Customer Information Sharing with E-Vendors: The Roles of Incentives and Trust

Katia Premazzi, Sandro Castaldo, Monica Grosso, Pushkala Raman, Susan Brudvig, and Charles F. Hofacker

ABSTRACT: The collection of personal information from customers is a necessity for Internet merchants, who need such information to effectively provide service to customers. The ease with which data can be acquired and disseminated across the Web, and the peculiarities of the electronic environment have led to growing concerns from many potential customers over disclosing personal information to e-service providers. Self-disclosure theories suggest that consumers’ willingness to disclose personal information is based on their assessments of the related costs, risks, and benefits. This study experimentally manipulated initial trust and the nature of the incentive given to encourage information disclosure. It also measured actual disclosure behavior rather than just intention or attitude. A key finding is that subjects did not claim to be more willing to provide information in the presence of incentives, but in fact, as indicated by their behavior, were more inclined to do so. What is more, privacy concern, involvement with the service category considered, and attitude toward on-line shopping act like antecedents for a willingness to share attitudinal measure but are not diagnostic of actual behavior.

KEY WORDS AND PHRASES: Compensation, e-vendors, incentives, initial trust, privacy concern, self-disclosure, services, service science.

Given the multitude of technological advances in the past decade, e-service growth rates continue to climb at an astounding rate [1, 85]. The motivations for firms to use electronic channels for providing services are many and linked to the variety of opportunities they afford marketers. Electronic channels are extremely flexible and allow firms to reduce costs as compared with off-line channels, optimize the marketing mix, automatically suggest complementary products and services, and implement such relationship-friendly tools as offers of comparison aids [84]. It is also true that multichannel shoppers have a higher purchase volume and are more profitable than single-channel shoppers [83]. Furthermore, electronic channels can serve an important communication function in terms of both attracting new customers and retaining current clients while extending and leveraging preexisting relationships by personalizing communications and offerings to individual consumers [3, 73]. To exploit these opportunities, companies must collect information about individual consumers [5].

Information and communication technology (ICT) evolution has proven very useful to this end, as it has provided firms with the opportunity to acquire a huge quantity and variety of data from Web visitors and shoppers (e.g., [12,
Both actively (through on-line forms) and passively (through tracking and cookies). However, the ease with which data can be acquired and disseminated across the Web and the peculiarities of the electronic environment have led to growing concerns from many potential customers over disclosing their personal information to e-service providers (e.g., [19, 54, 56, 65, 72, 76]). This is mainly because new technologies have changed the way people interact with firms, and calls for a radically new e-marketing approach within the broader field of a multidisciplinary service science [6].

Buyers can no longer meet with a salesperson, ask questions, observe body language, or actually see the physical product or experience the service-providing setting. The entire transaction is now conducted through the “veil” of the computer medium [62, p. 98]. The spatial and temporal separation between customers and e-vendors, along with the information asymmetry between them, leads to a situation in which consumers do not know what the on-line firm will do with their personal information, or worse, might even be unaware that data are being unobtrusively collected [1, 18, 47]. Technology enables firms to record the details of any on-line interactions with the customer, store these data in data warehouses, and use them to inform their marketing actions (e.g., by creating consumer profiles for customized offers) or even to sell these data to other businesses. This threat is relatively easy to avoid in off-line transactions, where, thanks to physical proximity, customers have more perceived control over their personal information. With the development of the on-line environment, the risks of privacy invasion are intensifying and becoming increasingly menacing for customers.

Consequently, a growing debate on how consumers protect themselves and how they have modified their on-line behavior in response to privacy invasion threats has emerged. Customers have begun to adopt “protective behaviors” aimed at reducing the information sharing with on-line firms [55, 68, 76]. Indeed, there is emerging evidence that consumers engage in “disclosure management” in the information-driven relationship-building process with companies, including active disclosure avoidance or reluctance in on-line interactions [37, 60, 89]. Such behaviors threaten profit opportunities for firms that wish to adopt an e-service orientation [63, 71]. This is so because the collection of personal information from customers is an unavoidable element of electronic commerce, and Internet merchants need it to deliver products and services, study customer profiles, and propose personalized offerings [39]. Such data are becoming an increasingly critical resource for firms in the current competitive environment, which is moving toward the paradigm of mass customization and personal service [21].

The minuscule amount of retailing executed on-line, even in Web-friendly countries like the United States, and the growing mass of retail dot-com failures, can be interpreted as pointing to the difficulties facing e-service companies [1, 28, 47]. Three-fourths of nonusers see the Internet as a privacy threat, suggesting that on-line privacy invasion is a strong deterrent to potential shoppers [15]. Privacy menaces may lower participation in commercial activities on-line and are of particular concern to new users, thereby limiting the growth potential of on-line commerce [70].
The aim of the present research is to answer the need for strategies to increase customers’ information sharing with e-firms at the initial stage of the relationship between an e-vendor and a consumer. Specifically, the study will rely on self-disclosure theories to examine the effects of two relevant antecedents of information sharing with unknown e-vendors that have been identified but have mainly been investigated separately in previous studies—namely, trust and compensation. Furthermore, this paper will analyze the effect of these two variables not only on customers’ willingness to divulge information, the dependent variable of most of the past research, but also on their actual disclosure behavior toward e-marketers. Moreover, it will investigate both dimensions of self-disclosure: the number (quantity) and type (quality) of information provided.

Previous research has studied these issues from different perspectives, such as consumers’ concerns about information privacy [21, 55], how they respond to such concerns [77], consumers’ willingness to provide personal information [65], the effect of trust (in the organization) on customers’ willingness to provide information [74], consumer awareness of privacy mechanisms [19, 57], the contents of privacy disclosures [58], and legal and ethical issues associated with on-line privacy [11].

The present study differs from previous research in two aspects that represent its main contributions. First, no prior studies on information disclosure have combined trust, different compensation typologies, attitudinal willingness to provide information, and actual information-giving behavior in a single empirical investigation. Previous literature focused on these issues separately and thus is unable to provide evidence for interaction among relevant variables. In particular, separate studies have appeared on the definition and measurement of privacy concerns [e.g., 75, 78], the antecedents and consequences of privacy concerns [e.g., 65, 66], the impact of trust [e.g., 34, 59], and compensation for information [77].

A second contribution of this study is its use of a controlled experimental setting that allows the measurement of respondents’ actual behavior in an on-line environment, in addition to their declared intentions or past behavior. A common element of many studies on responses to privacy invasion has been the use of surveys.1 The problem of a research design using surveys is threefold. As just mentioned, surveys measure past or intentional behavior, not actual behavior [9, 39]. Second, this methodology tends to heighten the concern for privacy because respondents are sensitized to the topic by being forced to focus on it [35]. Finally, past research suggests that many consumers ignore the implications of privacy invasion either because of denial or because of the manner in which choices are presented to them [44, 68]. According to this view, consumers may not be conscious of the implications of sharing their information with an on-line Web site and may be unable to predict their own behavior. The use of a behavioral approach avoids the problems surrounding the sensitizing effects and lack of awareness that plagues surveys.

In summary, this research represents a first effort to conduct empirical research that is as realistic as possible by (1) considering the interaction of variables that can be leveraged at the same time by e-service providers but
have mostly been considered separately in previous studies, and (2) analyzing real consumer behavior in the on-line environment.

**Literature Review and Hypotheses Development**

This paper addresses a relevant problem that e-vendors must solve to exploit fully the potential of business-to-consumer e-commerce: consumers’ hesitation to transact with them. This potential can only be realized if consumers are willing to transact, and thereby disclose personal information, even with unseen and unknown e-vendors. However, many potential customers have concerns about whether on-line firms will safeguard the privacy of personal information.

Potential loss of privacy has largely been studied as a deterrent to consumer disclosure, and this potential loss of privacy represents a specific type of socially risky disclosure consequence [20, 37, 54, 55, 65, 89]. Consumers’ concern for privacy refers broadly to the issues of who has access to their personal information and what is done with it [43, 89]. Consumers may wonder, for instance, whether the information is likely to be accessed by or even sold to parties external to the commercial relationship dyad, and whether it is going to be used for phone or mail intrusion or even fraud. When consumers feel they do not have full control over disclosure of personal information (e.g., demographics, lifestyle, financial data, and shopping or purchase habits), they are vulnerable to a loss of privacy and may be reluctant to disclose.

Starting from the basic assumption that consumers are reluctant to disclose personal information because of privacy issues, a recent line of research on this matter has applied self-disclosure theories [5, 40, 41, 60, 61, 89]. These theories suggest that consumers’ willingness to disclose personal information is based on their assessments of the costs, risks, and benefits [5, 49]. Hence, the studies adopt a social exchange theory perspective. This approach suggests that self-disclosure—defined as the quantity (breadth) and quality (depth) of personal information an individual provides to another—is engaged and interpreted in terms of the costs and benefits for the individuals [3, 5, 45, 81].

While the collection of personal information from customers is essential to the viability of electronic commerce, it has both risk and benefit implications for individuals [39]. Previous studies have pointed out that consumers are aware that not all relationships are mutually beneficial and consequently do not want to value the formation of relationships with unknown organizations [65, 79]. As already mentioned, consumers face a new spectrum of risks of information misuse related to the transaction medium’s intangibility, while in terms of benefits they are able to access more convenient and more customized new services, saving transaction time and search costs [39, 89, 92].

Companies that interact with consumers over the Internet could use a number of approaches to alter this cost-benefit trade-off and, consequently, encourage consumers to self-disclose [5, 88].

Among the approaches companies can take to alter the consumer’s cost-benefit analysis and encourage information disclosure are efforts to develop
consumers’ initial trust and offers of compensation for disclosing the information [5, 48, 53, 85].

First, companies can reduce the subjective costs of self-disclosure by trying to develop initial trust [48, 53, 85]. Critical to the definition of on-line relationships and information exchange is the element of trust, which can be seen as a shortcut and a mechanism to reduce the complexity of human conduct in situations where people have to cope with uncertainty [51]. Many studies suggest that one of the main reasons why many on-line consumers do not shop on-line is that they do not trust most on-line retailers enough to engage with them in exchanges involving money and personal information [38, 53].

The development of trust is an ongoing, dynamic process influenced by successive interactions between two parties. However, initial trust beliefs can be formed without any prior experience or interaction between the two parties [48]. In the e-commerce context, firms face the challenge of initiating consumer trust prior to on-line transactions because shoppers perceive more risks on-line than in traditional channels of distribution and so are less likely to enter into initial transactions [82]. While trust may change with time and with repeated interactions, first impressions are crucial, and initial trust may determine the extent to which future interactions take place [48, 53]. Hence initiating consumers’ trust, and consequently developing stable relationships with on-line shoppers, is a critical element for e-service firms [48, 85].

By reducing the perception of risk among potential but inexperienced consumers, initial trust enhances their propensity to disclose personal information to e-vendors [42]. If the consumer trusts the entity collecting information, privacy concerns are likely to be lessened and information disclosure to be maximized [34, 55]. The first hypothesis has two parts:

\[ H1a \text{ (Initial Trust and Willingness to Provide Information Hypothesis): The higher consumers’ initial trust, the higher will be their willingness to provide information.} \]

\[ H1b \text{ (Initial Trust and Behavioral Information Disclosure Hypothesis): The higher consumers’ initial trust, the higher will be their behavioral information disclosure.} \]

Second, companies can increase the subjective benefits of self-disclosure by offering rewards in exchange for personal information [5, 39]. Although compensation can work as an automatic announcement to consumers that information is being collected, it increases their perception that an exchange of benefits from the information-providing act is taking place, thus reducing concern with privacy because they feel an equal exchange has been established [32, 76]. People may be willing to give up a degree of privacy if they feel they get something in exchange, that is, compensation [56].

The effectiveness of incentives in enhancing on-line disclosure has been investigated experimentally in the organizational and information systems fields (e.g., to favor knowledge-sharing within groups in computer-mediated environment, as in [80]). These studies consider a broader concept of disclosure
involving individual’s tacit knowledge and including other risks and losses rather than loss of privacy (e.g., loss of power).

Investigation of incentives, in line with social exchange theory, can be found in the market research and methodology literature, where incentives are considered among the factors potentially affecting response rate and quality (as well as sample composition and study outcome). Participants’ disclosure of information is particularly critical to the feasibility and usefulness of marketing research and may involve privacy concerns. In this domain, incentives can assume several forms, such as cash, vouchers and coupons, lotteries, or even donations, which may have different effects, as empirical research has shown with respect to on-line surveys (e.g., [24, 33]).

In off-line surveys, the use of monetary incentives (e.g., small prepaid financial incentives) has been found effective in increasing the response rate [6, 13, 14, 25, 30, 36, 46, 90, 91]. Somewhat more limited evidence supports similar effects for material incentives in on-line surveys [24]. Hence, on-line consumers’ information disclosure could be increased by providing them with some kind of compensation, which, as previously mentioned, can take several forms. This study concentrates on two kinds of compensation that are frequently provided to customers: money (in the on-line environment, this takes the form of coupons) and gifts [5, 24].

As consumers can use monetary incentives flexibly for any purpose they wish, they may be perceived as providing higher benefits than a gift of the same value but of a nature determined not by the user but by the donor. This is coherent with the argument of Deutskens et al. that monetary compensation is the most effective [24]. The second hypothesis also includes two parts, stated as follows:

**H2a (Compensation and Willingness to Provide Information Hypothesis):** Willingness to provide information will be higher when monetary compensation is offered, followed by compensation through a gift, and lower when no compensation is proposed.

**H2b (Compensation and Actual Disclosure Behavior Hypothesis):**
Actual disclosure behavior also will be higher when monetary compensation is offered, followed by compensation through a gift, and lower when no compensation is proposed.

As highlighted in the previous section, one of the intended contributions of this study is the analysis of the interaction among the variables whose effects on information disclosure have so far only been investigated separately. Although there are no previous studies on the joint effect on information disclosure of initial trust and compensation, the literature can be helpful in hypothesizing the relationship linking the two variables. As has emerged previously, initial trust is a key element in starting an on-line transaction. One may therefore expect that the reduction of perceived risk felt by consumers in the presence of initial trust can add to the benefits provided by the compensation, hence increasing disclosure of information. On the contrary, in a situation in which trust is lacking, one may expect a lower effect of incentives on information disclosure. Therefore, an interaction effect is hypothesized between trust and
compensation, according to which trust acts as a moderating variable affecting the relationship between compensation and information disclosure. In particular, it is suggested that if offered compensation in situations of high initial trust, individuals will be more inclined to provide information on-line. The third hypothesis is also stated in two parts:

**H3a (Trust Condition and Willingness to Provide Information Hypothesis):** In the high-trust condition, subjects will be more willing to provide information when offered compensation than when offered no compensation. In comparison, the impact of compensation will be less positive or nonexistent in the low-trust condition.

**H3b (Trust Condition and Actual Disclosure Behavior Hypothesis):** In the high-trust condition, subjects will be more willing to engage in actual disclosure behavior when offered compensation than when offered no compensation. In comparison, the impact of compensation will be less positive or nonexistent in the low-trust condition.

Finally, the nature of the data requested by firms may also affect the concern over disclosure. Evidence both theoretical and anecdotal suggests that an important role in information sharing is played by data sensitivity, defined as the perceived intimacy level of the information [52, 87]. In particular, previous studies have demonstrated that people perceive the provision of sensitive information as entailing greater personal cost and are therefore less willing to provide this kind of information [5].

Much of the prior research on trust and information sharing has not considered the type of personal information requested [74]. Hence, when measuring disclosure, previous studies mainly focused on quantity. The present study investigates the relationship between trust and the disclosure of sensitive information, thus considering also the type of information disclosed. This is particularly interesting for e-tail providers because sensitive information, such as credit card number, is mandatory to conclude the on-line transaction.

As in the case of compensation, there are no previous studies on this topic. However, the presence of initial trust can reasonably be expected to increase the provision of sensitive information. This is because of the already mentioned capacity of initial trust to reduce the perceived costs in customers’ benefit/cost evaluations. In other words:

**H4 (Trust and Sensitive Information Provision Hypothesis):** Subjects will provide more sensitive information in the high initial trust condition than in the low-trust condition.

Coherently with the lower contribution to information disclosure of compensation with respect to trust, as predicted in Hypotheses 3a and 3b, this variable is not expected to have any effect on the behavioral disclosure of sensitive information by consumers. Therefore, the last hypothesis is the following:

**H5 (Compensation and Sensitive Information Disclosure Hypothesis):** Compensation has no effect on the disclosure of sensitive information.
The hypothesized relationships were investigated empirically in a laboratory experiment.

**Experimental Study**

The objective of the experimental study was to test the impact of initial trust and compensation of different types (monetary vs. gift or nonmonetary) on willingness to share information (H1a and H2a) and on actual on-line behavioral disclosure (H1b and H2b). The study also tested the moderating role of trust on the relationship between compensation and information disclosure (H3a and H3b), and verified the effect of trust (H4) and compensation (H5) on the behavioral disclosure of sensitive information.

**Subjects**

The 178 participants in the study were recruited by a firm that specializes in market research participant recruiting. The requisites of eligibility for the study were knowledge of English (to be sure they could understand trust manipulation) and the ability to browse a Web site. The sampled subjects varied in age from 35 to 64 years old; 47.6% of participants were female, while 52.4% were male (see Table 1). The experiment was run in a facility in a university in Northern Italy; subjects were randomly assigned to each experimental cell (see Table 2).

**Design and Procedure**

The study was designed as a 2 (initial trust: high vs. low) × 3 (compensation type: no compensation, monetary, nonmonetary) between-subjects experiment. The experiment was run in a controlled laboratory setting, and the experimental materials consisted of a fictitious prototype, limited-scope, “preview” company Web site, on which participants, after reading some introductory

<table>
<thead>
<tr>
<th>Profession</th>
<th>Number</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee</td>
<td>60</td>
<td>32.1</td>
</tr>
<tr>
<td>Worker</td>
<td>19</td>
<td>10.2</td>
</tr>
<tr>
<td>Professional</td>
<td>16</td>
<td>8.6</td>
</tr>
<tr>
<td>Manager</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Housewife</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Craftsman</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Retired</td>
<td>11</td>
<td>5.9</td>
</tr>
<tr>
<td>Executive</td>
<td>10</td>
<td>5.3</td>
</tr>
<tr>
<td>Entrepreneur</td>
<td>9</td>
<td>4.8</td>
</tr>
<tr>
<td>Teacher</td>
<td>8</td>
<td>4.3</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>5.9</td>
</tr>
</tbody>
</table>
printed pages and browsing it, answered a list of questions on a handout. Similar methods have been used in numerous studies, and much of the specific material used in this study has been extensively tested [31, 43, 48, 64, 67, 68]. A confederate, posing as the firm’s vice-president for marketing, ran the experiment. Experimental sessions lasted approximately 45 minutes.

Subjects were recruited under the pretext of participating in a consumer opinion market research for a (fictitious) UK mobile phone service provider, Azimuth, that was considering entering new competitive markets, including the Italian one. By definition, initial trust manipulation required that participants not know the firm used in the study and necessitated utilizing a fictitious firm. As an additional check, the questionnaire had a question (Q5) verifying knowledge of the company; none of the participants claimed to have heard of this firm.

After the fictional VP was introduced, subjects were first exposed to a short pamphlet describing the company’s profile in order to answer some questions about the company and its offering. Trust was manipulated by preparing two different versions of the pamphlet with varying descriptions of the fictitious company (see Appendix A.1 and A.2). The description consisted of fake excerpts from simulated articles that claimed to be about the company from the on-line version of the Wall Street Journal, considered a well-known and credible source. A company rating was also included. The same format and type of content were used in the two versions, with the main difference being the profile of the company. In the high-trust condition, the company was said to have the “best ever network performance,” the highest J.D. Power customer-satisfaction rating, the highest mobile connection success rate, and as being upgraded by S&P with a “stable outlook.” In contrast, in the low-trust condition the company was described as “delivering inadequate customer service,” with the lowest J.D. Power customer-satisfaction rating and stagnant sales growth. In addition, the company was described as having been downgraded by S&P. Trust manipulation was performed by leveraging the firm’s reputation, which in the literature is considered to be the main antecedent of initial trust [48, 53]. The pamphlet was presented in English and all participants were screened for English proficiency.

To further reinforce the impression of conducting marketing research, the first part of the questionnaire—completed after exposure to the trust

<table>
<thead>
<tr>
<th>Compensation condition</th>
<th>Monetary (certain) compensation</th>
<th>Nonmonetary (certain) compensation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No compensation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low trust</td>
<td>30</td>
<td>32</td>
<td>95</td>
</tr>
<tr>
<td>High trust</td>
<td>28</td>
<td>31</td>
<td>92</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>63</td>
<td>187</td>
</tr>
</tbody>
</table>

Table 2. Number of Participants in Each Experimental Cell.
manipulation, but prior to browsing the Web site—required data about the participants’ mobile phone ownership (Q1) and usage of mobile phone services (Q2), along with current satisfaction (Q3) and willingness to change provider and make purchases in the short-term future (Q4). This part also included two questions intended to measure two variables considered as potential covariates: the participant’s personal interest in and involvement with mobile phone services (Q6), and attitude toward on-line shopping in general (Q7).

The questionnaire ended with a manipulation check consisting of a multi-item question using a seven-point scale, where 1 = strongly disagree and 7 = strongly agree. Subjects were then instructed to visit and thoroughly view a beta-test Web site of the (fictional) company that was designed to contain on-line features one might expect in a mobile phone services company (i.e., pages devoted to plans, services, models, accessories, etc.). Appendix B provides sample screenshots from the site used in the study.

After subjects had thoroughly viewed the pages at the site, they were instructed to proceed to the registration page and provide information in the event the company might want to contact them. The registration page requested personally identifying information and financial data from subjects: name, address, city, state, zip code, e-mail, phone number, social security number counterpart for Italy, and credit card type, number, and expiration date.

It was at this stage that the compensation manipulation occurred. In fact, there were three different versions of the Web site (randomly assigned to subjects), each reflecting one of the compensation conditions. As shown in Appendix B, in the “no compensation” condition, subjects were simply required to provide the data indicated above. In the “monetary compensation” condition, subjects were informed that after registration they would receive a coupon worth €20 to be used in one of the main retail chains selling electronic products in Italy. In the “nonmonetary compensation” condition, participants were informed that they would receive a €20 wireless headphone as a gift.

Thanks to the individual code as required for entering the Web site (see Appendix B1), the personal information provided by each subject was registered and matched back to the corresponding hardcopy questionnaire.

Once the task was completed, participants were asked to fill out a questionnaire with questions measuring the dependent-variable willingness to provide information on-line, as well a third control variable, privacy concern.

**Measurement**

**Dependent Variables**

Dependent variables were included: willingness to provide information, behavioral information disclosure, and behavioral disclosure of sensitive information.

The dependent variable “Willingness to provide information” was measured as the average score on a set of multi-item questions. Participants rated their willingness to provide six different types of personal data, using a seven-point scale (1 = no willingness, 7 = high willingness). The average rating across
the items was calculated for each subject and considered as a measure of the subject’s willingness to disclose information, such that subjects with a higher average were more willing to provide information.

The dependent variable “Behavioral information disclosure” was measured as follows. First the quantity of information provided by subjects on the experimental Web site was computed as the sum of the number of identifying information items (name, address, zip code, citizenship, phone number, e-mail, SSN, and credit card expiration date, type, and number) provided by each subject: N_provided. As the provision of false or incomplete information is a relevant issue in on-line information disclosure [77], each data item was matched with a questionnaire item computing the sum of matching (true) items: N_matches. The dependent variable “Behavioral information disclosure” was computed as the mean between the two variables. The higher the mean, the higher the behavioral disclosure.

Finally the dependent variable “Behavioral disclosure of sensitive information” was computed using the same procedure but considering in the computation only the variables emerging as sensitive in the study by Hui, Teo, and Lee: phone number, e-mail, SSN, credit card expiration date, and credit card number [39].

**Covariates**

Three variables deemed possible covariates were included. Previous research suggested that the level of one’s privacy concern influences one’s willingness to share information [65, 76]. As a result, level of privacy concern was treated as a within-subjects factor, and was used as a covariate in this analysis. “Privacy concern” was measured using an 11-item index with each item comprising a seven-point scale (1 = strongly disagree, 7 = strongly agree). The index was adapted from the Concern for Information Privacy (CFIP) Instrument [78]. The 11 items are shown in Table 3. The items were factored to create a single measure of privacy concern where high scores indicate a higher level of privacy concern (Cronbach’s alpha = 0.903).

Two other covariates were introduced in the belief that they might have an impact on the results: attitude toward on-line shopping and involvement with mobile phone services (the category used in the study). Table 4 shows the scales used to measure these variables. Also in this case the items were factor analyzed, resulting in a single measure for each variable with an alpha = 0.879 for attitude toward on-line shopping and 0.847 for involvement with mobile phone service.

**Trust**

To perform the manipulation check, trust was measured using the same seven-point (1 = strongly disagree, 7 = strongly agree) multi-item scale that had been adapted from existing scales found in literature [8, 48]. The scale (see Table 5) was translated into Italian and back-translated into English by a
### Table 3. Privacy Concern Items.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection</td>
<td>When companies ask me for personal information, I sometimes think twice before providing it. It bothers me to give personal information to so many companies. I am concerned that companies are collecting too much personal information about me.</td>
</tr>
<tr>
<td>Access</td>
<td>Companies should devote more time and effort to preventing unauthorized access to personal information. Companies should take more steps to make sure that unauthorized people cannot access personal information in their computers.</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Companies should take more steps to make sure that the personal information in their files is accurate. Companies should have better procedures to correct errors in personal information. Companies should devote more time and effort to verifying the accuracy of the personal information in their databases.</td>
</tr>
<tr>
<td>Use</td>
<td>When people give personal information to a company for some reason, the company should never use the information for any other purpose. Companies should never sell the personal information in their computer databases to other companies. Companies should never share personal information with other companies unless it has been authorized by the individuals who provided the information.</td>
</tr>
</tbody>
</table>

### Table 4. Attitude Toward On-Line Shopping and Involvement with Items.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward on-line shopping</td>
<td>Please indicate your agreement with the following statements about on-line shopping (1 = strongly disagree, 7 = strongly agree). On-line shopping—results in lower prices for the consumer is convenient for the consumer stimulates the development of new products &amp; services helps save the consumer time allows for comparative shopping is a fun way to shop is hassle free provides wider selection</td>
</tr>
<tr>
<td>Involvement with mobile phone services</td>
<td>Please, indicate your feelings about mobile phone service: Important to me Of no concern to me Irrelevant Very meaningful to me Matters to me Interesting Significant Boring</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 nonimportant to me</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 of concern to me</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 relevant</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 means nothing to me</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 doesn’t matter to me</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 not interesting</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 insignificant</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 exciting</td>
</tr>
</tbody>
</table>
second translator to assure validity. The items were factor analyzed to create a single measure of trust where high scores indicated a higher level of trust in the Web site (Cronbach’s alpha = 0.873).

**Manipulation Check and Assumptions**

Tests were conducted to ensure that statistical assumptions associated with analysis of variance (ANOVA) and analysis of covariance (ANCOVA) were met. Levene’s test of equality of error variance was not rejected. In addition, tests were conducted to ensure that there was no interaction effect between the covariate and any of the three other factors, which indicated that the assumption of homogeneity of covariance regression coefficients had not been violated. A one-way ANOVA was used to check the trust manipulation. Participants in the high-trust-condition group reported a higher level of trust than those in the low-trust condition \( (M_{HIGH} = 4.6046, M_{LOW} = 4.2237, F(1, 185) = 8.217, p = 0.005) \).

**Results**

A factorial analysis of covariance (ANCOVA) was conducted using trust (high/low) and compensation (no compensation/nonmonetary compensation/monetary compensation) as independent variables and willingness to disclose information as the dependent variable to test the following hypotheses: Initial Trust and Willingness to Provide Information Hypothesis (H1a), Compensation and Willingness to Provide Information Hypothesis (H2a), and Trust Condition and Willingness to Provide Information Hypothesis (H3a). Attitude toward on-line shopping, involvement with mobile phone services, and privacy concern were used as covariates. All the covariates emerged as significant. The beta parameter for privacy concern was –0.245, for involvement with mobile phones –0.284, and for attitude toward on-line shopping 0.371, implying a negative effect of privacy concern and involvement with mobile phone services and a stronger, positive effect of attitude toward on-line shopping.
Table 6. General Linear Model Results for Willingness to Provide Information.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean square</th>
<th>F-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust (T)</td>
<td>1</td>
<td>.370</td>
<td>0.236</td>
<td>0.627</td>
</tr>
<tr>
<td>Compensation (C)</td>
<td>2</td>
<td>1.127</td>
<td>0.719</td>
<td>0.489</td>
</tr>
<tr>
<td>Attitude toward on-line shopping*</td>
<td>1</td>
<td>25.257</td>
<td>16.6117</td>
<td>0.000</td>
</tr>
<tr>
<td>Involvement with mobile phones*</td>
<td>1</td>
<td>15.288</td>
<td>9.756</td>
<td>0.002</td>
</tr>
<tr>
<td>Privacy concern*</td>
<td>1</td>
<td>10.023</td>
<td>6.396</td>
<td>0.12</td>
</tr>
<tr>
<td>T*C</td>
<td>2</td>
<td>8.283</td>
<td>5.285</td>
<td>0.006</td>
</tr>
<tr>
<td>Error</td>
<td>178</td>
<td>1.567</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Attitude toward on-line shopping, involvement with mobile phones, and privacy concern were used as covariates.

Figure 1. Interaction Plot of Trust and Incentive on Willingness to Provide Information

shopping on willingness to provide information. Table 6 shows the results of the analysis. The main effect of trust and compensation are not significant, meaning that both H1a and H2a are rejected. Only the interaction effect of compensation and trust was statistically significant (see Figure 1), but it did not follow the predicted pattern, and thus H3a is not supported.

The same procedure was followed using behavioral information disclosure as the dependent variable to test these hypotheses: the Initial Trust and Behavioral Information Disclosure Hypothesis (H1b), the Compensation and Actual Disclosure Hypothesis (H2b), and the Trust Condition and Actual Disclosure Behavior Hypothesis (H3b). For this dependent variable, none of the covariates
Table 7. General Linear Model Results for Behavioral Information Disclosure.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean square</th>
<th>F-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust [T]</td>
<td>1</td>
<td>11.319</td>
<td>3.794</td>
<td>0.053</td>
</tr>
<tr>
<td>Compensation [C]</td>
<td>2</td>
<td>9.129</td>
<td>3.128</td>
<td>0.046</td>
</tr>
<tr>
<td>T*C</td>
<td>2</td>
<td>20.039</td>
<td>6.718</td>
<td>0.002</td>
</tr>
<tr>
<td>Error</td>
<td>181</td>
<td>2.983</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

was significant. Therefore the analysis was rerun without covariates. Table 7 shows the results of the analysis.

These results show that, when considering behavioral information disclosure, there is a main effect of compensation (M_{NO COMP} = 7.376, M_{NONMONETARY COMP} = 8.140, M_{MONETARY COMP} = 7.873) with an $F$ value of 3.128, $p = 0.046$. The effect of trust is in the opposite direction from the prediction of H1b (M_{HIGH} = 7.56, M_{LOW} = 8.027) but does not reach significance ($F = 3.794$, $p = 0.053$). These effects must be qualified by the trust $\times$ compensation interaction, which is significant with $F = 6.718$, $p = 0.002$. In general these results support H2b and disconfirm H1b and H3b. The interaction effect between trust and incentive is illustrated in Figure 2. This suggests a different explanatory mechanism than that of H3b, covered below in the discussion section.

A third analysis using trust and compensation as independent variables and behavioral disclosure of sensitive information as dependent variable was used to test the fourth and fifth hypotheses: the Trust and Sensitive Information Provision Hypothesis (H4), and the Compensation and Sensitive Information
Disclosure Hypothesis (H5). None of the covariates was significant. The results (see Table 8) show that the main effect of trust is not significant, thus disconfirming H4, whereas the main effect of compensation ($M_{\text{NO COMP}} = 2.096$, $M_{\text{NONMONETARY COMP}} = 2.463$, $M_{\text{MONETARY COMP}} = 2.432$) is near significant ($F = 2.299$, $p = 0.103$), providing weak support for H5.

**Discussion**

The collection of personal information from customers is a behavior that Internet merchants need in order to effectively deliver products and services to customers in the current competitive scenario of mass customization and personal service. This study represented a first effort to overcome the limitations of surveys by creating a realistic experimental setting in which behavioral disclosure data were collected. It is noted in the study that subjects did not claim to be more willing to provide information in the presence of incentives, but in fact their behavior indicated that they were more inclined to do so. What is more, covariates privacy concern, involvement with mobile phones, and attitude toward on-line shopping acted like antecedents for willingness to share attitudinal measure but failed to predict either of the behavioral measures. Thus the study overcame a major limitation of previous studies that were exclusively based on attitudinal dependent variables. What consumers declare might well be different from what they actually do when facing a situation with an implied risk, and causal sequences among attitudinal variables may not hold up with actual behavior; hence attitudinal studies may not illustrate the whole story. The difference in the results obtained in testing the second set of hypotheses, H2a and H2b, with attitudinal and behavioral data points exactly to this.

The study also examined the joint effects of two relevant drivers of information sharing with unknown e-vendors that have been identified in self-disclosure theories but have mainly been investigated separately in previous studies: trust and compensation. Including both made it possible to investigate how these two effects interact. Maintaining attention still on actual information disclosure, the results of the experiment clearly show that the impacts of initial trust and compensation show a high degree of interaction in terms of their impact on disclosure. Since initial trust at the start of a relationship with potential customers is considered a key element in the e-commerce literature and may determine the extent to which future interactions will take place

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean square</th>
<th>F-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>1</td>
<td>0.104</td>
<td>0.090</td>
<td>0.764</td>
</tr>
<tr>
<td>Compensation</td>
<td>2</td>
<td>2.651</td>
<td>2.299</td>
<td>0.103</td>
</tr>
<tr>
<td>Error</td>
<td>181</td>
<td>1.153</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
[48, 53], it was expected that high initial trust would be a precondition to information disclosure. Contrary to expectations, compensation appears more useful in improving information disclosure in the low-trust condition than in the high-trust one. In fact, as seen in Figure 2, in the low-trust condition, the incentive improved information disclosure, but when trust was already high, monetary compensation resulted in lower information disclosure than in the nonmonetary and uncompensated conditions. It is possible that when a firm is not trusted, an incentive can act as a costly signal of the firm’s stability. The signal is reassuring and acts to encourage disclosure. On the other hand, when trust is already high, the addition of a monetary incentive makes an economic analysis by the consumer more likely, an analysis that results in the benefits of disclosure decreasing relative to the costs. The interaction in Figure 2 is also consistent with Hui et al.’s results, according to which compensation can offset lack of privacy assurance, implying a sort of “tradability” of privacy [39]. Here compensation seems to offset the lack of initial trust in information disclosure.

In a target market typically composed of workingpeople with an income, monetary incentives could be counterproductive for firms perceived as trustworthy at first sight because it undermines initial trust and lowers information-disclosure proneness. This points to the circumstances under which the tactics marketers employ to increase consumer proneness to provide personal information (i.e., monetary or gift compensation) may have unintended and adverse effects in on-line commercial relationships, particularly when the company has been able to engender initial trust. Relationship-seeking e-marketers should be aware that if they succeed in engendering trust, they must be very careful about devising and using incentives (especially compensation) to induce customers to provide necessary or interesting personal information. Interestingly, for a workingpeople target, neither initial trust nor compensation increases the disclosure of sensitive information. This means that further research in this area is needed to help firms deal with the disclosure of sensitive information of higher relevance for e-vendors. It is quite possible that other target markets will react differently.

It must be emphasized that the results presented here do not mean that initial trust is useless. In the absence of compensation, trust always enables higher information disclosure, including sensitive information. This implies that trust could represent a valuable strategy based on immaterial resources for firms to increase consumers’ disclosures.

As with any empirical study, limitations need to be recognized. A first group of limitations concerns some simplifications done to allow for the conditions of an experimental study. In an effort to isolate the effect of the experimental manipulations, the Web site was kept relatively simple and free from the myriad of images and opportunities for interactivity that are increasingly common on commercial Web sites. Further, study participants could not purchase services on the Web site.

Note, too, that the study tested only one type of on-line company that had a relatively limited product mix. Attributes that encourage customers to select one site over another depend on the shopping trip’s specific purpose [69]. Therefore, shopping for travels, flowers, books, or music may be
a distinctly different experience than shopping for mobile phones. Future research should increase the generalizability of the findings by investigating information disclosure with respect to other product and service categories and should use more complex commercial Web sites to test consumers’ behavior in an even more realistic purchasing situation. Likewise, the choice of specific compensation values is but one choice among many ways to design an experiment. Neither the €20 coupon nor the €20 gift was fungible, and both involved specific monetary values. The trust manipulation also involved specific operations that made the focal firm more or less trustworthy. The manipulation might also have made the firm seem less competent in general. While the manipulation check implied that the manipulation was successful, it cannot be ruled out that some of the observed effects were due to competence or quality. In the current study, the manipulation check itself might have sensitized some subjects.

To the specifics of the firm and industry, it should be added that the choice of a Web site as the experimental setting, even though the Web is a common retail platform today, does not make it possible to generalize to information disclosure on a mobile platform. Future research should look at how the mobile medium, a setting far more personal and private than the Web, influences disclosure behavior.

A second group of limitations pertains to the variables investigated in the study. First, it focused on initial trust, which represents a weaker, calculus-based form of trust [50]. Trust is an ongoing, dynamic construct that evolves—strengthening or weakening—according to the evolution of the relationship between two parties. Further studies should investigate the impact on information disclosure, as well as the interaction with compensation, of trust at a further stage of development of the relationship with the firm.

Finally, given the differences in the results according to the kind of compensation offered, future research should investigate in more depth the impact on information disclosure of different levels and types of compensation. This study focused on two kinds of compensation, both certain. However the incentives used by firms could assume several other forms, such as lotteries (uncertain compensation) or even donations, which can have different effects than those observed here. Likewise, the trust manipulation merely scratched the surface of what needs to be investigated. The focus here was on the firm and its reputation; other aspects of trust that might be of interest include the Web site and the transaction processing itself.

NOTES

1. Some exceptions include a series of experiments by Miyazaki and Krishnamurthy that indicate that the presence of seals of approval (e.g., TRUSTe, BBBOnline) can make consumers feel more favorable about a Web site’s privacy policy [59].

2. The phenomenon of self-disclosure has been investigated by several scholars in the psychology and marketing fields who adopted a social exchange theory perspective [4, 10, 16, 17, 22, 26, 45, 60]. Social exchange theory tries to understand the rules governing the exchange of resources between two or more individuals over the course of one or more transactions [27]. As White comments: “Consum-
users’ personal information can be considered a resource insofar as it is unknown to marketers (that is, not readily or easily obtained from external sources), yet valued by them. Similarly, the provision of consumers’ personal information for marketers’ goods, services, or information represents a resource exchange” [89, p. 42].

3. In particular, participants rated their willingness to provide information for each of the following items: identification data (name, address, etc.), data related to lifestyle (number of cars owned, ownership or rental of home, etc.), demographic data (age, ethnic group, height, etc.), data referred to media usage habits (television programs watched, magazines read, etc.), medical data, and financial data (credit card number, type, expiration date, etc.).

4. The scales were adapted from existing ones. Every scale used in the questionnaire was translated into Italian and back-translated into English by two different persons to check the validity of the translation.

5. The authors thank an anonymous reviewer for this interpretation of the interaction.

REFERENCES


68. Ramen, P.; Brudvig, S.; and Hofacker, C.F. To give or not to give: Providing personal information to online firms. Paper presented at Direct Marketing Association Educators’ Conference, San Francisco, October 2006.
85. Wang, S.; Beatty, S.E.; and Foxx, W. Signaling the trustworthiness of small online retailers. *Journal of Interactive Marketing*, 18, 1 (winter 2004), 53–69.
Appendix A.1. The Company Description Used in the Low Trust Condition

The following is excerpted from the Wall Street Journal [as of 11:50 a.m. EST Friday, September 9, 2007].

POOR RESULTS FROM AZIMUTH MOBILE NETWORK PROVIDER

Azimuth is a global provider of mobile services, offering consumer and corporate communications solutions. Headquartered in Birmingham, United Kingdom, the company operates in the UK, Germany, Ireland, and Canada.

Independently audited figures released by Azimuth today show that its sales have stagnated at just under 4 percent share of the UK market. Rather than develop relationships with a few select vendors, Azimuth purchases the bulk of what it sells from a variety of suppliers. As a result, there is a lack of consistency in the phone offerings. Further, independent evaluations by J.D. Power show Azimuth to be at the bottom of the heap of cell phone providers in customer satisfaction ratings. The primary cause of customer dissatisfaction appears to be Azimuth’s inability to provide adequate and timely customer service. These problems do not bode well for Azimuth’s entry into the U.S. market. Analysts believe that the company should focus on improving its performance in existing markets before testing new territories.

Commenting on the poor ratings, Derek McManus, head of Network Operations Azimuth UK, said: “We are committed to the continual improvement of our network quality. Our performance last year was a temporary setback and we believe that we are doing everything possible to take care of customer complaints.”

The following is excerpted from the Wall Street Journal [as of 11:50 a.m. EST Tuesday, September 20, 2007].

AZIMUTH DENOUNCES STANDARD & POOR’S RATINGS DOWNGRADE

Azimuth today expressed disappointment over Standard & Poor’s Ratings Services decision to downgrade its long-term corporate and senior unsecured debt ratings on the company to ‘BBB-’ from ‘BBB.’ The downgrade follows Azimuth’s interim results last week at which it posted its second significant loss almost exactly two years after becoming an independent, publicly listed company.

“While the company was optimistic regarding the future, we are concerned in the near term that poor supplier and customer relations is an indication of poor performance,” said S&P analyst Ray Munster. In response, Azimuth executives “forcefully” stated a case for increased investment in partner relations which is expected to show significant gains in the long term. David Finch, chief financial officer of Azimuth, said: “We are stunned that Standard & Poor’s has focused on our losses and ignored the significant strides we have made towards investment in infrastructure.

Complaints regarding poor customer service are sporadic and not endemic to the company. We are doing everything we can to take care of these minor issues.

In its statement, Standard & Poor’s noted: “The downgrade reflects Azimuth’s continued poor business performance, and the consistently low ratings on customer satisfaction. The company’s management needs to focus on improving customer service and vendor relations.”

### Wireless Ratings

J.D. Power 2007 Wireless Customer Care Performance Study SM

<table>
<thead>
<tr>
<th>Company</th>
<th>Customer Care Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vodafone</td>
<td>JD POWER AWARD</td>
</tr>
<tr>
<td>IDS Cellular</td>
<td></td>
</tr>
<tr>
<td>O2</td>
<td></td>
</tr>
<tr>
<td>Netline</td>
<td></td>
</tr>
<tr>
<td>ARJay Telecom</td>
<td></td>
</tr>
<tr>
<td>Azimuth</td>
<td></td>
</tr>
</tbody>
</table>

**About the ratings**

- Among the best.
- Better than most.
- About average.
- The rest.

Please note that J.D. Power Consumer Center ratings may not include all information used to determine J.D. Power and Associates awards.
The following is excerpted from the Wall Street Journal [as of 11:50 a.m. EST Friday, September 9, 2007].

AZIMUTH DELIVERS BEST EVER MOBILE NETWORK PERFORMANCE

Azimuth Ltd. is now poised to make a major breakthrough in the U.S. market, and is expected to be a significant player in the mobile and wireless market. Azimuth is a leading global provider of mobile services, offering consumer and corporate communications solutions. Headquartered in Birmingham, United Kingdom, the company operates in the UK, Germany, Ireland and Canada.

Independently audited figures released by Azimuth today show it to have the best ever mobile call success rate, beating all figures previously published by Ofcom, the regulator for the UK communications industries. For the period January 2007 to June 2007, Azimuth achieved an overall national call success rate of 99.2%. This figure is the highest ever published in the twice yearly Mobile Network Operators Call Success Rate Survey. Additionally, independent evaluations of cell phone providers by J.D. Power, rank Azimuth top of the list in customer satisfaction ratings.

Commenting on the achievements, Derek McManus, Head of Network Operations, Azimuth UK, said: “Our customers regularly tell us that network performance is an important part of the service we provide and we are committed to the continual improvement of our network quality. We set our people the target of delivering the best ever performance and they have worked around the clock to pull it off.”

The following has been excerpted from the Wall Street Journal [as of 11:50 a.m. EST Tuesday, September 20, 2007].

AZIMUTH WELCOMES STANDARD & POOR’S RATINGS UPGRADE

Azimuth today welcomed Standard & Poor’s Ratings Services decision to raise its long-term corporate and senior unsecured debt ratings on the company to ‘BBB’ from ‘BBB-‘ as well as assign a ‘stable outlook.’

The upgrade follows Azimuth's interim results last week at which it posted its first pre-tax profit almost exactly two years after becoming an independent, publicly listed company.

David Finch, chief financial officer of Azimuth, said: “We are pleased that Standard & Poor’s has acknowledged our further revenue and profit growth across our businesses in the UK, Germany and Ireland, whilst reducing net debt. As we move forward, we remain committed to maintaining our operational and financial momentum with initiatives such as the Tesco Mobile joint-venture and the new pan-European mobile alliance.”

In its statement, Standard & Poor’s noted: “The upgrade reflects Azimuth’s improved business performance, particularly in Germany, and its lower financial risk due to better than expected cash generation profile and resulting lower absolute debt. The company’s management is expected to continue its consistently prudent strategic, operational, and financial policies and execution.”

---

**Wireless Ratings**

J.D. Power 2007 Wireless Customer Care Performance Study

<table>
<thead>
<tr>
<th>Company</th>
<th>Customer Care Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azimuth</td>
<td>JD POWER AWARD</td>
</tr>
<tr>
<td>IDS Cellular</td>
<td></td>
</tr>
<tr>
<td>O2</td>
<td></td>
</tr>
<tr>
<td>Netline</td>
<td></td>
</tr>
<tr>
<td>ARJay Telecom</td>
<td></td>
</tr>
<tr>
<td>Vodafone</td>
<td></td>
</tr>
</tbody>
</table>

**About the ratings**

- 5/5 Among the best.
- 4/5 Better than most.
- 3/5 About average.
- 2/5 The rest.

Please note that J.D. Power Consumer Center ratings may not include all information used to determine J.D. Power and Associates awards.
Appendix B. Example Screens Images

Figure B.1. The Initial Page Requiring the User ID

Figure B.2. The Azimuth Home Page
Figure B.3. Compensation Conditions

A. “No compensation” condition

B. “Monetary compensation” condition

C. “Nonmonetary compensation” condition
KATIA PREMAZZI (katia.premazzi@sdabocconi.it) is an assistant professor in the Department of Management, Bocconi University, Milan, where she received her Ph.D. in business administration and management. She is a professor in the Marketing Department of the SDA Bocconi School of Management, where she is also a member of the Osservatorio Retailing research center. Her research and teaching interests include channel management, retail management, retail innovation, shopping behavior, trust, and corporate social responsibility.

SANDRO CASTALDO (sandro.castaldo@sdabocconi.it) is chair of the Marketing Department of the SDA Bocconi School of Management and full professor in the Management Department of Bocconi University, Milan, where he teaches marketing and channel management. He has a Ph.D. in business administration and management from Bocconi University. His current research interests are in trust, retailing, and channel relationships. His work in these and other areas has appeared in *Journal of Business Ethics*, *Industrial Marketing Management*, and *Journal of Service Management*. He recently coedited *Coopetition: Winning Strategies for the 21st Century* with G. Dagnino, F. Le Roy and S. Yami (Edward Elgar, forthcoming) and authored *Trust in Market Relationships* (Edward Elgar, 2007).

MONICA GROSSO (monica.grosso@unibocconi.it) is a Ph.D. candidate in business administration and management at Bocconi University, Milan. She collaborates as a researcher with the Osservatorio Retailing research center of the SDA Bocconi School of Management, Marketing Department. Her research interests are in retailing and channel management and, in particular, in private labels and collaborative relationships within distribution channels. She recently coauthored a paper published in *Industrial Marketing Management* investigating the role of third parties in facilitating collaboration between retailers and manufacturers.

PUSHKALA RAMAN (praman@twu.edu) is an associate professor of marketing at Texas Woman’s University, Denton. She received a Ph.D. in marketing from Texas A&M University and an MBA from the Indian Institute of Management, Ahmedabad, India. Her professional experience includes marketing research, sales, and strategic planning. Her current research interests are customer relationship management, information privacy, e-health information, and civic engagement. Her research has been published in the *Journal of Marketing*, *Journal of Personal Selling & Sales Management*, *Communications of the ACM*, and *Journal of Non Profit & Public Sector Management*.

SUSAN BRUDVIG (sbrudvig@bsu.edu) is an assistant professor of marketing at Ball State University. After a fifteen-year career in marketing research, she transitioned to academic research and became a college professor. She received her Ph.D. from Florida State University (2007) and holds an MBA from Purdue University. Her interests include research methods, database marketing, social media, and product launch.

CHARLES F. HOFACKER (chofack@cob.fsu.edu) has a Ph.D. in mathematical psychology from the University of California, Los Angeles, and is professor of marketing at Florida State University in Tallahassee. He was visiting professor at Bocconi University in 2001 and 2007. His research interests are at the intersection of marketing and information technology. His work in that and other areas has appeared in the *Journal of Marketing Research*, *Journal of Interactive Marketing*, *Journal of the Academy of Marketing Science*, *International Journal of Research in Marketing*, *Psychometrika*, and *Management Science*. Dr. Hofacker was recently appointed coeditor of the *Journal of Interactive Marketing*. He also currently serves as Webmaster for the American Marketing Association’s Academic Resource Center (ARC), a site that functions as a portal for marketing academics as well as an on-line repository of resources for the field. He is the moderator of ELMAR, an electronic newsletter and community platform for academic marketing with more than 6,500 subscribers, and is a member of several editorial review boards, including the *Journal of Service Research*. 