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Online Reviews: Do Consumers Use Them?

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Abstract

The use of the WWW as a venue for voicing opinions, complaints and recommendations on products and firms has been widely reported in the popular media. However little is known how consumers use these reviews and if they subsequently have any influence on evaluations and purchase intentions of products and retailers. This study examines the effect of negative reviews on retailer evaluation and patronage intention given that the consumer has already made a product/brand decision. Our results indicate that the extent of WOM search depends on the consumer's reasons for choosing an online retailer. Further the influence of negative WOM information on perceived reliability and purchase intentions is determined largely by familiarity with the retailer and differs based on whether the retailer is a pure-Internet or clicks-and-mortar firm. Managerial implications for positioning strategies to minimize the effect of negative word-of-mouth have been discussed.

Online Reviews: Do Consumers Use Them?

Research on word of mouth (WOM) effects provides plenty of evidence that a satisfied customer may tell some people about his experience with a company, but a dissatisfied one will tell everybody he meets. Virtual communities with active members who provide evaluations and opinions on products and firms now provide a venue to tell the world and represent one of the fastest growing phenomena on the Web (Armstrong and Hagel 1996). It is not surprising therefore, that providing consumers a venue to voice their opinions, recommendations and complaints and monitoring this word-of-mouth activity has become a business and some firms pay (in cash, points, recognition) consumers for their contributions (Tedeschi 1999) since they can be used as instruments to compete for consumer attention and visits (e.g., eBay, Oxygen Media). While some reports in the popular media provide anecdotal evidence that companies are listening, little is known if complaints and reviews posted at Web sites are instrumental in changing purchase decisions of consumers who read them. In this research we investigate if negative WOM information or reviews of online retailers affect evaluations and patronage intentions.

Online Consumer Reviews as Word-of-Mouth Information

Online word of mouth activity differs from those in the real world in many aspects. In the marketing literature WOM communication is "oral, person-to-person communication between a receiver and a communicator whom the receiver

perceives as noncommercial, regarding a brand, a product, a service or a provider"
(Arndt 1967, p. 5). Adapting this definition to be relevant to the online medium
requires reference to online communication modes (e-mail and hypertext), the
existence of remote many-to-many communication (most WOM information is from
strangers one has never met or will in the future, e.g. epinions.com). The non-
commercial focus may not be certain. Most of these online forums point out that
while they do not edit consumer comments, some get paid for referrals or purchases
and/or get advertising income from target firms. Further, word-of-mouth
information available online is far more voluminous in quantity compared to
information obtained from traditional contacts in the offline world and includes
several units of positive and negative information presented together from multiple
sources at the same time as opposed to a single piece of information that is either
positive or negative in valence.

The underlying benefit consumers derive from availability of other
consumers' evaluations in online virtual communities is the scale advantages they
experience in going through their purchase decision making. Word of mouth
information on the Internet exists in various forms that differ in accessibility, scope
and source. Despite popular wisdom that all content on the Web is accessible, the
immense volume and variety of information available online and consumer time
constraints provide opportunities for manufacturers and retailers to make some
word-of mouth information more easily accessible compared to others by placing
them close to purchase information. Reviews (actual user comments) or ratings (on a

scale) of product or retailers conveniently provided along with purchase information at online stores and comparison shopping agents represent the most accessible and prevalent form. In contrast, USENET groups exist independently from purchase information, are relatively less under marketer control but require prior knowledge of their existence and conscious effort by the consumer (e.g., deja.com).

Consumer evaluations may differ in scope by pertaining to either products or retailers. While most online retailers feature evaluations of products, reviews of online and offline retailers are generally provided by comparison shopping services (e.g., www.mysimon.com) and e-business rating services (e.g., www.bizrate.com). While some offline sources of product comparison information (e.g., Consumer Reports) are popular, similar information and reviews of retailers are practically unavailable (Sinha 2000). Hence, online sources of retailer information are widely used for both offline and online purchases and the topic of investigation in this research.

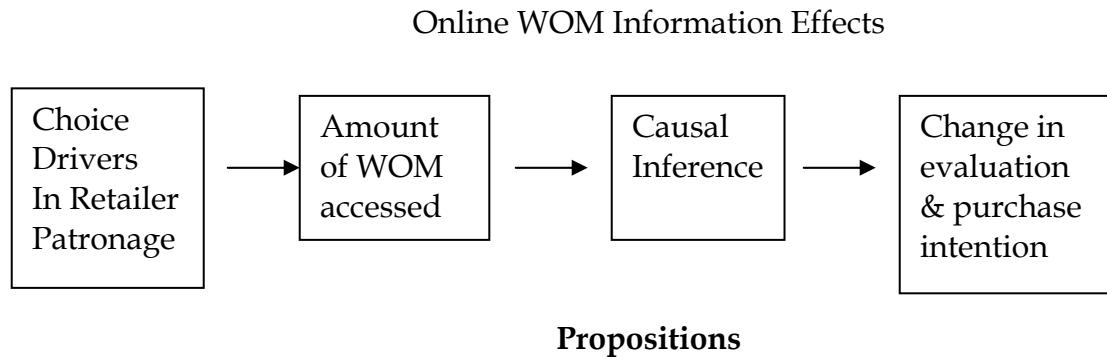**Effects of Product Reviews on Purchase Decisions**

Research in marketing literature points out that WOM information plays an important role in hybrid decision processes or recommendation-based heuristics in which the decision maker obtains recommendations for the purpose of reducing the uncertainty and amount of information that must be processed to make a decision (Olshavsky and Granbois 1979). The consequences of WOM communication occur in the behavior of those who receive it – their awareness, beliefs, attitudes and actual

decisions. Research on the potency of WOM information indicates that the inferences people draw are contingent upon their receptivity to the WOM information (Wilson and Peterson 1989). A substantial literature documents the mediating influence of the receiver's predisposition towards the target of WOM communication on receptivity to and interpretation of new information. The stronger an individual's feelings or confidence in choice prior to exposure to WOM information, the more the feelings will dominate the interpretation and use of WOM information. Hence criteria used by consumers in product decision or choice drivers play an important part in determining if and how much of WOM information is obtained and the influence of the WOM information on product evaluation and purchase decision.

WOM sources usually studied in the marketing literature are predominantly, though not exclusively, personal sources of information (Stewart et al. 1985) and may be strong and weak tie depending on the closeness of relationship between the decision maker and the recommendation source (Brown and Reingen 1987). In the online medium however, the "tie strength" is always very weak because recommendations are from total strangers. Unlike the case of WOM from interpersonal sources, the online recipient cannot use source similarity, expertise and accessibility to determine the credibility of information in Internet forums. Thus the theoretical framework of attribution theory (Kelly 1967) can be used to investigate the inferences consumers draw from WOM activity of weak tie sources. The direct and indirect (through influence on person perception) effects of causal

inference on product perception and purchase intention are a function of the generalizability (or consensus) of the cause across people, and the stability (or recurrence) of the cause. Figure 1 shows the processes involved when consumer access WOM information or reviews online.

Figure 1.

Online WOM Information Effects

| Choice Drivers In Retailer Patronage | → | Amount of WOM accessed | → | Causal Inference | → | Change in evaluation & purchase intention |

Propositions

The first research objective is to predict the extent of WOM information search during an online purchase occasion based on choice drivers behind the retailer choice decision. Next we examine the impact of negative WOM information on purchase intentions by examining the joint influence of an individual's reasons for patronizing a firm and inferences consumers draw from the negative WOM information on retailer evaluation and purchase intention.

Choice Drivers and Extent of WOM Information Search

The online shopping medium facilitates comparison shopping by consumers, and most shopping engines permit easy searching on the basis of price. A common problem consumers face while shopping online is choosing between a familiar retail firm that appears to be an expensive but safe choice (either a well-known on-line/

offline retailer or a firm they have prior experience with) and a cheaper alternative whose reliability is unknown to the consumer. Adapting the research on uncertainty in decision-making in brand choice to the online medium would suggest that consumers choosing an unfamiliar retailer are more likely to search for information on the retailer to reduce their uncertainty compared to consumers choosing a familiar option (Biswas 1992). This is especially relevant for the online retail channel because of security and risk concerns and the fact that transactions are conducted remotely.

> P1: Consumers whose decision to patronize a firm is driven by their familiarity with the firm are less likely to search for WOM information voluntarily than those who decide to buy from a retailer based on price.

The volume of WOM information available online is far greater (some products and firms have more than 40-50 postings by consumer reviewers) than those available through traditional contacts in the offline world. Exposure to online WOM information is totally under consumer control and is only limited by the time and cognitive constraints of the information-seeker. The regret literature suggests that actions that deviate from the norm (choosing unfamiliar retailer) involves greater attribution of responsibility for the negative consequences that follow. This implies that consumers who choose an unfamiliar retailer are more likely to attribute responsibility for negative future consequences to themselves compared to consumers who patronize a familiar retailer (Simonson 1992). This anticipation of regret is expected to induce consumers choosing an unfamiliar retailer to search and

access more WOM information compared to consumers choosing a familiar retailer. Hence,

> P2. Consumers whose decision to patronize a firm is based on familiarity
>
> with the firm will search for less negative WOM information compared to
>
> those who decide to buy based on price.

Generalizability and Stability of Negative WOM Information

Research in the marketing literature has been fairly consistent in assigning high credibility to WOM information in general and negative WOM in particular, because WOM sources have nothing to gain. In a study of unfavorable product ratings, Mizerski (1982) shows that when information about an object or firm comes through the opinions or recommendations of another person, negative information may be more credible and generalizable than positive information. However, consumer perception of credibility and hence generalizability of both positive and negative WOM information available online is suspect because of the lack of personal knowledge about the motivations of unseen strangers offering recommendations and the possibility that the commercial interests of the Web site or online forum are involved. Even in the case of independent online forums like USENET groups, reports in the popular media of firms systematically infiltrating online forums and paying students and consumers to "spread bad word" and to deflate popularity ratings of firms and products lead to cynicism about the veracity of the WOM information. Wilson and Peterson (1989) show that evaluative predispositions toward products and firms effectively acted as filters through which

word-of-mouth information flowed. Consumers who decide to patronize a retailer based on familiarity have stronger positive feelings and are less likely to trust negative WOM information regarding the firm compared to consumers who choose retailers based on price.

> P3. Consumers who choose to patronize a retailer based on familiarity will
>
> be less likely to perceive negative WOM information as credible compared
>
> to consumers who choose a retailer on the basis of price.

Past studies provide evidence to the notion that consumers' reactions to WOM communications varied by their familiarity with the target company, product or brand (Mowen 1980). Hence, consumers who decide to patronize a retailer based on familiarity are more likely to attribute the cause of negative retailer reviews or WOM information to situational or temporary factors (i.e., holiday rush of orders affecting service, or local server/technical failure). These factors are perceived less likely to recur and hence less severe compared to stable causes.

> P4. Consumers who choose to patronize a retailer based on familiarity will
>
> be more likely to perceive the cause of negative WOM information as
>
> unstable compared to consumers who choose on the basis of price.

Effect on Purchase Intention

There is a sizable body of evidence which suggests that the influence of negative WOM information is more potent compared to positive WOM information in influencing purchase intentions of potential buyers (Brown and Reingen 1987; Weinberger, Allen and Dillon 1980). However, since the salience of negative WOM

information on purchase intention will depend on consumer's perception of the generalizability and likelihood of recurrence of service failure and hence on the reasons for patronizing a firm we expect differential effects of WOM information on purchase information.

P5. Consumers who choose a retailer based on familiarity will be less likely to change their purchase intention in response to negative information compared to those who decide to buy from a retailer based on price.

METHOD

In this research, we consider online WOM information in the form of retailer reviews provided by comparison shopping engines along with purchase information. To control for the confounding effect of brand features and other marketing mix factors that are difficult to capture in an experimental study and maintain participants' involvement we confine ourselves to exploring the effect of negative reviews on decision to patronize the retailer given that a particular product (the recommended course textbook) will be bought.

Sample. Data for this study was collected from undergraduate marketing (314) and physics (105) students in two northeastern universities, with about equal number of males and females. After the first day of class in a computer lab students were asked to shop for their course textbook online using links to comparison-shopping search engines provided from the course Web page. Participation was requested for 45

minutes on a voluntary basis. 38 students did not complete the entire study so their responses were discarded.

Questionnaire Stimuli. The comparison-shopping pages had pre-programmed information on price of the textbook and shipping charges. Delivery time and buy back policy were maintained same across retailers. To test for possible differences in familiarity/price effects across pure-play Internet and click-and-mortar retailers, students were divided into 2 groups. For each group of students two retailers were offered for consideration, actual prices were listed $2 and $20 (after shipping and handling charges) lower than the campus bookstore (priced at $89.99). For the pure-Internet group the "familiar" retailer (A) had the highest price, while the unknown online retailer (B) had the lower price. This was done to ensure that respondents who typically shop on the basis of price will be in the unfamiliar condition (but we cannot infer price-effects). Similarly, for the clicks-and-mortar group, the "familiar" retailer (C) had the highest price, while unknown retailer (D) had the lower price. We did not consider the high familiarity - low price and low familiarity - high price situations because experiments in an earlier separate study revealed that all subjects chose the former option. A radio button next to the link – "Get retailer reviews" was provided for each retailer (the page linked to it indicated no reviews were available at the present time – so WOM information would not affect initial choice) and student clicks were recorded. On the next page students selected their chosen retailer, and the reasons behind their choice. Initial purchase intention was recorded in terms of how likely they were to buy from the retailer on a 5-point scale (1-most

likely not buy, 5-most likely buy). Responses to the open-ended question on retailer choice drivers was followed by asking students to select the most important reason for their choice.

On the next page all subjects (including those who had not clicked on get retailer reviews) were informed that an independent online forum had agreed to make consumer reviews for their chosen retailer available. They were given the option to browse through as many or few reviews and could use as much or little time as needed and take a final decision at the end of the session. Subjects who did not want to browse through the reviews were asked to fill out their "final decision" and leave.

Selection of WOM information. Selection of multiple units of WOM information was made while controlling for effects that are not the focus of study. The retailer review pages were identical for all retailers except for the change in name (based on the respondent's choice) and pre-programmed using actual consumer negative reviews from online forums at www.deja.com, www. thirdvoice.com and www.buyerpower.com. Since prior research indicates that weak-tie sources are more important for evaluation of instrumental (rather than affective) cues (Brown and Reingen 1987), and to control for differences in salience of WOM information on different attributes, we confined ourselves to comments on the retailer's order processing issues (e.g., order form on Web site gave errors, e-mail confirmation not sent etc.) available as a link. This section had an index page with one-line links to 30 reviews. The one-line description had the contributor's screen name or e-mail

address, and the first 3 letters of the message as in actual review sites. Respondents had to click on the link to access the actual message. At the end of each message respondents had to judge if the message was believable (1-not believable at all, 5-totally believable) and stable (1-not likely to happen to me, 5- most likely to happen to me) on a 5-point scale.

On each page students had the option to end their WOM search and "take the final decision" by clicking on a link. On the "final decision" page subjects responded to three items. First item measured if they would use online consumer reviews in their purchase decision making in the future on a 5-point scale (1-most likely not use, 5-most likely use). The second question measured change in purchase intention compared to initial decision on a 5-point scale (1- certainly less likely to buy now, 3- as likely to buy as before, 5-certainly more likely to buy now). The third item recorded how reliable their retailer is on a reverse-coded 5-point scale (1-very reliable, 5-not reliable at all). Subjects were debriefed at the end of the session and thanked for their participation.

Manipulation Checks: In the later part of the questionnaire, students were asked to indicate their level of familiarity with retailers A, B, C and D using a 9-point scale where 1=not familiar and 9=very familiar. An analysis of variance test indicated significant differences for both pure-Internet and clicks-and-mortar groups (F=123.4, p=.0001; F=106.9, p=.0001) between unfamiliar (x=1.74, x=2.23) and familiar (x=7.81, x=8.64) treatments, suggesting that brand familiarity was effectively manipulated.

RESULTS

To evaluate the impact of choice drivers responses for the most important reason for choosing a retailer were categorized into those based on familiarity (e.g., prior buying experience online or offline, well-known) and price-related factors. To test our propositions we combine the familiarity treatments for both groups. As can be seen in Table 1, more subjects selected a retailer based on price than familiarity. This may be particularly true of online purchases of textbooks that are standardized products, and consumers do not have an option of choosing among brands of products. Further significantly more subjects (25%, z=2.43, p>0.01) who selected their retailer on the basis of price tried to access retailer reviews on their own during their decision-making process compared to 16% of subjects who selected a retailer they were familiar with, thus supporting P1.

Table 1.

Choice Drivers And Propensity To Voluntarily Access WOM Information

Most important reason for choosing retailer	Number of respondents	Respondents voluntarily accessed retailer reviews (**P1**)	Respondents agreeing to search reviews
Familiarity	144 (38%)	23 (16%)	86 (59%)
Price	237 (62%)	59 (25%)	119 (50%)
Total number of respondents	381	72	205

When subjects were informed about the availability of retailer reviews 205 (54% of total participants) subjects chose to access the recommendation section

before taking their final decision. An equal proportion of participants from both familiar (59%) and price (50%) groups wanted to access the reviews. We found consumers who selected their retailer on the basis of price browsed through significantly (t=6.02, p< 0.001) more negative reviews overall compared to those who selected their retailer on the basis of familiarity thus supporting P2.   Contrary to our expectations, Table 2 indicates that the perception of credibility of negative WOM information did not differ across consumers who chose their retailer on the basis of price or familiarity (t=1.37, p>0.10) hence P3 is not supported. However consumers who chose their retailer on the basis of familiarity are more likely to attribute temporary causes to the service failures reported in reviews that will not affect their experience with the retailer compared to those who chose a retailer based on price. Hence our proposition regarding the perceived stability or likelihood of recurrence (P4) is supported (t=3.24, p<0.001).

Table 2.

Choice Drivers And Propensity To Access WOM Information
(Standard Deviations In Parentheses)

Choice Drivers	Non-voluntary Access of Retailer Reviews		
Most important reason for choosing retailer	Mean no. of reviews accessed (**P2***)	Credibility of -ve Reviews (**P3**)	Perceived stability of –ve Reviews (**P4***)
Familiarity	6.27 (1.5)	3.16 (1.06)	1.6 (1.27)
Price	8.04 (1.94)	2.06 (1.92)	2.4 (2.13)
All respondents	7.24 (1.79)	2.99 (1.65)	2.04 (1.79)

As expected, consumers who selected their retailer on the basis of familiarity are less likely to change their purchase intention (t=2.26, p<0.01) on exposure to negative WOM information compared to subjects who selected the retailer offering the best price, providing support for P5. Though we do not specify any hypothesis for reliability of retailer after exposure to negative WOM we find that consumers choosing a familiar retailer are less likely to be negatively affected compared to those who choose a retailer based on price (t=2.87, p<0.001). In contrast, however there is no significant difference among consumers in their desire to use online reviews in the future.

Table 3.

Effect Of WOM Information On Purchase Intention
(Standard deviations in parentheses)

Most important reason for choosing retailer	Use online reviews in future	Change in Purchase Intention (**P5**[**])	Reliability of Retailer
Familiarity	3.16 (0.84)	3.93 (0.59)	3.85 (0.46)
Price	3.7 (2.57)	3.4 (1.04)	4.1 (0.8)
All respondents	3.46 (1.99)	3.74 (0.97)	3.96 (0.63)

[*] Tests significant at 0.001 level.
[**] Tests significant at 0.01 level.

Analyzing data for pure Internet and click-and-mortar retailers separately we find some differences in results. Similar to overall findings, consumers choosing a clicks-and-mortar retailer based on familiarity display significant differences from those choosing on the basis of price in seeking less negative WOM nonvoluntarily

(P2 supported), and perceive problems to be less stable (P4 supported). However, contrary to overall findings, these consumers are less likely to seek negative WOM voluntarily (P1 not supported) , and do not differ significantly in changing their purchase intention. In contrast, consumers choosing among pure-Internet retailers are more susceptible to negative WOM (P1, P2, P3 and P5 supported) if they choose an umfamiliar retailer.

Discussion And Conclusion

The present findings suggest that for Internet retailers in general and click-and-mortar and pure Internet retailers, the deleterious impact of negative consumer reviews on perceived reliability of retailer and purchase intention is mitigated by consumer's familiarity with the retailer. Further, consumers patronizing a familiar retailer are less receptive to negative WOM information and seek less information. Consumers choosing an unfamiliar retailer because of a lower price seek more negative WOM information, and are more likely to believe that the problems may recur compared to consumers patronizing a firm they are familiar with.

These results have implications for consumer service and positioning strategies of online retailers. Firms positioning themselves as offering "the absolutely lowest price" are more susceptible to negative WOM activity because consumers find negative WOM to be more credible and likely to recur in their case. This is particularly true for pure-Internet retailers than for click-and-mortar firms. Click-and-mortar firms are less susceptible to negative WOM even if they are

unknown. For pure-Internet retailers providing superior service experience and establishing an image of reliability through advertising provides better protection against negative WOM information.

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