## What's New With You? On the Moderating Effect of Product Novelty on eWOM Effectiveness

Daria Plotkina and Andreas Munzel

**Abstract** With the growing importance of the Internet and its increasing impact on everyday behaviour and consumption practices, online recommendations by other consumers are of great importance. As a major source of web-accessible information, prior research provides support for the role online reviews play in consumers' decision-making processes. Our research investigates the thus far, understudied effect of novelty on the effectiveness of e-recommendations via online reviews. We conduct a multi-categorical study integrating the moderating effect of product novelty on the recommendation receiver's purchase intention after exposure to a positive or negative online review. We find that new products are indeed less appealing and more impacted by online reviews, but only for products that are purchased frequently enough to distinguish between new and old ones. On the other hand, products that are less familiar to the customer are all the same new to him whether they were launched on the market recently or a long time ago. Our study contributes to the growing field of online word-of-mouth behaviour research by investigating the role of novelty in several product categories.

🖂 andreas.munzel@em-strasbourg.eu

CUSTOMER & SERVICE SYSTEMS KIT SCIENTIFIC PUBLISHING Vol. 1, No. 1, S. 103–114, 2014 DOI 10.5445/KSP/1000038784/12 ISSN 2198-8005

Daria Plotkina

EM Strasbourg Business School, HuManiS, University of Strasbourg, 61 Avenue de la Forêt Noire, 67085 Strasbourg Cedex, France

<sup>🖾</sup> daria.plotkina@em-strasbourg.eu

Andreas Munzel

EM Strasbourg Business School, HuManiS, University of Strasbourg, 61 Avenue de la Forêt Noire, 67085 Strasbourg Cedex, France

#### 1 Purpose and Background of the Research

# 1.1 Impact of electronic word-of-mouth on purchase decision

The Internet opens new opportunities for consumers to conduct prepurchase information searches (Brown et al, 2007) and they become increasingly dependent on it to find the information they need (Bagozzi and Dholakia, 2002: Brown et al. 2007). Consumers often ask the advice of people around them, i.e. friends, opinion leaders, expert consumers or even individuals combining these characteristics (Bertrandias and Vernette, 2012). Despite the still powerful role of personal communication in shaping consumers' opinion and decision, the rapid development of the Internet in recent years has encouraged peer consumer online interaction or electronic word-of-mouth (eWOM) (Cheung et al, 2008). Additionally, under certain circumstances (online business, geographical distance, rare expertise, and budget limitation) e-marketing is the only feasible option, both for companies and consumers. As consumers increasingly exchange and rely on opinions and experiences regarding products and services shared via eWOM (Bagozzi and Dholakia, 2002), eWOM becomes an important communication tool for marketers.

Empirical research shows the impact of eWOM on sales (Zhu and Zhang, 2010), purchasing intentions (Park et al, 2007), and product choice (Senecal and Nantel, 2004). There is no doubt left that eWOM heavily impacts consumers' purchasing behaviour and attitudes toward brands, products, services, and companies. However, there are many factors that influence this impact. These factors have been researched from different points of view: based on the nature of eWOM (Chiou and Cheng, 2003), based on the platform where it is published (Brown et al, 2007), quantity and quality of reviews, reviewed product (movies: Chakravarty et al (2010); hotels: Kim et al (2011)), and characteristics of the reviewer (e.g. gender: Kim et al, 2011).

Our literature review shows that the majority of empirical studies in the field of eWOM effectiveness concentrate only on one type of product and/or service neglecting the role of the product and/or service category by including this aspect. However, a few studies in traditional word-ofmouth (WOM) communication that integrated several product categories were able to show differences in WOM effectiveness (East et al, 2008). We, therefore, included several product categories to examine its importance in the online environment.

Furthermore, we identified a gap in the literature concerning the impact of the novelty of the product on eWOM effectiveness.

#### 1.2 Importance of product novelty in eWOM effectiveness

We believe that with the growing importance of innovation and the difficulty for an innovation to succeed on the market, the possible dependence of the reaction to eWOM on the novelty of the reviewed service and/or product is of paramount interest. Unceasingly there are new launched products and services on the market. Innovation is crucial for business survival, as improving and developing service operations is expected to lead to growth and differentiation of service quality, reduced costs and greater responsiveness (Simchi-Levi, 2010).

According to a theoretical and empirical review by Herbig and Day (1992) the customers' awareness and the implication in the innovation increase the acceptance of the product, however, few approaches emphasize the importance of information diffusion and right communication with the consumers. As a result many companies do not adopt their practices and bear losses when launching a new offer.

Originally though, early investigations in the field of WOM behaviour highlighted the importance of interpersonal influence and customer-tocustomer interactions in the diffusion and, therefore, success of innovations in the market (e.g. Arndt, 1967). In this early stream of literature dedicated to interpersonal communication and consumers' recommendation behaviour, WOM is perceived as a measure to diffuse innovations and, therefore, crucial for its success (Arndt, 1967). However, whereas prior studies researched a wide range of eWOM attributes, the relevance of product novelty has so far been neglected. In this study we only analyze the novelty effect for the same product, however, we are ambitious to continue to further investigate the question by bringing radical innovations into the picture.

As a consequence, the goal of the paper is to learn about the effect of product novelty on the impact of eWOM on the receiver's purchase decision. We investigate three main relations: (1) overall product novelty influence on the eWOM impact on purchase decision; (2) interaction of novelty, eWOM valence, and the impact on purchase decision; and (3) interaction of novelty and product category in eWOM impact on the decision to buy.

#### 2 Hypotheses

Attitude-formation theories, such as the Elaboration-Likelihood Model (ELM) (Cacioppo and Petty, 1986) and the Heuristic-Systematic Processing Model (HSM) (Chaiken, 1980), suggest that consumer experience or knowledge is a key variable in the formation of attitude. Lack of product-specific knowledge and insufficient information are perceived as risk. Researchers agree that overall the greater the perceived risk is, the less likely the product will be purchased (Ross, 1975). Based on the very definition, novelty captures a very important notion of risk related to the product. Consistent with existing conceptual and empirical studies in eWOM impact on the intention to buy and the above-mentioned theory on the perceived risk and purchase decision, we expect the influence of online reviews to be greater on "new" products than on "old" products <Hypothesis 1>.

Furthermore, existing research shows convincing evidence that negative online reviews have a wider impact than the positive ones (Fiske, 1992; Chiou and Cheng, 2003). We expect this relation to be enhanced by the novelty factor in a way that it will intensify the relative impact of negative eWOM over positive eWOM for the new offers <Hypothesis 2>.

Numerous empirical studies have proved differences in the eWOM effect on products of different categories (Verhagen et al, 2010; Park et al, 2007). In accordance with these studies we expect a significant difference among the reviews impact on the three products <Hypothesis 3>.

#### 3 Method

#### 3.1 Experimental design and procedure

We conduct a 2 (product novelty: new vs. old) x 3 (type of product: restaurant, mobile package, car repairs) x 2 (eWOM valence: positive vs. negative) experiment using a between-subject factorial design. This matrix is divided into several smaller studies for every product: first investigating the novelty effect and then adding other variables to check for correlations and compound effects.

Online reviews were used to manipulate the valence of the reviews. These re-views posted by other consumers were preceded by a brief product description and short promotional offer manipulating product novelty and the type of the product. The 3 types of the products were chosen to be different based on several classifications (see Table 1). The product type impacts the type of information that is requested and its effectiveness (Verhagen et al, 2010). We concentrated on services, as they are more likely to be checked upon with eWOM information, being of a more intangible and heterogeneous nature (Huang et al, 2007). Based on previous research (e.g. Cheung et al, 2008; East et al, 2008) and the characteristics of the product (frequently purchased and viewed/ reviewed, accessible for everyone, bearing moderate consequences etc.) the main product is a restaurant. Whereas the respective product or service is already existent in the market for several years, the offering is completely new to the market in opposite novelty manipulation. Consistent with prior research, we explore the eWOM impact by taking into account the importance of the valence of the online review (Fiske, 1992; Chiou and Cheng, 2003): Positive eWOM (PWOM) and negative eWOM (NWOM) were used for satisfactory and unsatisfactory experiences by the eWOM senders respectively.

As being potential influencing factors, first, we controlled for the respondent's experiences with this form of eWOM and his general tendency to buy new products before other consumers by including Internet experience and familiarity as well as the individual innovativeness (Midgley and Dowling, 1978) in the first part of the questionnaire. In a second step, the respondent is exposed to an offer and is asked to evaluate the offer attractiveness to control for unintended effects in our study. After presenting a negative or a positive online review in the next step, we checked for the success of our manipulations and measured the dependent variable, purchase intention. A control group was not exposed to the online reviews and was asked to evaluate their purchase intention based on the described product offer. Finally, we checked for ecological validity and collected socio-demographical parameters of the respondents.

#### 3.2 Measures

The measures have been taken primarily from existing research and respondents answered on 7-point Likert scales from 1 "totally disagree" to 7 "totally agree". Measures for the consumer's innovativeness were compiled from scales suggested by Roehrich (1995) and Le Louarn (1997). Three statements to evaluate the attractiveness of the offer were adapted from the scale for the attitude towards the product used by Lepkowska-White et al (2003). Items to measure the respondent's purchase intention were adapted from Chandran and Morwitz (2005) as well as Dodds et al (1991). Three items from Bradley and Sparks (2009) were used to check the realism of the scenario and the respondent's ability to put himself into the described situation. To check whether the manipulations on eWOM valence and the product category relative to the SEC framework worked out as intended, we included two single items asking for the respondent's perception of the positivity of the review and his appraisal whether the product quality can be evaluated easily or not.

#### 3.3 Sampling

Participants were recruited evenly from social networks, by email and with the help of amazon mechanical turk. The questionnaires were anonymous and automatically randomized. Lately, amazon turk was confirmed to provide valid and reliable results (Rand, 2012): apparently, the online engine enables cross-cultural studies even better than other ways of respondents recruitment. We therefore assume that the sample is valid and sufficiently big (1564 respondents after all checks and clearings) to yield solid results.

#### 4 Results

We have validated our Hypothesis 1 for the main product: new restaurants were viewed less appealing and were more impacted by eWOM. We have partially validated our Hypothesis 2 stating that negative reviews have a significantly greater impact on the purchase intention than the positive ones, but this influence does not depend on the product novelty. Validation of Hypothesis 3 brought us some very interesting insight into the correlation of product type and product novelty. All the three products showed a significantly different impact in the light of the eWOM displayed to the respondents (p-value>0.01). As the restaurant was the only product the evaluation of which depended on the novelty and taking in count the characteristics of the studied product we could conclude that products that are not frequently purchased by the consumers are not familiar and thus are new as a whole class of products to the consumer, with no regard for the exact launch of the product on the market. Also we could state the importance of a multi-categorical study to yield general result or, on the other hand, a need to conduct a narrowly specialized study for one (type of) product for more precise conclusions.

We have validated our Hypothesis 1 reversely and only for the main product: new restaurants were viewed less appealing and were significantly (p <, 001) less impacted by positive eWOM (see Figure 1). We have partially validated our Hypothesis 2 stating that negative reviews have a significantly greater impact on the purchase intention than the positive ones (see Figure 2), but this influence does not depend on the product novelty. As expected in Hypothesis 3, the findings show that eWOM effectiveness differs respective to product categories: we observe significant differences of the effect of eWOM on purchase intention across the three product types in our study (F = 2, 13; p < 1). As the restaurant was the only product the evaluation of which depended on the novelty and taking in count the characteristics of the studied product we could conclude that products that are not frequently purchased by the consumers are not familiar and thus are new as a whole class of products to the consumer, with no regard for the exact launch of the product on the market. Also we could state the importance of a multi-categorical study to yield general result or, on the other hand, a need to conduct a narrowly specialized study for one (type of) product for more precise conclusions.

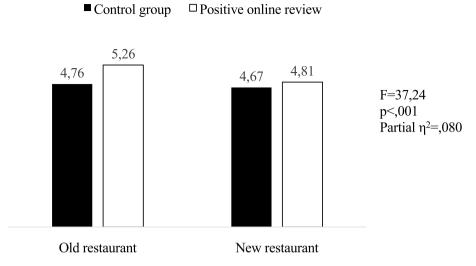
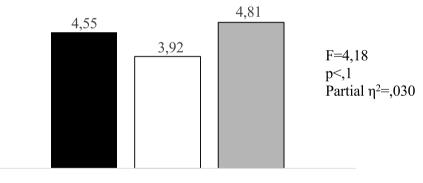


Fig. 1 Impact of positive online reviews on purchase intention of restaurant: Novelty factor  $\left(\mathrm{H1}\right)$ 

■ Control group □ Negative online reviews □ Positive online reviews



Purchase Intention

Fig. 2 Impact of online reviews on the purchase intention: Aggregated means (H2)

#### **5** Discussions and Implications

Our research investigates the important question of the novelty effect on eWOM impact on the purchase decision. In a way we come back to the initial purpose of WOM in the diffusion of new products and fill in the existing research gap with regard to novelty. It is important to see if with the immense volume of online information, its speed and accessibility, the novelty of a product has a stand-alone impact on the eWOM effectiveness, interacts with other product-specific factors or does not play any significant role in influencing the online reviews impact on the purchase decision.

Launching new products and managing them is indisputably important in the modern world: We propose that knowing eWOM dependence on the novelty of the goods might be considered as a contribution to improve managerial practices. Beyond any doubt eWOM influences purchase decisions. With the increased importance of purchases and a more significant impact of eWOM for new products on the market, companies should pay attention to online consumer reviews in order to support the launched products. Managers should encourage consumers to write online reviews to attract further customers throughout all the life cycle of the product. Additionally, even more effort should be made to deal with negative reviews; keeping in mind that negative eWOM has a deeper impact on purchase decision. The novelty factor plays an additional moderating role on the importance of eWOM for products that are frequently purchased.

Undeniably, the study has very distinct limitations: the number of products, the number of reviews, the abridged language of reviews, and the approach to the product novelty. We believe that this topic could be interesting to the re-searchers and managers by integrating new angles such as radical innovations and reviews by experts and innovators with a too specific vocabulary for the regular consumer to understand.

Char./Product	Mobile package	Restaurant	Car repairs
Type (SEC)	search	experience	credence
Hedonic/ utilitarian	utilitarian	hedonic	utilitarian
Frequency of purchase	once in a while	often	exceptional purchase
Long-lasting consequences	possibly	no	yes
Related costs	average	moderate	substantial
Perceived responsibility	average	low	high
Acquaintance	moderate	high	low
Novelty definition	classic / new	well known / just opened	factory-based garage / newly opened garage
Comments	one company in order to reduce risk and uncertainty of a new provider: provider is known and info on the package is stated and clear		

Table 1 The List of Used Products and their Characteristics

### References

- Arndt J (1967) Role of product-related conversations in the diffusion of a new product. Journal of Marketing Research 4(3):291–295
- Bagozzi R, Dholakia U (2002) Intentional social action in virtual communities. Journal of Interactive Marketing 16(2):2–21
- Bertrandias L, Vernette É (2012) What is interpersonal communication worth? Interpersonal calibration of knowledge and selection of recommendation sources. Recherche et Applications en Marketing 27(1):33-56
- Bradley GL, Sparks BA (2009) Dealing with service failures: The use of explanations. Journal of Travel & Tourism Marketing 26(2):129–143
- Brown J, Broderick AJ, Lee N (2007) Word of mouth communication within online communities: Conceptualizing the online social network. Journal of Interactive Marketing 21(3):2–20
- Cacioppo JT, Petty RE (1986) Psychology: Systems, processes, and applications, social processes in M.G.H. Guildford, New York

- Chaiken S (1980) Heuristic versus systematic information processing and the use of source versus message cues in persuasion. Journal of Personality and Social Psychology 39(5):752–766
- Chakravarty A, Liu Y, Mazumdar T (2010) The differential effects of online word-of-mouth and critics' reviews on pre-release movie evaluation. Journal of Interactive Marketing 24(3):185–197
- Chandran S, Morwitz VG (2005) Effects of participative pricing on consumers' cognitions and actions: A goal theoretic perspective. Journal of Consumer Research 32(2):249–259
- Cheung CM, Lee MK, Rabjohn N (2008) The impact of electronic wordof-mouth: The adoption of online opinions in online customer communities. Internet Research 18(3):229–247
- Chiou JS, Cheng C (2003) Should a company have message boards on its web sites? Journal of Interactive Marketing 17(3):50–61
- Dodds WB, Monroe KB, Grewal D (1991) Effects of price, brand, and store information on buyers' product evaluations. Journal of Marketing Research 28(3):307–319
- East R, Hammond K, Lomax W (2008) Measuring the impact of positive and negative word of mouth on brand purchase probability. International Journal of Research in Marketing 25(3):215–224
- Fiske ST (1992) Thinking is for doing: Portraits of social cognition from daguerreotype to laserphoto. Journal of Personality and Social Psychology 63(6):877–889
- Herbig PA, Day RL (1992) Customer acceptance: the key to successful introductions of innovations. Marketing Intelligence & Planning 10(1):4– 15
- Huang LS, Chou YJ, Lan IT (2007) Effects of perceived risk, message types, and reading motives on the acceptance and transmission of electronic word-of-mouth communication. Contemporary Management Research 3(4):299–312
- Kim EEK, Mattila AS, Baloglu S (2011) Effects of gender and expertise on consumers' motivation to read online hotel reviews. Cornell Hospitality Quarterly 52(4):399–406
- Le Louarn P (1997) La tendance á innover des consommateurs: Analyse conceptuelle et proposition d'une èchelle de mesure. Recherche et Applications en Marketing 12(1):3–19

- Lepkowska-White E, Brashear TG, Weinberger MG (2003) A test ad appeal effectiveness in poland and the united states: The interplay of appeal, product, and culture. Journal of Advertising 32(3):57–67
- Midgley DF, Dowling GR (1978) Innovativeness: The concept and its measurement. Journal of Consumer Research 4(4):229–242
- Park DH, Lee J, Han I (2007) The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. International Journal of Electronic Commerce 11(4):125–148
- Rand DG (2012) The promise of mechanical turk: How online labor markets can help theorists run behavioral experiments. Journal of Theoretical Biology 299:172–179
- Roehrich G (1995) Innovativités hédoniste et sociale: Proposition d'une échelle de mesure. Recherche et Applications en Marketing 9(2):19–42
- Ross I (1975) Perceived risk and consumer behavior: A critical review. Advances in Consumer Research Volume 2:1–20
- Senecal S, Nantel J (2004) The influence of online product recommendations on consumers' online choices. Journal of Retailing 80(2):159–169
- Simchi-Levi D (2010) Operations Rules: Delivering Customer Value Through Flexible Operations. Mit, Cambridge, MA
- Verhagen T, Boter J, Adelaar T (2010) The effect of product type on consumer preferences for website content elements: An empirical study. Journal of Computer-Mediated Communication 16(1):139–170
- Zhu F, Zhang XM (2010) Impact of online consumer reviews on sales: The moderating role of product and consumer characteristics. Journal of Marketing 74(2):133–148