Electronic Word-Of-Mouth Contribution Continuance in Online Opinion Platforms: The Role of Multiple Commitments

Xiao-Ling Jin  
City University of Hong Kong, xiaojin@cityu.edu.hk

Li Xiang  
USTC-CityU Joint Advanced Research Center, xiangli53@mail.ustc.edu.cn

Matthew K.O. Lee  
City University of Hong Kong, cbmatlee@cityu.edu.hk

Christy M.K. Cheung  
Hong Kong Baptist University, ccheung@hkbu.edu.hk

Zhongyun Zhou  
USTC-CityU Joint Advanced Research Center, zhongzhou2@student.cityu.edu.hk

Follow this and additional works at: http://aisel.aisnet.org/pacis2010

Recommended Citation
Jin, Xiao-Ling; Xiang, Li; Lee, Matthew K.O.; Cheung, Christy M.K.; Zhou, Zhongyun; and Zhao, Ding-Tao, "Electronic Word-Of-Mouth Contribution Continuance in Online Opinion Platforms: The Role of Multiple Commitments" (2010). PACIS 2010 Proceedings. 149.  
http://aisel.aisnet.org/pacis2010/149
Abstract

Based on the theoretical lens of multiple commitments and prior research on electronic word-of-mouth (eWOM), this study develops a research model to investigate the antecedents of users’ continuance intention to contribute eWOM in online opinion platforms. Specially, this study investigates the mediating roles of multiple commitments namely, affective commitment, calculative commitment and normative commitment, between perceived benefits and continuance intention of eWOM contribution. The research model is tested by the data collected from 456 eWOM contributors of a famous online opinion platform in China (i.e., “dianping.com”). The results indicate that affective commitment and normative commitment are the key determinant of continuance intention to contribute eWOM in online opinion platforms. These two commitments are, in turn, influenced by extrinsic reward and self-enhancement. Surprisingly, enjoyment in helping other consumers and enjoyment in helping the company have little impact on either affective commitment or normative commitment. Implications of this study are noteworthy for both researchers and practitioners.

Keywords: Electronic word of mouth, Online opinion platforms, Continuance intention, Affective commitment, Normative commitment, Calculative commitment
1 INTRODUCTION

Along with the rapid development of the Internet, electronic media (such as Internet forums, Weblogs, online feedback mechanisms, etc) have been emerged as important channels for consumers to share positive or negative consumption-related advice regarding a product or company with a great many of people over the world; that is to engage in electronic word-of-mouth (eWOM) communication. eWOM communication has a significant impact on consumers’ pre-purchase risk perception of online shopping (Ha 2002) and customer perceptions of value and customer loyalty intentions (Gruen et al. 2006). Bickart and Schindler (2001) compared the characteristic of WOM-based information on Internet forums with market-generated information on the website. They showed that eWOM-based information may have a greater credibility, empathy and relevance to customers than online marketer-garneted information (Bickart and Schindler 2001). They also conducted an experiment to investigate the effects of these two different kinds of information on consumer behaviors and found that consumer generated eWOM information on Internet forums had stronger influence on consumers’ interest in the product topic than marketer-generated information on the website. eWOM communication can take place in many ways, such as online reputation systems, discussion forums, etc. In this study, we focus on eWOM communication via online opinion platforms in which consumers anonymously share their own advice on, and consumption experience with, products and services with multiple people through the Internet.

The success of online opinion platform depends on consumers’ persistent contribution. There should be a group of consumers to frequently articulate their opinions or experience regarding goods or services. Otherwise, online opinion platforms will lose their values and effect. Based on the literature of online communities and traditional WOM, prior studies have investigated the motivations behind consumers’ decisions to spread eWOM on online platforms (e.g., Hennig-Thurau et al. 2004; Gruen et al. 2006; Tong et al. 2007). Little empirical work, however, has investigated the factors influence consumers’ continuously eWOM spreading in online opinion platforms. Filling this research gap, this study proposed a research model by drawing upon theoretical lens of commitment and prior literature of eWOM communication. Especially, the purposes of this study are to: (1) investigate the roles of multiple commitments in users’ continuance intention to contribute eWOM in online opinion platforms; (2) examine how perceived benefits from eWOM contribution influence consumers’ multiple commitments to online opinion platforms.

2 MODEL DEVELOPMENT

In order to understand why consumers continue contributing eWOM in online opinion platforms, a research model (see Figure 1) is developed on the literature of multiple commitment and eWOM communication in online opinion platforms.

2.1 Three Forms of Commitment

The importance of commitment on behavioral continuance has been addressed in various disciplines. In the social exchange literature, commitment is conceptualized as “the attachment an individual feels to a collective entity, such as a relation, a group, or organization” (Lawler and Yoon 1996). It posits that people engage in commitment behavior because of their desire to maintain a valued relationship with a person, a group, or an organization. Attachment to a collective entity involves various interests which result in three dimensions of commitment, including calculative (continuance) commitment (derived from perceived costs of leaving the relationship), affective (emotional) commitment (derived from emotional attachment to, identification with, and involvement in an entity) and normative commitment (motivated by the actor’s moral obligation that he must fulfill). The behavioral consequences of commitment in social exchange include “(1) stay in the exchange relation despite attractive alternatives; (2) provide each other token gifts, and (3) contribute to a new joint venture” (Lawler and Yoon 1996).
In the relationship marketing literature, commitment is defined as “an exchange partner believing that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it; that is, the committed party believes the relationship is worth working on to ensure that it endures indefinitely” (Morgan and Hunt 1994, p. 23). It has been found to play a very remarkable role in predicting consumer retention (Gruen and Summers 2000) and positive word-of-mouth communication (Brown et al. 2005).

Recently, commitment has been investigated to understand users’ continued behavior in online communities (Jin et al. 2009; Cheung and Lee 2009; Li et al. 2006). This line of research indicates that commitment exerts a significant effect on users’ decisions to continue participating in online communities. These studies only focused on one or two types of attitudinal commitment and ignore the others. However, different types of attitudinal commitment can explain different aspects of reasons for behavioral continuance in online communities (e.g., online opinion platforms). Affective commitment captures an individual user’s sense of emotional attachment to and involvement with an online community. Users who have affective commitment to an online community are desire to stay in that online community and help others. Calculative commitment refers to an individual user’s need to stay in an online community because of the cost of switching or discontinuing. Normative commitment represents users’ responsibility to stay in the online community and help others. Users normatively commit to an online community because they believe that it is the right and moral thing to do. In this study, we posit that the three types of commitment influence users’ continued intention to contribute eWOM in online opinion platforms.

H1-H3: eWOM contributors’ commitment to an opinion platform including affective commitment, calculative commitment and normative commitment has a positive effect on their continuance intention to contribute eWOM in that opinion platform.

2.2 Perceived Benefits of eWOM Contribution in Online Opinion Platforms

Commitment theorists posit that commitment to a social group is primarily derived from the membership benefits (Morgan and Hunt 1994). Consistent with this view, commitment to an online opinion platform stems from an understanding that membership entails significant benefits. According to prior research, contributing eWOM may provide the contributors not only self-interest benefits but also enjoyment in helping others.

Self-interest benefits are the benefits that increase the welfare of one self, including tangible benefits such as economic reward and intangible benefits such as self-enhancement (Tong et al. 2007; Hennig-Thurau et al. 2004). Economic reward refers to monetary reward (gift or money) provided for eWOM contribution (Tong et al. 2007). Self-enhancement is the perception of status and respect from others by eWOM contribution. Economic reward and self-enhancement are considered by the eWOM contributors as a sign of approval of their effort by the reward giver (Hennig-Thurau et al. 2004).

Enjoyment in helping others is the feelings of pleasure obtained from helping others. It is closely related to the concept of altruism or prosocial behavior discussed in philosophical literature (e.g., Batson 1994). There are two aspects of enjoyment in helping others in eWOM contribution, namely, enjoyment in helping other consumers and enjoyment in helping the company. Enjoyment in helping other consumers is driven by users’ desire to recommend their positive experience to other consumers, to warn others of bad products, or both. Enjoyment in helping the company is driven by users’ desire to reciprocate the company in return for a good experience. The impact of perceived benefits on commitment has been empirically proved in prior research (e.g., Hennig-Thurau et al. 2002; Park and Kim 2006; Jin et al. 2009).

H4a-H6d: Perceived benefits of eWOM contribution in an online opinion platform including enjoyment in helping other consumers, enjoyment in helping the company, extrinsic reward and self-enhancement have positive effects on affective commitment, calculative commitment and normative commitment to the online opinion platform.
H4a-H4d: Perceived benefits of eWOM contribution in an online opinion platform including enjoyment in helping other consumers, enjoyment in helping the company, extrinsic reward and self-enhancement have positive effects on affective commitment to the online opinion platform.

H5a-H5d: Perceived benefits of eWOM contribution in an online opinion platform including enjoyment in helping other consumers, enjoyment in helping the company, extrinsic reward and self-enhancement and have positive impacts on calculative commitment to the online opinion platform.

H6a-H6d: Perceived benefits of eWOM contribution in an online opinion platform including enjoyment in helping other consumers, enjoyment in helping the company, extrinsic reward and self-enhancement have positive impacts on normative commitment to the online opinion platform.

Figure 1  Research Model

3  RESEARCH METHOD

3.1 Data collection

In order to test our research model, we posted a self-administrative online questionnaire in “dianping.com”, the largest online opinion platform in China. The target subjects of this study were eWOM contributors in “dianping.com”. We sent a message with a link to the online survey to the users who had ever contributed comments in “dianping.com”. Preventive measures (i.e. reject two pieces of data with the same IP address) were used to avoid repetitive completion of the questionnaire by the same respondent. To encourage more participation, we gave 10 RMB to every validate respondent with complete answers. A total of 456 usable questionnaires were collected in one-month time. Among these respondents, 25.7% were male and 74.3% were female. A majority of the respondents aged between 19 and 28 and had a bachelor degree or above. They were also frequent and experienced users of “dianping.com”.

3.2 Measures

The constructs in the research model were all measured by using multiple-item scales drawn from previous studies with minor modifications to ensure contextual consistency. Extrinsic reward, self-enhancement, enjoyment in helping other consumers and enjoyment in helping the company were measured using the items from Hennig-Thurau et al. (2004). Affective commitment and calculative commitment were measured using items from Allen and Meyer (1991). Normative commitment was measured by the three items developed and validated by Li et al. (2006). Finally, measures for intention to continue contributing eWOM comments were adopted from Taylor and Todd (1995). The scale items used seven-point semantic differential scales anchored from “strongly disagree” to “strongly agree.”
4 RESULTS

Data analysis is performed using Smart Partial Least Squares (PLS), a newly developed structural equation modeling technique which has been more and more used in modern business research such as marketing and information technology (Foltz et al. 2008; Hennig-Thurau et al. 2007).

4.1 Assessment of the Measurement Model

Convergent validity, which indicates the extent to which the items of a scale that are theoretically related to each other relate to each other in reality, was verified by examining the composite reliability (CR) and the average variance extracted (AVE). Acceptable values of CR and AVE should be greater than 0.7 and 0.5 respectively (Fornell 1987). As Table 1 shows, all CR and AVE values of the items meet the recommended threshold and almost the entire factor loadings are more than 0.70.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Number of Items</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyment in helping other consumers (EHO)</td>
<td>4</td>
<td>0.89</td>
<td>0.67</td>
</tr>
<tr>
<td>Enjoyment in helping the company (EHC)</td>
<td>2</td>
<td>0.89</td>
<td>0.80</td>
</tr>
<tr>
<td>Self-enhancement (SE)</td>
<td>4</td>
<td>0.91</td>
<td>0.71</td>
</tr>
<tr>
<td>Extrinsic rewards (ER)</td>
<td>2</td>
<td>0.83</td>
<td>0.71</td>
</tr>
<tr>
<td>Affective commitment (AC)</td>
<td>3</td>
<td>0.92</td>
<td>0.80</td>
</tr>
<tr>
<td>Calculative commitment (CC)</td>
<td>3</td>
<td>0.93</td>
<td>0.81</td>
</tr>
<tr>
<td>Normative commitment (NC)</td>
<td>3</td>
<td>0.88</td>
<td>0.72</td>
</tr>
<tr>
<td>Continuance intention (CI)</td>
<td>3</td>
<td>0.94</td>
<td>0.84</td>
</tr>
</tbody>
</table>

Table 1 Assessment of Internal Consistency and Convergent Validity

Discriminant validity measuring whether a given construct is different from other constructs was assessed by one criterion: the square root of AVE for each construct should be greater than the correlations between the construct and other constructs (Fornell et al. 1987). It is easily seen from Table 2 that all AVE values are greater than the off-diagonal elements in the corresponding rows and columns, demonstrating discriminant validity.

<table>
<thead>
<tr>
<th>AVE</th>
<th>AC</th>
<th>CC</th>
<th>CI</th>
<th>EHC</th>
<th>EHO</th>
<th>ER</th>
<th>NC</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>0.80</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC</td>
<td>0.81</td>
<td>0.73</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI</td>
<td>0.84</td>
<td>0.65</td>
<td>0.56</td>
<td>0.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EHC</td>
<td>0.80</td>
<td>0.45</td>
<td>0.37</td>
<td>0.52</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EHO</td>
<td>0.67</td>
<td>0.49</td>
<td>0.37</td>
<td>0.55</td>
<td>0.65</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ER</td>
<td>0.71</td>
<td>0.48</td>
<td>0.43</td>
<td>0.43</td>
<td>0.48</td>
<td>0.44</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>0.72</td>
<td>0.63</td>
<td>0.67</td>
<td>0.60</td>
<td>0.47</td>
<td>0.46</td>
<td>0.50</td>
<td>0.85</td>
</tr>
<tr>
<td>SE</td>
<td>0.71</td>
<td>0.56</td>
<td>0.47</td>
<td>0.59</td>
<td>0.63</td>
<td>0.70</td>
<td>0.56</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Table 2 Correlation Matrix and Psychometric Properties of Key Constructs

Notes: Shaded diagonal elements are the square root of AVE for each construct Off-diagonal elements are the correlations between constructs

4.2 Assessment of the Structural Model

Table 3 summarizes the results of the structural model, including the overall explanatory power, path coefficients (all significant paths are indicated with an asterisk), and associated t-value of the paths. As show in Table 3, 48 percent of the variance in continuance intention was explained by the three types of commitment. The path between affective commitment and continuance intention is positive and significant ($\beta=0.43$, $p<0.001$). The path between normative commitment and continuance intention is positive and significant ($\beta=0.31$, $p<0.001$). However, the path between calculative
commitment and continuance intention was insignificant. The results suggests that among the three types of commitment, only affective commitment and normative commitment have impacts on continuance intention to contribute eWOM in online opinion platforms. Affective commitment was influenced by extrinsic rewards ($\beta=0.21$, $p<0.001$) and self-enhancement ($\beta=0.30$, $p<0.001$). Normative commitment was also affected by extrinsic rewards ($\beta=0.25$, $p<0.001$) and self-enhancement ($\beta=0.28$, $p<0.001$). Enjoyment in helping other consumers and enjoyment in helping the company were, however, found to be insignificantly related to affective commitment or normative commitment. Moreover, following the three-step method suggested by Baron and Kenny (1986) (refer to http://davidakenny.net/cm/mediate.htm), we have conducted the test of mediator, our result showed that the impact of self-enhancement on continuance intention was partially mediated by affective commitment and normative commitment, while the relationship between extrinsic reward and continuance intention was fully mediated by affective commitment and normative commitment.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path coefficient</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>0.43*** ($t=4.90$)</td>
<td>supported</td>
</tr>
<tr>
<td>H2</td>
<td>ns</td>
<td>Not supported</td>
</tr>
<tr>
<td>H3</td>
<td>0.31*** ($t=3.78$)</td>
<td>supported</td>
</tr>
<tr>
<td>H4a</td>
<td>ns</td>
<td>Not supported</td>
</tr>
<tr>
<td>H4b</td>
<td>ns</td>
<td>Not supported</td>
</tr>
<tr>
<td>H4c</td>
<td>0.30*** ($t=3.58$)</td>
<td>supported</td>
</tr>
<tr>
<td>H4d</td>
<td>0.21*** ($t=3.66$)</td>
<td>supported</td>
</tr>
<tr>
<td>H5a</td>
<td>ns</td>
<td>Not supported</td>
</tr>
<tr>
<td>H5b</td>
<td>ns</td>
<td>Not supported</td>
</tr>
<tr>
<td>H5c</td>
<td>0.27** ($t=2.90$)</td>
<td>supported</td>
</tr>
<tr>
<td>H5d</td>
<td>0.23** ($t=3.28$)</td>
<td>supported</td>
</tr>
<tr>
<td>H6a</td>
<td>ns</td>
<td>Not supported</td>
</tr>
<tr>
<td>H6b</td>
<td>ns</td>
<td>Not supported</td>
</tr>
<tr>
<td>H6c</td>
<td>0.28*** ($t=3.48$)</td>
<td>supported</td>
</tr>
<tr>
<td>H6d</td>
<td>0.25*** ($t=3.74$)</td>
<td>supported</td>
</tr>
</tbody>
</table>

Variance explained (R2)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuance intention</td>
<td>0.48</td>
</tr>
<tr>
<td>Affective commitment</td>
<td>0.37</td>
</tr>
<tr>
<td>Calculative commitment</td>
<td>0.26</td>
</tr>
<tr>
<td>Normative commitment</td>
<td>0.37</td>
</tr>
</tbody>
</table>

Table 3 Summary of the results

5 DISCUSSION AND CONCLUSION

This study sought to investigate users’ continuance intention to spread eWOM in online opinion platforms based on theoretical lens of multiple commitments and prior literature of eWOM communication in online opinion platforms. In particular, this paper investigates the mediating roles of three types of commitment between benefits from eWOM contribution and continuance intention to contribute eWOM. The findings of this study have important implications for both research and practice regarding eWOM spreading in online opinion platforms.

This study contributes to theory in at least three aspects. First, while past studies have mainly focused on users’ behavior of initial eWOM contribution in the Internet, this study moves a step forward and identifies the factors that influence users’ continued intention to contribute eWOM in online opinion platforms. This study highlights three types of commitment as mediators between realized benefits and continuance intention. It suggests that whether or not users want to contribute their consumption-related advice again in online opinion platforms depends directly on their commitment to the online opinion platforms rather than on expected benefits which are the key direct predictors of users’ initial eWOM contribution. In consequence, our theoretical structure serves as an example for future attempts to integrate theories for investigating users’ further intentions after initial eWOM contribution in online opinion platforms.
Second, among the three types of commitment, only affective commitment and normative commitment are found to be significantly related to continuance intention. The relationship between calculative commitment and continuance is, however, found to be insignificant. The results indicate that calculative commitment is not important in the context of online opinion platforms. One of the explanations may be that users participate in online opinion platforms is voluntarily and they can switch to other online opinion platforms very easily without any significant cost. This finding is consistent with prior studies on continued participation in online contexts (e.g., Cheung and Lee 2009). Nevertheless, while prior studies claimed that normative commitment was non-essential in online contexts, this study found that normative commitment plays a very significant role on continuance intention to contribute eWOM in online opinion platforms. This interesting finding indicates that users will continue contribute eWOM in online opinion platform partly due to the reason that they think this is the right thing to do. Hence, future research in eWOM spreading should consider the potential influence of normative commitment.

Third, self-referent benefits such as extrinsic rewards and self-enhancement are found to be related to continuance intention mediated by affective commitment and normative commitment. Enjoyment in helping other consumers and enjoyment in helping the company, however, have no significant relationship with continuance intention. These findings indicate that users mainly concern their self-referent benefits in dianping.com. This may due to the special mechanisms in this online opinion platform that mainly use personal incentives to encourage users to generate eWOM comments. These mechanisms crowd out the effect of intrinsic benefits. Future research should consider the environment factors of online opinion platforms.

Users’ persistent eWOM contribution can bring many benefits to the sustainability of online opinion platforms, the reputation of companies and the buying decisions of other consumers. In this study, affective commitment and normative commitment have the two key determinant of continuance intention to contribute eWOM. These two types of commitment are in term influenced by self-referent benefits such as extrinsic reward and self-enhancement from eWOM contribution. The operators of online opinion platforms should establish a fair reward system for their users. For example, in dianping.com, discount coupons and gifts are offered to the users who contribute many consuming advices. Operators of online opinion platforms should also build a reputation system among their users. For instant, in dianping.com, every user has a reputation level according to their contributions. Users with higher reputation levels are easily recognized by other users.

References


customer online know-how exchange on customer value and loyalty. Journal of Business Research,
59 (4), 449-456.
Ha, H.Y. (2002). The effects of consumer risk perception on pre-purchase information in online
auctions: Brand, word-of-mouth, and customized information. Journal of Computer-Mediated
Communication, 8 (1).
via consumer-opinion platforms: What motivates consumers to articulate themselves on the
outcomes: An integration of relational benefits and relationship quality. Journal of Service
communities: Model development and empirical test. Behaviour & Information Technology. First
published on: 04 November 2009 (iFirst).
of Marketing, 58(3), 20-38.
consumers’ online shopping site commitments. Journal of Electronic Commerce in Organizations,
4 (1), 70-90.
online feedback systems from social exchange and motivation crowding perspectives. Proceedings
of the 40th Hawaii International Conference on System Sciences.