

CUSTOMER ENGAGEMENT IN AN ONLINE SOCIAL PLATFORM: A CONCEPTUAL MODEL AND SCALE DEVELOPMENT

Research-in-Progress

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Abstract

The rise of new media channels in the last few years has changed the ways customers communicate and exchange information. Managing customer relationship through social media engagement has become an important component of successful electronic marketing strategies. Though the concept of customer engagement has received considerable attention in the business community, there is a paucity of theory-guided empirical research in customer engagement in an online social platform. More importantly, there is a lack of consensus regarding its definition, forms, dimensionality, and operationalization. This study addresses these limitations in part by theoretically conceptualizing and empirically validating a scale to measure customer engagement in an online social platform. In this research-in-progress paper, we present our conceptual model of customer engagement and propose a rigorous approach in scale development and validation. The authors believe that this research will contribute to the development of online community literature and add to the repository of rigorous research instruments for researchers to use.

Keywords: Customer engagement, social media, online communities, instrument development, vigor, absorption, dedication

Introduction

The rising popularity of social media has created a new online social platform for consumers to connect and share their enthusiasm about their favorite brand with their friends, personal contacts, and other acquaintances. Consumers can freely join their favorite brand communities in social networking sites and engage in these online social platforms through ongoing communication processes (e.g., providing positive comments on pictures and videos related to the brand or company, and the like). With the advent and public popularity of social media, customer engagement has received significant attention in recent years among marketers and practitioners.

Social media have now moved from “buzz word” status to being a fundamental component of any successful marketing strategy. Many companies have realized the enormous potential of this strategic tool in reaching and communicating with consumers, measuring their communication browsing, or purchase-related behavior, and building brand loyalty (Hennig-Thurau et al. 2010). Marketers clearly value engagement: 67 percent of senior marketers said that customer engagement is very important in their company, and 86 percent agreed that customer engagement is an ongoing conversation with the top management teams. In addition, 69 percent of Chief marketing officers highlighted their companies had a defined strategy for customer engagement¹. The Marketing Science Institute (MSI)² has also called for research for a better understanding of customer engagement in its 2006-2008 research priorities. In recent years, we notice that customer engagement has become a term widely used in the marketing literature (Verhoef et al. 2010). However, the concept is understood in a very vague and unsystematic way. Little theory-guided research has been undertaken to understand the nature of customer engagement, and its antecedents and consequences in the specific context of online social platforms. More importantly, the study of customer engagement in an online social platform has been hampered by a lack of validated scales in the literature. As a step towards bridging this gap, the current study explores the concept of customer engagement in an online social platform, develops a conceptual model, as well as proposes a rigorous approach of scale development and validation.

Theoretical Foundations of Customer Engagement

Conceptualizing Customer Engagement

The concept of engagement has been examined under various contexts over the years, such as school and education (London et al. 2007), organizations (Saks 2006; Salanova et al. 2005), public policies (Gregory 2007), and brands (Spratt et al. 2009). In marketing, most of what has been written about customer engagement is found in practitioner journals where it has its basis in practice rather than theory. Marketing practitioners tend to focus on behavioral measures of customer engagement. For example, Peterson (2006) derived a total engagement index by adding the values for each engagement category, including click depth (content clicked on), loyalty (no. of return visits over a longer period of time), recentness (no. of return visits over a shorter period of time), duration (time of session), interactivity (actions taken with content-downloading, posting, attending a video/audiocast), and subscription.

The concept of customer engagement is still emerging in the marketing literature. Brands (Spratt et al. 2009), products and organizations (Patterson et al. 2006), and brand communities (Algesheimer et al. 2005) are the key engagement objects cited in the literature. Though many marketing studies with constructs carrying the “engagement” label, the definition, dimensionality, and operationalization of customer engagement however are inconsistent and mixed. Based on our review of the literature, we have identified three key ways to conceptualize customer engagement:

- Customer engagement as a process: Bowden (2009) postulated customer engagement as a psychological process that leads to the formation of loyalty.

¹ <http://www.marketingprofs.com/charts/2010/3718/senior-marketers-rethinking-customer-engagement>

² <http://www.msi.org/research/index.cfm?id=43>

- Customer engagement as behavioral manifestation: van Doorn et al. (2010) defined customer engagement as “the behavioral manifestation from a customer toward a brand or a firm which goes beyond purchase behavior. (p.254)”.
- Customer engagement as psychological state: Patterson et al. (2006) drew on a variety of parent disciplines including social psychology and organizational behavior and defined customer engagement as a psychological state that is characterized by a degree of vigor, dedication, absorption, and interaction.

Dimensions of Customer Engagement

Kahn (1990) defined personal engagement as “the simultaneous employment and expression of a person’s “preferred-self” in task behaviors that promote connections to work and to others, personal presence (physical, cognitive, and emotional), and active, full role of performance (p.700)”. There are two characteristics of Kahn’s (1990) definition: (1) Engagement has a psychological connection with the performance of tasks rather than an attitude toward tasks. (2) Engagement concerns the self-investment of personal resources in a task, specifically with an investment of multiple dimensions (physical, emotional, and cognitive) of the self (Christian et al. 2011). In this study, we build upon the conceptual foundation of “personal engagement” and derive a definition of customer engagement in an online social platform. Customer engagement in an online social platform is defined as “the level of a customer’s physical, cognitive, and emotional presence in connections with a particular online social platform”. It is commonly agreed that a multidimensional view of engagement can best capture the breadth and complexity of this construct (Newman and Harrison 2008). The three key dimensions of customer engagement are explained:

- Vigor (Physical) refers to the level of energy and mental resilience while using an online social platform, willingness to invest time and effort in one’s role as a customer.
- Absorption (Cognitive) refers to being fully concentrated and deeply engrossed in an online social platform.
- Dedication (Emotional) refers to a sense of significance, enthusiasm, inspiration, pride, and challenge towards an online social platform.

A Conceptual Model of Customer Engagement in an Online Social Platform

Though researchers have highlighted the importance of customer engagement in the context of an online social platform (Hennig-Thurau et al 2010), most existing studies are primarily descriptive and qualitative, and lack of theoretical framework and measure of this important concept. Building on prior literature, we develop a conceptual model of customer engagement in an online social platform (as shown in Figure 1).

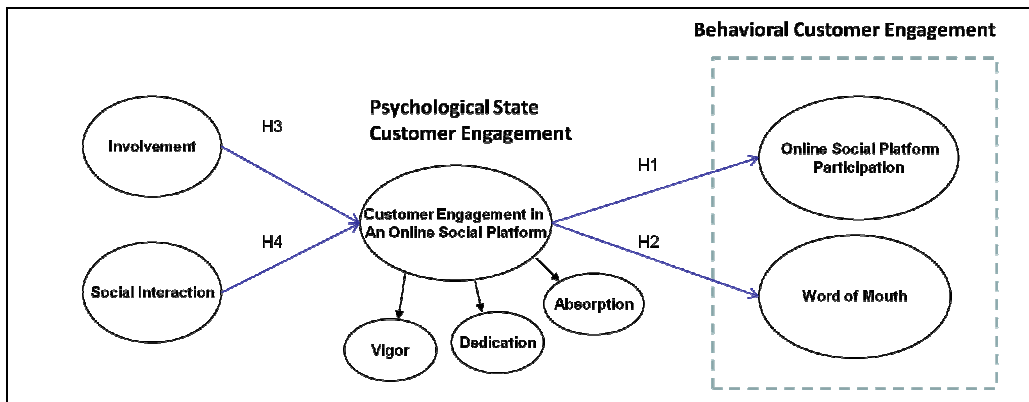


Figure 1. Conceptual Model of Customer Engagement in an Online Social Platform

This model plays an important role in clarifying the nomological network of constructs associated with customer engagement, as well as identifies potential antecedents and consequences of customer engagement in an online social platform. As mentioned before, customer engagement in an online social

platform is a second-order latent construct comprising of vigor, absorption, and dedication. It represents a psychological state of customer engagement that drives behavioral customer engagement, including participation in an online social platform and word-of-mouth communication about the online social platform. Two related but conceptually distinct constructs, involvement and social interaction are included as antecedents of customer engagement in an online social platform (Hollebeek 2010). The purpose of adding these two antecedents is to empirically demonstrate that they are different from the concept of customer engagement. In the organizational behavior literature, state engagement is found to have a significant relationship with behavioral engagement, such as organizational citizenship behavior (Christian et al. 2011; Macey and Schneider 2008). In the consumer behavior literature, van Doorn et al. (2010) suggested that customer engagement is closely related to their frequency and intensity of participation. Kumar et al. (2010) also argued that customer engagement is important if one hopes to build a customer base through referrals. In the context of online social platforms, we believe that state customer engagement should also exhibit a positive impact on engagement behaviors. Particularly, if a customer is willing to invest personal energy (physically, emotionally, and cognitively) into an online social platform, he/she will have a higher propensity to participate in activities on the online social platform, as well as to spread word-of-mouth communication about the platform.

H1: Customer engagement in an online social platform will have a positive effect on online social platform participation.

H2: Customer engagement in an online social platform will have a positive effect on word-of-mouth communication about the online social platform.

Involvement refers to the level of a customer's interest and/or personal relevance with respect to an online social platform. Hollebeek (2010) argued that involvement is an antecedent to engagement required prior to the expression of a customer's relevant state customer engagement level.

H3: Involvement in an online social platform will have a positive effect on customer engagement in an online social platform.

Social interaction refers to interaction between customers in an online social platform. Repeated interactions among people can enhance their commitment to the community, as well as their relationships with other members (Haythomthwaite 1999; Nahapiet and Ghoshal 1998). We expect that repeated social interactions among customers in an online social platform will enhance their feelings of engagement toward the social platform.

H4: Social interactions in an online social platform will have a positive effect on customer engagement in an online social platform.

Scale Development and Validation Process

A systematic and rigorous approach of developing scales is strongly advocated in the IS discipline (Boudreau, Gefen, and Straub 2001; Segars 1997). IS scholars have argued that constructs with strong theoretical justification and measures with high degrees of reliability and validity are prerequisites to cumulative knowledge in IS research. Therefore, the main purpose of this study is to develop and validate measures for customer engagement in an online social platform. In the current study, we adopted Churchill's (1979) robust paradigm for scale development and validation. According to Churchill (1979), scale development and validation is a longitudinal process that starts with scale construction. The scale is then subjected to a systematic assessment of the reliability, validity, and generalizability. Figure 2 summarizes the major steps in the scale development and validation process.

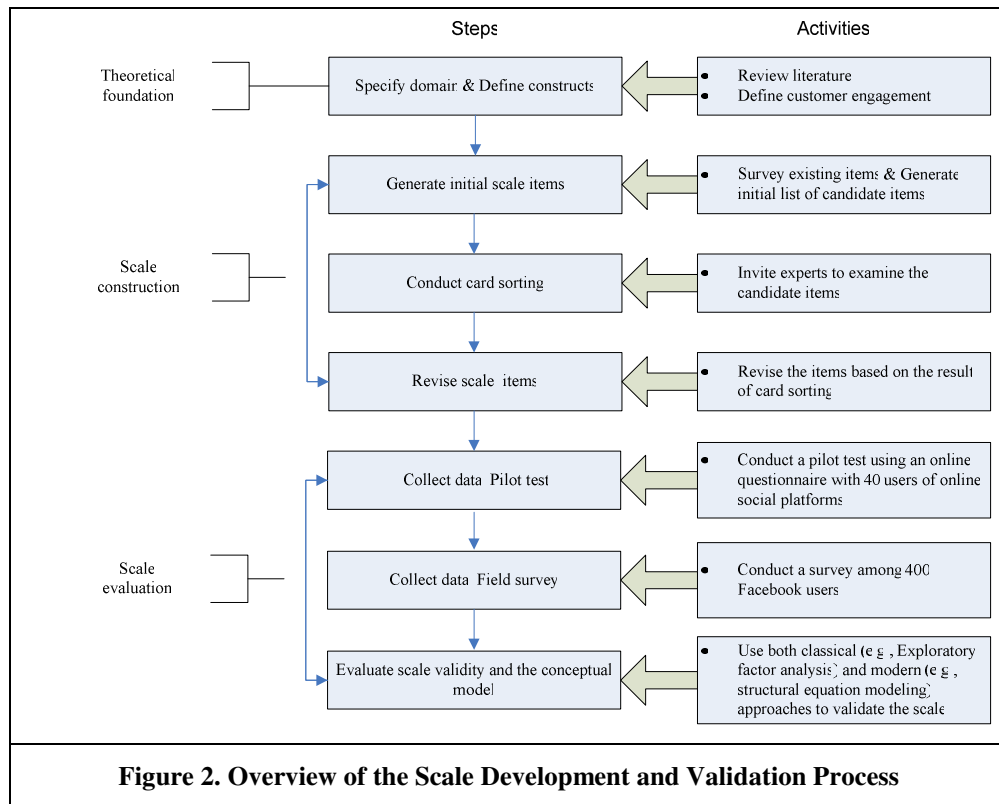
Domain Specification and Definition of the Consumer Engagement Construct

The first step in scale development is to specify the domain of the construct. In this study, we define customer engagement in social media as "the level of a customer's physical, cognitive, and emotional presence in connections with a particular online social platform".

Scale Construction

Churchill (1979) recommended a series of techniques in generating initial scale items, including literature searches, experience surveys, focus groups, and indepth interviews. The use of these methods can enable

the generation of scale items with a relatively high degree of content validity (Moore and Benbasat 1991). We based item generation on a review of relevant engagement literature, which resulted in an initial pool of 18 scale items intended to capture the three dimensions of customer engagement in an online social platform.



Six experienced researchers were invited to evaluate the content validity of each item with respect to our definitions of the three dimensions of customer engagement in an online social platform. They were requested to carefully read each item and classify it into the corresponding dimension of customer engagement. Two measurements, Cohen’s (1960) Kappa and item placement ratio, were computed to assess the reliability of the sorting procedures and the content validity of the scale. The results are shown in Table 1 and Table 2. An acceptable score of Kappa should be greater than 0.65 (Vessey 1989; Todd and Benbasat 1991). High degree of correct placement of items within them is considered to demonstrate a high degree of construct validity. In this study, the average inter-judge agreement score is 0.80, and the overall placement ratio of items to target constructs is 89.82%.

		Degree of Agreement		Degree of Agreement	
Judge	Judge	Kappa	Judge	Judge	Kappa
1	2	0.75	2	3	0.75
1	3	0.75	2	4	0.84
1	4	0.76	2	5	0.75
1	5	0.83	2	6	0.75
1	6	1.00	4	5	0.76
3	4	0.76	4	6	0.76
3	5	0.83	5	6	0.83
3	6	0.75			

Table 2: Results of Card Sorting- Item Placement Ratio

Target Category	Actual Category				Total Qs	Hit Rate (%)
	Vigor	Absorption	Dedication	Others		
Vigor	31	2	2	1	36	86.11
Absorption	3	33			36	91.67
Dedication	2		33	1	36	91.67
Average						89.82

Scale Evaluation

A self-administrated online questionnaire was distributed to 40 research students (who were not involved in the previous stages of scale development) for review and refinement. This pilot test included scale items of customer engagement in an online social platform, as well as items related to its antecedents and consequences. Cronbach’s alpha was calculated for assessing scale validity and reliability (See Table 3). Scale reliability met conventional standards of internal consistency (Hair et al. 1998), with Cronbach’s Alpha greater than 0.70.

Table 3: Results of Pilot Test

Constructs	Number of items	Cronbach’s Alpha	Mean
Vigor (VIG)	6	0.84	4.16
Dedication (DED)	6	0.88	4.58
Absorption (ABS)	6	0.86	4.19
Social Interaction (SI)	4	0.88	4.81
Involvement (INV)	10	0.92	4.92
Participation (PI)	2	0.83	5.23
Word of Mouth (WOM)	6	0.88	4.57

Based on participants’ feedback in the pilot test, we have refined the scale items (See Table 4 for the list of items of customer engagement in an online social platform). We are now preparing a refined online questionnaire for the full-scale field study. Facebook brand communities will be used in this research project to empirically validate the measures. Many companies have started to create pages (brand communities) in connection with their brands on Facebook and more than 10 million users become fans of pages each day³.

Table 4: Scale Items of Customer Engagement in Social Media

Constructs	Items	Sources
Vigor	1. I can continue using this online social platform for very long periods at a time.	(Salanova et al., 2005; Schaufeli et al., 2002)
	2. I feel strong and vigorous when I am using this online social platform.	(Salanova et al., 2005; Schaufeli et al., 2002)
	3. I feel very resilient, mentally, as far as this online social platform is concerned.	(Schaufeli et al., 2002)
	4. In this online social platform, I always persevere, even when things do not go well.	(Salanova et al., 2005; Schaufeli et al., 2002)
	5. I devote a lot of energy to this online social platform.	(Rich et al. 2010)
	6. I try my hardest to perform well on this online social platform.	(Rich et al. 2010)
Absorption	7. Time flies when I am using this online social platform.	(Salanova et al., 2005; Schaufeli et al., 2002)
	8. Using this online social platform is so absorbing that I forgot about everything else.	(Salanova et al., 2005; Schaufeli et al., 2002; Rich et al. 2010)

³ www.facebook.com/press/info.php?statistics

	9. I am rarely distracted when using this online social platform.	(Salanova et al., 2005; Schaufeli et al., 2002)
	10. I am immersed in this online social platform.	(Salanova et al., 2005; Schaufeli et al., 2002)
	11. My mind is focused when using this online social platform.	(Rich et al. 2010)
	12. I pay a lot of attention to this online social platform.	(Rich et al. 2010)
Dedication	13. I am enthusiastic in this online social platform.	(Salanova et al., 2005; Schaufeli et al., 2002; Rich et al. 2010)
	14. This online social platform inspires me.	(Salanova et al., 2005; Schaufeli et al., 2002)
	15. I found this online social platform full of meaning and purpose.	(Salanova et al., 2005; Schaufeli et al., 2002)
	16. I am excited when using this online social platform.	(Rich et al. 2010)
	17. I am interested in this online social platform.	(Rich et al. 2010)
	18. I am proud of using this online social platform.	(Salanova et al., 2005; Schaufeli et al., 2002)

We target 400 members who have joined and participated in Facebook Fan Pages in the recent two weeks. We will first ask them to provide the details related to when and where exactly their most recent activities (e.g., posting and replying messages, sharing photos, videos, links, and else) were done. We will then ask them to recall their beliefs and perceptions associated with that engagement. The online questionnaire contains all scale items (Due to space limitation, we only list the items related to the customer engagement construct) of constructs related to the conceptual model of customer engagement in an online social platform. Participation in this study will be voluntary. To encourage participation, an incentive of US\$7 coupons will be offered as lucky draw prizes. We will use both classical approach (item-to-total score correlation, Cronbach's Alpha, and exploratory factor analysis) and modern approach (structural equation modeling – LISREL (both measurement model and structural model)) to validate the scale in the current study (Bagozzi et al. 1991). The aim of using these approaches as a way of method triangulation is to ensure the development of a rigor scale.

Conclusions and Expected Contributions

The purpose of this study is to develop and validate a scale for measuring customer engagement in an online social platform, for potential use in future empirical studies of customer engagement in social media contexts. We followed Churchill's scale development and validation process. Building on prior literature, customer engagement is conceptualized as a psychological state that is characterized by a degree of vigor, absorption, and dedication. A pool of 18 items of customer engagement in an online social platform was developed. The scale development and validation process will be continued and we will be able to report the finalized scale, and we will develop the nomological network for the construct which shows how the concept is formed and affects engagement behaviors. Numerous definitions of customer engagement can be found from the practice and research driven literatures. In addition, there is a lack of consensus regarding its definition, forms, dimensionality, and operationalization of customer engagement in the context of online social platforms (e.g., Facebook). We believe that the current work enriches existing work in social media through refining the concept of customer engagement. In addition, the validated scale adds to the repository of rigorous research instruments for IS survey researchers to use, thus helping to develop a cumulated tradition for research in the IS discipline. This study is timely to enhance our understanding of the seemingly universal phenomenon of social media engagement. We believe that the findings of this study will also provide companies with a new way to think about how to use these powerful social tools and how they should invest their marketing resources.

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