

# **Does Negative e-WOM Affect Consumer Attitude Negatively or Positively?**

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## 序文

「崖の上のポニョって、なんであんなに酷評されたのに、みんな揃いも揃って観に行ったんだろうね？」

「ねー！！マジ意味わかんなくね？ でも、あたしも人から面白くないって聞いたのに、観たし！！」

「俺も観ちゃったし！！消費者行動って全く不可解だよな（笑）」

始まりは英論メンバーのたわいもない会話だった。そして、これがきっかけとなって決まった「ネガティブなクチコミの、ポジティブな影響を探る」という常識を覆すテーマのもと、我々の研究活動が始まった。常識を覆したのはテーマ設定だけではない。そもそも「英論」の誕生自体、常識を覆すものだった。

「日本語で三田論を書き上げるのも十分大変なのに、英語で書くなんて、限りなく不可能に等しいよ！」と言われたこともあった。しかし、この英論プロジェクトに志願した挑戦することに取り分け積極的な6名は、英語で論文を書くことなんてできないという周囲の評価をよそに、誰も想像できない新たな困難に武者ぶるいをしたのであった。

確かに、英語で学術論文を書き上げるというのは並大抵の挑戦ではないだろう。小野ゼミ史上、三田論を英語で書いた先輩がいなかったことから、そう言えよう。しかし、この挑戦を支えたのは、英論完成までの道のりが険しいにも拘わらず、常に笑いの絶えることのなかったメンバーの底抜けの明るさと前向きさである。先が見えず挫けそうになったときでも、メンバーの誰かが必ずチームに元気と笑顔をもたらしていた。そして、我々はとにかくよく集まり、本気で議論をした。時には衝突や、行き詰まりもあったが、それでも英論を完成させるという最終目標に向かって我々は邁進した。そうして積み重ねた時間によって、我々は目の前に立ちはだかる高い壁を乗り越えることができた。そのことによって得た強い自信は、論文執筆活動が終わったあとも、我々が社会の荒波に立ち向かう際の原因力となるであろう。

末筆ながら、未熟な私たちをいつも支えてくださった小野晃典先生に心の底から謝辞を述べたい。先生は、英論プロジェクト立ち上げの提案に対しても、我々の主体性を尊重し、背中を押してくださった。論文執筆活動においても、テーマ設定をはじめとして、論文の構成や文章の書き方に至るまで、英論のほぼ全ての局面において、常に我々の進むべき道を照らしてくださった。先生のご尽力なくしてこの英論が完成の日を見ることはなかっただろう。メンバー一同、先生には感謝の念に堪えない。

さらに、熱心に指導してくださったOBの森岡さん、千葉さん、池谷さん、6期の先輩の方々、そしてロンドン大学からの留学生 張一さんにも併せて深い感謝を述べたい。また、この数カ月間苦楽を共にし、励まし合った仲間である7期生にも謝意を表したい。最後に、我々の精神的支えとなり、論文執筆活動を陰ながらサポートしてくれた家族に心からの感謝の意を示しつつ、我々の研究活動の終幕としたい。

2009年11月吉日

マーケティングの本場アメリカを夢に見ながら目黒のマクドナルドにて

慶應義塾大学商学部小野晃典研究会  
第7期 英語論文執筆プロジェクト・チーム 一同

## 要旨

本研究は、インターネット上のクチコミ（e クチコミ）のポジティブな情報とネガティブな情報の割合がそれぞれ 10 : 0, 8 : 2, 6 : 4 の時に、サイトに対する態度、クチコミの信頼性、製品に対する態度、購買意図の 4 つの概念によって測定される e クチコミの影響が、製品特性、情報特性、消費者特性によって、どのように変わるのか、ということについて調査する。2（快楽財 対 実用財）× 2（属性中心クチコミ 対 便益中心クチコミ）× 2（専門性の高い消費者 対 専門性の低い消費者）の被験者間計画で実験を行ってデータを収集した。分散分析の結果、以下の 2 つのケースにおいて、ポジティブな e クチコミとネガティブな e クチコミの割合が 10 : 0 の時に比して 8 : 2 の時のほうが、e クチコミが消費者の製品への態度に及ぼすポジティブな影響は高かった。それは、専門性の高い消費者が属性中心クチコミを読んだ場合、および、クチコミが快楽財についての場合である。この分析知見は、ネガティブな e クチコミが消費者行動にポジティブな影響を及ぼす状況を明らかにしたという意味で、マーケティング研究における新機軸を打ち立てたと位置づけられるであろう。

## Abstract

This paper investigates how electronic word-of-mouth (e-WOM) effects vary with type of products, type of reviews, and level of expertise, when the ratios of positive to negative messages of e-WOM are 10:0, 8:2, and 6:4 in turn. E-WOM effects are measured by four constructs: attitude toward the Website, credibility of the messages, attitude toward the product, and purchase intention. The hypotheses were tested using a 2 (hedonic vs. utilitarian) × 2 (attribute-centric vs. benefit-centric) × 2 (experts vs. novices) between-subjects experiment. As a result of the ANOVA, the positive effects of e-WOM on attitude toward the product were stronger when the ratio of positive to negative messages is 8:2 than 10:0 and 6:4 in two cases, experts reading attribute-centric reviews and e-WOM on hedonic products. These findings can be a research step to identify the conditions under which negative e-WOM positively affects consumer behavior.

## Extended Abstract

### INTRODUCTION

Word-of-mouth (WOM) is defined as a form of person-to-person communication between a receiver and a communicator whom the receiver perceives as non-commercial, concerning a brand, a product, or service for sale (Arndt, 1967). With the advent of the Internet, a less personal but more ubiquitous form of WOM, viz. electronic word-of-mouth (e-WOM) consumer reviews, has come into vogue (Bickart and Schindler, 2001; Godes and Mayzlin, 2004). The effects of e-WOM cannot be neglected at the formation of consumer behavior. Rather, it is meaningful for business to comprehend the function of e-WOM.

Previous research has shown that positive e-WOM has positive effects, while negative e-WOM has negative effects on consumer behavior: (Herr, Kardes, and Kim, 1991; Luo, 2009). Additionally, regarding positive vs. negative WOM, people tend to weight negative information more than positive information during evaluation (Herr, Kardes, and Kim, 1991; Ahluwalia and Shiv, 1997). These studies, however, have assumed that consumers form their attitudes through referring to either positive or negative WOM, including the difficulty of not reflecting the fact that consumers refer to both positive and negative WOM simultaneously.

Thus, we investigate that negative WOM may have positive effects on consumer behavior under condition that consumers refer to both positive and negative WOM simultaneously. Also, we present a clear picture of how the effects of negative WOM vary with type of products (hedonic products vs. utilitarian products), type of reviews (attribute-centric reviews vs. benefit-centric reviews), and level of expertise (experts vs. novices) when the ratios of positive to negative messages are 10:0, 8:2, and 6:4 in turn.

### THEORETICAL BACKGROUND AND HYPOTHESES

Park and Kim (2008) focused on the role of both consumer and review characteristics and inquired how level of expertise and type of reviews influence the effects of e-WOM on consumer behavior. The level of expertise involves consumers' motivation and ability to process detailed information: Experts have both, while novices have either or nothing. Reviews are categorized into two types: attribute-centric (AC) reviews, which refer to the attributes of the products, and benefit-centric (BC) reviews, which refer to concrete benefits that the attributes will provide. They investigated how AC and BC reviews influence experts and novices, respectively. As a result, AC reviews had stronger effects on experts than BC reviews did, while

BC reviews had stronger effects on novices than AC reviews did.

Similarly, Sussman and Siegal (2003) suggested that consumers with low expertise weight source credibility more than argument quality, while consumers with high expertise weight argument quality more than source credibility. According to Cheung et al. (2008), information comprehensiveness containing both positive and negative sides has the strongest impacts on information usefulness in all components of argument quality. They claimed that comprehensiveness is important for experts: For experts, AC reviews including some negative WOM have stronger impacts on their attitude formation than the reviews excluding negative WOM. Thus, we propose the hypothesis 1 as follows.

H1: In the case of experts reading AC reviews, positive effects of e-WOM on attitude toward the product are higher when there is some negative e-WOM than none of it.

Sen and Lerman (2007) investigated negative effects of e-WOM for hedonic versus utilitarian products on the basis of the affect-confirmation hypothesis. Hedonic products are defined as the products which are primarily characterized by an affective and sensory experience of aesthetic or sensual pleasure, fantasy, and fun (Hirschman and Holbrook, 1982). In contrast, utilitarian products are defined as the products which are measured as a function of the products' tangible attributes (Drolet, Simonson, and Tversky, 2000). The affect-confirmation hypothesis offers an explanation of the differences in consumer behavior for hedonic vs. utilitarian products (Adaval, 2001). Persons who base their product judgment on hedonic criteria give greater weight to attribute information when the information is consistent with their mood than when it is inconsistent with their mood. This should not be the case, however, when reading reviews for utilitarian products.

Consumers are likely to be in a positive mood when reading reviews for a hedonic product because they are looking forward to choosing a product that will make them feel good. As a result, they may discount negative reviews on the product as it is inconsistent with their current mood. Therefore, in the case of hedonic products, negative effects of negative e-WOM are extinguished.

The optimal arousal theory (Ellis, 1973) claimed that people seek to optimal stimulations which are not too low or too high. People feel the most comfortable when they are in the most favorable stimulation, called optimal arousal. Assumed that negative messages can be seen as stimulation for consumers processing information to make purchase decision, they may regard a lower the ratio of positive to negative messages than 10:0 as an optimal stimulation. If so, consumer attitude is higher when there is some negative e-WOM than none of it.

Thus, we propose the hypothesis 2 as follows.

H2: In the case of e-WOM on hedonic products, positive effects of e-WOM on attitude toward the product are higher when there is some negative e-WOM than none of it.

## RESEARCH METHOD AND DESIGN

We investigated the difference in consumer attitude toward the product by ratio of negative e-WOM, type of products (hedonic products vs. utilitarian products), type of reviews (attribute-centric reviews vs. benefit-centric reviews), and level of expertise (experts vs. novices). ANOVA was used to analyze the hypotheses proposed above. A laboratory experiment with virtual e-WOM sites was conducted. These sites were about movie and comic as hedonic products, and digital camera and portable media player as utilitarian products. The ratios of positive to negative messages of this site were 10:0, 8:2, and 6:4 in turn. Thirty-five undergraduate students in a school of business participated in the experiment. They were asked to browse a series of e-WOM and answer the questions regarding their own evaluation on the product.

## RESULTS

The results are summarized in table 4-1. Regarding the main effects, ratio of e-WOM has significant effects on consumer attitude ( $F=234.52$ ,  $p<0.01$ ). Other variables, i.e., type of products, type of reviews, and level of expertise, have no significant effects. On the other hand, the results show two kinds of interactions: between type of the products and ratio of e-WOM, and among type of reviews, ratio of e-WOM, and level of expertise have significant effects ( $F=6.40$ ,  $p<0.01$ ;  $F=4.24$ ,  $p<0.05$ , respectively).

Table 4-1: ANOVA results

$X_1$ (Type of products)	F= 1.24
$X_2$ (Type of reviews)	F= 0.81
$X_3$ (Ratio of e-WOM)	F= 234.52 <sup>a</sup>
$X_4$ (Level of expertise)	F= 0.17
$X_1 * X_3$ (Type of products $\times$ Ratio of e-WOM)	F= 6.40 <sup>a</sup>
$X_2 * X_3 * X_4$ (Type of reviews $\times$ Ratio of e-WOM $\times$ Level of expertise)	F= 4.24 <sup>b</sup>

Note. <sup>a</sup> significant at 0.01 level, <sup>b</sup> significant at 0.05 level. F statistics for overall model is 12.98 ( $p<0.01$ ).

Figure 4-1a: The interaction effects among type of reviews, ratio of e-WOM, and level of expertise

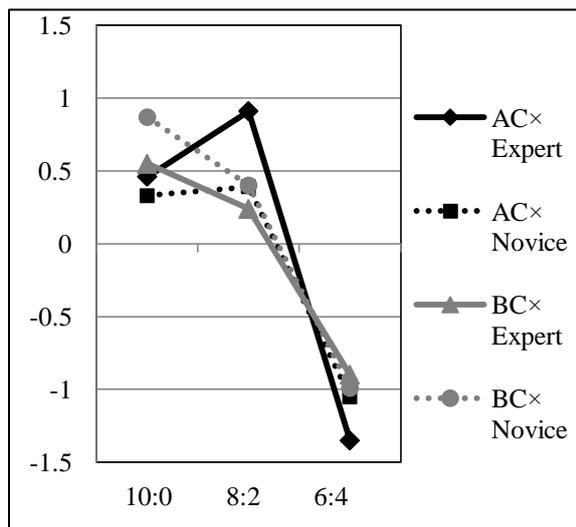


Figure 4-1b: The interaction effects between type of products and ratio of e-WOM

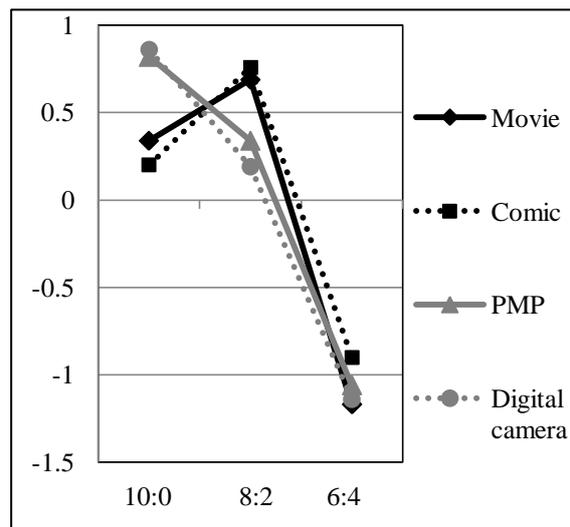


Table 4-2: Mean and standard deviation of attitude toward the product

		Mean (S. D.)			F value (p<F)
		X <sub>3</sub> (Ratio of e-WOM)			
		10:0	8:2	6:4	
		0.55	0.49	-1.07	172.91 (<0.01)
X <sub>1</sub> (Type of products)		10:0	8:2	6:4	
	Movie	0.34 (0.67)	0.69 (0.59)	-1.17	44.37 (<0.01)
	Comic	0.20 (0.68)	0.76 (0.56)	-0.90	39.23 (<0.01)
	PMP	0.82 (0.55)	0.34 (0.47)	-1.06	65.28 (<0.01)
	Digital Camera	0.86 (0.3)	0.19 (0.67)	-1.14	60.52 (<0.01)
X <sub>2</sub> (Type of reviews)	X <sub>4</sub> (Level of expertise)	10:0	8:2	6:4	
AC (attribute-centric)	Expert	0.46 (0.54)	0.91 (0.45)	-1.35	92.88 (<0.01)
AC (attribute-centric)	Novice	0.33 (0.68)	0.39 (0.52)	-1.05	31.82 (<0.01)
BC (benefit-centric)	Expert	0.55 (0.66)	0.24 (0.66)	-0.90	29.45 (<0.01)
BC (benefit-centric)	Novice	0.87 (0.60)	0.40 (0.62)	-0.99	55.31 (<0.01)

Figure 4-1 and table 4-2 suggest that, in the case where experts read AC reviews, means of attitude toward the product are 0.46 (S.D.=0.54), 0.91 (S.D.=0.45), and -1.35 (S.D.=0.74) when the ratios of positive to negative messages are 10:0, 8:2, and 6:4, respectively. With a post hoc test, all comparisons showed a significant difference. The result shows that experts' attitude toward the product is formed more strongly when they read both positive and negative reviews. Thus, H1 was supported.

Figure 4-1 and table 4-2 also suggest that, in the case where consumers read e-WOM on movie (a hedonic product), means of attitude toward the product are 0.34 (S.D.=0.67), 0.69 (S.D.=0.59), and -1.17 (S.D.=0.83) when the ratios of positive to negative messages are 10:0,

8:2, and 6:4, respectively. With a post hoc test, all comparisons showed a significant difference. In the case of e-WOM on comic as a hedonic product, means of attitude are 0.20 (S.D.=0.68), 0.76 (S.D.=0.56), and -0.90 (S.D.=0.66) when the ratios of positive to negative messages are 10:0, 8:2, and 6:4, respectively. The result shows that existence of negative messages also influences attitude toward the product positively in the case of hedonic products. Thus, H2 was supported.

## DISCUSSION

There has been a great deal of discussion about e-WOM messages. Many researchers have shown that positive e-WOM has positive effects, while negative e-WOM has negative effects on consumer behavior. Contrary to this, this research finds that, under particular conditions, negative e-WOM positively stimulates consumer attitude toward the product: In the case of experts reading attribute-centric reviews and in the case of e-WOM on hedonic products, the effects of e-WOM may be higher when there is some negative e-WOM than none of it. This study is somewhat limited: We should assume that AC and BC reviews coexist in a same Website. We should also consider the ratio of AC to BC reviews when we conduct the farther research.

## REFERENCENCES

- Adaval, Rashmi. 2001. Sometimes It Just Feels Right: The Differential Weighting of Affect-Consistent and Affect-Inconsistent Product Information. *Journal of Consumer Research*, 28(6), 1-17.
- Arndt, Johan. 1967. Role of Product-Related Conversations in the Diffusion of a New Product. *Journal of Marketing Research*, 4(3), 291-295.
- Batra, Rajeev and Olli Ahtola. 1990. Measuring the Hedonic and Utilitarian Sources of Consumer Attitudes. *Marketing Letters*, 2(2), 159-170.
- Cheung, Christy M. K., Matthew K. O. Lee, and Neil Rabjohn. 2008. The Impact of Electronic Word-of-Mouth: The Adoption of Online Opinions in Online Customer Communities. *Internet Research*, 18(3), 229-247.
- Doh, Sun-Jae, M.S. and Jang-Sun Hwang. 2009. How Consumers Evaluate eWOM (Electronic Word-of-Mouth) Messages. *Cyber Psychology & Behavior*, 12(2), 193-197.
- Drolet, Aimee, Itamar Simonson, and Amos Tversky. 2000. Indifference Curves That Travel with the Choice Set. *Marketing Letters*, 11(3), 199-209.
- Gruen, Thomas W., Talai Osmonbekov, and Andrew J. Czaplewski. 2006. eWOM: The Im-

- impact of Customer-to-Customer Online Know-How Exchange on Customer Value and Loyalty. *Journal of Business Research*, 59(4), 449-456.
- Harrison-Walker L. Jean. 2001. The Measurement of Word-of-Mouth Communication and an Investigation of Service Quality and Customer Commitment as Potential Antecedents. *Journal of Service Research*, 4(1), 60-75.
- Herr, Paul M., Kardes Frank R., and John Kim. 1991. Effects of Word-of-Mouth and Product-Attribute Information on Persuasion: An Accessibility-Diagnosticity Perspective. *Journal of Consumer Research*, 17(4), 454-515.
- Hirschman, Elizabeth C. and Morris B. Holbrook. 1982. Hedonic Consumption: Emerging Concepts, Methods, and Propositions. *Journal of Marketing*, 46(3), 92-101.
- Luo, Xueming. 2009. Quantifying the Long-Term Impact of Negative Word of Mouth on Cash Flows and Stock Prices. *Marketing Science*, 28(1), 148-165.
- Ellis, Michael J 1973. *Why People Play?* Prentice-Hall.
- Mort, Gillian Sullivan and Trista Rose. 2004. The Effect of Product Type on Value Linkages in the Means-End Chain: Implications for Theory and Method. *Journal of Consumer Behaviour*, 3(3), 221-234.
- Park, Do Hyung and Sara Kim. 2008. The Effects of Consumer Knowledge on Message Processing of Electronic Word-of-Mouth Via Online Consumer Reviews. *Electronic Commerce Research and Applications*, 7(4), 399-410.
- Petty, Richard E. and John T. Cacioppo. 1986. *Communication and Persuasion: Central and Peripheral Routes to Persuasion*. Springer-Verlag, New York.
- Sen, Shahana and Dawn Lerman. 2007. Why Are You Telling Me This? An Examination into Negative Consumer Reviews on the Web. *Journal of Interactive Marketing*, 21(4), 76-96.
- Sussman, Stephanie Watts and Wendy Schneier Sieg. 2003. Informational Influence in Organizations: An Integrated Approach to Knowledge Adoption. *Information Systems Research*, 14(1), 47-65.

