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Investigation of Differences in Diffusion Between Positive and Negative Word-Of-Mouth

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Our study investigates how WoM valence (a) influences WoM diffusion frequency and speed and (b) moderates the type of social ties activated during WoM transmission. Additionally we analyze whether WoM reflecting hearsay shows different diffusion patterns than WoM originating from a personal and direct experience made by the WoM sender.

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amount that participants were willing to pay for the both products. A between groups analysis revealed that participants were willing to pay significantly more for the DVDs when there were no other bidders versus the condition where there were multiple bidders (F(1, 59)=7.93, *p*<0.01, M$DVD_social presence=10.114 vs. M$DVD_social presence absent=7.749). There were no observed differences between the two groups in the willingness to pay for the universal remote control.

In conclusion, our findings demonstrate that under conditions of uncertainty, informational social influence can enhance the perceived quality of products. However, when consumers are familiar with the products in question, informational social influence can create negative byproducts through its employment which we have demonstrated can decrease the value of the product as well as its perceived quality.

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Investigation of Differences in Diffusion Between Positive and Negative Word-of-Mouth

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Extended Abstract

Word-of-Mouth (WoM) is a topic that has received regular interest among Marketing researchers over the last 50 years in both traditional (e.g. Day 1971; Katz and Lazarsfeld 1955; Thorelli 1971; Udell 1966) and electronic settings (e.g. Dellarocas 2003; Dwyer 2007; Godes and Mayzlin 2004; Hennig-Thurau et al. 2004; Kozinets 2002). Within this stream of research, we investigate how WoM valence (i.e. positive vs. negative WoM) influences WoM diffusion characteristics based on data from a French virtual world, similar to the US-based "Second Life" application.

Study 1

Study 1 investigates the impact of valence on WoM diffusion frequency (i.e. the number of contacts WoM is spread to) and speed (i.e. the time elapsed between receiving and retransmitting the information). With respect to WoM diffusion frequency, it is commonly believed that negative WoM is spread to more contacts than positive WoM (e.g. Silverman 1997), triggered by several research studies showing that negative WoM from dissatisfied customers exceeds the amount of positive WoM by satisfied clients (e.g. Bearden and Teel 1983; Richins 1983a, b; Westbrook 1987). However, East, Hammond, and Wright (2007) show that differences in aggregated WoM volume are caused by differences in WoM penetration (i.e. the share of the population spreading WoM) instead of differences in individual-level diffusion frequencies. Given that people take account of the needs of others when engaging in information transmission, the same customers are likely to spread both positive and negative WoM (with equal frequency), depending on the information needs of the receiver (East et al. 2007; Mangold, Miller, and Brockway 1999). We therefore assume that WoM diffusion frequency is independent from WoM valence. Regarding diffusion speed, we expect negative WoM to spread faster than positive WoM as unpleasant or potentially dangerous situations lead to a strong negative reaction, the negativity bias (e.g. Ito et al. 1998). This is supported by studies in the Finance discipline showing that stock prices tend to reflect bad news faster than good news (Lobo 2000) and that good news have more pronounced lagged effects than bad news (Marshall and Walker 2002). This leads to the following two hypotheses:

H_1: There is no impact of WoM valence on individual-level WoM diffusion frequency.

H_2: WoM diffusion speed is higher for negative WoM than for positive WoM.

Study 2

Study 1 provides insight into the impact of WoM valence on basic WoM diffusion characteristics (i.e. how often and when). Study 2 analyzes the influence of social network-related variables on WoM transmission (i.e. to whom). We expect that strong ties are activated more frequently than weak ties in WoM diffusion as strong tie relationships tend to be more influential as information sources (Brown and Reingen 1987; Reingen and Kernan 1986) and their presence leads to higher levels of WoM (Fitzgerald Bone 1992; Wirtz and Chew 2002). Concerning WoM valence, we assume a moderating influence in the sense that this strong-tie preference will be even more pronounced for negative than for positive WoM. One the on hand, we expect people to be reluctant to transmit negative WoM to weak tie relationships as it tends to be associated with unpleasant messages and a notion of complaining, potentially resulting in

a negative impression that the transmitter may want to avoid (Sperduto, Calhoun, and Ciminero 1978; Tice et al. 1995). On the other hand, WoM to strong ties is likely to be caused by altruistic motives and the desire to help the receiver making better decisions. Given that the sender is likely to have a good level of understanding of the needs and likes of strong ties (Kiecker and Hartman 1994), s/he may be sufficiently confident sharing even negative information (Frenzen and Nakamoto 1993; Wirtz and Chew 2002). This leads to the following two hypotheses:

H$_3$: Strong ties are activated more often than weak ties in the WoM diffusion process.

H$_4$: The preference for strong ties gets stronger with increasing WoM negativity.

Study 3

Studies 1 and 2 analyze WoM diffusion by focusing on messages received by some source and passed on to social contacts of varying degree of closeness. Study 3 addresses the question whether WoM that reflects hearsay shows different diffusion patterns than WoM originating from a personal and direct experience made by the WoM sender. Generally, we expect that personal experiences lead to higher degree of WoM than hearsay as they result in unique and less ambiguous information that people feel more confident to transmit (Fazio and Zanna 1981; Kardes, Allen, and Pontes 1993). With respect to WoM valence, we expect a moderating impact in the sense that information based on hearsay is more likely to be transmitted when it is of negative compared to positive valence. This is based on Kamins, Folkes, and Perner (1997) who showed that consumers are more inclined to spread negative than positive rumors and (Donavan, Mowen, and Chakraborty (1999) who indicate that urban legends with negative information are associated with higher levels of communication intent. This leads to the following two hypotheses:

H$_5$: WoM based on personal experience will be transferred more often than WoM based on hearsay.

H$_6$: For WoM based on hearsay, negative WoM is more likely to be transmitted than positive WoM.

Research Methodology

We plan to investigate the aforementioned hypotheses based on data we collected from a French virtual world, which is targeted toward children and teenagers. We chose this setting over traditional laboratory-style experiments as we expect it to provide a higher degree of external validity. Within this virtual world we launched 16 different messages (4 message per cell within a 2 levels of message strength x 2 levels of message valence design) and recorded the resulting WoM activities generated by the virtual world users (diffusion frequency, diffusion speed, type of social tie activation). Currently, we are in the process of coding the data obtained form the virtual world platform (weblogs) in order to prepare our data analysis.

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Are Bad Reviews Stronger than Good?
Asymmetric Negativity Biases in the Formation of Online Consumer Trust

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This research examines biases in the formation of trusting beliefs and intentions in an online environment. Interactions with unfamiliar sellers contain an element of uncertainty and risk (Reichheld and Schefter 2000), but modern consumers have access to various forms of information to help resolve this uncertainty, including online consumer reviews. Empirical studies have demonstrated a negativity bias whereby even a limited number of "bad" reviews from prior consumers have stronger impact than good reviews on sales and price premiums (Ba and Pavlou 2002; Chevalier and Mayzlin 2006). However, measurements of trust and corresponding beliefs are generally unavailable in secondary data. On the other hand, survey-based studies in the trust literature have tended to measure relevant constructs without regard to potential biases. To address this gap, we take an experimental approach and ask the following: Do consumers exposed to online reviews of a seller exhibit bias in the formation of trusting beliefs and intentions? If so, is the bias always negative? Drawing upon prospect theory and models of person perception, we propose that although consumers may exhibit a general negativity bias, the magnitude of this bias will depend on the dimension of seller behavior involved.

That tendency to weigh negative information more heavily than positive information has been established as a general principle of human judgment (Baumeister et al. 2001; Rozin and Royzman 2001). This tendency follows directly from Kahneman and Tversky's (1979) prospect theory, which posits that people derive value from gains and losses according to a nonlinear "value function" that is concave for gains and convex for losses; losses loom larger than gains. Applied to the risky environment of e-commerce, consumers will be more concerned with potential losses than with potential gains. In particular, when considering positive and negative information related to the trustworthiness of a seller, they will overweight the negative information, and this bias will subsequently lead to more negative trusting beliefs and eventual intentions

However, evidence from the arena of person perception suggests that when judging others' behavior, "bad is not always stronger than good". For example, Skowronski and Carlston's (1987) category diagnosticity model separates person-relevant information into 'competence' and 'morality' domains. The model suggests that most individuals possess schemas in which moral people exhibit moral behaviors all the time; therefore, a single immoral behavior is a reliable indicator of immorality. The same is not true for competence, where even competent individuals occasionally fail; a single success is a more reliable indicator of competence, while a single failure is generally discounted. Online trust literature also breaks trusting beliefs into "competence" and "integrity" dimensions among others