PEER: Looking into Consumer Engagement in e-WOM through Social Media

Leonidas Hatzithomas, Christina Boutsouki, Vassilis Pigadas, and Yorgos Zotos

1 Introduction: The Sequence of Participation, Engrossment, Emotion Sharing and Relationship Building (PEER)

According to philosopher Martin Heidegger (1927/1996) the human existence takes place through the ongoing, active and practical engagement with other people, things and the world as a whole. To be human is to be engaged with other beings in the world. This central role of engagement in human life and consciousness has drawn the attention of academics from different disciplines (Hollebeek, 2011). A plethora of studies has examined the concept of engagement in education (Lutz et al., 2006), organizational behavior (Noland and Phillips, 2010), psychology (Avery et al., 2007), political sciences (Resnick, 2001) and information systems (Wagner and Majchrzak, 2007). In marketing consumer engagement is a strategic direction. It is a carefully planned necessity for all those companies striving to establish and maintain sustainable competitive advantage, as it predicts future business performances (Brodie et al., 2013).

According to Hollebeek (2010, p. 1) “consumer engagement may be viewed to reflect consumers’ levels of motivational (cognitive, emotional and/or behavioral) investments in their brand interactions”. Indeed, most researchers in this field shed light on these particular dimensions of consumer engagement (Vivek et al., 2012). However, except for cognitive, emotional and behavioral, social motives are also of great importance in the context of social media. Through social networks the users have the opportunity to get along with other people, to establish ties with peers, to make new friends and to share social experiences (Chu and Kim, 2011). Social brand experiences contribute to the creation of brand associations (Berry, 2000) and to the establishment of brand relationships similar to human relationships (Schmitt, 1999). To date the vast majority of the research papers examining consumer engagement remains conceptual and theoretical in its focus (Hollebeek, 2011). Furthermore, only a few research papers have concentrated on virtual consumer engagement in internet (Sawhney et al., 2005; Fuller, 2006) and in social media (Chu and Kim, 2011).

The present paper intends to fill this research gap by conceptualizing consumer engagement (that manifested the days preceding, during and after a provider-initiated event) as a process of four steps: participation (behavioral...
engagement), engrossment (cognitive engagement), emotion sharing (emotional engagement) and finally relationship building (social engagement). In this model, behavioral engagement (namely the participation in electronic word of mouth) is considered a prerequisite condition for the cognitive, affective and social manifestations of consumer engagement, while social engagement represents both the continuous and the ultimate purpose of the process (Figure 1 illustrates the PEER model). The proposed framework was empirically tested using 10,801 tweets for two events (organized by Apple – 10/9/2013 – and Nintendo – 18/11/2012 – in the USA for launching their new brands) that were collected and text analyzed by an online version of the Linguistic Inquiry Word Count software (LIWC) (Pennebaker et al., 2007).

![Figure 1: The PEER Model for Consumer Engagement in e-WOM via Social Media](image)

The objective of this study and model testing is to provide answers to the following research questions:
1. How does a provider-initiated event, such as a brand-launching event, affect behavioral, cognitive, emotional and social consumer engagement in eWOM? Are the effects distributed uniformly or heterogeneously throughout the days preceding, during and after the event? Do they take a form of hierarchy of effects?
2. Is this hierarchical model valid for other brands or it represents a brand-specific model?
3. Can the model predict the success or failure of a new brand in the market?
4. Are there any causal relationships between the variables?

2  **Looking into the Features of PEER**

2.1  **Participation (Behavioral Engagement)**

Vivek et al. (2012, pp. 127) defines consumer engagement “as the intensity of an individual’s participation in and connection with an organization’s offerings and/or organizational activities, which either the customer or the organization initiate”. Indeed, consumer brand engagement in eWOM begins at the moment an internet user participates in a dialogue by requesting more information, answering questions, generating reports and/or providing product reviews. These consumer engagement behaviors create value for firms by influencing other customers (customer influencer value), incentivizing referral of new customers (customer referral value) and providing feedback to the firm (customer knowledge value) (Kumar et al., 2011). Participation is a behavioral manifestation of consumer engagement toward the brand and at the same time a distinct and necessary variable that precedes consumer engagement (Vivek et al., 2012) in eWOM – that is, participation in eWOM is a prerequisite condition for cognitive, emotional and social engagement to be manifested. It prepares the ground for them when it is motivated by organizational offerings and/or activities such as brand launching events. Based on the aforementioned analysis it is expected that the intensity of individuals’ participation in a provider-initiated event affects the intensity of consumer engagement as a whole. At the same time, as prior studies (Thelwall et al., 2010) have shown, extensive participation in eWOM is expected to be observed on the day of the event. Hence, the following hypothesis is advanced:

H1: Consumers’ participation in eWOM about the brand has a sharp increase on the day of the event.

2.2  **Engrossment (Cognitive Engagement)**

Every brand event has three time phases in relation to it (the event cycle): before, during and after the event (Saget, 2006). During the first phase, namely the days preceding the event (pre-event), teaser messages and announcements are broadcast on traditional and new media, exciting the curiosity of the public.
The intensity of consumers’ interest in brand announcements and new brand characteristics is increased and consumers are searching like “maniacs” for anything that has any connection both with the brand and the event. Funs, blogs, websites, social media and videos circulate and recirculate rumors, speculations and suggestions about the event and the announced brands (Sherr, 2013). Consumers experience high levels of engrossment or concentration towards the event, expressing, in that manner, their high cognitive engagement (Hollebeek, 2011). On the other hand, the firm provides information sparingly, trying to manage and control the information flow (Sherr, 2013). This strategy rekindles rumors and increases consumers’ cognitive engagement in eWOM. The above arguments lead to the following hypothesis:

H2: Cognitive engagement in eWOM (engrossment) has a sharp increase on the days preceding the event.

### 2.3 Emotion Sharing (Emotional Engagement)

During the second phase of the event cycle, consumers attend the event either on TV or on internet or live. Participation in eWOM becomes more intense and extensive on that day. Consumers had been waiting for months and now their desire to interact with each other and to engage in brand activities bursts out like a volcano (see also Marcus et al., 2011). The firm is presenting its new offerings giving the opportunity to consumers to share their emotions and attitudes as well as their commitment, enthusiasm, inspiration and pride (emotional engagement) (Hollebeek, 2011; Vivek, 2009). In line with this, Thelwall et al. (2010) indicated that important events creating higher participation rates are associated with increased positive and/or negative emotions. These fluctuations of emotions in reaction to the event are expressed in real time and can be used to evaluate its success (Diakopoulos and Shamma, 2010). The following hypothesis is proposed:

H3: Emotional engagement in eWOM (through emotion sharing) has a sharp increase on the day of the event.

### 2.4 Relationship Building (Social Engagement)

Even when the event has finished, usually consumer engagement in eWOM does not stop. Especially in the events organized by well-known corporations, internet users continue to be engaged in eWOM communication about the brand and the event itself in the post-event phase (see also Gruhl and Guha, 2004 for Microsoft). They use social media in order to upload, tag and comment pictures of the event, to join in groups related to it and to build relationships with other
peers around the event and the advertised brand (Zhang et al., 2011). Actually, social engagement in eWOM via social media is a continuous activity throughout the event cycle (Zhang et al., 2011). However, in the post-event period, consumers capitalize the social investments they have made in the previous days. The following hypothesis is advanced:

H4: Social engagement in eWOM (relationship building) has a sharp increase on the days after the event.

3 The Research Process

A text analysis approach was adopted as an appropriate and suitable method for the scientific analysis of text-based electronic word of mouth (Tang and Guo, 2013). LIWC software (Pennebaker et al., 2007) was used as the text mining tool since it is a validated and reliable tool for measuring cognitive, emotional and social engagement through the analysis of written or spoken texts (Cohn et al., 2004). LIWC program is a computerized text analysis tool that has been used in marketing literature in studying electronic word of mouth communication (Tang and Guo, 2013) and the effect of online user reviews on conversation rates (Ludwig, 2013). This approach gave the opportunity to the authors to study the spontaneous manifestations of cognitive, emotional and social consumer engagement and not just the levels of self-reported engagement in eWOM (for self-reported consumer engagement see Vivek, 2009). For the purpose of this study an online version of LIWC program was designed and it provided researchers with the ability to collect, manage, clear and process social media texts in real time. Overall, 171,399 tweets for the hashtag #Apple and 157,758 tweets for the hashtag #WiiU were collected. In each case, the tweets had been posted three days preceding the event, the day of the event and four days after the event. Tweets were obtained for these hashtags because the events were advertised as the “Wii U launch event” and the “Apple’s annual event”. After deleting retweets, tweets containing only hashtags and irrelevant tweets (e.g. “Does eating an #apple a day really keep the doctor away?”), a random sample of 7,107 tweets for the hashtag #Apple and 3,694 tweets for the hashtag #WiiU was selected from the whole population. This study focused on twitter, since prior studies have indicated that twitter mirrors offline sentiment (Tumasjan et al., 2010).

4 Debating PEER

Kruskal–Wallis test and Mann-Whitney U test with Bonferroni corrections were used for the examination of the four hypotheses, since the data were obtained from a non-normal distribution (as Kolmogorov-Smirnov and Shapiro-
Wilk tests were statistically insignificant). Moreover the z-scores were computed for each variable to both express how far any given score is from average and show the effect sizes on the same graph. As the first hypothesis suggested, the results indicated that the participation in eWOM, about the brand, experiences a sharp increase on the day of the event (the fourth day was the day of the event). This trend was observed both in the Wii U launch event ($\chi^2=72.85, df=7, n=192, p<.000$) and in Apple’s annual event ($\chi^2=143.803, df=7, n=192, p<.000$) (Graphs 1 and 2). Hence, hypothesis 1 is supported.

Interestingly, the text analysis, also, revealed that consumers engage continuously in eWOM conversations as an alternative means of “participating” in the three phases of the event. Actually, it seems like they had synchronized their clocks to keep track of the event (Wii U: $\chi^2=18.30, df=7, n=3,694, p<.011$, Apple: $\chi^2=254.99, df=7, n=7,107, p<.000$) (Graphs 3 and 4). Their tweets had a future-orientation on the days preceding the event (Wii U: $\chi^2=36.13, df=7, n=3,694, p<.000$, Apple: $\chi^2=29.61, df=7, n=7,107, p<.000$), a present-orientation the day of the event (Wii U: $\chi^2=20.43, df=7, n=3,694, p<.005$, Apple: $\chi^2=74.74, df=7, n=7,107, p<.000$) and a past-orientation the days following the event (Wii U: $\chi^2=20.55, df=7, n=3,694, p<.005$, Apple: $\chi^2=41.55, df=7, n=7,107, p<.000$) (Graphs 5-10). For instance, someone mentioned “Just
one day left #Apple”, while another one posted “Today is THE day !!! #apple #iphone”.

Graphs 3-6: Time orientation (the fourth day is the day of the event)
As far as the cognitive engagement (engrossment) in eWOM is concerned, it considerably increased in the days preceding the event (Graphs 11 and 12). In
those days consumers wanted to know more about the brand and the upcoming event (Wii U: $x^2=20.28$, $df=7$, $n=3,694$, $p<.005$, Apple: $x^2=34.31$, $df=7$, $n=7,107$, $p<.000$). For example a consumer tweeted “#iPhone 5S may have a ring of light around the home button? What do you think, fact or fiction?” Another user fed the need of other fans to know more, writing “#WiiU commercials are running before Breaking Dawn Part 2. Don't ask how I know this”. Thus, hypothesis 2 is also supported. Interestingly, it seems that in the case of Apple, consumers’ participation in eWOM, also had a sharp increase the fourth day (September 14, 2013) after the event. Indeed, a new PEER process had begun, because iPad Air and IOS7 were released by APPLE on September 18, 2013, eight days after their announcement.

**Graphs 11, 12: Cognitive Engagement (The fourth day is the day of the event)**

The intense desire of consumers to share their emotions about the brand with their friends on twitter was expressed especially during the event (Wii U: $x^2=15.17$, $df=7$, $n=, p<$, Apple: $x^2=31.42$, $df=7$, $n=7,107$, $p<.000$) (Graphs 13 and 15). For instance, someone wrote “Thought you hated the original Wii. Don't worry, the #WiiU can emulate it!!”, while another one tweeted “iPhone 5s is insane I love it so much I think I’ll marry it. #apple #iphone5s”. These results provide support to the third hypothesis. It is noteworthy that in the case of the Wii U launch event, the graph of emotional engagement is similar to the graph of anger (Graph 14).
Graphs 13-16: Emotional Engagement (The fourth day is the day of the event)
Advances in Advertising Research (Vol. VI)
The Digital, the Classic, the Subtle, and the Alternative
Verlegh, P.; Voorveld, H.; Eisend, M. (Eds.)
2016, XII, 406 p. 57 illus., Hardcover
ISBN: 978-3-658-10557-0