Person-environment fit, commitment, and customer contribution in online brand community: A nonlinear model

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ABSTRACT

Online brand community is often regarded as a value co-creation platform where customers' active contributions are most important to the success of the community. Previous studies on the potential drivers of users' contributions placed a great emphasis on either users or the community itself, and most of these studies primarily focused on linear relationships. Drawing upon person-environment fit theory, this study develops a research model to explore the nonlinear effects of person-environment fit, i.e., needs-supplies fit and demands-abilities fit, on community commitment, as well as the nonlinear effect of community commitment on users' knowledge contribution intention. Using 480 online survey responses, the results indicate that needs-supplies fit has a decreasing incremental effect, while demands-abilities fit has an increasing incremental effect on community commitment. Community commitment has an increasing incremental effect on willingness to contribute. Implications for both research and practice are also discussed.

1. Introduction

In the Web 2.0 era, the popularity of value co-creation has increased the importance of knowledge generated by customers. Online brand community acts as an important platform in which customers can share their experiences and feelings about particular products or services, and express their support and passion for a brand (Muñiz & O'Guinn, 2001). As a result, online brand community becomes a crucial source of customer needs and information that will provide valuable insights into firm's market research (Füller, Bartl, Ernst, & Mühlbacher, 2006; Kozinets, De Valck, Wojnicki, & Wilner, 2010; Shen, Zhang, & Zhao, 2016). Online brand community therefore evolves into a strategic resource for companies (Baldus, Voorhees, & Calantone, 2015; Wirtz et al., 2013). Some leading brands, such as SAP, P&G, and XiaoMi, are pouring significant money into building their own online brand communities to engage customers in the value co-creation process, and to harness customer knowledge. However, in the absence of mandatory requirements or monetary incentives, people are prone to withhold their efforts in knowledge contribution, particularly in online spaces where contribution is a completely voluntary action (Lin & Huang, 2010; Ren et al., 2012). In this regard, identifying the potential drivers of customer contribution is of increasing importance in both research and practice for brand management.

Scholars have devoted considerable efforts to this issue from different perspectives, such as motivational drivers and personalities, community features, and firms' efforts (Brodie, Ilic, Juric, & Hollebeek, 2013; Casaló, Flavián, & Guinalíu, 2010; Füller, 2010; Jang, Olfman, Ko, Koh, & Kim, 2008; Liao, Huang, & Xiao, 2017). Most of these studies largely examined the separate impacts of a community or customers, but often ignored the synergistic effects exerted by both of them. Since people will spontaneously evaluate how well the community fits with their needs and how well their abilities may fit with the community's demands, their decisions to contribute are likely to be a joint result of factors from both themselves and the community. The person-environment (P-E) fit framework, derived from organizational behavior research (Caplan, 1987), is thus used to explore the joint effects of brand community and community members. In addition, due to the open nature of online brand communities, there are no explicit norms or bonds that can restrict users' leaving or switching behavior (Hemetsberger & Reinhardt, 2009). In this sense, the real success of an online brand community may lie in users' commitment, which is extensively believed to result from high P-E fit in previous studies (Astakhova, 2016; Greguras & Diefendorff, 2009). In this regard, the first research question of this study is that, to what extent the effects of P-E fit on customer contribution act through community commitment.

Previous studies regarding how P-E fit affects customer behavior through commitment have generated some ambiguous results. Some scholars suggested that P-E fit was positively related to commitment

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(Astakhova, 2016), whereas some others argued the relationship between P-E fit and commitment was not always positive (Livingstone, Nelson, & Barr, 1997). If individuals' needs are highly fulfilled, improvement in P-E fit by increasing environmental supplies will not necessarily promote their commitment because the arousal motive in regard to commitment remains constant in this case, and therefore, a nonlinear model is believed to better describe such behavior (Livingstone et al., 1997; Pee & Min, 2017). However, most of these studies measured the P-E fit indirectly by comparing environmental and personal features. It is necessary to notice that when environmental supplies extremely exceed personal preferences, it suggests a misfit rather than a high level of fit (Ostroff, Shin, & Kinicki, 2005). As a result, measuring fit in an indirect way may lead to a misunderstanding of the concept of fit, especially when investigating its nonlinear effect. In this regard, the second research question of this study is that, how the nonlinear effects of P-E fit are exerted on commitment when P-E fit is measured in a direct way.

Likewise, prior studies have also demonstrated that a nonlinear relationship may be more in line with the reality of the effect of commitment on behavioral intention, but largely focusing on either normative or continuance commitment (Morin, Vandenberghe, Turmel, Madore, & Maïano, 2013; Siegrist et al., 2004). These studies, primarily from organizational settings, have argued that high commitment required considerable personal investments. If people feel an imbalance between their exerted efforts and the received reward, or they hold too many duties, they will experience burnout and strain, suggesting an inverted U-shape relationship between commitment and work performance (Siegrist et al., 2004). However, in the online community context, if users feel imbalance or strain, they tend to leave the focal community directly because of no explicit norms and no financial pressure. As a result, over-commitment has no chance to damage their mental health and community performance. Instead, people choose to stay in the community mainly because they like the brand and the associated community (Muñiz & O'Guinn, 2001), wherein affective commitment should be at the heart of online contribution. In this regard, the third research question of this study is that, whether affective commitment exerts a nonlinear effect on contribution intention in online brand communities.

We can understand the contributions of this study to the literature in the following three ways. First, while prior studies have investigated customer contributions in online communities from the perspective of customers or communities, this study tries to investigate the combined effects of customers and the community based on the P-E fit theory derived from organizational research. As such, this study introduces the fit perspective to enrich customer behavior research in online communities, and P-E fit theory itself is also extended to an online setting. Second, in contrast to prior research that measured P-E fit indirectly when exploring the nonlinear effects of P-E fit, this study considers P-E fit directly and further demonstrates that different nonlinear relationships exist between P-E fit and commitment. Therefore, this study enriches current research regarding nonlinear effects of P-E fit. Third, different from previous research on the nonlinear effects of continuance and normative commitment, this study highlights the nonlinear effect of affective commitment and confirms the increasing incremental effect of affective commitment on customer behavior. In this regard, this study contributes to customer commitment research by revealing the nonlinear effect of affective commitment.

In what follows, we review the relevant research on P-E fit and commitment and then develop the associated hypotheses. Next, we introduce our research method, including research setting, instrument scales, and data collection procedure. The results of data analysis are reported in the following section. We conclude this study by discussing the findings and the implications for theory and practice.

2. Literature review and hypothesis development

2.1. Community commitment and customer contribution intention

The concept of "commitment" originally comes from organizational behavior research, which is defined as a force that binds a person to an organization (O'Reilly & Chatman, 1986). Commitment is generally believed to be positively related to various pro-social work outcomes, such as attendance, well-being, and organizational citizenship behavior (Allen & Meyer, 1990; O'Reilly & Chatman, 1986). In general, commitment is conceptualized into three components: affective commitment, continuance commitment, and normative commitment (Allen & Meyer, 1990). Affective commitment is concerned with the attitudinal component of commitment, which refers to "an affective or emotional attachment to the organization such that the strongly committed individual identifies with, is involved in, and enjoys membership in, the organization" (Allen & Meyer, 1990, p. 2). Continuance commitment involves the cognitive component of commitment, which occurs when there is "a profit associated with continued participation and a cost associated with leaving" (Allen & Meyer, 1990, p. 3). Normative commitment refers to "a belief about one's responsibility to the organization" (Allen & Meyer, 1990, p. 3). In marketing research, commitment is regarded as a key factor for relationship marketing, and it reflects individuals' desires to maintain a valued relationship with others (Gustafsson, Johnson, & Roos, 2005; Morgan & Hunt, 1994).

Most of commitment studies suggest a positive relationship between commitment and pro-social behavior (Allen & Meyer, 1990; Raïes, Mühlbacher, & Gavard-Perret, 2015; Shen, Lee, & Cheung, 2014). However, some other scholars also believe that a nonlinear relationship might better explain the effects of commitment on work performance (Luchak & Gellatly, 2007; Morin et al., 2013). In particular, the effort-reward imbalance model suggests that people with high commitment are more productive and are more involved in work, requiring a significant investment of time, efforts and other resources (Morin et al., 2013; Siegrist et al., 2004). As a result, people are likely to suffer from strain, and their organizational citizenship behavior will be reduced if the organization does not reciprocate the efforts they pour into the job or other work-related tasks (Siegrist et al., 2004). Notably, the effort-reward imbalance model is based on transactional exchanges and echoes the cognitive nature of continuance commitment (Allen & Meyer, 1990). On the other hand, normative commitment is driven by obligation, duty, or guilt-avoidance, which are externally controlled and prevention-focused (Meyer, Becker, & Vandenberghe, 2004). Over-normative-commitment is likely to result in heavy workloads and job burnout, since over-duty also needs a huge amount of personal resource investment, and most people do not hold adequate intrinsic motivation (Meyer et al., 2004).

However, these negative consequences of over-commitment are not the case for affective commitment. People with high affective commitment are less likely to suffer from strain and burnout even though they have to invest lots of personal resources, since affective commitment is internally driven and intrinsically motivated (Luchak & Gellatly, 2007; Meyer et al., 2004). That is, people with higher affective commitment will show higher intrinsic motivation and experience a stronger promotion-typed focus in pursuit of goals, so they tend to set more difficult goals with more autonomous regulation in order to obtain a higher sense of achievement (Meyer et al., 2004). In this sense, affective commitment can be conceptualized as consistent with a growth role, a higher-order need in need-gratification theories. Based on need-gratification and dual-factor motivation theories, once personal lower-order needs are met by the environment, increasing fulfillment of higher-order needs has an increasing incremental effect on personal performance (Agustin & Singh, 2005; Herzberg, 1966; Vargo & Lusch, 2004). With this point of view, affective commitment may fail to motivate people to contribute in online brand communities until their lower-order needs, such as information support, membership security