

The Investigation of the Influence of Service Quality toward Customer Engagement in Service Dominant Industries in Thailand

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Abstract. The concept of customer engagement gained the attention of marketing scholars and practitioners ever since there was research evidence to confirm that positive customer engagement lead to increasing a firms' performance. In today's interactive dynamic business environment, customer engagement represents a strategic imperative for generating enhanced corporate performance such as sales growth, superior competitive advantage, and profitability. Engaged customers enhance a firm's performance by providing positive word-of-mouth, being involved in new product development processes, and co-creating experience and value. Although there has been an increased recognition in the concept of customer engagement, empirical research concerning both antecedents and consequents of customer engagement are still very limited, especially in marketing literature. This study endeavors to add value to the customer engagement conceptualization in response to emerging importance of the theory as emphasized by the Marketing Science Institute. The concept of customer engagement has become more popular in marketing theory and needs more concrete empirical research to support it. However, only a few extant empirical studies have examined the relationship between service quality and customer engagement. The purpose of this study is to investigate the influence of service quality toward customer engagement. The results found that service quality has a positive relationship with customer engagement as the antecedent factor. According to the Structural Equation Modeling analysis of proposed hypotheses, sub dimensions of service quality significantly influence customer engagement in three dimensions; namely, cognitive, emotional, and behavioral engagement. Reliability is the highest positive effect to customer engagement. The second highest positive effect is responsiveness. Tangibility has the third highest positive effect to customer engagement.

Keywords: Customer Engagement, Service Quality, Service Dominant Industries, Thailand

1. Introduction

Customer engagement (CE) has received attention by marketing scholars as a result of the recognition that customers are not only value recipients, but also act as value co-creators. Customer's experiences also add value to the firm and a company's endeavour to find the methods to interact with their prospect customers and existing customers. Previous research showed that there is a positive relationship between customer engagement and firm performance. In other words, engaged customers can assist firms to have better corporate performance by providing positive word-of-mouth about a firm's products, services, and brands to others and by getting involved with the firm's new product development, and also co-creating experiences and values (Brodie et al, 2011a). Therefore, the concept of customer engagement has increasingly become an important element of firms' marketing strategies. However, more understanding of the concept of customer engagement is still needed. The Marketing Science Institute (MSI) called for better understanding of "customer engagement" as a research priority (2010-2012). MSI defines CE as "customers' behavioural manifestation toward brand". The word "engagement" has been used in psychology, management, information system, education, and also in the marketing field. Researchers and practitioners

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have tried to define the concept of engagement. However, its domain and the definition of the engagement concept are still inconsistent across these disciplines and research areas. In marketing literature, the concept of customer engagement still needs the empirical studies to make a better understanding about the CE theoretical foundation. In spite of this interest, there are still limited numbers of research investigating the main antecedent which directly links to customer engagement. The objective of this paper is to investigate the influence of service quality as expected as one of the antecedent of customer engagement.

2. Literature Review

2.1. Customer Engagement in Marketing Literature

Few authors have defined the definition of “customer engagement” in marketing literature. There are related words such as “Customer brand engagement”, “Brand engagement”, and “Consumer engagement”. Patterson et al. (2006) define the customer engagement as “the level of a customer’s physical, cognitive and emotional presence in their relationship with a service organization”; whereas Hollebeek (2011) uses the word “customer brand engagement” as “the level of customer’s motivational, brand-related and context dependent state of mind characterized by a specific level of cognitive, emotional and behavioral activity in brand interactions”.

According to Vivek (2009), the perspective of relationship marketing has shifted from “marketing to” to “marketing with” approach. The value is co-created by customers and firms as the co-creation especially in service-dominant logic (S-D logic) than goods-dominant logic (G-D logic). Firms start trying to encourage their customers to get involved in other activities as non-transactional behaviors apart from only purchase intentions (Verhoef et al., 2010). In marketing literature, there is still a lack of consensus of definition and dimensionality of customer engagement (Cheung et al., 2011). Customer engagement can be classified into two concepts; namely, unidimensional and multidimensional conceptualization. For unidimensional conceptualization, customer engagement is focused on only the behavioral aspects. On the other hand, multidimensional conceptualization portrays customer engagement comprising of several sub-dimensions including cognitive, emotional, and behavioral (Vivek et al., 2010; Hollebeek, 2011; Brodie et al., 2011). Brodie et al. (2011) provided a comprehensive review of customer engagement definitions and conceptualization. According to Brodie et al. (2011), a general definition of customer engagement can be portrayed as:

“Customer engagement (CE) is a psychological state that occurs by virtue of interactive, cocreative customer experiences with a focal agent/object (e.g., a brand) in focal service relationships. It occurs under a specific set of context dependent conditions generating differing CE levels; and exists as a dynamic, iterative process within service relationships that cocreate value. CE plays a central role in a nomological network governing service relationships in which other relational concepts (e.g., involvement, loyalty) are antecedents and/or consequences in iterative CE processes. It is a multidimensional concept subject to a context- and/or stakeholder-specific expression of relevant cognitive, emotional and/or behavioral dimensions”

The customer engagement concepts, definitions, and dimensionality constructs in marketing literature are summarized in Table 1.

2.2. Service Quality

Service quality is the very important dimension for gaining the competitive advantage especially in service related business. Firms providing excellent service quality will lead to high customer satisfaction and customer loyalty (Hung et al., 2003). Although the definition of service quality varies, the service quality can be defined as the customers’ perception on services offered by firms. There has been recognition of the multidimensionality of service quality.

The first attempt to formulate a dimension of service quality was in 1985. Parasuraman et al. (1985) formulated the dimensions of service quality; SERVQUAL, took into consideration the assessment of customers’ point of view in terms of the gap between expectations of a particular service and the evaluation of the said service by a particular provider. Parasuraman et al. (1985; 1988; 1993) proposed ten components of SERVQUAL, namely reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer, and tangibles. In 1988, Parasuraman et al. were

conceptualized into five dimensions: reliability, assurance, tangibles, empathy, and responsiveness. They also developed 22 item instruments to measure customer expectations and perceptions of SERVQUAL. Cronin & Taylor (1992) developed the SERVPERF scale; the “perception measurement only” scale for measuring service quality.

Table 1: Engagement Concepts, Definitions, and Dimensionality in the marketing literature adapted from Bordie and et al. (2011)

Authors	Concept	Conceptualization and definition	Dimensionality constructs
Patterson et al. (2006)	Customer engagement	The level of a customer’s physical, cognitive, and emotional presence in their relationship with a service organization.	Cognitive, Emotional and Behavioral (The terms used by the authors: Absorption, Dedication, and Vigor/Interaction)
Vivek et al. (2010)	Consumer engagement	The intensity of an individual’s participation and connection with the organization’s offerings and activities initiated by either the customer or the organization.	Cognitive, Emotional, and Behavioral
Mollen & Wilson (2010)	Online brand engagement	The customer’s cognitive and affective commitment to an active relationship with the brand as personified by the website or other computer-mediated entities designed to communicate brand value.	Cognitive and Emotional (The terms used by the authors: Sustained cognitive processing, Instrumental value, and Experiential value)
Bowden (2009a)	Customer engagement process	A psychological process that models the underlying mechanisms by which customerloyalty forms for new customers of a service brand as well as the mechanisms by whichloyalty may be maintained for repeatpurchase customers of a service brand.	Cognitive, Emotional, and Behavioral
Hollebeek (2011)	Customer brand engagement	The level of a customer’s motivational, brand related and context dependent state of mind characterized by specific levels of cognitive, emotional, and behavioral activity in brand interactions.	Cognitive, Emotional, and Behavioral
Higgins & Scholer (2009)	Engagement	A state of being involved, occupied, fully absorbed, or engrossed in something, generating the consequences of a particular attraction or repulsion force. The more engaged individuals are to approach or repel a target, the more value is added to or subtracted from it.	Cognitive, Emotional, and Behavioral

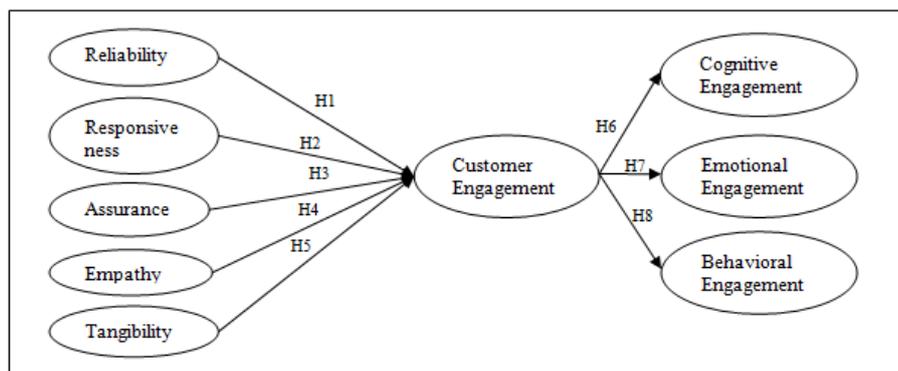


Figure 1: The conceptual framework the influence of service quality towards customer engagement and the construct.

Table 2: Construct measurement items, sources, and scale reliabilities.

Measure/Source	Items
Service Quality dimensions	
Reliability	Providing services as promised. Dependability in handling customers' service performed. Performing the services right the first time. Providing services at the promised time. Maintaining error-free records.
Responsiveness	Keeping customers informed about when services will be performed. Prompt service to customers. Willing to help customers. Readiness to respond to customers' requests.
Assurance	Employees who instill confidence in customers. Making customers feel safe in their transactions. Employees who are consistently courteous. Knowledgeable employee to answer customer questions.
Empathy	Giving customers individual attention. Employees who deal with customers in a caring fashion. Having the customer's best interest at heart. Employees who understand the needs of their customers. Convenient business hours.
Tangibility	Modern equipment. Visually appealing facilities. Employees who have a neat, professional appearance. Visually appealing materials associated with the service.
Customer engagement adapted from Cheung et al. (2011)	
Cognitive engagement	Time flies when I am browsing on the brand name's website. Browsing on the brand name's website is so absorbing that I forget about everything else. I am rarely distracted when browsing on the brand name's website. I am immersed in browsing on and interacting with the brand name's website. My mind is focused when browsing on the brand name's website. I pay a lot of attention to the brand name's website.
Emotional engagement	I am enthusiastic about the brand name's website. The brand name's website inspires me. I find the brand name's website full of meaning and purpose. I am excited when browsing on the brand name's website. I am interested in the brand name's website. I am proud of being a fan of that brand name.
Behavioral engagement	How often do you visit the brand name's website? How often do you read related news about that brand name? How often do you talk about that brand name with your friends? How often do you search on the brand name's news in the internet? I devote a lot of energy to the brand name's website.

3. Conceptual Framework and Hypothesizes Development

This study investigates the influence of service quality toward customer engagement. According to the definition and the findings from relevant literature review, a conceptual framework of influence of service quality towards customer engagement was developed. The conceptual framework portrays service quality construct consists of 5 sub constructs namely, Reliability, Responsiveness, Assurance, Empathy, and Tangible. For customer engagement, we adopted the customer engagement's concept of multidimensionality (Bowden, 2009b; Hollebeek, 2011). There are three dimensions of customer engagement; namely, cognitive, emotional, and behavioral. On the basis of the literature review presented above, a conceptual model for the present research is presented in Figure 1. This model depicts certain hypothesized relationships among the constructs of service quality and customer engagement. The conceptual framework is illustrated as Figure 1.

The purpose of this study was to investigate the influence of service quality toward customer engagement. After comprehensive literature review previous relevant researches on marketing literature, in

accordance to the proposed model, the hypotheses for the structural equation modeling (SEM) analysis are as follows:

- H1: Reliability has a positive effect on Customer Engagement.
- H2: Responsiveness has a positive effect on Customer Engagement.
- H3: Assurance has a positive effect on Customer Engagement.
- H4: Empathy has a positive effect on Customer Engagement.
- H5: Tangibility has a positive effect on Customer Engagement.
- H6: Cognitive Engagement contributes to an overall construct of Customer Engagement.
- H7: Emotional Engagement contributes to an overall construct of Customer Engagement.
- H8: Behavioral Engagement contributes to an overall construct of Customer Engagement.

3.1. Measurement of Constructs

The survey instrument consists of 38 items measuring the constructs mentioned in the model – the service quality and customer engagement. Based on the studies of Cronin & Taylor (1992), they developed the SERVPERF scale; “perception measurement only” scale for measuring service quality, which includes five dimensions; reliability, assurance, tangibles, empathy, and assurance. The response format used for service quality measurement items in the questionnaire was a five point Likert scale anchored by 1=“Strongly disagree”, 5=“Strongly agree”.

Customer engagement has been split into three dimensions; namely, cognitive, emotional, and behavioral. The cognitive, emotional, and behavioral engagement scales have been used as suggested by Cheung et al. (2011). The response format used for cognitive and emotional engagement measuring items in the questionnaire was a five point Likert scale anchored by 1= “Strongly disagree”, 5= “Strongly agree”. For behavioral engagement dimension, 4 of 5 constructed items refer to the frequency of the different forms of behavioral engagement. The response format chosen for these five items has been a five point frequency scale (1= Almost never, 2= Rarely, 3= Sometimes, 4 = Often, 5 = Almost all the time).

4. Methodology

4.1. Data Collection and Sample

Firstly, a series of in-depth interviews were conducted with some experts in the field of service quality and customer engagement to examine the validity of the questionnaire. The questionnaire was developed based on the relevant literature. In order to test the content validity, our questionnaire was sent to three university lecturers in the marketing field for revising the content to ensure that it was clear, concise, and understandable. A pilot study was conducted with 42 samples in order to determine the reliability of the questionnaire for the study by computing Cronbach’s Alpha. The Cronbach’s Alpha score for all constructs were above 0.7 which indicated that the questionnaire was reliable. Survey methodology was used for this study. As we aim to focus our study on the influence of service quality toward customer engagement. In order to test the hypotheses, a survey was administered during January to May 2014. The 498 questionnaires were distributed to Bangkok and Nation universities’ undergraduate and graduate students in Thailand. In total, 395 questionnaires from 498 questionnaires were returned to us. The rate for the usable responses was 79%. After checking the completion of the details in the questionnaires, 379 questionnaires were usable for further analysis.

4.2. Measures

The model is tested with structural equation modeling (SEM). SEM has gained popularity across many disciplines especially in Social Science and Business Administration research due to its generality and flexibility. SEM has been used for all information models, including factor loadings and simultaneous regressions. We explain the sample and scales for all model constructs followed by the results of the SEM analyses, which are conducted by using AMOS version 20. All items are measured on five-point Likert scales (1 = strongly disagree to 5 = strongly agree, and 1=Almost never to 5=Almost all the time).

5. Data Analysis

5.1. Measure Validation

Figure 1 illustrates the proposed latent variable model, showing all structural paths. The data are subjected to Structural Equation Modeling (SEM) using the AMOS 20.0 software. According to Anderson and Gerbing (1988), the model is tested using a two-stage structural equation model. Firstly, Confirmatory Factor Analysis (CFA) to evaluate constructs validity regarding convergent and discriminant validity. The second, Path Analysis, is to test research hypotheses empirically.

5.2. First-order Confirmatory Factor Analysis

The first-order Confirmatory Factor Analysis is performed to five service quality dimensions (Reliability, Responsiveness, Assurance, Empathy, and Tangibility) and three components of customer engagement (Cognitive, Emotional, and Behavioral engagement). Convergent validity exists when item factor loadings are greater than 0.7 and item squared multiple correlations are greater than 0.5 (Anderson and Gerbing, 1988). Therefore, the items with factor loading lower than 0.7 were deleted. After fourteen items were deleted, a confirmatory factor model was tested. The measurement model offered an acceptable fit to the data (Chi-square= 415.968, df = 224, CMIN/df = 1.857, GFI = 0.871, RMSEA = 0.041). Factor loadings of items to corresponding constructs range from 0.705 to 0.913, and all loadings are significant ($P < 0.01$), which further supports convergent validity. Discriminant validity exists when the squared correlation between constructs must be less than the average variance extracted (AVE) of each underlying (Anderson and Gerbing, 1988). The correlations between the latent variables and the average variance extracted (AVE) of each construct is achieved the criteria.

5.3. Second-order Factor (Customer Engagement)

According to the proposed model, Customer Engagement is a higher-order construct consisting of Cognitive, Emotional, and Behavioral Engagement. In order to establish that Customer Engagement is a single second-order factor, the null hypothesis that the first order factors converge to a single higher-order construct was evaluated. The results show that the model appropriately fits the data. Factor loadings from the measurement items to first-order constructs range from 0.711 to 0.897 and are significant at $P < 0.01$. Factor loadings from first-order factors to the second-order factor vary from 0.723 to 0.856 and are significant at $P < 0.01$. Measures of goodness of fit support the null hypothesis that the first-order factors converge to a single higher-order construct. The ratio of Chi-square to degrees of freedom is 1.824, GFI is 0.897, and RMSEA is 0.043. Consequently, the second-order factor model was employed to represent Customer Engagement, and Hypothesis 6, 7, and 8 are supported.

5.4. The Results of Path Analysis

After testing confirmatory factor analysis, the structural model in Figure 1 was subsequently tested. The following are the overall model fit and the tests of each research hypotheses. The results of the full model (structural and measurement models) indicated fit indices: Chi-Square = 434.538, degree of freedom = 234, CMIN/df = 1.857, GFI = 0.827, RMSEA = 0.046. All proposed paths are significant. The coefficient on the path from reliability to customer engagement is 0.854 ($t = 7.921$, $P < 0.001$). Therefore, this positive relationship suggests that Hypothesis 1 is supported. The path coefficient from responsiveness to customer engagement is 0.832 ($t = 2.246$, $P < 0.05$), which supports Hypothesis 2. The path coefficient from assurance to customer engagement is 0.841 ($t = 3.134$, $P < 0.01$), so Hypothesis 3 is supported. Empathy significantly affects customer engagement. The coefficient on the path from empathy to customer engagement is 0.791 ($t = 7.931$, $P < 0.001$). Therefore, this positive relationship suggests that Hypothesis 4 is supported. The path coefficient from tangibility to customer engagement is 0.754 ($t = 2.592$, $P < 0.01$), which supports Hypothesis 5.

The adequacy of the structural equation models were evaluated on the criteria of overall fit with the data. The results of the evaluation of each individual paths of the model are summarized in Table 3.

Table 3: Results of path analysis

Paths	Standardized parameter estimate	P-value	Result
H1: Reliability → Customer Engagement	0.854(7.921)	0.000***	Supported
H2: Responsiveness → Customer Engagement	0.841(2.246)	0.022*	Supported
H3: Assurance → Customer Engagement	0.754(3.134)	0.008**	Supported
H4: Empathy → Customer Engagement	0.791(7.931)	0.025***	Supported
H5: Tangibility → Customer Engagement	0.832(2.592)	0.007**	Supported
H6: Customer Engagement → Cognitive Engagement	0.896(5.723)	0.000***	Supported
H7: Customer Engagement → Emotional Engagement	0.758(5.028)	0.027***	Supported
H8: Customer Engagement → Behavioral Engagement	0.713(1.983)	0.046*	Supported
Goodness of fit: Chi-square = 434.538, df = 234; GFI= 0.827; RMSEA = 0.046			

Notes: * Significant at $P < 0.05$; ** Significant at $P < 0.01$; *** Significant at $P < 0.001$; df = degrees of freedom, GFI = Goodness-of-fit index; RMSEA = Root mean square error of approximation; Standardized coefficients, and t-values in parentheses

6. Conclusion

In this study, we have focused on the investigation of the influence of service quality toward customer engagement in service dominant industries in Thailand in order to provide more clarification about effective service quality to enhance customer engagement for academics and managers; especially the importance of service quality attributed by service dominant firms. A framework for studying service quality toward customer engagement was developed. The model was tested using data collected from undergraduate students in Thailand. The results support all hypotheses.

The result of this study is in line with previous research from Patterson et al. (2006), Higgins & Scholer (2009), Vivek et al. (2010), and Mollen & Wilson (2010) that customer engagement consists of more than one dimension, and in order to have enhanced customer engagement service quality provided by service dominant firms is one of the importance aspect that needed to take into account by practitioners and the results of enhancing customer engagement will lead to higher customer positive behavior such as more positive word of mouth, more share of wallet spending, and brand loyalty. According to the results of structural equation modeling (SEM), Reliability has the highest positive effect on customer engagement with 0.854 factor loading. The second is responsiveness with 0.841 factor loading and tangibility has the third highest positive effect to customer engagement with 0.832 factor loading.

7. References

- [1] J. Anderson, J. C., & Gerbing, D. W. (1988). "Structural equation modeling in practice: A review and recommended two-step approach," *Psychological Bulletin*, Vol.103, No.3, pp. 411-423.
- [2] Bowden, J. (2009a). The Process of Customer Engagement: A Conceptual Framework. *Journal of Marketing Theory and Practice*, 63-74.
- [3] Bowden, J. (2009b). Customer Engagement: A Framework for Assessing Customer-Brand Relationships: The Case of the Restaurant Industry. *Journal of Hospitality Marketing & Management*, 574-596.
- [4] Brodie, R. J., Hollebeek, L. D., Juric, B., & Ilic, A. (2011a). Customer Engagement: Conceptual Domain, Fundamental Propositions, and Implications for Research. *Journal of Service Research*, 252-271.
- [5] Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2011b). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*.
- [6] Cheung, C., Lee, M., & Jin, X.-L. (2011). Customer Engagement in an Online Social Platform: Conceptual Model and Scale Development. *Thirty Second International Conference on Information Systems*. Shanghai: Online Communities and Digital Collaborations.
- [7] Cronin, J.J. & Taylor, S.A. (1992). Measuring service quality: a re-examination and extension. *Journal of Marketing*, 6(7), 55-68.
- [8] Fornell, C. & Lacker, D. (1981), "Evaluating structural equation models with unobservable variables and measurement error," *Journal of marketing research*, Vol. 18, pp. 39-50

- [9] Higgins, E.T., & Scholer, A.A. (2009).Engaging the consumer: The science and art of the value creation process. *Journal of Consumer Psychology*, 19, 100-114.
- [10] Hollebeek, L. (2011). Demystifying Customer Engagement: Exploring the Loyalty Nexus. *Journal of Marketing Management*.
- [11] Hung, Y.H., Huang, M.L. & Chen, K.S. (2003).Service quality evaluation by service quality performance matrix. *Total quality Management & Business Excellence*, 14(1), 79-89.
- [12] Mollen, A., & Wilson, H. (2010). Engagement, telepresence and interactivity in online consumer experience: reconciling scholastic and managerial perspectives. *Journal of Business Research*, 919 925.
- [13] MSI — Marketing Science Institute. 2010–2012 research priorities. Available at http://www.msi.org/pdf/MSI_RP10-12.pdf. [Accessed 6 September 2013].
- [14] Patterson, P., Yu, T., & Ruyter, K. (2006).Understanding Customer Engagement in Services. *Advancing Theory, Maintaining Relevance, Proceedings of ANZMAC 2006 Conference*. Brisbane.
- [15] Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1985).A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.
- [16] Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1988). SERVQUAL: a multi-item scale for measuring customer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- [17] Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1993). Research note: more on improving service quality measurement. *Journal of Retailing*, 69(1), 140-147.
- [18] Ping, Robert A., Jr. (2004), "On Assuring Valid Measures for Theoretical Models Using Survey Data," *Journal of Business Research*, 57 (2), 125–41.
- [19] Schumacker, R.E. & Lomax, R.G. (1996), *A Beginner's Guide to Structural Equation Modeling*, Lawrence Erlbaum Associates, Mahwah, NJ.
- [20] Verhoef, P. C., Reinartz, W. J., & Krafft, M. (2010).Customer Engagement as a New Perspective in Customer Management. *Journal of Service Research*, 247-252.
- [21] Vivek, S. (2009).A Scale of Consumer Engagement. *Doctor of Philosophy Dissertation, Department of Management & Marketing, Graduate School–The University of Alabama*.
- [22] Vivek, M., & Cooley, D. (2010). Antecedents and Consequences of Online Brand Community Participation: A Conceptual Framework. *Journal of Internet Commerce*, 127-147.
- [23] Vivek, S., Beatty, S., & Morgan, R. (2010). Consumer Engagement: Exploring Customer Relationships Beyond Purchase. *Journal of Marketing Theory and Practice*.