THE ROLE OF VIRTUAL TRAVEL COMMUNITY AS SHOPPING REFERENCE GROUP

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ABSTRACT

The development of Web 2.0 brings the concept of virtual communities to the tourism industry. The emergence of virtual travel community (VTC) allowed the potential tourists to search up to date, personalized member-generated content, including trustworthy reviews and recommendations. The growing use of VTCs' functionalities, however, raises the question of to what extent the role of these virtual groups as shopping reference groups. This study used an extended model that originated from Technology Acceptance Model and Information System Success Model. A minor modification to the model has been made where virtual group influence is proposed as the outcome or net benefit in the model instead of brand loyalty. The objective of this paper is to measure the direct and indirect relationships of technological features, VTC usage and user satisfaction toward the virtual group influence. The model was tested by using SPSS multiple linear regression. The findings showed that perceived playfulness, perceived ease of use and perceived usefulness are important antecedents to VTC usage and user satisfaction which in turn affected the virtual group influence. These research findings highlight the important of having an idea of what motivates the user to use a VTC and the role of VTC members as shopping reference group.

Keyword: Virtual group influence, virtual travel community, perceived ease of use, perceived usefulness, perceived playfulness, satisfaction.

1. Introduction

The development of Web 2.0 brings the concept of virtual communities to the tourism industry. Virtual community is refers to a group of people who communicate with each other via electronic media, such as the Internet and share common interests unconstrained by their geographical locations (Ridings, Gefen and Arinze, 2002). It can be used as a platform to ask about information. It is unique because most of the content is member-generated, as opposed to those provided by the company websites. The emergence of virtual travel community (VTC) allowed the potential tourists to search the up to date, personalized member-generated content, including trustworthy reviews and recommendations (Buhalis and Law, 2008).

In VTC information can be transmitted through active and passive participation of what other members post about their product and brand use, real experiences and also pictures sharing. Hence, VTC is expected to become a place where members will share credible information (Chan, 2014) including getting information as the basis for making a purchase decision (Ratchford, Lee, and Taludkar, 2003). Due to high level of expertise in particular areas, VTCs can exert influence on shopping decisions (Pentina, Prybutok and Zhang, 2008).

The growing use of VTCs functionalities, however, raises the question of to what extent the role of these virtual groups as shopping reference groups. According to Pentina et. al. (2008) it is not known whether there are significant shopping/consumption related influences take place in VTC. To date the existing literatures on reference group influence in consumer behavior generally focus on face-to-face context (Pentina et al., 2008). Thus more research on the virtual group influence is needed as it can greatly aid our understanding pertaining to this particular issue.

This study used an extended model based on Chan's (2014) study (which combining both Technology Acceptance Model (TAM) and Information System (IS) Success Model) on virtual community effectiveness which is not empirically tested. A minor modification to the model has been made where virtual group influence is proposed as the outcome or net benefit in the model instead of brand loyalty. The broad objective of this paper is to measure the direct and indirect relationships of technological features, VTC usage and user satisfaction toward the virtual group influence.

Research questions are as depicted below:

a) Does perceived ease of use (PEU) affect the VTC usage and user satisfaction?
b) Does perceived usefulness (PU) affect the VTC usage and user satisfaction?
c) Does perceived playfulness (PP) affect the VTC usage and user satisfaction?
d) Does VTC usage play the role in establishing virtual group influence?
e) Does VTC satisfaction play the role in establishing virtual group influence?

This paper is organized as follows: First, an overview of the research problem. Second, review of existing literatures. Third, propose of conceptual framework and hypotheses. Fourth,

describe the research methodology. Fifth, discuss research results and findings. Sixth, state the study limitations, managerial implications and suggestions for future research.

2. Literature Review

Reference group is refers to a person or a group of people that significantly influences an individual's behaviour. According to Lessig and Park (1975, p.41), reference can be defined as "actual or imaginary institutions, individuals or groups conceived of having significant relevance upon individual's evaluations, aspirations or behaviours." From marketing perspective, reference groups are those that consumers will look to for helps in making their purchase decisions.

There are empirical studies of reference group influence in face-to-face context. In Kelley (1947) study, there are two main types of reference group influences identified namely normative influence and comparative influence. Normative influence is conformity based on one's desire to fulfill others' expectations and gain acceptance (Myers, 2008). This influence leads us to conformity in order to be liked and accepted by the normative referents such as parents, teachers and peers (Pentina et. al., 2008). It will help to set and enforce fundamental standards of conduct such as norms, attitudes and values.

On the other hand, comparative influence is refers to a mean of comparison for personality or achievements and anything else (Childers and Rao, 1992). A comparative reference group is a group whose their lifestyles and activities serve as a benchmark for others to be followed. For instance, a person may compare to a comparative referent (such as celebrities) that she/he knows whose lifestyle appears better than them and is worthy for admiration. It provides a standard for comparison and also for adopting specific lifestyles and activities.

Muniz and O'Guinn's (2001) qualitative study on brand communities indicated that members identify with respective brand-related communities through purchasing and using products and services. While VTCs are found to form and enforce the norms of participation and member behavior (Postmes, 2000), it is not known whether any significant consumption-related norms or influences take place online. No mechanism has been proposed or tested that would explain how online groups may exert influence on their members' consumption/shopping decisions.

In short, the uniqueness of VTC justified them as a special case of reference groups characterized by flexibility in membership, lack of face-to-face interactions, possibility of anonymity and low conspicuousness of products. Such unique characteristics in VTC would changing the nature or character of the traditionally accepted types of reference group influences mainly developed in offline context. Prior research on the antecedents of virtual community participation tested such online influence as social identification and group norms (Bagozzi and Dholakia, 2002; Dholakia, Bagozzi and Pearo, 2008).

3. The Proposed Framework and Hypotheses

This study proposed the following research model that presents virtual group influence as a consequence of direct and indirect relationship with VTC usage, user satisfaction, perceived ease of use (PEU), perceived usefulness (PU) and perceived playfulness (PP) (see Figure 1).

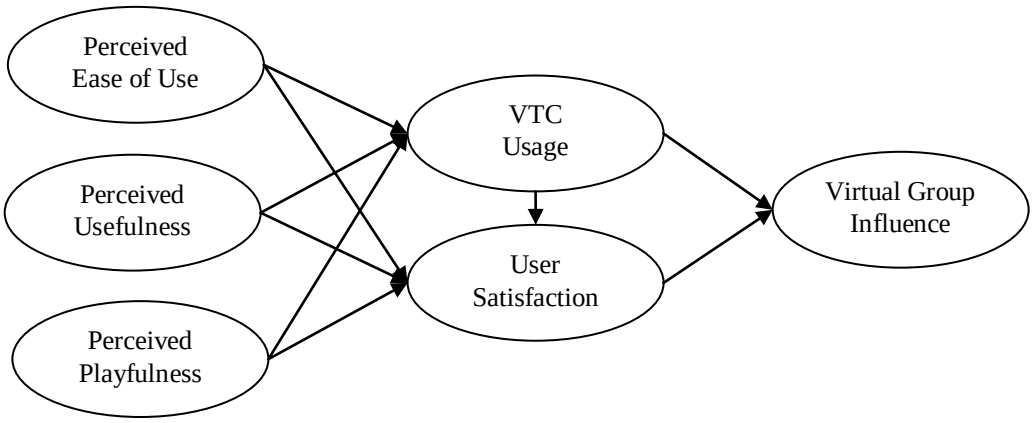

Figure 1: The Proposed Research Model

3.1. VTC Usage and User Satisfaction

For voluntary systems, system use and satisfaction are considered as appropriate measure of its success. System use is refers to a behaviour (DeLone and McLean, 2003) in using a particular system. User satisfaction is refers to the user's favourable attitude (Flavián, Guinalíu and Gurrea, 2006) toward a particular system.

System usage and user satisfaction are closely interrelated where positive experience with "use" will lead to greater "user satisfaction" (DeLone and McLean, 2003). System usage must precede impacts and benefits. Hence, the following hypotheses are proposed:

H1: VTC usage is positively related to virtual group influence.

H2: VTC satisfaction is positively related to virtual group influence.

H3: VTC usage is positively related to user satisfaction.

3.2. Technological Features

According to Davis, Bagozzi and Warshaw (1989), an individual adopts a new technology primarily because of the functionality offered. TAM has long been used to examine the acceptance of Internet related technologies. PEU and PU constructs have been considered important in determining the individuals' acceptance and use of Information Technology (IT) (Keil, Beranek and Konsynski, 1995).

It has been criticized that PEU and PU are found not to be enough to explain the users' motives (Ahn, Ryu and Han, 2007). User believes that an aesthetically pleasing VTC is a

demonstration of the perceived affective quality (Sanchez-Franco and Rondan-Cataluna, 2009). If users find the VTC's appearences pleasing, it is likely that will influence all of the users' emotions and their inclination to use the VTC (Browne, Durrett and Wetherbe, 2004). According to Lindgaard (2007), a pleasant experience such as navigating a "beautiful" website shows to be intrinsically connected to customer satisfaction. Hence, the following hypotheses are proposed:

H4: PEU is positively related to VTC usage.
H5: PEU is positively related to user satisfaction.
H6: PU is positively related to VTC usage.
H7: PU is positively related to user satisfaction.
H8: PP is positively related to VTC usage.
H9: PP is positively related to user satisfaction.

4. Methodology

All measurement items for the present study are adapted from literature. The items are from these sources: virtual group influence – Bearden, Richard and Jesse, 1989, VTC usage – Jiang, Hsu, Klein and Lin, 2000, user satisfaction - Flavián et al., 2006, PEU, PU and PP – Ahn et al., 2007. Five-point Likert-scale that ranging from 1-strongly disagreed to 5-strongly agreed is used to measure each items. The respondents will indicate to what degree they agreed or disagreed to the given statements. Some of the items in are phrased in negative forms to encourage critical evaluation before responses are given.

Non-probability judgmental sampling was employed in collecting the data from the respondents. Those who are having experience in using or browsing a VTC for the past six months only are selected as sample. This is to ensure that the respondents are in the best position to provide the required data for this study. 300 self-administered questionnaires were distributed. 232 questionnaires were returned but only 230 questionnaires are usable for further analysis. This yielded 76.7% response rate.

5. Data Analysis and Findings

SPSS was used to analyze the collected data. The process started with running various descriptive analyses as to feel and to test the "goodness" of the data. Maximum, minimum and missing values were checked. This is to ensure that all the data are filled and within the range. There were some missing cases identified, it was replaced with the midpoint of scale i.e. 3 as suggested by Hair et al. (2014). Standardized scores (z-scores) were generated as to check the presence of outliers. The results showed that the scores were less than ±3.29 and hence the data set can be claimed as free from outliers (Hair et al., 2014).

To test the "goodness" of the data, reliability and validity analyses were carried out. Conbach's alpha values were generated in order to test the interitem consistency reliability.

According to Lance, Butts and Michels (2006), an alpha value of 0.6 or higher is considered acceptable. All the variable items were having alpha values greater than 0.8 and it can be claimed that the measurement items are reliable. To test the validity of the observed variables, correlation test was carried out. High correlations (more than 0.7) indicate collinearity (Pallant, 2013). Pearson correlation coefficients among all the observed variables were below 0.6 and it is deemed that all the variables are not highly correlated and measuring the different concepts.

Next, the demographic profiles of respondents were analyzed. There are a total of 230 respondents for this study which 147 (63.9%) are male and 83 (36.1%) are female. In term of age, the age group of 21-30 is recorded with the highest number with 139 respondents and followed by 31-40 group with 59 respondents, 41-50 group with 24 respondents and 51 and above group with only 8 respondents. All the respondents are having at least diploma qualification. There are 63.5% of the respondents are having Bachelor Degree qualification, Master's degree qualification is 22.6%, Diploma qualification is 13.0% and only 0.9% respondents are with PhD qualification. 58.7% (135 respondents) are single and 36.5% (84 respondents) are married and 11 respondents are with other status.

In term the Internet usage, there are 20 respondents reported with less than 10 hours usage in a week, 65 respondents reported 10-20 hours usage, 21 respondents reported 21-30 hours usage, 75 respondents reported 31-40 hours usage, 22 respondents reported 41-50 hours usage and 27 respondents with more than 50 hours usage. 94.8% of respondents indicated that they are having online purchase experience for the last nine months and only 5.2% are not purchasing any item online.

Based on the research framework, ten hypotheses were developed. To test those hypotheses, multiple regression analyses (4 models) were carried out. Multiple regression is a common method used to test or to measure the relationship between the independent and dependent variables. Regression model 1 is to test H1 and H2, regression model 2 is to test H3, regression model 3 is to test H4, H6 and H8 and regression model 4 is to test H5, H7 and H9.

The results of the regression model 1 indicated the two predictors explained 36.7% of the variance ($R2=.367$, $F=21.48$, $p<.001$). It was found that VTC usage ($\beta=.327$, $p<.001$) and user satisfaction ($\beta=.252$, $p<.05$) significantly predicted virtual group influence. The results of the regression model 2 indicated the predictor explained 19.1% of the variance ($R2=.191$, $F=53.73$, $p<.001$). It was found that VTC usage ($\beta=.437$, $p<.001$) significantly predicted user satisfaction. The results of the regression model 3 indicated the three predictors explained 40.8% of the variance ($R2=.408$, $F=26.18$, $p<.001$). It was found that PEU ($\beta=.262$, $p<.01$), PU ($\beta=.209$, $p<.05$) and PP ($\beta=.410$, $p<.001$) significantly predicted VTC usage. The results of the regression model 4 indicated the three predictors explained 35.3% of the variance ($R2=.353$, $F=29.77$, $p<.001$). It was found that PEU ($\beta=.226$, $p<.01$), PU ($\beta=.218$, $p<.01$) and PP ($\beta=.385$, $p<.001$) significantly predicted user satisfaction. Table 1 below summarized the results of hypothesis testing that generated from the several multiple regression analyses.

Table 1: Results of Hypothesis Testing

Hypotheses	**Path**	**Supported**
H1	VTC Usage → Virtual Group Influence	Yes
H2	VTC Satisfaction → Virtual Group Influence	Yes
H3	VTC Usage → User Satisfaction	Yes
H4	PEU → VTC Usage	Yes
H5	PEU → User Satisfaction	Yes
H6	PU → VTC Usage	Yes
H7	PU → User Satisfaction	Yes
H8	PP → VTC Usage	Yes
H9	PP → User Satisfaction	Yes

6. Conclusion

The main objective of this study is to measure the direct and indirect relationships of technological features, VTC usage and user satisfaction toward the virtual group influence. Through several multiple linear regression analyses, it shown that all factors (H1 to H9) had a significant positive influence on virtual group influence. The results support the developed conceptual model.

The technological features within a VTC are significantly impact or influence the usage and satisfaction level of the users. Particularly, perceived playfulness had the highest impact on VTC usage and user satisfaction. This comes in line with what was previously predicted that an aesthetically pleasing VTC is likely to influence the users' inclination to use the VTC. System usage must precede impacts and benefits. As such, virtual group influence is proposed as the outcome or net benefit. VTC usage and user satisfaction are having positive influence on virtual group influence. The more usage or patron in a particular VTC, the more information that a person may get especially those real or objective experiences that shared. If those member-generated information are considered trustworthy by the users, they may use as the input for making the product or brand choice. Because of this information gathering, it will influence the users' decision making process. It is in line with what Pentina et al. (2008) found in their study that VTCs can exert influence on shopping decisions.

Findings from the present study make a contribution to research on virtual group influence by clarifying the situation nature of the technological features and suggesting a new approach to measuring the outcome or benefit in virtual community context. VTC not only can fulfill their users' social needs, but also have a higher potential to influence users' shopping preferences and may present opportunities for businesses.

Businesses can benefit by upgrading their websites to provide more interactive interests-centered chat-rooms moderated by experts and encouraging opinion-sharing, exchange of ideas and information, and engaging in product-related discussions. There are limitations such as no

differentiation between the different types and modes of usage (posting or lurking) or community characteristics. The context of the present study is focus solely into the tourisms industry. But there are many similar online communities in other industries as well which is not being study. Future research should focus on differentiating the different types of usage and also to validate this model in other virtual community context. Alternatively, new outcome or benefit that derived from the system usage can be proposed as dependent variable.

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