

Self-Disclosure on the Web: The Impact of Privacy Policy, Reward, and Company Reputation

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ABSTRACT

Companies need to collect information about consumers to exploit the personalization opportunities afforded by the Internet. However consumers have significant privacy concerns about providing this personal information. In an exploratory experimental study, three approaches for encouraging self-disclosure of personal information—the completeness of the privacy policy, the reputation of the company, and the offer of a reward—are examined. The results indicate that completeness of privacy policy and reputation of the company reduce the level of concern over self-disclosure, while the offer of a reward heightens concern.

An important benefit offered by the Internet is the opportunity to personalize communications and offerings to individual consumers (Alba et al. 1997). To exploit this opportunity, companies must collect information about the needs and preferences of individual consumers. However, consumer concern over disclosing personal information is growing as they realize that data about their Internet behaviors is being collected without their knowledge and agreement (Sheehan and Hoy 2000; Phelps et al. 2000). These privacy concerns can ultimately reduce the personalization benefits that companies can deliver to consumers.

Theories of self-disclosure suggest that consumers' willingness to disclose personal information is based on their assessments of the costs and benefits. Thus, companies who interact with consumers over the Internet use a number of approaches to alter this cost-benefit tradeoff and encourage consumers to self-disclose. Some companies increase the subjective benefits of self-disclosure by offering rewards (e.g., coupons or gifts) in exchange for personal information. Other companies reduce the subjective costs of self-disclosure by posting extensive privacy policies that claim to protect consumer privacy.

Even though self-disclosure is intimately connected to a critical benefit afforded by the Internet, research on factors encouraging self-disclosure is limited. The objective of this research is to explore the impact of privacy policy, company reputation, and rewards on consumer concerns with disclosing personal information. The following section develops four hypotheses based on theories of interpersonal relations. Then the experiment testing these hypotheses is described and its results are presented. The paper concludes with a discussion of the limitations of the study and directions for future research.

THEORETICAL FRAMEWORK

Self-disclosure is defined as the quantity (breadth) and quality (depth) of personal information that an individual provides to another (Jourard 1971). Considerable psychological and marketing research has examined the phenomenon of self-disclosure (Altman & Taylor 1973; Berg 1984; Collins & Miller 1994; Cozby 1973; Daher & Banikitos 1976; Dindia & Allen 1992; Jourard 1971; Moon 2000). In general, this research adopts a social exchange theory perspective (Thibaut & Kelley 1959, Ajzen 1977) suggesting that self-disclosure, like other interpersonal behaviors, is engaged in and interpreted in terms of the costs and benefits to the individuals. Moon (2000) has found that individuals interact with sources of electronic communications in the same way they interact with other people. Thus,

interpersonal theories on self-disclosure apply to electronic as well as to interpersonal interactions.

In the context of this research, the benefits of self-disclosure are receiving personalized communications and offerings based on the consumers' individual needs. The costs, or risks, of self-disclosure lie in the possibility that the company receiving the personal information will pass it along to a third party, and that this third party will use it in a manner detrimental to the consumer. For example, the third party might send unwanted messages or offer products and services that embarrass the consumer.

Some approaches that companies can take to alter the consumer's cost-benefit analysis and encourage self-disclosure are: (1) developing a reputation for trustworthiness, (2) provide a comprehensive privacy policy indicating how the disclosed information will be used, and (3) offering a reward for disclosing the information. Both the reputation of the company requesting information and the provision of a comprehensive privacy policy have a positive effect on a consumer's perception of the company's trustworthiness, which increases the propensity to disclose personal information. The information-processing models of attraction (Ajzen 1977; Dalto, Ajzen, and Kapplan 1979) support this perspective that an individual's beliefs about the other mediate self-disclosure. Thus,

Hypothesis 1: The reputation of the company requesting information decreases the concern of consumers about self-disclosure.

Hypothesis 2: The completeness of the privacy policy provided by the company requesting information decreases the concern of consumers about self-disclosure.

The offering of a reward increases the benefits of self-disclosure. Thus,

Hypothesis 3: An offer of a reward decreases concerns about self-disclosure.

Finally, the nature of the information that the company inquires about is also anticipated to affect the concern over disclosure. People are likely to perceive the provision of identification (e.g., email address) or sensitive (e.g., medical) information as entailing a greater personal cost. In other words,

Hypothesis 4: The nature of the information affects the concern over self-disclosure.

METHOD

The four hypotheses were tested using an experimental design. The experiment was a two (company reputation: high vs. low) x two (privacy policy: extensive vs. brief) x two (an offer of a reward: present vs. absent) between-subjects design.

Subjects

One-hundred and fourteen undergraduate students from a large Southeastern university volunteered for participation in exchange for credit in introductory marketing classes.

TABLE 1
Dimensions of concern about information disclosure

Items	Dimension 1 - ID Information	Dimension 2 - Sensitive Information	Dimension 3 - General Habits
Email address	.843	-.250	.231
Phone number	.737	.381	.046
Name	.726	.308	.161
SSN	.005	.824	.152
Medical information	.248	.768	-.105
Product preferences	.191	-.140	.869
Interest and hobbies	.118	.215	.862

Procedure

The manipulations and measures were administered in a paper-and-pencil questionnaire. The first page of the questionnaire provided the following privacy policy: "We respect the privacy of our customers, and we use the appropriate technologies to store our clients' data on a secure server." Subjects were told that *Consumer Reports* indicates that this policy is typically offered by companies communicating with consumers over the Internet. This description of a "typical" privacy policy was included so that subjects would have a baseline to judge the completeness of a privacy policy.

The following page of the questionnaire featured a specific website homepage with information about the website's privacy policy. Subjects were instructed that in order to enter the website, consumers had to register and share some information. Then subjects indicated their concern over the disclosure of personal information to this website. The questionnaire concluded with an assessment of the effectiveness of the manipulations and two qualitative inquiries.

Manipulations

Reputation was manipulated by identifying the website with a company possessing a superior or inferior reputation. Pretests of twenty brands were conducted to determine the reputation of companies (retailers). Based on these pretests, four companies were identified to enjoy superior reputation (Walmart.com, Samsclub.com, Sears.com, and Jcpenney.com), and four hypothetical companies were found to have inferior reputation (Goodbuys.com, Greatdeals.com, Buyhappy.com, and Fastclick.com). The difference between the two groups was significant ($F_{1,40}=13.18, p<.002$). In addition, the companies within each group did not differ from one another ($F_{sup. reputation 3,63} = 1.57, p>.20$; $F_{inf. reputation 3,60} = .087, p>.90$).

The completeness of the privacy policy was manipulated by describing the policy on the web site as follows:

Extensive Policy: "Our policy is to respect and protect the privacy of our users. We will not rent or sell your name, address, email, or other personal information to any third party. We use the latest technology to protect your information and do not release it to any outside organization. All of the customer data that we collect is carefully protected via our secure servers, which prevent unauthorized access from others. Moreover, you can have access to your data in order to modify any information you provided in the past."

Brief Policy: "Our policy is to respect and protect the privacy of our users."

The reward was manipulated by the presence or absence of the following statement: "Simply register with us and tell us a little more about yourself. You will receive a \$10 check. Don't miss this opportunity."

Manipulation Checks

The completeness of the privacy policy was measured with three seven-point semantic-differential scales: *detailed vs. not detailed*, *complete vs. incomplete*, and *informative vs. uninformative*. The reputation of the company was also measured with three seven-point semantic-differential items: *good vs. bad*, *trustworthy vs. untrustworthy*, and *good reputation vs. poor reputation*. The presence of a reward was assessed by having subjects indicate whether or not the website offered a financial benefit.

The multi-item semantic-differential scales designed to measure the effectiveness of the reputation and privacy policy completeness manipulations were found to be unidimensional and to have acceptable reliabilities (completeness of the privacy policy: Cronbach's alpha=.949; the company reputation: Cronbach's alpha=.903).

The manipulations of the completeness of the privacy policy and of the company reputation were successful (completeness of the privacy policy: $F_{1,112}=101.11, p<.01$; $X_c=14.63$ vs. $X_t=7.46$; company reputation: $F_{1,111}=44.64, p<.01$; $X_c=15.55$ vs. $X_t=11.58$). Similarly, a cross-tabulation found that 95% of the subjects correctly indicated whether the website offered a reward in exchange for disclosure.

Dependent Variable – Concern for Self-Disclosure

Subjects indicated their concern over self-disclosure to the website in reference to seven types of information – name, social security number, telephone number, email address, medical information, product preferences, and interest and hobbies – on seven-point scales, where *not concerned at all* described the left anchor and *very concerned* – the right anchor.

A principal-components analysis with a Varimax rotation of the seven items revealed three factors (Table 1).

The three dimensions were found to explain 73% of the variance. The first dimension summarizes identification information (name and email address). The second dimension reflects sensitive information (social security number and medical information). The third dimension refers to preferences and habits (product preferences, and interests and hobbies).

Qualitative Inquiries

At the conclusion of the questionnaire, subjects were asked to discuss, in their own words, how a website's privacy policy influences their readiness or concern to disclose, and how the offer of a reward in exchange for self-disclosure makes them feel.

RESULTS

Hypotheses 1, 2, and 3 were tested using a three-factor ANOVA with the items loading on each of the dimensions of concern for self-disclosure as the dependent variable. The results for each of the three dimensions were very similar. Thus, in reporting the results, concern for privacy was treated as a summative scale, and the responses on each dimension were summed.

TABLE 2
Differences on level of concern by type of information

Pairs	Means	N	St. Dev.	Significance Level
Sensitive Information	5.9	114	1.22	
ID Information	3.8	114	1.41	p < .001
ID information	3.8	114	1.41	
General Habits	1.8	114	1.12	p < .001

The results support Hypotheses 1 and 2. The reputation of the company decreased self-disclosure concern ($F_{1,106} = 3.273, p < .08; 28.08, \text{ vs. } 25.96$). A complete privacy policy, in comparison to an incomplete policy, alleviated the concern over disclosure ($F_{1,106} = 4.018; p < .05; 28.19, \text{ vs. } 25.85$). However, the results for testing Hypothesis 3 were in the opposite direction. The offer of a reward intensified the concern ($F_{1,106} = 3.477, p < .07; 25.92, \text{ vs. } 28.11$).

The qualitative data suggests that consumers are inclined to perceive the offer of a reward as an inadequate compensation for disclosure. Thirty-five subjects (31%) indicated that they consider offers of a reward with *suspicion*, as "decoys" which companies employ to inveigle individuals to reveal sensitive personal information; in contrast, half as many, fourteen, subjects (12%) look upon offers of a reward as a fair compensation for the disclosure of personal information.

The qualitative inquiries furnished additional support for the hypothesis that the presence of a privacy policy and the reputation of the company decrease the concern over disclosure. Forty-nine subjects (43%) indicated that the presence of a privacy policy alleviates their concern, while only eleven subjects (10%) indicated that privacy policies do not affect their propensity to disclose, and only four subjects (4%) indicated that they entertain suspicions with respect to privacy policies. With respect to the reputation of the company, fourteen subjects (12%) indicated that this factor affects their propensity to disclose.

Paired samples tests were used to test Hypothesis 4. These tests revealed that the sensitive information induced stronger concern than the identification information, which, in turn, induced stronger concern than the disclosure of preferences and habits.

Twenty-nine subjects (29%) indicated that the kind of information that the company inquires about affects their willingness to disclose. Six subjects (5%) indicated that the amount of information that the company asks for affects their decision. Eight subjects (7%) indicated that the reasons for the disclosure—to complete a purchase or to access the website—affect their decision.

DISCUSSION

The experimental results support the hypotheses that the completeness of the privacy policy and the reputation of the company alleviate the concern over self-disclosure, but an offer of a reward was observed to intensify concern for self-disclosure. The type of information which the company inquires about was also found to influence the concern over disclosure.

The results concerning the offer of a reward contradict our hypothesis and merit further investigation. It would be interesting to identify situations in which the effect of reward reverses. For instance, the type of information solicited and the type of reward offered by the company may moderate this effect.

Limitations and Future Research Directions

The absence of a detailed theoretical model which features the cognitive processes that mediate the effects constitutes the major limitation to this effort. Moreover, with the exception of the effect of reward, the findings are rather intuitive. The subjective assess-

ment of the concern over disclosure in the place of a behavioral measure of actual disclosure presents another weakness.

The unforeseen effect of reward offers a potential avenue for further study. Attribution theories (e.g., Kelley 1973) can be brought to bear on this phenomenon. The literature on interpersonal relationships has provided evidence regarding the importance of attribution on self-disclosure and on relationship development (Kelley 1979). By asking subjects to describe *why* they think a company offers them a reward, it would be possible to identify the mediating role of attributions, and, in this way, to determine when reward enhances, and when it decreases, self-disclosure.

In summary, this project constitutes an exploratory effort, which studies the effect of three variables - completeness of the privacy policy, reputation of the company, and offer of a reward—on the concern to disclose sensitive information. It also throws some light on the cognitive variables that underlie these effects. More rigorous theoretical models and detailed tests are demanded to uncover the mediating processes.

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