/0.835
	BOSC2	0.88	24.31	0.78	
	BOSC3	0.81	21.92	0.66	

Table 5
Bivariate Correlations with AVE on the diagonal for discriminate validity.

Variables	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
1. Economic	0.7437							
2. Networking	0.60 [†]	0.8404						
3. Trust	0.51 [†]	0.50 [†]	0.7406					
4. Bridging	0.47 [†]	0.62 [†]	0.54 [†]	0.6902				
5. Bonding	0.16 [†]	0.22 [†]	0.37 [†]	0.41 [†]	0.6310			
6. Attitude	0.36 [†]	0.46 [†]	0.52 [†]	0.46 [†]	0.26 [†]	0.7200		
7. Satisfaction	0.42 [†]	0.48 [†]	0.60 [†]	0.60 [†]	0.35 [†]	0.52 [†]	0.7863	
8. Continued Use	0.33 [†]	0.45 [†]	0.39 [†]	0.39 [†]	0.23 [†]	0.30 [†]	0.28 [†]	0.9152

Note: Diagonal shows the Average Variance Extracted (AVE) for each construct.

[†] *p*-value < 0.001.

Table 6 all paths except for networking value → bonding social capital are statistically significant. The model could explain 23% of the variance in attitude, 42% variance in satisfaction, and 11% of the variance in continued use intention (Table 6).

For continued use intention of the SNETT site, both attitude and satisfaction were found to be significant in the hypothesized directions. Thus, the results support H6b and H7. The research model also includes bridging social capital and bonding social capital for attitude and satisfaction based on the social capital approach, i.e. H4a, H4b, H5a, and H5b, which are all supported. Trust was found to be significant in the hypothesized directions for both social capital constructs, thus supporting H3a and H3b. Economic value was found to be significant toward bridging social capital but networking value was not found to be significant toward bonding social capital. Thus, the results support H1 but not H2.

5. Discussion

Although the current research shows significant results alluding to factors that influence continued use intention, there are likely additional factors that are left to be explored. This is a new area of research that has yet to be fully explored. The current research evaluated a niche area of social networking that is used for meeting others during travels. These SNETT sites provide an alternative to travel agencies where users can gather information about their destination, tour guides when traveling, and even alternative accommodations obtained through other members of the site. By using a mixed-methods approach, we were able to qualitatively identify motivations for using SNETT sites that were then added as factors in the quantitative study used to determine antecedents to continued use intention. A quantitative analysis confirmed the hypotheses identified in the literature review. However, the relationship between networking value and bonding social capital was shown insignificant in our research results despite being identified as an important factor in the qualitative study results.

To understand the insignificant relationship between networking and bonding social capital, we will first discuss the results of bonding social capital as a whole. An evaluation of the results shows a strong correlation between bridging social capital and the constructs of attitude and satisfaction. Although bonding social capital is significant, its effects are not as strong as bridging social capital. Because of the nature of SNETT sites and how they are used, it is likely that bridging social capital is of higher importance to

users than bonding social capital in this context. Individuals use SNETT sites to meet others when travel to gather information about their travel destination, find a tour guide, or have a free place to stay. These goals are related to bridging social capital, which would be the primary purpose of using SNETT services. Bonding social capital is likely a secondary goal for some users but cannot be determined based on the results if it is a goal of all users. Bonding social capital would relate to the desire to build deeper connections with others met through the SNETT site. Some users are likely to meet others at their travel destination to have a friend to hang out with. This could lead to a deeper friendship that lasts well beyond the initial connection on the site or any possible meeting that could have taken place. It is likely that networking takes place for reasons other than developing strong ties with connections made through the website.

Post hoc analysis tests were conducted to evaluate if a relationship existed between networking value and bringing social capital. However, this relationship also proved to be insignificant. Appendix B shows the analysis results evaluating networking value as a motivator related to bridging social capital. The qualitative analysis identified networking as an important factor in this context, but the contribution networking makes remains undetermined. This study provides a preliminary investigation and new foundation into the context of SNETT. Although there is still much to be explored in this context, the current research provides many theoretical and practical implications that can serve as the foundation for future research.

5.1. Theoretical implications

Through a triangulation approach, this study caters to mounting request for both scientific realism and rigor. As one of the earliest attempts in IS community, this study endeavors to unveil an emerging and less studied social networking service domain. Drawing from an array of theories, this study carries several significant contributions to social networking research. In light of the IS research, this work advances our knowledge by illustrating how social capital and trust contribute to the continued use of SNETT services. This is particularly important because social tourism is surfacing as a complementary mechanism for traditional off-line and e-commerce travel services. Understanding the factors that can influence the continual use of this embryonic technology enhances our ability to foster the long-term success of SNETT sites. The qualitative and quantitative results of this work highlight how bonding and bridging social capital can be

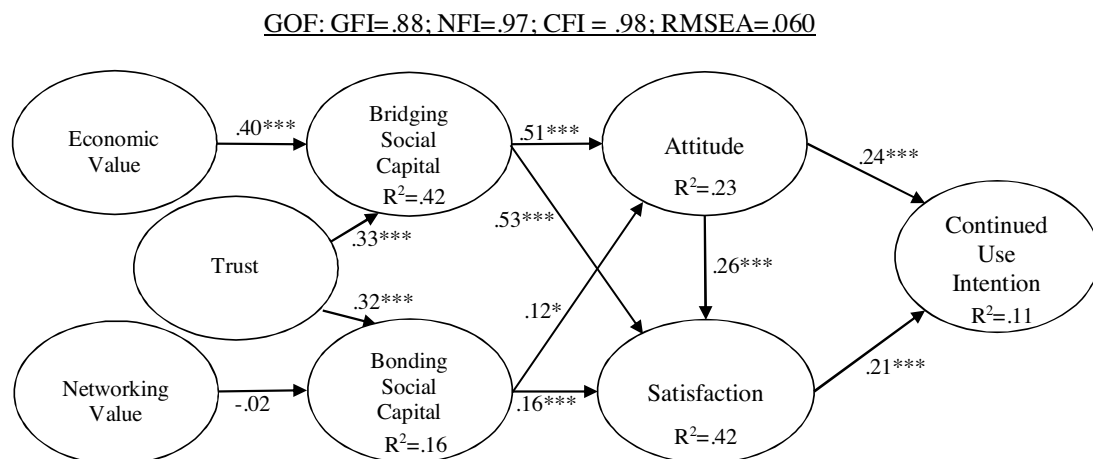


Fig. 2. Full Structural Model Measuring Exogenous Effects on Continued Use Intention. *** p-value < 0.001, ** p-value < 0.01, * p-value < 0.05.

Table 6
Summary of the Hypothesis Testing Results.

Hypotheses	Path Coefficients	t value	Result	
H1	Economic value → bridging social capital	0.40	12.27	Supported
H2	Networking value → bonding social capital	−0.02	−0.60	Not Supported
H3a	Trust → bridging social capital	0.33	9.48	Supported
H3b	Trust → bonding social capital	0.32	8.28	Supported
H4a	Bridging social capital → attitude	0.51	9.51	Supported
H4b	Bridging social capital → satisfaction	0.53	9.44	Supported
H5a	Bonding social capital → attitude	0.12	2.38	Supported
H5b	Bonding social capital → satisfaction	0.16	3.39	Supported
H6a	Attitude → satisfaction	0.26	5.82	Supported
H6b	Attitude → continued use intention	0.24	4.11	Supported
H7	Satisfaction → continued use intention	0.21	3.70	Supported

influenced by networking and economic values and, in turn, further influence users' attitude and satisfaction toward their continued use intention. In essence, this study advances our knowledge by highlighting two distinct types of value, networking value and economic value, which were identified by SNETT users as important motivations for participation in these networks. By highlighting and specifying the different types of value tied to social capital, this study calls attention to the important role of different values for theory development in social networking research. As such, we gain a more in-depth understanding of the phenomenon of interest here and such advancement could be useful in future social network studies as long as the specification is theoretically or methodologically motivated.

This study is one of the relatively few individual-level investigations of the SNETT services in social networking research. In essence, this study sheds light on an important aspect of the social capital associated with trust and self-determination factors. Although this research distinguishes between two types of values for social capital, the empirical findings of this research enrich the understanding of the widely studied relationships between user attitude and satisfaction and intention to continue to use. This study shows the importance of considering the direct influence of attitude and satisfaction on the formation of intention to continue to use for online SNETT services. Furthermore, this study contributes to the existing body of social capital vis-à-vis technology use literature. This research suggests that both bonding and bridging social capital may exert crucial influence on user's attitude and satisfaction toward an innovative technology. The significance of this study is that it implies the necessary lineation for future social networking research.

This study also has important implications for studying trust in newly invented information technology (IT) artifacts. This research, to certain degree, suggests that trust plays a vital role in developing social capital in social networking service domain. According to the significant statistical evidence, this study adds to the existing research by presenting a new relationship between trust and social capital, which can be decomposed into two different types. Despite the fact that trust has been proposed and validated in a variety of contexts by previous studies, this research breaks new ground for trust investigation in social networking research. Although existing research has shown that trust is a crucial factor for behavioral intention, this study further advances this line of research by proving that trust is significantly related to social capital in the context of social networking research where current and/or potential users have yet to meet given the absent geographical proximity.

5.2. Practical implications

The current research makes several contributions to practice in respect to smart tourism and social tourism. Each year millions

of people go online to search for travel destinations, attractions, information, and accommodations. Travel agencies have traditionally provided these services and profited heavily from them. However, with the emergence of SNETT sites, new competition has entered the market in the form of a substitute product. Although it is unlikely that SNETT sites will ever replace the traditional model for traveling, they do possess the potential to gain a share of this market, particularly among the digital natives who are accustomed to social networking technology. The long-term effects could be the use of alternative means for planning travel activities and accommodations by future customers.

Although these websites have received little attention to date, it is something that travel agencies should address as a potential threat to the future of their business. It is recommended that practitioners realize the potential of these websites and incorporate similar functionality into their own website. Rather than being a substitute to travel agency websites, they could become a complimentary service to functionality already provided. By allowing users to connect to each other in addition to making flight and hotel reservations, they could thwart competition and create stronger loyalty among their customers. Users would likely visit the travel agency website more often to connect with other users rather than just visiting when they have a specific need, such as purchasing airplane tickets or making hotel reservations. This can improve the stickiness of their website allowing them to further advertise special deals and convert potential customers into paying customers.

The current research also provides benefits for travel agencies that wish to provide SNETT services in the future. Our research lays the foundation for understanding SNETT sites and factors that influence the usage of this service. Travel agencies can implement functionality to help facilitate these factors and improve the likelihood of success when implementing SNETT services into their current website. For SNETT websites that already exist, the current research provides them with a better understanding of their users and the value of social networking that influences attitude and satisfaction, ultimately resulting in continued use intention. This could help improve their existing communities and provide additional services to improve the users' ability to connect to each other and improve their social capital.

5.3. Limitations and future research

All research contains limitations in its ability to address the three desirable aspects of generalizability, precision, and realism [38]. The current research uses a mixed-methods research model to balance the strengths of one method to compensate for weaknesses in another. Although measures were taken to increase rigor and realism, the current research has some limitations of its

own that should be recognized. Furthermore, these limitations present opportunities for future research to build on the theoretical and practical contributions made by the current research.

Because of lack of research in the specified context being analyzed, the current research first conducted a qualitative assessment to determine motivating factors for using SNETT sites. SDT was used to identify potential motivations, but this is not a comprehensive list of all motivations that could be evaluated. Furthermore, a limited sample size for the qualitative study could be another limitation due to the inability to gain multifarious perspectives of reasons for using. Further research should evaluate other theories on motivations and collect data from a wider audience to determine other motivations that exist beyond what was identified in the current study.

The scope of the study is another limitation that also presents itself with opportunities for future research. The current research evaluates factors such as trust and satisfaction at the community level rather than trust among individuals. Overall, trust in the community may result in continued use of the SNETT community but does not provide insights on deciding who to meet when using the social tourism site. Future research should evaluate these factors at the individual level and determine motivations for meeting specific individuals and factors that influence trust in the person that users meet off-line when traveling.

It was hypothesized that networking value would be positively related to bonding social capital. However, the current research did not support this relationship despite it being the most mentioned motivation among the qualitative sample of users. This raises the possibility of missing factors in the model or other relationships not identified. Future research should evaluate the motivation relating to networking value more deeply to understand its true influence and how it fits in the model for understanding SNETT usage. Other recommendations for future research consists of evaluating privacy, positive word of mouth, and discontinuance. Although a certain level of information is required to instill trust between users, privacy must also be a concern. From the discussions, we had during the qualitative interviews, many users seem very loyal to the SNETT community and were happy to talk about it. However, not all users are likely to feel the same way. Therefore, understanding factors that influence positive word of mouth would be important in understanding the growth of these networks as they seek to take advantages of networking effects. Finally, although participants in the current study expressed satisfaction with the SNETT community, not everybody is likely to have a positive experience. Although dissatisfaction (or negative experiences) is an obvious factor resulting in discontinuance, other factors should also be studied in this highly specific context of social networking in future studies.

6. Conclusion

This study centered on the social networking services context of social networking research investigating the factors that influence the users' continued use intentions of SNETT services. The proposed multitheory model – grounded on TPB, SDT, and social capital theory – was empirically tested using both qualitative and quantitative methodologies. The qualitative method helped glean constructs, which in turn were applied to perform the quantitative testing and analyses. This study contributes to both IS research and practicing communities. The social networking research community benefits from the findings of this study with regard to how social capital and trust contribute to the continued use of social network services. This study validates that trust is significantly related to social capital within the context of social networking research. The practicing business community benefits from the insights this study provides on understanding the value of social media for collaborative economy and the factors that increase customer engagement for the development of smart tourism.

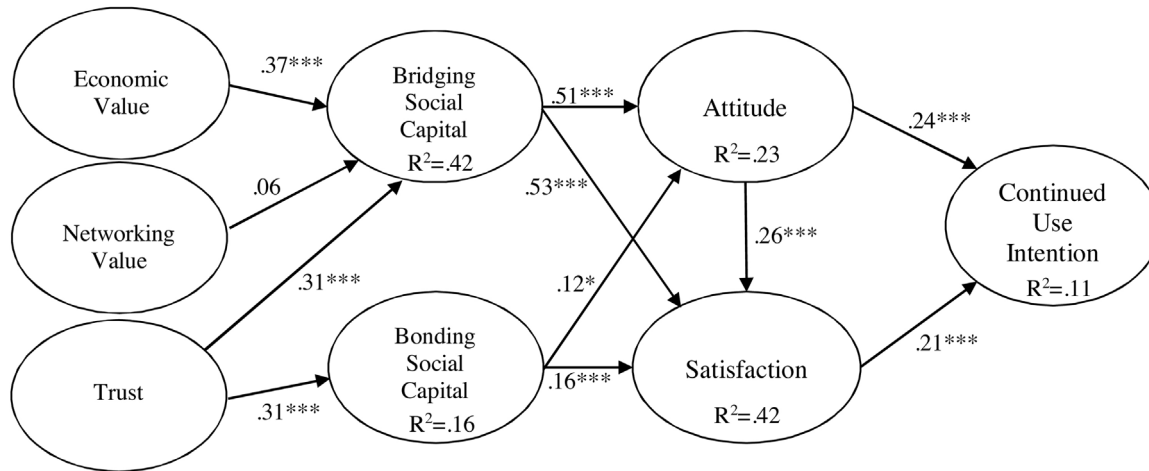
Given the nascent nature of smart tourism-related research in IS, the context of this study is highly relevant because today's collaborative or sharing economy is being triggered by the increased use of social technologies. As nearly one-third of consumer spending in the near future would be influenced by social interactions and more than six billion mobile phones are currently in use worldwide. Social technology applications are expected to further proliferate with mobile devices such as smartphones and tablets and consumer use of social technologies will simultaneously increase. Businesses that rely heavily on consumer insights for product development and marketing need to have in-depth understanding of how to effectively engage their customers on social media to create business value. This study breaks new ground by establishing a methodological and theoretical foundation for future studies to investigate critical successful/failure factors of smart tourism. Scholars may further apply different cultural lens to more deeply understand the interplays of the factors and their associated cultural influence at national, societal, or espoused level.

Appendix A. Aliases for interview respondents

Name	Age	Gender	Years of Using
Amber	23	Female	2
Charley	23	Male	4
Frank	38	Male	2
Heather	40	Female	6
Iris	26	Female	6
Jeremy	33	Male	8
Karen	30	Female	4
Michael	34	Male	2
Roger	29	Male	2
Travis	30	Male	3
Walter	35	Male	1

Appendix B. Posttest evaluation of networking value to bridging Social Capital

GOF: GFI=.88; NFI=.97; CFI = .98; RMSEA=.060

*** p -value < .001, ** p -value < .01, * p -value < .05

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