WHAT KEES PEOPLE IN SOCIAL VIRTUAL COMMUNITIES? COGNITIVE, AFFECTIVE AND CONATIVE DRIVERS OF LOYALTY

DUQUE, LOLA C. *
GASTON-BRETON, CHARLOTTE
LADO, NORA
lduque@emp.uc3m, charlotte.gaston@uc3m.es, nora@eco.uc3m.es
Universidad Carlos III de Madrid

ABSTRACT

Building on the ABC (Affect-Behavior-Cognition) model of attitude we propose that Social Virtual Communities (SVC) can be evaluated either in terms of feelings (i.e., sense of community towards SVC to SVC), actions (i.e., participation to SVC) or beliefs (i.e., satisfaction judgment). We propose that SVC loyalty should be positively influenced by those three drivers, which additionally will be moderated by participants' experiences (pleasure, contentment, surprise and relief) (Oliver, 1997). Despite the positive influence of the three drivers on loyalty, the effect of satisfaction is higher for the contentment-oriented group and the effect of participation is higher for the relief-oriented group. Results suggest that there are three main drivers of loyalty, satisfaction as a more cognitive factor perceived by the participant, the sense of virtual community as a more affective factor felt by the participant and the actual participation as a more behavioral aspect, the later being the most important factor.

Keywords:

Satisfaction, sense of virtual community, participation, loyalty, experiences

* This study has been funded by the Spanish Ministry of Education and Science (project SEJ2007-65897). Lola C. Duque is the corresponding author and can be contacted at lduque@emp.uc3m.

1. Introduction

Fairly banal phenomena are sometimes rashly referred to as "new trend", yet concerning social virtual communities (SVCs) the claim is totally justified. Worldwide networks such as Facebook or Messenger as well as local sites, such as Tuenti in Spain or Skyrock in France, are visited by three quarters of consumers who go online, and the numbers of people visiting these sites increased by 24% in 2010 compared to 2009 (Nielsen online, 2010). SVC phenomena isn't just growing rapidly, it is also evolving– both in terms of users' expectations and differentiation in SVC positioning. Thus, there is a compelling need to explore SVC participation and its related marketing opportunities in a long-term perspective considering heterogeneity in terms of consumer experiences and SVC types. This paper particularly aims at identifying the drivers of SVC loyalty and explaining their relative importance according to consumer experiences with the SVC.

Despite a growing number of studies on SVC members, relatively little is known about what drives consumers to maintain their membership, that is, their loyalty to SVC. Previous studies focused on the why, what and how people start to participate in a SVC (Hennig-Thurau, et al 2004; Dholokia, Bagozzi and Pearo, 2004) but do not address those questions in terms of actual and future participation despite its direct relationship with key issues of marketing such as loyalty to the SVC. Only two recent studies (Langerak et al, 2003; Chen, 2007) have measured the relationships between participation, satisfaction and continuance intention in a SVC context.

In this paper, we attempt to cover this research gap by proposing that loyalty can be activated through cognitive, affective and conative drivers which, in turn, could be respectively influenced by consumer's experiences. First, building on the ABC (Affect-Behavior-Cognition) model of attitude (Eagly and Chaiken, 1995) we propose that SVC can be evaluated either in terms of feelings (i.e., sense of community towards SVC to SVC), actions (i.e., participation to SVC) or beliefs (i.e., satisfaction judgment). Whereas the sense of community speaks to feelings and affect, participation reflects the actions realized by participants and satisfaction captures the cognitive evaluation of the differences between expectations and outcomes. We propose that SVC loyalty should be positively influenced by those three drivers. Second, we explore under which conditions the cognitive, affective and conative evaluations have a stronger impact on loyalty. When consumers experience an emotional relationship with the SVC, we propose that their loyalty should depend more on affective evaluations. Alternatively, when consumers have a more analytical approach towards the SVC, they should give more importance to cognitive or conative evaluations. Based on Oliver's (1997) classification of consumer experiences, we especially argue that users delighted-, pleased- or surprised-oriented should maintain their participation for affective reasons whereas the loyalty for the contentment-, tolerant- and relieved-oriented users should rely more on cognitive and conative aspects.

2. Conceptual Framework and Hypotheses

Figure 1 summarizes the proposed relationships.

2.1. The Cognitive, Affective and Conative drivers of SVC loyalty

Satisfaction: Cognitive evaluation of the SVC

Satisfaction is an evaluative judgment that has been modeled cognitively by researchers (Oliver, 1997). Indeed, the satisfaction judgment is generally agreed to originate in a comparison of the level of product or service performance, quality, or other outcomes perceived by the consumer with an evaluative standard. The evaluative aspect of the satisfaction judgment vary along a continuum, from unfavorable (i.e., dissatisfied) to favorable (i.e., satisfied). Few researches study the relationship of satisfaction with a SVC and the participant's behavioral intentions. One of the studies (Langerak et al., 2003) models satisfaction as a multidimensional construct, and two other studies model satisfaction as one-dimensional construct (Jin, Cheung, Lee and Chen, 2007). In line with these findings we expect that:

H1. Satisfaction with the SVC is positively related to SVC loyalty.

2.1.1. Sense of community: Affective evaluation of the SVC

Sense of community is recognized as a significant feature in virtual environments (Blanchard and Markus, 2004; Koh and Kim, 2003) and defined as members' feelings of membership, identity, belonging and attachment to a group that interacts primarily through electronic communication (Blanchard, 2007, p. 827). Thus, to capture the affective dimension of SVC evaluation, we use the concept of the sense of community given by the consumers to the SVC. A useful starting point is the qualitative study developed by Blanchard and Markus (2002) on the "experienced sense" of the well established SVC called messenger. The authors underlined that MSN was actively maintained through three social processes: the giving and receiving of support, the creation of identity and the making of identifications, and the production of trust. These processes were not independent of each other, but interacted to produce sense of SVC characterized by recognition, support, identification, attachment, relationship and obligation. Thus, SVC loyalty should be influenced by the sense of community given by the participants in social networks. Therefore, we predict that:

H2. Sense of SVC is positively related to SVC loyalty.

2.1.2. Participation: Conative evaluation of the SVC

There is a normal transition when a new participant joints a SVC to the moment he gets familiar with it. As Langerak et al. (2003) note, knowledge about the SVC rules is accumulated over time and the more time spend in the SVC the stronger the ties between participants. Thus, the evaluation of the SVC to be different between novices versus experienced members. In line with the commitment-trust theory (Morgan and Hunt, 1994) those that have spent longer time as members of the SVC will be more involved in it. Yet, the membership length or usage duration is different from usage frequency; since a novice member can participate frequently in the new SVC he belongs to. In general, SVC usage has been included in previous models as a dependent variable in order to identify the motives to participate in the SVC. In our framework, we expect these types of participation to affect SVC loyalty. Another type of indicator of participation in the new SVC environment is given by the number of contacts the participant maintains relationships with. On overall, we predict that:

H3. Participation with the SVC is positively related to SVC loyalty.

2.2. The Moderating role of consumers' experiences with SVC

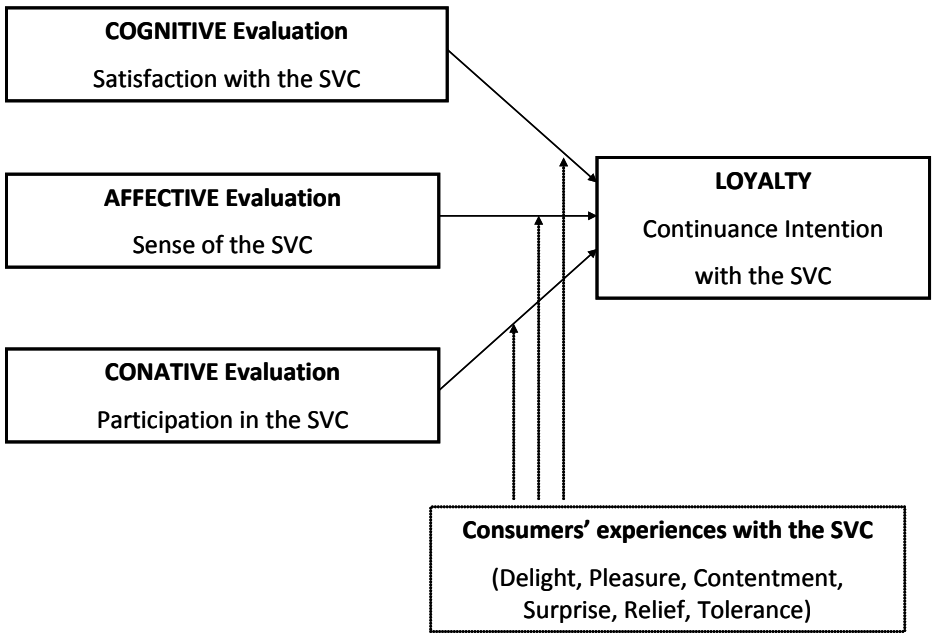
Participants may have diverse experiences with the SVC they stay in. These experiences have been called also prototypes or orientations, and so far research has proved the existence of six of them (Oliver 1997): *delight*, *pleasure*, *contentment*, *surprise*, *relief*, and *tolerance*. Based on surveys among automobile users, Westbrook and Oliver (1991) and Oliver (1997) were able to establish emotional and processing profiles according to the six categories of experiences. Especially, the delighted, pleased and surprised groups score high on both affect and process whereas the relieved group scores very low on both aspects. Alternatively, contentment and tolerant groups do moderately process the information and are scoring low on the positive affects. Attitudes are expected to change with experiences. Thus, SVC evaluations should be influenced by users' experiences. Especially, when consumers experience an emotional relationship with the SVC, their loyalty should depend more on affective evaluations. In other words, the delighted-, pleased- or surprised-oriented users of SVC should mainly maintain their participation for affective reasons whereas the tolerant-, contentment- and relief-oriented users should rely more on other aspects. In particular, we predict that consumer experiences with the SVC interact with the Cognitive, Affective, Conative drivers of SVC loyalty, such that:

H4a. Satisfaction with the SVC is the strongest driver of loyalty when consumers have a low hedonic experience and a moderate processing with the SVC (e.g., Tolerance and Contentment experiences).

H4b. Sense of SVC is the strongest driver of loyalty when consumers have a high hedonic and processing experience with the SVC (e.g., Surprise, Pleasure, Delight)

H4c. Participation with the SVC is the strongest driver of loyalty when consumers have a low processing and low hedonic experience with the SVC (e.g., Relief)

FIGURE 1
Conceptual Framework



3. Research Method

3.1. Subjects and procedure

Previous studies of SVCs have considered students an appropriate source of data (Pentina et al., 2008; Wang and Fesenmaier, 2003). A total of 1112 Spanish students from undergraduate courses of marketing in the University Carlos III de Madrid participated in the online survey (the URL was distributed via email), who were rewarded for their participation. The survey was presented as an "opinion study" and participants had to fulfill, first, questions about SVC participation. The findings underline that 95% of the participants (1056) belong to at least one SVC. The descriptive analysis shows that the most popular SVCs in terms of usage frequency are Messenger (55%), Tuenti (31%) and Facebook (11%) identifying My Space, Hi5 and Skype as marginally used SVCs (less than 1.5% respectively). Students were asked to write down the SVC that they connected the most. Then the ensuing questions were based on that SVC. We only retain for the analysis participants from the three more important SVCs, thus our final usable sample consists of 1008 observations.

3.2. Measures of satisfaction, sense of SVC, participation and loyalty

Satisfaction and loyalty were measured with one standard item whereas sense of SVC and participation were modeled as formative constructs with various indicators. The questionnaire was pretested with a sample of 118 students and was found to be reliable and easy to use. *Satisfaction with the SVC* was measured with a global indicator taking into consideration all previous experiences of the participant with the SVC (cumulative satisfaction). A 10 point Likert scale was used (Oliver, 1997). *Sense of Virtual Community* was measured through the experienced benefits identified through a qualitative study by Blanchard and Markus (2004). Participants indicated, in a 5 point Likert scale, why they still participate in the SVC: I can identify participants (recognition), I feel identified with others (identification), I find interesting and supportive information (support), I meet new and interesting people (relationship), I feel involved in this community (emotional attachment) and I feel obliged to fulfill in this community (obligation). This construct is modeled as formative, so we assessed the measures' quality following the process suggested by Diamantopoulos and Winklhofer (2001). There were no indications of multicollinearity among the measures nor of content and empirical redundancy, thus all measures were retained for the model estimation. *Participation* was also modeled as a formative construct. We used three indicators that imply a different type of participation in a SVC: *duration of participation* that indicates for how long they have been using the

SVC (5 points scale ranging from less than 6 months to more than 5 years), *usage frequency* that indicates how often they use the SVC (5 points scale ranging from never to very frequently), and *number of contacts* they have in the SVC (5 points scale ranging from less than 50 to more than 200). We followed Diamantopoulos and Winklhofer´s (2001) suggestions and retained the three measures. *Loyalty to the SVC* was measured by asking participants whether they will use the SVC in the future, having 5 options ranging from very likely to very unlikely, as in the Jin et al (2007) study.

3.3. Moderator: Experiences with the SVC

In order to create subsamples we identified the *orientation participants have toward the SVC* by translating the six orientations proposed by Oliver (1997) to the SVC context. We asked students to pick the option that best fitted the orientation they have: It makes me feel well (*delight*), It entertains me (*pleasure*), It is a routine/costume for me (*contentment*), I always find something new (*surprise*), I do not want to miss something (*relief*), and I do not have any other alternative (*tolerance*). This classification resulted in 38 observations for delight (4%), 357 for pleasure (34%), 437 for contentment (41%), 112 for surprise (11%), 102 for relief (10%) and 10 for tolerance (1%). Because of the samples sizes, delight and tolerance cannot be analyzed since these groups do not meet the requirements for the model estimation (minimum of 70 per group for PLS). Thus, we test the hypotheses for pleasure, contentment, surprise and relief.

Discrimitant validity was tested by comparing the average variance extracted (AVE) of each construct with the shared variance between constructs (Fornell and Lacker 1981): for each construct, the AVE's squared root exceeds its shared variance with other constructs. Convergent validity and internal consistency do not apply to our analysis since there are not reflexive constructs in the model.

4. Data Analysis and Results

The proposed model is tested using the methodology of structural equations based on the Partial Least Squares (PLS) algorithm, which consists of an iterative process that maximizes the predictive and explanatory power of the model. The model is assessed in terms of R-square value of the dependent variable in the model: the model explains 20% of loyalty for the pooled sample and 24% for the contentment subsample, 18% for pleasure, 36% for relief and 22% for surprise. Based on the psychometric properties of the models it is concluded that the proposed model reasonably fit the data. Table 1 reports the standardized coefficients for the model estimations.

TABLE 1
Standarized Coefficients

Path / Experience	**Contentment**	**Pleasure**	**Relief**	**Surprise**	**Pooled**
Satisfaction > loyalty	.231 **	.127 **	.030	.110	.172 **
Sense of VC > loyalty	.187 **	.191 **	.290 **	.313 **	.186 **
Participation > loyalty	.277 **	.284 **	.456 **	.192 **	.287 **
R-square of dependent variable (%)					
Loyalty	24	18	36	22	20

** significant at 5% level (t > 1.96)

Hypothesis 1 predicted that loyalty with the SVC is driven by satisfaction (cognitive). This effect is positive and significant (β= .17), thus H1 is supported. Hypothesis 2 predicted the effect of sense of SVC (affective) on loyalty. The effect is also positive and significant, and similar to the one of satisfaction (β = .19), thus H2 is supported. Hypothesis 3 predicted the effect of participation (conative) on loyalty. This is the highest effect on loyalty (β= .29), thus H3 is also supported.

Hypothesis 4 predicted that one of the drivers will have a stronger effect on loyalty depending on the experience of the participant towards the SVC. This is if they classify the SVC as giving them contentment, pleasure, relief or surprise. Table 3 gives the estimates for each of the subsamples. A first look at the table suggests that there are differences in the impacts of the drives on loyalty by experience. In fact the impact of satisfaction on loyalty is not significant for the relief and surprise groups. To compare if the differences between the standardized coefficients are significant, we use the standard errors from the bootstrap output of the PLS estimation as suggested by Chin (2000).

H4a predicted that the effect of satisfaction on loyalty would be the highest for the contentment group. The test presented in table 4 allows us to confirm that the effect for contentment (β= .23) is significantly higher than the one for pleasure (β= .13) and relief (β= .03), but not for surprise. Thus, H4a is partially supported.

H4b predicted that the effect of sense of SVC on loyalty would be higher for the surprise and pleasure groups. The test presented in table 4 shows that all the coefficients are statistically equal, thus H4b is not supported. This hypothesis was suggested in terms of the moderating effect of experiences on the relationship between sense of SVC and loyalty; however experiences do have a direct effect on the sense of SVC. The ANOVA test shows that the level of sense of SVC is significantly different by groups, particularly a Bonferroni test confirms that the contentment group is significantly lower than the other groups. Interestingly, the prediction could be reworded as the affective evaluation will be lower for the less hedonic group: the contentment-oriented participants.

H4c predicted that the effect of participation on loyalty would be higher for the relief group. The test confirms that this effect (β= .46) is significantly higher than the effect for contentment (β= .28), pleasure (β= .28) and surprise (β= .19). Thus, H4c is supported.

5. Discussion

Our research sought to understand the main drivers of loyalty through the Affect-Behavior-Cognition (ABC) model. Results suggest that there are three main drivers of loyalty, satisfaction as a more cognitive factor perceived by the participant, the sense of virtual community as a more affective factor felt by the participant and the actual participation as a more behavioral aspect, the later being the most important factor. These findings apply to the overall sample that involves three SVCs: Messenger, Facebook and Tuenti.

Our research also proposed and found reasonable support for the moderating effect of consumers experiences (Oliver 1997) on the effect of the ABC drivers of loyalty. We explored four types of experiences participants may have with the SVC: (a) experience-as-pleasure, (b) experience-as-contentment, (c) experience-as-surprise and (d) experience-as-relief. This categorization allowed us testing the ABC model for the four subgroups and testing our predictions: when participants experience an emotional relationship with the SVC, loyalty should depend more on affective evaluations, whereas when participants have a more analytical approach towards the SVC, they should give more importance to cognitive or conative evaluations. We found that the satisfaction-loyalty relationship is higher for the contentment group and the participation-loyalty relationship is higher for the relief group. We did not find differences for the sense of SVC-loyalty relationship by experiences, although we could confirm that the level of sense of SVC felt by the contentment group is significantly lower than for the other groups.

Since this approach proved its usefulness for understanding what keeps different groups of participants loyal to a SVC, this finding has interesting practical implications for SVCs' managers that could better target their participants and take actions (promotions, games, services, etc.) to keep them involved depending on their different profiles.

REFERENCES

BLANCHARD, A.L. (2007), "Developing a Sense of Virtual Community Measure", *Cyberpsychology & Behavior*, Vol. 10 (6), pp. 827-830.

BLANCHARD, A.L. and MARKUS, M.L. (2004), "The experienced 'sense' of a virtual community: Characteristics and Processes", *Data base for Advances in Information Systems*, Vol. 35, No. 1, pp. 65-79.

CHEN, I.Y.L. (2007), "The factors influencing members' continuance intentions in professional virtual communities –A longitudinal study", *Journal of Information Science*, Vol. XX, No. X, pp. 1-17.

CHIN, W. W. (2000). Frequently Asked Questions – Partial Least Squares & PLS-Graph. Available at http://disc-nt.cba.uh.edu/chin/plsfaq.htm, accessed November 2010.

DHOLAKIA, U.M., BAGOZZI, R.P. and PEARO, L.K. (2004), "A Social Influence Model of Consumer Participation in Network- And Small-Group-Based Virtual Communities", *International Journal of Research in Marketing*, Vol. 21, No. 3, pp. 241-263.

DIAMANTOPOULOS, A. and WINKLHOFER, H.(2001). "Index Construction with Formative Indicators: An Alternative to Scale Development", *Journal of Marketing Research*, Vol.38 (2), pp.269-277.

EAGLY, A., & CHAIKEN, S. (1995). Attitude strength, attitude structure and resistance to change. In R. Petty and J. Kosnik (Eds.), Attitude Strength. (pp. 413–432). Mahwah, NJ: Erlbaum

FOMELL, C. and LARCKER, D. F. (1981), "Structural Equation Models With Unobservable Variables and Measurement Errors," *Journal of Marketing Research* (18:2), 1981, pp. 39-50.

HENNING-THURAU, T., GWINNER, K.P., WALSH, G. and GREMLER, D.D. (2004), "Electronic Word-of-Mouth Via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet?", *Journal of Interactive Marketing*, Vol. 18, No. 1, pp. 38-52.

JIN, X., CHEUNG, C.M.K., LEE, M.K.O. and CHEN, H. (2007), "Factors Affecting Users' Intention to Continue Using Virtual Community", *The 9th IEEE International Conference on E-Commerce Technology and the 4th IEEE International Conference on Enterprise Computing*, E-Commerce, and E-Services.

KOH J. and KIM Y-G (2003), "Sense of Virtual Community: A Conceptual Framework and Empirical Validation", *International Journal of Electronic Commerce*, 8(2), pp. 75-93.

LANGERAK, F., VERHOEF, P.C., VERLEGH, P.W.J., and VALCK, K. (2003), "The Effect of Members' Satisfaction with a Virtual Community on Member Participation", *ERIM Report Series Research in Management*, 4. Erasmus University.

MORGAN, R. M., and HUNT, S. D. (1994), "The Commitment-Trust Theory of Relationship Marketing", *Journal of Marketing*, Vol. 58, No. July, pp. 20-38.

OLIVER, R.L. (1997), *Satisfaction: A Behavioural Perspective on the Consumer*. New York: Mcgraw-Hill.

PENTINA, I., PRYBUTOK, V.R., ZHANG, X. (2008), "The Role of Virtual Communities as Shopping Reference Groups", *Journal of Electronic Commerce Research*, Vol. 9, No. 2, pp. 114-123.

PERLUSZ, S., GATTIKER, U. and WICKRAMASINGHE, N. (2003), "Risk and the Adoption of New Technologies: A Field Study", *Academy of Management Proceedings*, Seattle, Washington, 1-6.

RIDINGS, C., GEFEN, D. and ARINZE, B. (2006), "Psychological Barriers: Lurker and Poster Motivation and Behavior in Online Communities", *Communications of the Association for Information Systems*, Vol. 18, pp. 329-354.

THOMAS, J.B., PETERS, C.O. and TOLSON, H. (2007), "An Exploratory Investigation of the Virtual community MySpace.com: What are Consumers Saying about Fashion?", *Journal of Fashion Marketing and Management*, Vol. 11, No. 4, pp. 587-603.

WESTBROOK R.A. and OLIVER R.L. (1991), "The Dimensionality of Consumption Emotion Patterns and Consumer Satisfaction". *Journal of Consumer Research*, 18 (June), pp. 84-91.