Does eWOM matter to brand extension?

An examination of the impact of online reviews on brand extension evaluations

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Abstract

Purpose – The purpose of this study is to find out how electronic word of mouth (eWOM) may affect evaluations of products with different brand images. In particular, the study explores differential eWOM impacts across several brand types and extension categories.

Design/methodology/approach – An experiment with 2 (brand image: prestige/function) $\times$ 2 (category similarity: low/high) $\times$ 2 (eWOM message type: positive/negative) between-subjects design was used to examine the impacts of eWOM on different types of brand extensions. A total of 268 subjects from a public university in the Southwest participated in the study. Analysis of Variance (ANOVA) was used in analyzing the data.

Findings – The findings highlight the differential impact of eWOM on brand extension evaluations with different brand images. First, eWOM is more effective in influencing evaluations of functional brand extensions than prestige brand extensions. Second, whereas negative eWOM does equally bad on both high- and low-similarity brand extensions, positive eWOM is more effective in improving evaluations of high-similarity extensions than low-similarity extensions.

Originality/value – This study is the first to examine the impact of eWOM on products with different brand images. This is a critical issue for brand managers who allocate limited marketing resources to monitoring and managing vast amounts of eWOM activities. The findings provide important guidance for managing social media marketing communications.

Keywords Branding, Marketing communications, Brand management, Social media marketing, Word-of-mouth marketing

Paper type Research paper

Introduction

In recent years, the landscape of marketing communications has been vastly changed by user-generated content. Electronic word-of-mouth (eWOM), as an important source of user-generated content, demonstrates influential impacts on consumers' product evaluations. Typical examples of eWOM include online reviews posted by anonymous consumers. A recent survey (BrightLocal, 2016) showed that 91 per cent of consumers read online reviews to judge a local business, and 84 per cent of consumers claim that they trust online reviews as much as recommendations from friends.

The fast-growing popularity of eWOM has motivated researchers to examine eWOM's effects on consumer decision-making. Previous studies have found that eWOM influences

purchase decisions in various ways, including increased time spent on online product search (Gupta and Harris, 2010), online product sales (Zhu and Zhang, 2010), new product adoptions (López and Sicilia, 2013), consumer attention (Daugherty and Hoffman, 2014), product choice (Huang *et al.*, 2012), perceived product quality (Koh *et al.*, 2010) and purchase intention (Tsao and Hsieh, 2015; Huang *et al.*, 2012; Prendergast and Yuen, 2010).

Although the literature has recognized the role of eWOM in general product purchase, little is known about how eWOM may affect products with different brand images. For example, would eWOM be more influential for certain brand types than others? This is a critical question for brand managers who allocate limited marketing resources to monitoring and managing vast amounts of eWOM activities. Answers to this and other questions would provide important guidance for managing social media marketing communications.

As an initial step to understand the effects of eWOM on brand images, this study examines a popular type of eWOM – consumer online reviews. Nowadays, consumer online reviews play an important role in consumers' decision-making. This paper examines the effects of consumer online reviews in the context of brand extensions. A brand extension introduces a new product using an existing brand name (Aaker and Keller, 1990). For example, Starbucks introduced coffee-flavored ice cream under its "Starbucks" brand name. Brand extension is a dominant strategy for new product introductions and, thus, provides a highly relevant context for examining the effect of eWOM on the role of brand images.

The findings highlight the differential impact of eWOM on brand extension evaluations with different brand images. First, it is found that positive eWOM is more effective in improving evaluations of functional brand extensions than prestige brand extensions. Second, whereas negative eWOM does equally bad on both high- and low-similarity brand extensions, positive eWOM is more effective in improving evaluations of high-similarity extensions than low-similarity extensions. These findings also provide guidance for monitoring and managing social media marketing communications.

The remainder of the paper is structured as follows. First, the literature regarding eWOM on product evaluations is examined, and the paper then hypotheses and explains the impacts of eWOM on different types of brand extensions. The findings and implications from an experimental study are then discussed, and the paper concludes with both academic and practical implications.

Electronic word of mouth on product evaluations
According to Hennig-Thurau *et al.* (2004, p. 39), eWOM can be defined as:

> [...] any positive or negative statement made by potential, actual or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet.

Online reviews posted by anonymous consumers constitute an influential format of eWOM. eWOM differs from traditional word of mouth (WOM) in three important ways. First, the scope of eWOM communication is much wider. Unlike traditional WOM, which can only spread among people who know each other, eWOM communication can reach a much broader audience, regardless of whether these people know each other. Second, online review websites compile numerous examples of eWOM each day and make them accessible to their general audience in a short time, which makes eWOM much more impactful than traditional WOM (Li and Du, 2011; Lindgreen *et al.*, 2013; Litvin *et al.*, 2008). Third, reviews can be easily measured via various rating systems provided by each website, which makes it easier to spread.

www.

Recent literature has explored the role of eWOM in the consumer decision-making process from two perspectives:

(1) What kind of eWOM is deemed useful by consumers?

(2) What are the factors that moderate the influence of eWOM?

First, various studies have explored determinants of the helpfulness of eWOM, with message valence being one of the most examined factors. Negative eWOM has been found to have a greater effect than positive eWOM (Park and Lee, 2009). Purnawirawan *et al.* (2012) found that reviews expressing a clear opinion (either positive or negative) are considered more useful than neutral ones, and consumers are more likely to recall these messages when evaluating products. Message valence has often been found to interact with other factors, such as brand type (Daugherty and Hoffman, 2014), product type (Park and Lee, 2009) and platform (Park and Lee, 2009; Lee and Youn, 2009). Huang *et al.* (2011) also identified four eWOM characteristics (quality, authority, authenticity and interestingness) that positively affect message receivers' acceptance level, as well as their likelihood of resending the message. In addition, longer reviews are considered more helpful than shorter ones in general (Pan and Zhang, 2011). A meta-analysis of eWOM (Ya *et al.*, 2015) concluded that eWOM valence and volume is more effective for durable goods, products with lower trialability, products with lower observability and when there is perceived expertise and trustworthiness of the source of eWOM and less competition.

Credibility is another issue with regard to the usefulness of eWOM. Tsao and Hsieh (2015) found that positive, high-quality eWOM enhances its credibility, which also mediates its influence on purchase intentions. This is especially true for positive, high-quality eWOM from independent platforms, as compared to that from corporate platforms. Others have also found that source credibility plays an important role in the credibility of eWOM and the impact of eWOM on consumers. For example, the impact of eWOM from an unknown user has been found to be greater than that from firm-created communication (Godes and Mayzlin, 2009) and greater than that from established websites than from less established websites (Park and Lee, 2009).

Second, as the literature has recognized the important role of eWOM in product evaluations (Schivinski and Dabrowski, 2015), recent studies have noted the differential impact of eWOM under several conditions. For example, Gupta and Harris (2010) showed that eWOM increases the time taken to consider the recommended product. The increase in time is moderated by an individual's willingness to process the information. Zhu and Zhang (2010) found that the impact of eWOM on product sales is moderated by product familiarity. Their study, based on the sales data and consumer online reviews on video games, concluded that online reviews are more influential in driving sales for less-popular products and for products targeting consumers with greater internet experience. In other words, the effect of eWOM on sales is moderated by both product familiarity and consumer experience.

Product/brand type is often considered another important factor that moderates the effect of eWOM on consumer perception. Pan and Zhang (2011) compared the impact of message valence (positive versus negative) and message length between the utilitarian and experiential product categories on review helpfulness. Their results showed that the message valence effect is stronger in experiential products, whereas the message length effect is stronger in utilitarian products. Similarly, Daugherty and Hoffman (2014) showed that the impact of negative eWOM is greater for luxury goods than for non-luxury goods with respect to capturing consumer attention. Park and Lee (2009) also showed that the perceived persuasiveness of eWOM is greater for experience goods than that for search goods, and the effect of product type also interacts with message valence. In addition, the

effect of negative message is more pronounced for experience goods than for search goods. Tsao and Hsieh (2015) compared search goods with credence goods and found that the credibility of positive eWOM and its impact on purchase intention is stronger for credence goods than it is for search goods. Because of the intangible nature of the attributes of credence goods and experience goods, it is difficult for consumers to make an objective judgment on their quality; hence, eWOM reviews and comments become more important when making evaluations in those categories. In addition, Tsao and Hsieh (2015) found that product type moderates the interaction effect between positive eWOM quality and the type of eWOM platform (independent platforms versus corporate platforms).

To summarize, the literature of eWOM has recognized that the impact of eWOM varies across different product and consumer characteristics, such as product categories, product familiarity and consumers' willingness to process the information. As a further step, this study examines eWOM in the context of brand extension. In particular, the study explores differential eWOM impacts across different brand types and extension categories.

Hypotheses
Brand images on electronic word of mouth
Park *et al*. (1991) proposed two types of brand image – functional and prestige – where the former is mostly associated with tangible product attributes (e.g. Tide detergent), and the latter goes beyond functional attributes and links to consumers' self-expression and image enhancement (e.g. Rolex watches or Apple products). In particular, Monga and John (2010) pointed out that with everything else being equal, consumers have more favorable extension evaluations for brands with prestige images than for brands with functional images. Monga and John (2010) argued that intangible attributes help prestige brands extend to a different category. For example, the brand image of Rolex is associated with many non-product attributes, such as luxury and exclusiveness. These non-product attributes help the brand extend to distant categories, including scarves and neckties. In contrast, functional brands often lack such intangible brand associations that can link the brand to distant product categories. For example, it would be much harder for Timex to extend to fashion or handbags than for Rolex. Compared with prestige brands, functional brands face more challenges to extend to distant categories.

The current study proposes eWOM as an effective way to influence consumers' evaluations for functional brand extensions. It argues that eWOM is more effective in influencing evaluations of functional brand extensions than prestige brand extensions. According to Monga and John (2010), everything else being equal, the level of perceived risk is higher for functional brand extensions than prestige ones. Such a high level of perceived risk arises from the limited extendibility of functional brands (Monga and John, 2010). Therefore, eWOM helps consumers gain additional information and thereby reduce the perceived risk. The framework of accessibility–diagnosticity (Feldman and Lynch, 1988; Herr *et al*., 1991) suggests that the chance of any particular piece of information being used to evaluate a product depends on the accessibility and diagnosticity of the information. A piece of an online review message is considered diagnostic if it provides additional useful information in its product evaluation. Therefore, consumers are more likely to consider eWOM messages in evaluating functional brand extensions.

On the other hand, eWOM messages about prestige brand extensions are less likely to be used in product evaluations. When evaluating a prestige brand extension, consumers can easily access the non-product-related attributes associated with the brand. These brand attributes can be linked to a wide range of product categories and serve as strong signals in extension evaluations. When evaluating Rolex scarves, for instance, consumers can easily

apply non-product-related attributes, such as "premium status", to their assessment. Given the easy accessibility to those brand associations, consumers are less likely to consider eWOM in their evaluation. Therefore, the following is proposed:

H1. Electronic word of mouth is more effective in influencing functional brand extension evaluations than prestige brand extension evaluations.

Electronic word of mouth's impact on high- versus low-similarity brand extension
An important factor in brand extension evaluations is the level of similarity between the parent category and the extension category (Broniarczyk and Alba, 1994; Keller and Aaker, 1992; Park *et al.*, 1991). A high-similarity brand extension occurs when a brand extends to a category that is similar to the parent category. For example, "Tide to go", an instant stain remover, is a high-similarity brand extension of Tide because the two products (detergent and stain remover) are similar to each other. In general, consumers have more favorable evaluations of high-similarity brand extensions than of low-similarity brand extensions (Aaker and Keller, 1990; Boush and Loken, 1991). When a brand extends to a similar category, the transfer of positive attitude from the parent brand to the extension product is likely to be smooth. In addition, in the case of a high-similarity brand extension, consumers can easily perceive the transfer of manufacturing skills and capabilities (Aaker and Keller, 1990). Everything else being equal, consumers prefer high-similarity brand extensions over low-similarity ones.

In this study, it is suggested that eWOM is more effective in influencing high-similarity brand extension evaluations than low-similarity ones. This is because consumers' negative impression of low-similarity brand extensions weakens the effectiveness of eWOM. This argument is consistent with traditional WOM literature. For example, Herr *et al.* (1991) found that WOM effects are reduced when negative attribute information is presented. The main reason for this is that a negative attribute, compared with a positive one, is more useful in helping to categorize the product as a good or bad one. For example, a TV set with poor sound quality may clearly indicate low product quality, whereas a positive attribute, such as a premium sound system, may not necessarily suggest a high-quality TV set.

Brand extension literature has established that consumers have unfavorable attitudes toward low-similarity brand extensions. Such unfavorableness would discount positive information contained in eWOM. Thus, eWOM is less effective in influencing low-similarity brand extension *evaluations*:

H2. Electronic word of mouth is more effective in influencing high-similarity brand extension evaluations than low-similarity brand extension evaluations.

To clarify, the argument for *H1* differs from that of *H2* in that the argument for *H1* emphasizes the role of eWOM in reducing consumers' level of uncertainty, whereas the argument for *H2* addresses the weakening eWOM effect in the presence of a negative impression of low-similarity brand extensions. For *H1*, information provided by eWOM helps reduce the high level of perceived risk associated with functional brand extensions. *However, it is important to realize that functional brands are not less favorable than prestige brands, despite the different brand images.* Functional brands, such as Tide (detergent) and Johnson & Johnson (baby products), enjoy great popularity in consumer markets. For functional brand extensions, the main challenge is the lack of relevant brand associations in the extension category. eWOM helps overcome this challenge by providing additional information from consumers. For low-similarity brand extensions, consumers' unfavorable attitudes are the main problem to overcome (Keller and Aaker, 1992).

H2 highlights the scenario in which consumers have already formed a negative attitude toward low-similarity brand extensions, as consistently documented in the literature (Broniarczyk and Alba, 1994; Keller and Aaker, 1992). Such a negative prior impression discounts the usefulness of eWOM. Therefore, it is argued that eWOM is less impactful for low-similarity extensions than for high-similarity ones.

Method

Sample and design

A 2 (brand image: prestige/function) $\times$ 2 (category similarity: low/high) $\times$ 2 (eWOM message type: positive/negative) between-subjects design was used to examine the impacts of eWOM on different types of brand extensions. A total of 268 subjects from a public university participated in the study. Each subject was randomly assigned to one of the eight experimental conditions. Brands and products were selected based on pretest results. Table I lists the product and brand selection for each factor.

Stimuli

Apple and Dell were selected as prestige and functional brands, respectively, based on subjects' familiarity with these brands as confirmed by the pretest results. First, products that have been commonly tested in previous brand extension studies were reviewed, and electronic products were selected because college students usually make purchase decisions on these items by themselves. Next, an LCD TV and sports watch were selected as two extension categories with different levels of similarity to their parent product category (computer). A pilot study was conducted to test the stimuli using students sampled from a large introductory marketing class. The results confirmed that Dell was considered a functional brand and Apple a prestige one. Regarding the similarity of extension category, the LCD TV/sports watch was chosen as high-/low-similarity extensions, respectively. It should be noted that this study was designed before Apple and other brands launched their smart watches. News about smart watches was not released until after the current data were collected, so although sports watch may be considered technology-related products now, they were not at the time of the study. These manipulations were further checked in the main study.

Procedure

The subjects were told that a consulting company was exploring opportunities in new product categories for some well-known brands. Subjects were among the small pool being selected to participate, and each opinion was very important for decision-making. A paragraph at the beginning of the questionnaire described the selected product and presented a positive/negative online review message. For example, an Apple brand extension with positive messages was described as the following:

Parent brand type (prestige/function)	Category similarity	Product choice
Apple/Dell computers	Low similarity High similarity	Sports watch LCD TV

Apple, the computer manufacturer, is going to launch a new product this fall, an LCD television. The product has been tested among a small group of consumers selected from Amazon.com. The following is a review posted on Amazon.com regarding the Apple iMac television:

I really like the Apple iMac TV. It has excellent picture quality; the TV connects with the computer seamlessly through the Wi-Fi network. Setting up the TV was very easy. Overall, I am very impressed by the Apple iMac TV. from Amazon.com

After they had read the online review, subjects were asked to evaluate the new Apple TV product described in the scenario and rate Apple in terms of brand image, extension category similarity, etc. Additional questions regarding subjects' demographic background were answered at the end of the procedure. The whole session took approximately 30 minutes, and participants were debriefed upon completion of the questionnaire.

Measures
Following Kirmani *et al.* (1999), brand images were assessed on two dimensions: prestige image and functional image. The prestige image was assessed by two seven-point items (Kirmani *et al.*, 1999; Park *et al.*, 1991). A higher score indicates a more prestigious image (1 = "low status" to 7 = "high status"; 1 = "low prestige" to 7 = "high prestige"; Cronbach's $\alpha = 0.92$). The functional image was measured by two seven-point items (Monga and John, 2010) (1 = "bad buy" to 7 = "good buy"; 1 = "good value" to 7 = "bad value"; Cronbach's $\alpha = 0.92$).

Category similarity was assessed by simply asking the respondents how similar one product is from another on a seven-point scale (Aaker and Keller, 1990) (1 = "not similar at all" to 7 = "very similar"). Message valence was assessed based on respondents' perception using a seven-point semantic differential scale (Park and Lee, 2009) (1 = "very negative" to 7 = "very positive"). Similarly, brand familiarity was assessed on a seven-point scale (Monga and John, 2010) (1 = "not familiar at all" to 7 = "very familiar"). Usefulness of eWOM was measured by taking an average of three seven-point Likert scales, as listed in the Appendix (Park and Lee, 2009).

The subjects were then asked for brand extension evaluations on two seven-point items (Kirmani *et al.*, 1999). A higher score indicated a more positive attitude toward the extension products (1 = "very unlikable" to 7 = "very likable"; 1 = "very unappealing" to 7 = "very appealing"; Cronbach's $\alpha = 0.94$). An average of the two items was used as the measure for the brand extension evaluation of each product.

Results
Manipulation check
The subjects were asked about their perceptions of brand image, extension category similarity and message valence as manipulation checks in the study. Across all product categories, Apple was considered a more prestigious brand compared to Dell (mean$_{\text{Apple}}$ = 5.53, SD = 1.05; mean$_{\text{Dell}}$ = 4.74, SD = 1.05; $t = 6.068$, $p < 0.001$). The results also show that Dell was considered a better-value brand than Apple (mean$_{\text{Dell}}$ = 5.51, SD = 1.44; mean$_{\text{Apple}}$ = 4.82, SD = 1.20; $t = 1.99$, $p < 0.05$). This supports the categorization of Apple as a prestige brand and Dell as a functional brand.

As for category similarity, the results showed that the LCD TV was consistently rated as a high-similarity extension category, whereas the sports watch was rated lower for both brands (mean$_{\text{high-similarity}}$ = 3.57, mean$_{\text{low-similarity}}$ = 2.0, $t = 9.62$, $p < 0.001$). Therefore, the similarity categorization of the extension products was valid.

Subjects reading the positive review messages reported a higher score compared to those reading the negative ones (mean$_{positive\ message}$ = 5.77, SD = 1.23; mean$_{negative\ message}$ = 3.02, SD = 1.34; t = 17.459, p < 0.001). Therefore, the control of message valence was valid.

In addition, subjects' familiarity with both brands and the usefulness of the review messages were checked. The results show that the subjects were quite familiar with the two brands (mean = 4.91, SD = 1.80).

The reliability of the three-item usefulness of eWOM scale was also checked (Cronbach's α = 0.892.), and subjects reported an average score of 4.52 out of 7 (SD = 1.44). The results confirmed that the stimuli for the experiment were valid.

Analysis of variance results
Brand extension evaluations were analyzed in a 2 (brand image) × 2 (category similarity) × 2 (message valence) between-subjects analysis of variance. Table II summarizes the analysis of variance (ANOVA) results, and Table III lists the means of the brand extension evaluations under different conditions. Overall, the results show significant effects of category similarity (F (1, 267) = 9.45, p < 0.01) and message valence (F (1, 267) = 4.388, p < 0.05) on brand extension evaluations. The main effect of category similarity confirms findings in the brand extension literature that consumers favor high-similarity brand extensions over low-similarity ones. The message valence effect means that the brand extension evaluations were higher for the positive eWOM condition than for the negative one. This is consistent with conventional wisdom.

Next, the results show a strong interaction effect between brand image and message valence (F (1, 267) = 4.388, p < 0.05). This supports *H1*, in that eWOM has a greater impact on functional brand extensions than on prestige ones. Second, the results support *H2* via a marginally significant interaction between category similarity and message valence (F (1,267) = 2.756, p < 0.1). The following *sections* discuss these interaction effects in relation to the hypotheses.

Condition	df	F	p-value
Message valence (MV)	1	212.201	0.000
Brand image (BI)	1	1.206	0.273
Category similarity (CS)	1	9.499	0.002
MV × BI	1	4.388	0.037
MV × CS	1	2.756	0.098
BI × CS	1	0.045	0.833
MV × BI × CS	1	0.000	0.986

Note: DV: Brand extension evaluations (n = 267)

Table II.
ANOVA Results

Brand type	Low-similarity extension		High-similarity extension	
	Positive eWOM	Negative eWOM	Positive eWOM	Negative eWOM
Prestige brand (Apple)	5.03 (1.30)	3.63 (0.94)	5.62 (1.25)	3.79 (0.94)
Functional brand (Dell)	5.13 (.97)	3.19 (1.04)	5.77 (0.96)	3.40 (1.02)

Table III.
Brand extension evaluations means and standard deviations

Interaction effect between electronic word of mouth and brand image

H1 predicted that eWOM is more effective in influencing brand extension evaluations for functional brands than for prestige brands. The effectiveness of eWOM was assessed by comparing consumers' evaluations under positive and negative reviews, respectively. Under the condition of negative review message, evaluations of functional brand extensions were significantly lower than those of prestige brand extensions (mean$_{functional}$ = 3.708, mean$_{prestige}$ = 3.296, F = 5.061, $p < 0.05$). However, under the condition of positive review message, the evaluation scores of functional brand extensions were close to those of prestige ones, and differences in evaluations across two brand types are no longer significant (mean$_{functional}$ = 5.450, mean$_{prestige}$ = 5.321, F = 0.500, p = 0.480). As shown in Figure 1, positive message reviews improve functional brand extensions much more than prestige brand extensions do. Therefore, *H1* is supported.

Interaction between electronic word of mouth and category similarity

H2 predicted that eWOM influences evaluations for high-similarity extensions more than for low-similarity extension evaluations. The ANOVA results show a marginally significant effect between message valence and category similarity (F (1,267) = 2.756, $p < 0.1$). A further planned contrast analysis reveals that while negative reviews do equally "badly" on evaluations of both low- and high-similarity brand extensions (mean$_{low\text{-}similarity}$ = 3.594, mean$_{high\text{-}similarity}$ = 3.410, F = 1.003, p = 0.317), positive reviews improve more for evaluations of high-similarity brand extensions than for low-similarity ones (mean$_{low\text{-}similarity}$ = 5.079, mean$_{high\text{-}similarity}$ = 5.692, F = 11.326, $p <$ 0.01). Therefore, *H2* is partially supported. Figure 2 illustrates the interaction effect.

Discussion

From a theoretical perspective, this paper is the first to assess the impacts of eWOM in influencing brand extension evaluations. Brand extension has been widely used as an important strategy for new product introductions (Aaker and Keller, 1990). However, our knowledge about its application in the digital age has not been updated very much if there is any. User-generated reviews have been found very influential in consumer decision-making in recent years, but its effect has not been examined on consumer evaluations of brand extensions. In this research, we assessed the impacts of eWOM by comparing consumers' evaluations in the positive versus negative eWOM context. The findings contribute to the literature by showing the two types of differential impacts of eWOM on brand extension conditions. First, negative eWOM is more effective in influencing evaluations of functional
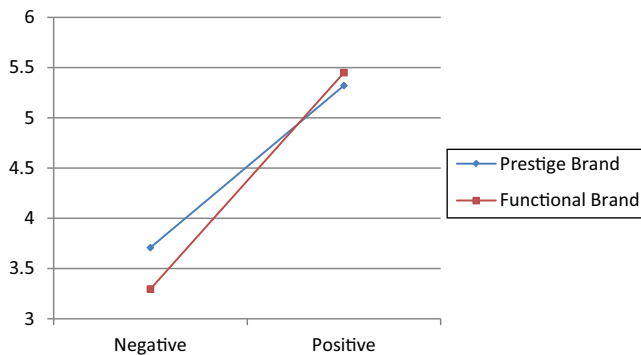

Figure 1.
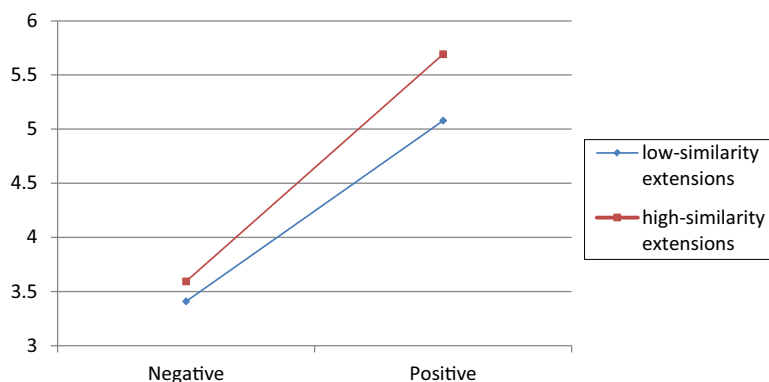eWOM on prestige versus functional brand extension

Figure 2.
eWOM on high-
versus low-similarity
brand extensions

brand extensions than of prestige brand extensions. Second, positive eWOM is more effective in improving evaluations of high-similarity extension evaluations than of low-similarity extensions.

From a managerial perspective, the results provide several important insights to help brand managers optimize resources for eWOM campaigns. Currently, firms actively engage in different types of eWOM marketing activities. For example, NPR reported that Amazon had an incentive-based review program, "Amazon Vine", that sent free new products to the site's top reviewers (Chow, 2013). Similarly, many firms offer incentives for consumers to post reviews on social network sites such as Yelp and Facebook. However, marketing policy-makers have scrutinized transparency issues of consumers' online reviews. For example, marketing policy-makers have scrutinized fairness and transparency issues with respect to consumers' online reviews. For example, in 2015, the Federal Trade Commission (FTC) stopped an automobile broker from compensating consumers in exchange for their reviews without disclosing such information to the public (Federal Trade Commission, 2015). As the practice of paid online reviews are banned, it becomes more important to manage organic online reviews. This study advances knowledge about the differential effect of eWOM on brand extensions. This helps improve the effectiveness of monitoring and managing consumers' reviews for different brand extension products.

First, the study indicates that eWOM is an effective strategy in influencing consumers' evaluations, particularly for functional brand extensions. The consensus in the literature is that extensions of functional brands are not as well-received as those of prestige brands (Monga and John, 2010; Park et al., 1991). This study suggests that eWOM may provide a way to improve functional brand extensions if it is positive. As positive eWOM can significantly help improve functional brand extension evaluations, managers are encouraged to expand their efforts in eWOM communications to help promote those products. Various incentive programs can be used to invite product trials and online reviews so that eWOM can be strengthened.

Second, the study finds that positive eWOM helps high-similarity brand extensions more than low-similarity ones. As marketing managers actively promote their brand portfolio, this finding suggests that promotion strategies can be differentiated among extensions with different similarities to the parent brand. It is more effective to use positive eWOM communications to promote high-similarity brand extensions than low-similarity ones, while negative eWOM needs to be closely monitored. When negative eWOM is posted,

marketing managers need to react quickly to address concerns so that its negative effect can be minimized.

Third, differential eWOM effects on brand extension evaluations across different brand types and similarities have interesting policy implications. As social media expands, eWOM will play an increasingly important role in consumer decision-making, and there will be more chances for fraudulent and unfair eWOM going viral. For example, AmeriFreight was recently barred by the FTC from deceptively touting online consume reviews (Federal Trade Commission, 2015). Often, the economic impact on the consumers and the brand because of these malpractices is difficult to assess. The findings from this study provide some reference points and value to lawmakers who try to assess the gains or losses a brand may have incurred because of exaggerated or malicious eWOM.

Limitations and future research

The role of eWOM has become increasingly important in consumer decision-making. This study serves as an initial step to assess the influence of eWOM on brand extension evaluations but is subject to several limitations. First, the findings about brand extensions were only based on electronic products (LCD TV versus sports watch). Prior research has suggested that consumer experience online differs across product categories (Tsao and Hsieh, 2015). Second, the hypotheses were tested in an experiment with various factors controlled, while in the online shopping environment, several factors may affect the influence of eWOM, such as source credibility and various characteristics of the eWOM messages, as well as those of the consumers. Third, there are four types of eWOM communications (Kiecher and Cowles, 2002), but the current study focused only on one of these. Finally, the medium of the eWOM submission was not specified in the study, which may limit its generalizability to mobile marketing.

Because of the above limitations, the study provides several interesting avenues for future research. It is important for future studies to identify the boundaries of the above conclusions; for example, would such findings hold across products with different levels of consumer involvement? Future studies may determine this by including different product types. Other types of consumer characteristics, such as brand loyalty, need for cognition and self-efficacy, may affect their perception of eWOM, as well as its influence.

Additionally, the study examined the influence of message valence (positive versus negative), brand type and brand similarity. Future studies could explore other message characteristics, such as the medium of review submission and message strength, credibility, emotion content and vividness. A recent paper (Berger and Milkman, 2012) showed that the vitality of the message is related more to the content than to its valence. In particular, messages that evoke psychological arousal are more likely to spread. Future studies may examine how message characteristics, such as vividness, would affect consumers' attitudes toward different brand types. Such findings would help improve the effectiveness of eWOM campaigns. Finally, as mobile device usage becomes increasingly prevalent, it is worthwhile to see whether the same hypotheses still hold true in a mobile marketing environment, where consumers are likely to have smaller, portable screens and a shorter time to review.

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Appendix

Usefulness of eWOM (Park and Lee, 2009) (Cronbach's $\alpha = 0.892$).

I would refer to this eWOM information in a purchase decision.

Overall, I think this eWOM information is credible.

This eWOM information will crucially affect my purchase decision.

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