Engaging Consumers in Online Advertising: The Central Role of Perceived Value

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The Internet plays an important role in many companies' advertising strategies. According to Forrester Research, total interactive marketing spending will triple from \$18.4 billion in 2007 to \$61.3 billion in 2012 (VanBoskirk, 2008). Among the various forms of online advertising, emerging media such as social media and mobile are expected to grow the fastest at 59% per year. Although these numbers show phenomenal growth of online advertising, consumers' reaction toward online advertising did not improve over the years. To the contrary, online ad click-through rates have steadily declined, and some intrusive online advertising formats have stimulated intense negative reactions from consumers (Edwards, Li, & Lee, 2002; Elkin, 2004). The much-anticipated partnership between online advertising giant Google and a top social network Myspace has also produced disappointing results so far (Blodget, 2009). Despite its start as an interactive channel that should draw consumers, online advertising now faces the danger of becoming another "push" media and being rejected by consumers as with traditional advertising.

These developments run against the trend of integrated marketing communications (IMC). IMC purports the coordination of marketing activities to form a purposeful dialogue with stakeholders (Duncan, 2002), which implies the participation of consumers and a need to take consumer preferences into consideration. As a result, two-way interactive communication *with* (rather than *to*) consumers should be at the center of marketing communication efforts (Duncan & Moriaty, 1998). The same thinking is reflected in relationship marketing, which treats consumers as a partner in the marketing process and advocates a more intimate approach to marketing (Vargo & Lusch, 2004). This suggests that for advertising to be truly effective to today's more wary consumers, it needs to put consumers back into the equation and empower them while getting the message across.

Toward this end, this article draws upon communication and psychology literature to investigate consumers' varying degrees of online interaction tendency. Through qualitative and quantitative studies, it identifies the drivers of online interaction tendency and, in particular, the importance of value perception in engaging consumers in an online dialogue. Various ways of enhancing value perception are then suggested to guide advertisers in their effort to adapt their advertising strategies to the new online media.

Literature review Consumers as Active Participants

While traditional marketing communication strategies focus mostly on conveying information to and persuading consumers, recent theories argue for a much more active role of consumers in marketing (Stewart & Pavlou, 2002; Vargo & Lusch, 2004). Consumers are no longer just receivers at one end of the communication continuum but, instead, actively participate in the marketing process, including the development and distribution of advertisements. As a result, consumers co-construct the meaning of marketing messages and develop a more effective personal relationship with companies. Reflecting this line of thinking, Duncan and Moriaty (1998) argue that the key to communicating effectively with consumers is a two-way exchange built on balance, symmetry, and reciprocity. This calls for attention to consumers' needs and preferences in marketing communication.

Evidence of the need to attend to consumers' needs and preferences can be gleaned from research on attitude toward advertising and advertising avoidance. Studies in these areas show that advertising forms that are forced onto consumers without regard to their choice are generally received negatively (Shavitt, Vargas, & Lowrey, 2004). Ads in such forms are more likely to be avoided (Speck & Elliott, 1997) and tend to have adverse effects on brand recall and subsequent attitudes (Mehta, 2000). Supporting these academic findings, the advertising industry has witnessed in recent years the steady decline of dependence on TV commercials, an advertising form consistently rated as the most negative by consumers due to its intrusive and pushy nature (Mittal, 1994; Shavitt, Vargas, & Lowrey, 2004). Advertisers are now resorting to softer approaches such as product placement and are shifting their focus to less intrusive media such as the Internet. Taken together, academic and industry evidences point to a need to incorporate consumers' communication preferences into advertising.

The Role of New Media

Newly-emerged communication channels such as social networks have the most potential for incorporating consumer preferences into the advertising process and overcoming the negative denotation that comes with traditional push advertising. They are interactive media that allow two-way communication between consumers and advertisers (Kaplan & Haenlein, 2010). Through new online advertising tools, companies can now engage in fast, meaningful, and personal dialogue with consumers. The conversation with consumers can range from shallow exchange, such as providing an inquiring customer with product information, to deeper engagement with consumers in the form of customer participation in product design and customer service and immersive brand experience. At each step of the process, consumers can actively participate by offering feedback to companies and controlling the information they receive. All of this contributes to a potentially better understanding and incorporation of consumer needs and preferences, which should lead to more effective marketing communication.

In the meantime, the same characteristics of new media also present unique challenges to advertisers. One major concern that many advertisers have about new media is the loss of control (Kaplan & Haenlein, 2010). The fast-moving nature of the real-time Web gives advertisers less time to carefully craft their communication messages. The highly interactive capability of new media also endows consumers with more control. As a result, consumers tend to be more demanding and less tolerant of forced communication from advertisers. The more goal-oriented and high-involvement nature of social media use also means that disruption by advertisements will create more annoyance among consumers. Add to this the acute privacy concerns associated with personal social networks and mobile devices, and it can be even more challenging for advertisers to communicate with consumers effectively through these new channels without consumer reactance.

This equivocal nature of interactive communication is reflected in the interactivity literature. Although some existing studies have found interactive ads to be more persuasive than non-interactive ads (*e.g.*, Fortin & Dholakia, 2005; Sundar, Kalyanaraman, & Brown, 2003), other studies have revealed no or even negative effects of interactivity on persuasion (*e.g.*, Bezjian-Avery, Calder, & Iacobucci, 1998; Coyle & Thorson, 2001; Lohtia, Donthu, & Hershberger, 2003). Consequently, researchers have pointed out that interactivity may not be advantageous across all consumers and/or all situations (Liu & Shrum, 2002; Sohn, Ci, & Lee, 2007). These conflicting findings show the intricacies of interactive advertising messages differently according to their own needs.

The key consideration for an online advertiser, therefore, is to maximize the benefits of the self-selected and interactive nature of the new media, and in the meantime, avoid offensive and excessively-interactive advertising messages to consumers who do not want to interact. The first step toward this direction is to understand how much consumers are willing to use the new online media in an interactive fashion (rather than as a passive information source, as with traditional media) and what drives their desire to do so. To answer these questions, this research starts with a qualitative study to identify the drivers of online interaction tendency. These drivers are then tested in a large-scale survey.

Study 1: Antecedents of Online Interaction Tendency – A Qualitative Study

Method

To identify what affects consumers' tendency to engage in interactive online communication, a series of semi-structured interviews were conducted. Each interview lasted between 30-60 minutes and included questions on general Internet usage, as well as considerations related specifically to interactive online behavior. The respondents consisted of a convenience sample of 26 Internet users identified through personal contact with snowballing techniques. As this stage of the research is still exploratory in nature, the use of such a convenience sample is considered appropriate (Cooper & Schindler, 2006). Later, a large-scale survey is conducted to validate the findings from this qualitative study, as will be described later in the paper. Besides the qualitative interviews, a review of the relationship marketing literature and related communication and consumer psychology research was also conducted to identify possible factors.

Findings

The final set of antecedents identified from the qualitative interviews and literature review contained five main factors and fitted well into an abilitymotivation-opportunity framework similar to the advertising information processing model proposed by MacInnis and Jaworski (1989). Each of the factors is described in turn below.

Perceived value. Perceived value is defined as the perceived ability of online interaction to help fulfill a consumer's goals. Within the arena of dyadic communication and relationships, value perception is considered a key contributor to the decision to engage in interactive relationship-oriented behavior. Sheth and Parvatiyar (1995), for example, proposed that consumers are more prone to engage in relational market behavior if the behavior brings values such as efficiency and risk reduction. In an online environment, Ko, Cho, and Roberts (2005) found that consumers' needs for convenience and social interaction and the perceived ability of the Internet to fulfill such needs positively impact consumers' interaction intentions. Confirming these views, the respondents from the qualitative interviews offered various value-related reasons for engaging in interactive behavior online, such as social fulfillment, immediacy, convenience, and time-saving.

Perceived risk. While perceived value is a motivator of online interaction, perceived risk can deter a consumer from interacting online. Following Stone and Gronhaug (1993), perceived risk is defined as "subjective expectations of loss" (p.

42) as a result of interacting online. Research on traditional communication demonstrates a link between perceived risk and an individual's willingness to interact. When individuals perceive a certain situation to be risky, they are likely to withdraw socially and exhibit a reluctance to engage in interaction (McCroskey, 1984; Neuliep & Ryan, 1998). Risk is a central topic to online marketing (Olivero & Lunt, 2004). The virtual and personal nature of the social Web brings uncertainty and risk to online communication and may prevent consumers from interacting through such channels. For example, an advertiser may attempt to offer personalized product recommendations to a consumer based on the preferences of similar friends in the consumer's personal network. But if the consumer considers revealing such personal information as risky, this tactic is more likely to be treated as a violation of consumer privacy rather than as a helpful tool. During the interviews, a consumer said, "My overall level (of interacting online) is hindered by my uncertainty of security over the Internet." Another consumer mentioned, "I always provide fake information to companies when I am not familiar with whom they are, or I have a gut feeling they may use my information to harm me." The different degrees of concern about security and privacy issues can lead to variations in perceived risk and thus lead to different levels of willingness to engage in online interaction.

Technology expertise. Intuitively, consumers need to possess a certain level of technology expertise to engage in online interaction. During the interviews, consumers repeatedly mentioned their Internet/computer skills as a facilitator of online interaction or the lack of such skills as a barrier to online interaction. Consumers without the required technology expertise are likely to feel frustrated and will not be able to take full advantage of the interactivity provided to them (Hoffman & Novak, 1996). These findings are in line with Novak, Hoffman, and Yi's (2000) discovery that consumers with low technology expertise are less likely to experience an enjoyable state of flow when faced with the challenges of navigating through the Internet. When these consumers are exposed to interactive online advertising, they are less likely to find such ads appealing and are unlikely to engage in the type of interaction desired by advertisers.

Time-pressedness. Lack of time is a common syndrome of today's fast-paced lifestyle. This time-pressedness, felt to different degrees by different consumers, can have a double-edged effect on consumers' usage of the Internet. On one hand, consumers may use the Internet more because of its timesaving benefits (Alba et al., 1997). On the other hand, two-way communication is time consuming (Liu & Shrum, 2002). As a result, busy consumers may be reluctant to participate in involved forms of online interaction, such as viral marketing campaigns, even if they find the advertised product to be desirable. During the interviews, one respondent said, "I do

not spend any time chatting online, partly because I have no time." Another consumer expressed a similar sentiment, stating, "I would have interacted online more if I had the time to do so." Despite the motivation to interact online, these consumers lack the opportunity to do so.

Technology environment. Finally, online interaction at the minimum requires access to a computer or a mobile device with an Internet/data connection. Only when a consumer is regularly present in a technology-facilitative setting, his or her tendency to use the Internet for interaction purposes is likely to be high. The qualitative interviews suggested an impact from Internet connection speed. For example, one consumer mentioned in the interview, "The cost of high-speed Internet access and associated hardware limits my activity on the Internet. Video streaming, online conferencing, etc. are not feasible for me at this time." This is consistent with industry research that shows consumers with a faster broadband Internet connection engage in a wider variety of activities than consumers with slower connections (Horrigan, 2003).

Study 2: Consumer Online Interaction Survey

Data Collection

To test the antecedents of online interaction tendency identified through the qualitative interviews and the literature review, a mail survey of 1,000 Internet users in the mid-Atlantic region was conducted. The consumers' information was obtained from a commercial mailing list company. Three waves of mailing were used, starting with a pre-notification letter, followed by the questionnaire with a cover letter, and finally a reminder postcard (Dillman, 2000). Of 973 deliverable surveys, 369 questionnaires were returned, yielding a response rate of 38%. Follow-up phone calls were made randomly to consumers who did not respond to check for response bias. No significant difference was found between those who responded to the survey and this latter group. Seven returned questionnaires had most questions blank and thus were not included in the data analysis. The final sample size was 362. This final sample included consumers with a wide age range, from 18-years-old up to 83-years-old, with the median age being 47. Males and females were evenly distributed in the sample.

Measures

Online Interaction Tendency. Consumers' tendency to engage in interactive online communication was measured using the online interaction readiness scale developed by Liu (2006). The scale consists of 10 items measured on 7-point scales

anchored by "strongly disagree" and "strongly agree" (see appendix for a list of the items). The items were related to perception and treatment of the Internet as an interactive medium and to the use of specific online interaction mechanisms, such as instant messaging. An online interaction tendency score was derived by averaging each consumer's responses to the 10 items ($\alpha = .81$).

Technology expertise. The four-item, self-reported technology expertise measure ($\alpha = .84$) was taken from Novak, Hoffman, and Yung (2000). Although these authors added two other items to the original measure in their final survey, those two items did not show high reliability in pretests. Therefore, they were not included in the scale.

Perceived value. A perceived value measure was developed based on Parasuraman and Grewal's (2000) customer value framework and on the qualitative interviews discussed earlier. Since this research deals with the perceived value of online interaction rather than that of a specific product, the current measure focuses on two of the customer values proposed by Parasuraman and Grewal (2000) – acquisition value and in-use value. Acquisition value in the current context refers to the benefits derived from online interaction comparative to the cost of online interaction. In-use value refers to the utility derived from engaging in online interaction. Such utility can be both utilitarian and hedonic. Based on this framework, a total of six items were developed to measure perceived value ($\alpha = .88$), including an item measuring the overall perceived value of online interaction. The items are listed in the appendix.

Perceived risk. A perceived risk scale was developed based on the risk measures from Stone and Gronhaug (1993) and Cheung and Lee (1999). Although Stone and Gronhaug's (1993) scale has six dimensions, they found that all the other five dimensions influenced overall risk perception through psychological risk. Therefore, only the items for the psychological risk dimension were used. Their original items were reworded to reflect perceived risk in online interaction. Pretests were conducted to ensure the clarity and reliability of the perceived risk measure, and the final scale contained five items ($\alpha = 0.87$; see the appendix).

Time-pressedness. Consumers' time-pressedness was measured through the time dimension of the role overload scale developed by Reilly (1982). Three of the original items were deleted due to poor performance in pretests. The participants indicated to what extent they agree or disagree with each of the statements on a 7-point scale ($\alpha = .90$).

Technology environment. Consumers' technology environment consists of two elements: ease of computer access and type of Internet connection. Ease of computer access was measured by asking consumers whether they have a computer available

for their use most of the time. As to Internet connection, since many consumers often have Internet access both from work and from home, questions were asked on their Internet access both at home and at work, and the connection they use most often was used in the data analysis.

Data Analysis and Results

Model Fit. The proposed model was tested using structural equation modeling. A two-step approach was used, where the measurement model was first evaluated and the structural model was then estimated (Anderson & Gerbing, 1984). The measurement model showed a good fit. The chi-square of the model was 806.10 (*d.f.* = 385; p < .001), and the RMSEA was 0.074, which conforms to the recommended threshold of RMSEA no more than 0.08 (Hair, Anderson, Tatham, & Black, 1998). The NNFI was 0.92, and the CFI was 0.93, both exceeding the recommended threshold of 0.90 (Hair, Anderson, Tatham, & Black, 1998). All indicator loadings on their respective constructs were significant. The structural model was then estimated and also showed a good fit to the data, yielding a chi-square of 789.49 (*d.f.* = 384; p < .001) and RMSEA of 0.073. The NNFI for the model was 0.93, and the CFI was 0.94.

Antecedents of Online Interaction Tendency. Overall, the respondents indicated a relatively low level of tendency to interact online (M = 2.92). The individual scores

Figure 1. Antecedents and Consequences of Online Interaction Readiness

(a) Original Structural Model



ranged from 1.00 to 6.60. The low average score suggests that although the Internet is an interactive medium, consumers have yet to take full advantage of its interactive capabilities. Figure 1(a) shows the structural model with the estimated coefficients. Consistent with Study 1 findings, results showed a significant positive path from perceived value to online interaction tendency ($\beta = .47$; p < .001). The other motivation-related factor – perceived risk, however, did not show a significant impact. Given its significance in online consumer behavior, it is counter-intuitive that perceived risk would have no impact at all on online interaction tendency. A closer examination of the data revealed a rather high correlation between perceived value and perceived risk (r = .49). It is possible that perceived value mediated the effect of perceived risk.

To test whether perceived value indeed mediated the effect of perceived risk on online interaction tendency, we followed the procedure recommended by Brown (1997) for testing mediating effects using structural equation modeling. The original structural model was revised by adding an additional path from perceived risk to perceived value. The revised model yielded a chi-square of 809.33 (*d.f.* = 389; *p* < . 001) and RMSEA of 0.074. The NNFI for the model was 0.93 and the CFI was 0.94. The model coefficients are shown in Figure 1(b). As shown in the figure, perceived risk had a significant impact on perceived value (β = -.46; *p* < .001), and perceived value in turn significantly influenced online interaction tendency (β = .47; *p* < .001).

(b) Revised Structural Model that Incorporates the Mediating Role of Perceived Value



Furthermore, while there was a significant total effect (including direct and indirect effects) of perceived risk on online interaction tendency ($\beta = -.21, p = .002$). The direct effect of perceived risk was not significant ($\beta = -.01; p = .86$). The indirect effect of perceived risk through perceived value captured almost all of the effects of perceived risk. These findings suggest that perceived risk did have a significant negative impact on the desire to interact online. However, its effect was exerted through reducing consumers' perceived value of online interaction.¹

As expected, technology expertise had a positive effect on online interaction tendency ($\beta = .10$; p < .01). Easy access to a computer also had a significant impact on online interaction ($\beta = .17$; p < .001). However, having a broadband connection as the main way of accessing the Internet did not have a significant influence on online interaction tendency ($\beta = .06$; p = .08). This is potentially due to the widespread availability of high-speed broadband Internet access. For the time-pressedness factor, our results showed a significant negative effect of time-pressedness on online interaction tendency ($\beta = ..11$; p = .03). In other words, the double-edged effect of time-pressedness on online interaction tilted predominantly toward the negative side. A time-pressed consumer has limited time for extensive online interaction and thus will have a low desire to engage in interactive online communication.

Enhancing Value Perception

Although the relatively low levels of online interaction readiness found from the current survey send alarming signals to advertisers, the importance of value perception as a key driver of online interaction also suggests great promises. In fact, our analysis revealed perceived value as the most important driver, accounting for 21% of the variance in online interaction tendency. Out of the five antecedents, perceived value is also the factor that advertisers have the most potential influence over. The importance of this factor suggests that although many online ads have not been received well by consumers, advertisers can reverse the situation by enhancing the perceived value of their communication. In this section, we discuss a few ways of enhancing value perception of advertising through new media.

Sharing Control with Consumers

Although many advertisers are eager to interact with consumers, a traditional media mindset also inhibits many from giving up control of the advertising process. However, as the Internet moves toward an increasingly participatory environment, consumers are demanding more active engagement in online value creation activities, from solving other consumers' problems to contributing to human knowledge via

Wikipedia. These collaborative activities have created a new economic model that is likely to have far-reaching impact on the practice of advertising and branding (Tapscott & Williams, 2006). While the original Internet has already empowered consumers with richer information, the new collaborative 'net creates an even more demanding mindset. This new mindset asks for "ownership" of Web content and may require the same from advertisers. If advertisers are willing to relinquish their control and invite consumers to participate in advertising design and delivery, consumers will be more likely to engage in a true interaction with advertisers and other consumers. This strategy has proven successful in user-participated online video contests run by a wide range of advertisers, from non-profit organizations such as the Brooklyn Museum to well-known corporations such as Dunkin' Donuts. The key issue for advertisers to consider is in what ways consumers can be productively involved in the early stages of the advertising creation process, rather than only allowing interaction after an ad has been created.

Offering Social and Entertainment Values

While some skeptics dismiss the exponential growth of social networking and online communities as fads that will soon cool off, human beings' innate social nature suggests otherwise. This social transformation of the Internet is accompanied in the offline world by shrinking household size and increasing number of single-person households (Hobbs & Stoops, 2002). As traditional sources for social connection shrink, the Internet becomes an even more important source for satisfying consumers' social needs. In response to these needs, advertisers should consider how they can use their advertising to enhance consumers' social bonds. Successful brand communities, for example, bring consumers together under the umbrella of the brand and offer consumers a social environment with which they identify. These communities, in turn, provide advertisers with important market intelligence that helps design more effective advertising strategies in the future.

Besides informational and social values, past research also identifies entertainment as a main value provided by advertising (Ducoffe, 1995). When consumers browse online, their behavior is likely to fall into one of two types: goaloriented browsing or experiential browsing (Hoffman & Novak, 1996). For the former, information utility is key to these consumers, whereas consumers in the latter category are looking for an engaging and entertaining experience. While social values provided by advertisers can partially fulfill this latter purpose, entertainment can also be offered in combination with social values. For example, OfficeMax ran a highly successful ElfYourself campaign during two Christmas seasons (Lemonnier, 2008). By allowing consumers to create their own elves and send them to friends and families, OfficeMax's campaign brought a fun experience to consumers and enhanced consumers' social connections at the same time. This entertainment value may be especially important to advertisers who wish to target younger consumers, as statistics show that these consumers are much more likely to engage in experiential browsing than their older counterparts (Fox & Madden, 2006).

Providing Context-Specific Value

While enhancing the informational, entertainment, and social values of an ad is helpful, it is also important for advertisers to pay attention to the context of online ad exposure. On the Internet, consumers are no longer just media consumers at the time of ad exposure. Rather, they may be information searching, socializing, or conducting online transactions. Depending on what consumers are doing at the moment, they may be particularly receptive or resistant to a set of value propositions. For example, an ad that offers social benefits (*e.g.*, sharing a creative graffiti) may be more appealing when a consumer is messaging a friend than when the consumer is performing an information search task online.

Consistent with this context-specific view of value perception, consumer research has shown that task context primes consumers' mind for particular types of stimuli and can influence consumers' attention to and processing of information they come across (Chartrand & Bargh, 1996; Johnston & Dark, 1986; Kamins, Marks, & Skinner, 1991). The effectiveness of context-specific advertising has been demonstrated by the rise of search engine advertising in recent years. When consumers are searching for specific products, they are much more likely to be open to product suggestions. In a more cutting-edge setting, Nike demonstrated the importance of providing context-specific value through its Second Life campaign (Hemp, 2006). By providing Second Life avatars with shoes that allow these avatars to "run" faster in the virtual world, Nike showcased its products in a relevant way, in contrast with companies who merely furnish a space in Second Life that few consumers are interested in visiting.

Conclusions and Implications for Advertisers

Through qualitative interviews and a large-scale consumer survey, the current research identified the drivers of and barriers to consumers' inclination to engage in interactive online communication with advertisers. Findings show that skilled Internet users with a more facilitative technology environment are more likely to interact online, whereas both perceived risk and a busy lifestyle damper the willingness to interact. The most important driver of online interaction, however, comes from consumers' perceived value of an online interaction. Not only did

perceived value account for the largest proportion of variance, but it also mediated the effect of perceived risk on online interaction readiness.

These findings have important implications for online advertisers. Although the Internet is a highly interactive medium, it does not mean consumers always want to engage in an interaction with advertisers. The relatively low levels of online interaction readiness found in the consumer survey sample support this view. Thus, advertisers need to switch from a push mentality that often prevails in traditional advertising to a more adaptive online advertising strategy that carefully considers consumers' preferences. A key strategy for advertisers to consider is to enhance the value perception of their advertising offerings. This article suggests three ways of enhancing value: (1) sharing control with consumers at early stages of the advertising process; (2) adding social and entertainment values; and (3) providing value that is congruent with the context of ad exposure.

Besides enhancing value perception, the current research also suggests that advertisers should consider the exact audience they are talking to. More interactive advertising forms, such as viral advertising campaigns, advergames, and social network participation, are more appropriate for consumers who are experienced Internet users, have constant access to a personal computer, and have more free time in their hands. Such ads are also likely to be more effective for younger consumers. For consumers who are not quite technology-savvy or consumers who lead a busy lifestyle, more subtle online advertising, such as sponsorship or an informative-butstraightforward website may be more appropriate. Ultimately, an advertiser wants to enhance the value of their interactive online ads for the right audience to reduce resistance from consumers and achieve higher effectiveness.

Appendix: Key Survey Measures

Online Interaction Tendency:

- 1. I feel comfortable creating friendship online.
- 2. I am open to meeting new people on the Internet.
- 3. I have never really used the Internet for social activities outside of keeping in touch with friends and family via email*.
- 4. If given the time and opportunity, I would have mingled on the Internet more
- 5. The idea of online instant messaging is really attractive to me.
- 6. I enjoy interacting with others online via email, chatting, etc.
- 7. I use the Internet mostly for social reasons such as emailing friends and

families and participating in online discussions.

- 8. For me, the Internet is more like an information source than a communication tool*
- 9. I actively participate in online interaction activities such as email, chatting, and group discussion.
- 10. I depend on the Internet for most of my day-to-day interaction.
- * These items were reserve scored.

Perceived Value:

- 1. The Internet is an indispensable communication tool.
- 2. I have benefited a lot from online interaction.
- 3. The ability to interact with companies and other individuals on the Internet is really valuable to me.
- 4. Communicating online has allowed me to accomplish my goals quickly.
- 5. I am really glad that I have learned how to use the Internet to communicate with others.
- 6. Online interaction brings me a lot of enjoyment.

Perceived Risk:

- 1. Communicating on the Internet makes me feel uncomfortable.
- 2. I find it risky to communicate with businesses on the Internet.
- 3. The thought of online interaction makes me feel anxious.
- 4. I find it risky to communicate with other people on the Internet.
- 5. I feel nervous when interacting online.

Note: The items were measured on 7-point scales anchored by "strongly disagree" and "strongly agree."

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