Selling Webtrust: An Exploratory Examination Of Factors Influencing Consumers' Decisions To Use Online Distribution Channels

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Abstract

This exploratory study uses open-ended questions in the context of an actual WebTrust site to identify antecedents of consumer's decisions to use online distribution channels. Important antecedents identified include attention to the WebTrust seal, general attitudes toward online transactions, general likelihood of purchasing online, online transaction expectations for the site, desire for personal contact, perceived convenience, perceived credibility of the site and concerns about low information security. These results imply that practitioners can add value to their WebTrust services by helping clients recognize and adequately respond to these antecedents.

Introduction

With the advent of WebTrust, accountants are providing assurances about online transactions to consumers who may otherwise hesitate to engage in electronic commerce. To adequately anticipate consumers' responses to the WebTrust service, professionals must have a thorough understanding of the many determinants of consumers' decisions to utilize online distribution channels.

Previous research has addressed the importance of consumers' expectations and purchase intentions in the purchase of generalized

products and services (Oliver 1997). However, if the WebTrust service is to be successful, research dealing with expectations and purchase intentions needs to be targeted more specifically at consumers' decisions to use online distribution channels, which are the intended focus of WebTrust. Therefore, this study explores a number of factors influencing consumers' decisions to use online distribution channels. The primary purpose of the study is to identify factors that weigh heavily in consumer's decisions about online purchasing. Other researchers (Yankelovich 1997, Griffin et al. 1997) have used surveys to examine determinants of consumers' online purchasing behavior. However, our study is unique in that, (1) using open-ended questions, it al-

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lows consumers to identify those factors that are important to their decisions to use an online distribution channel, and (2) it studies consumer behavior in the context of a purchasing decision using an actual WebTrust site.

Through the open-ended questions, consumers identify five important antecedents of their decisions to use online distribution channels. These factors are (1) concerns about low information security, (2) previous online experience, (3) perceived convenience of purchasing online, (4) desire for personal contact, and (5) perceived credibility of the web site.

In addition to these consumer-identified factors, the study specifically measures five general and site-specific factors expected to act as antecedents to consumers' decisions to use online distribution channels. General measures examined include general attitudes toward online transactions and general likelihood of purchasing online. Site-specific factors examined include consumers' attention to the WebTrust seal, consumers' online transaction expectations for the site and consumers' intent to purchase online from the site. Guided by the exploratory research model shown in Figure 1, potential relationships among these measured factors and the consumer-identified factors are then examined.

Observed relationships between the consumer-identified factors and the measured variables are shown in Figure 2. In particular, general attitudes toward online transactions, attention to the WebTrust seal, desire for personal contact, perceived convenience of purchasing online and perceived credibility of the web site all are significantly related to expectations of online transactions for the web site. Additionally, expectations of online transactions for the web site, attention to the WebTrust seal, general likelihood of purchasing online, concerns about low information security and perceived credibility of the web site are significantly correlated with intent to purchase online from the web site.

The remainder of this manuscript is organized as follows. First, the exploratory research model and rationale for the measured variables in the study are examined. Second, the research method is described. Third, results are examined. Finally, limitations and conclusions are discussed.

Background and Model Development

The exploratory research model that serves as the basis for data analysis in the study is shown in Figure 1. A primary purpose of the study is to determine, through open-ended questions of potential consumers, what factors have the greatest influence on consumer's decisions to use an online distribution channel. This purpose of the paper is highly exploratory in nature. Because of this, these consumer-identified factors are illustrated using a single box in Figure 1. Dashed lines show potential relationships between these consumer-identified factors and two immediate antecedents of consumers' decisions to use online distribution channels -- expectations for online transactions at the site and intent to purchase online from the site. The importance of these antecedents to consumers' decisions to use online distribution channels, as well as the importance of other measured variables in the study, are discussed in the following sections.

Expectations, Purchase Intentions and Choice of Online Distribution Channels

A review of the marketing research suggests two important factors that will act as direct antecedents of consumers' decisions to utilize online distribution channels -- online transaction expectations for the site and intent to purchase online from the site. Consumer expectations, defined in the marketing literature as pre-purchase probability assessments that a product possesses certain characteristics, have been shown to have an important influence on decision making in a variety of marketing contexts (Oliver and Winer 1987). Not surprisingly, consumers who expect a product to possess

characteristics of interest to them are generally more willing to purchase that product (Oliver 1997). However, expectations may not lead directly to purchasing behavior. A variety of circumstantial factors may interfere with individuals' ability to purchase, despite their expectations related to the product (Fishbein and Ajzen 1975, Morrison 1979, Kalwani and Silk 1982). As a result, marketing research often measures purchase intentions instead of actual purchasing behavior. Measuring purchase intentions allows marketers to factor out the noise created by these other circumstantial factors, which are often outside of the marketer's control, and to overcome challenges associated with measuring actual purchasing behavior.

Despite logical and empirical arguments for utilizing purchase intentions as an indicator of actual purchasing behavior (Fishbein and Ajzen 1975), research using purchase intentions has shown equivocal results (McQuarrie 1998, Morrison 1979, Juster 1964). However, studies conducted by Warshaw (1980) imply that difficulties using purchase intentions as indicators of actual purchasing behavior result from lack of specificity in measuring intentions. Warshaw's research suggests that intentions related to the product and intentions related to the distribution channel should be examined separately to most effectively predict purchasing behavior. In his research, Warshaw examined both consumers' intent to purchase a particular brand of soft drink and their intent to use three different distribution channels, vending machine, store or restaurant/bar. Results indicate that a more accurate prediction of behavior is possible when these variables are measured separately.

Consistent with Warshaw's work and the focus of WebTrust, this study separates the intent to purchase a product from the intent to purchase the product online from a particular web site. Intent to purchase online from the web site (which is the variable measured in the study) reflects consumers' probability of purchasing via the Internet from a particular site.

Though Warshaw does not directly address expectations, Fishbein and Ajzen (1975) make strong arguments regarding the importance of measuring expectations, intentions and behavior at the same level of specificity. Therefore, this study also separates expectations about the product from online transaction expectations for the web site. Only online transaction expectations for the site, which refer to consumers' pre-purchase probability assessments regarding characteristics of online transactions, are measured. For purposes of this study, both expectations and purchase intentions related to the product itself are held constant.

Based on past marketing research (Oliver 1997), the exploratory research model in Figure 1 shows online transaction expectations for the web site as an antecedent of intent to purchase online from the site, which in turn influences the actual behavior of interest, decisions to use online distribution channels. As shown in Figure 1, several other factors are expected to influence behavior indirectly through these two behavioral antecedents. These other factors include consumer-identified factors, elicited during the study using open-ended questions, and three items that are specifically measured as part of the study -- attention to the WebTrust seal, general attitudes toward online transactions and general likelihood of purchasing online. The next two sections discuss the rationale for these three measured factors.

Attention to the WebTrust Seal

The AICPA (1997) has defined assurance services as "independent, professional services provided by Certified Public Accountants (CPAs) designed to improve the quality of information, or its context, to aid decision makers." Financial statement audits are the traditional assurance services provided by CPAs, but a wide variety of other assurance services are either provided by or are under development by the profession.

Figure 1
Exploratory Research Model

The AICPA developed the WebTrust service with the expectation that businesses would value a service that could potentially increase consumers' confidence in online distribution channels and therefore their decisions to use these online distribution channels. In providing the service, CPAs examine the company's business practices as they relate to online transaction processing, security and confidentiality in accordance with the WebTrust Principles and Criteria. Businesses that satisfactorily meet this set of evaluative criteria are then allowed to display the CPA WebTrust seal on their web site.

By clicking on the seal, consumers can view the WebTrust assurance report, information about the WebTrust Principles and Criteria and disclosures related to the company's business practices. They can also verify the authenticity of the seal by viewing the digital ID for the site. The WebTrust service is predicated on the belief that seeing the WebTrust seal and viewing the disclosures (collectively defined as attention to the WebTrust seal) will influence consumers' decisions to use online distribution channels. No research is available to suggest the exact means through which the WebTrust service will influence these decisions. Therefore possible relationships between attention to the WebTrust seal and both online transaction expectations for the site and intent to purchase online from the site are shown as dashed lines in the exploratory research model shown in Figure 1.

Other Measured Factors

Marketing research (Oliver 1997, Solomon 1994) acknowledges that expectations and purchase intentions vary in their level of abstraction, being either general or specific. General expectations and purchase intentions are frequently referred to as attitudes, reflecting their more enduring and less context-specific nature. Accordingly, in an online purchasing decision, consumers are expected to have attitudes about online transactions in general and about their own general likelihood of purchasing online. Previous

research by the AICPA (1997) reveals that many individuals have strong, negative attitudes towards online purchases. Though the purpose of WebTrust is to overcome these negative feelings, the degree to which this is possible depends upon the strength of these feelings. Therefore, when faced with an actual decision whether to purchase a specific product online from a particular web site, it seems reasonable that these more enduring attitudes will influence consumers' online transaction expectations for that web site and consumers' intent to purchase online from that web site. These relationships are shown in Figure 1.

The Study

The subjects in the study were 231 college-age consumers enrolled in an introductory management information systems course at a large Midwestern university. Like typical online consumers, these subjects are younger and more highly educated than traditional consumers (OECD 1998). Furthermore, because younger consumers are generally more likely to purchase online (Kotkin 1998), these subjects provide a fairly conservative test of the effects of WebTrust. Ashton and Kramer (1980) have also shown that for tasks involving information processing and decision making, college students make decisions that approximate those made by the rest of the general population.

These potential consumers were required to evaluate their likelihood of making an online purchase from CreativeKids, an actual web site bearing the WebTrust seal. For purposes of this study, CreativeKids was chosen because it was the only retail site bearing the WebTrust seal at that time. The study itself consisted of set of pre-test questions, the treatment, which involved exploring the CreativeKids web site and determining whether they would purchase a specified item using the online distribution channel, and a series of post-test questions.

The independent variables in the study were general attitudes toward online transactions, general likelihood of purchasing online, attention to the WebTrust seal and other potential determinants of decisions to use online distribution channels as identified by subjects in the study. The dependent variables were online transaction expectations for the CreativeKids' web site and intent to purchase a particular product (Orly's Draw a Story) online from the CreativeKid's web site. Each of the independent and dependent variables was measured at the appropriate time during the study, as described below.

General attitudes toward online transactions are not specific to any particular product or web site. Therefore, they were measured as part of a pre-test battery of questions. This variable was measured using the following six statements:

- My credit card number or other personal information will be protected if I make an online purchase.
- Returns and warranties related to the online transaction will be processed efficiently.
- The web site will get my online transaction right, such as the product ordered, quantity shipped and delivery address.
- The product I purchase online will be of good quality.
- Companies that sell online are financially sound.
- Every transaction conducted online is audited and will be dealt with correctly.

Subjects indicated their agreement with these statements using a 5-point, Likert-type scale anchored by 'strongly disagree' and 'strongly agree,' such that higher (lower) expectations correspond with higher (lower) scores.

These six statements reflect a variety of consumer concerns related to online transactions. Because our study is directed at developers of the WebTrust service, the first three statements reflect concerns that the WebTrust service in-

tends to address: (1) safety of credit card and personal information, (2) accuracy of transaction processing, and (3) processing of returns and warranties. However, these first three statements do not reflect a number of concerns previously expressed by consumers. For example, consumers have also noted their concerns about the authenticity of the online retailer as well as the legitimacy and quality of the products being offered (Gray and Debreceeny 1998, Primoff 1998, U.S. Department of Commerce 1998).

Because consumers' general attitudes toward online transactions may be strongly influenced by factors other than those that the WebTrust service explicitly addresses, we included the last three statements. These statements address consumer concerns about (1) product quality, (2) financial soundness of the online retailer and (3) audits of every transaction. Thus, our final measure of general attitudes toward online transactions includes six statements reflecting consumer concerns about online transactions.

Online transaction expectations for the CreativeKids web site were measured as part of the post-test battery of questions to avoid biasing subjects' decision-making processes through the demand effects that might result from such questions. Online transaction expectations for the site were measured using the same six statements as were used to measure general attitudes toward online transactions. However, each statement specifically referred to the CreativeKids web site. For example, the first statement was altered to read, "My credit card number or other personal information would be protected if I made an online purchase from CreativeKids."

Like general attitudes toward online transactions, general likelihood of purchasing online reflects a belief that is not specific to any particular product or web site. Thus, general likelihood of purchasing online was also measured as part of the pre-test battery of questions. Subjects were instructed to assume that they had identified a product that they wished to purchase.

They were further instructed to assume that the item was valued at \$25 and was available online. Subjects were then asked to indicate their level of agreement with a single statement that they would purchase the item online.

To measure intent to purchase online from the CreativeKids web site, subjects were asked to go to the site and make a purchase decision. Immediately after completing the pre-test questions, subjects received the treatment and were given approximately one and one-half weeks to complete it. The treatment, which was part of a regular classroom assignment dealing with finding items on the World Wide Web, required subjects to visit the CreativeKids web site.

To remove the effect of product-related factors, subjects were instructed to assume they were interested in buying a specific product and their only decision involved whether they would buy the product online from CreativeKids or using other channels. Subjects were then asked to explore the web site. After exploring the site, subjects responded to a statement that asked them to evaluate the likelihood they would make an online purchase of the specified product offered at the CreativeKids site.

Attention to the WebTrust Seal was measured after subjects had made their purchase decision. In the post-test, subjects were asked to identify (1) whether they noticed the WebTrust seal and (2) whether they clicked on the WebTrust seal to view the additional disclosures provided. Based on these responses, a three-level variable was developed. The levels were 0 - did not notice the seal, 1 - noticed the seal, and 2 - noticed and clicked on the seal. Subjects responded to these questions during the post-test to avoid demand effects that might have resulted from asking about the WebTrust seal while subjects were assessing their purchase intentions.

To identify factors other than WebTrust that influenced consumers' expectations and purchase intentions, during the treatment phase of

the study, subjects were also asked to describe any factors that influenced their decision about how to purchase the product, i.e. online or otherwise. Subjects were urged to consider attributes like the characteristics of the web site, the statements made on the web site, and their general feelings about purchasing online versus using other means. Subjects were reminded to assume they had already decided to purchase the product.

Results

This section presents the results of analyses performed on the consumer-identified factors influencing decisions to use online distribution channels and descriptive statistics for the measured variables. Then, this section presents results of two separate regression analyses using online transaction expectations for the site and intent to purchase online from the site as dependent variables.

Consumer-Identified Factors Influencing Decisions to Use Online Distribution Channels

We compiled and analyzed subjects' responses to the open-ended question about factors influencing their decision to use online distribution channels. Two different researchers separately analyzed and classified a sample of subject responses. Their classifications were combined to derive a final set of five broad categories of concerns used to code subjects' responses. These categories are shown near the bottom of Figure 2, which also shows actual relationships between these factors and other measured factors in the study.

The categories of consumer-identified factors are summarized in Table 1. The categories were low information security, previous online experience, desire for personal contact, perceived convenience, and perceived credibility of the web site. Each of these factors is discussed separately below.

Figure 2
Summary of Results
Regression Coefficients (p-values)

¹ Previous Online Experience was identified by participants as a factor influencing their use of online distribution channels, but was not significantly related to either expectations of online transactions for the site or intent to purchase online from the site.

Low Information Security -- Of the 231 subjects, 134 (58%) subjects expressed concerns about low information security. These subjects commented about the general safety of web sites (20), credit card security (106) and the security of personal information given over the Internet (20). This factor was coded between 0 and 3, depending on how many of the three security-related factors that they mentioned (1=122, 2=12 and 3=0). The presence of more concerns about low information security is expected to have a negative influence on decisions to use online distribution channels.

Previous Online Experience -- Twenty-three (10%) subjects acknowledged the effect of their previous online experience. These subjects commented either about their positive previous experiences purchasing online (9) or about their limited experience with computers and/or purchasing online (14). As a result, this factor was coded as 0 (did not mention experience), -1 (lack of previous experience) or 1 (previous positive experience). This variable is expected to have a positive relationship with decisions to use online distribution channels.

Desire for Personal Contact -- Fifty-four (23%) subjects expressed desire for personal contact, either with a salesperson or with the product itself, as an important decision factor. This variable was coded as 0 (did not mention desire for personal contact) or 1 (mentioned desire for personal contact). This variable is expected to have a negative relationship with deci-

sions to use online distribution channels.

Perceived Convenience -- Fifty-three (23%) subjects cited the level of convenience as a reason that affected their decision to purchase online. Some subjects perceived purchasing online as inconvenient (16) while a greater number perceived purchasing online as convenient (37). Thus, this variable was coded as 0 (did not mention convenience), -1 (online is less convenient) or 1 (online is more convenient). This variable is expected to have a positive relationship with decisions to use online distribution channels.

Perceived Credibility of the Web Site -- A significant portion of subjects, 113 (49%), cited one or more attributes related to the credibility of the site as reasons for their purchase decisions. These attributes included the use of encryption (44), the legitimacy of the business (49), the stated business practices (12) and the professionalism of the site (34). This variable was coded from 0 to 4, depending on how many of these credibility-related factors were mentioned by the subject (1=82, 2=28, 3=3, 4=0). Because all subjects mentioned these factors in a favorable light, this variable is expected to have a positive relationship with decisions to use online distribution channels.

Descriptive Statistics for Measured Variables

Referring to Figure 1, the five measured variables considered in this study are online transaction expectations for the site, intent to

Table 1
Consumer-Identified Factors Influencing Decisions to Use Online Distribution Channel

Factor	# of Subjects	% of Subjects	Expected Relationship with Decisions to Use Online Distribution Channels
Concerns about Low Information Security	134	58%	negative
Previous Online Experience	23	10%	positive
Desire for Personal Contact	54	23%	negative
Perceived Convenience	53	23%	positive
Perceived Credibility of the Web Site	113	49%	positive

Table 2
Descriptive Statistics

Variable	Mean	Std Dev.	Minimum	Maximum
Attention to the WebTrust seal	.86	.83	0	2
General Attitude toward Online Transactions	3.15	.54	1	5
General Likelihood of Purchasing Online	3.36	1.18	1	5
Online Transaction Expectations of the Web Site	3.44	.44	2.33	5
Intent to Purchase Online from the Web Site	3.17	1.21	1	5

purchase online from the site, general attitudes toward online transactions, general likelihood of purchasing online and attention to the WebTrust seal. Means and standard deviations for each of the five variables are presented in Table 2. For the attention to the WebTrust seal variable, of the 231 subjects in the study, 98 (42%) did not notice the WebTrust seal; 68 (29%) only noticed the WebTrust seal; and 65 (28%) both noticed and clicked on the seal. These levels of attention were coded as 0 (did not notice the seal), 1 (noticed the seal) and 2 (noticed and clicked on the seal). This resulted in a mean attention score of .86.

measure general attitudes toward online transactions and online transaction expectations for the site are shown in Table 3. Cronbach's coefficient alpha for the attitude measure was .81. Alpha for expectations was .74. In addition, factor analyses suggested that in both cases, all six statements loaded on a single factor. Factor loadings ranged from .58 to .78, indicating strong relationships between the statements and the underlying factors. Given the favorable factor analysis results, the means for the individual statements were averaged to obtain single measures of general attitudes toward online transactions and online transaction expectations for the web site.

The means for the six statements used to

Table 3
General Attitudes toward Online Transactions and Online Transaction Expectations for the Web Site
mean (standard deviation)

Item	General Attitude Towards Online Transactions	Online Transaction Expectations for the Site
My credit card number or other personal information will be protected if I make an online purchase.	2.79 (.96)	3.42 (.82)
Returns and warranties related to the online transaction will be processed efficiently.	3.18 (.75)	3.42 (.70)
The web site will get my online transaction right, such as the product ordered, quantity shipped and delivery address.	3.49 (.76)	3.64 (.64)
The product I purchase online will be of good quality.	3.42 (.66)	3.48 (.60)
Companies that sell online are financially sound.	3.09 (.67)	3.31 (.52)
Every transaction conducted online is audited and will be dealt with correctly.	2.93 (.74)	3.29 (.65)
Total Score Coefficient Alpha	.81	.74
Total Score Range of Factor Loadings	.63-.78	.58-.77

Antecedents of Online Transaction Expectations for the Site

The model shown in Figure 1 suggests seven potential determinants of online transaction expectations -- attention to the WebTrust seal, general attitudes toward online transactions and the five consumer-identified factors arrived at through open-ended questions. Results of a regression analysis between these variables and online transaction expectations are shown in Table 4. The independent variables in the regression model explain 35% of the variability in online transaction expectations for the web site. The regression also indicates that both measured variables -- attention to the WebTrust seal and general attitudes toward online transactions -- are significant determinants of online transaction expectations ($p < .05$).

Of the consumer-identified factors, three -- desire for personal contact, perceived convenience and perceived credibility of the web site -- were significantly related to online transaction expectations for the site ($p < .05$). In addition, the direction of each effect was as expected. Desire for personal contact was negatively related to online transaction expectations for the site, while perceived convenience and perceived credibility of the web site were both positively

related to online transaction expectations for the site. Low information security and previous online experience were not significantly related to online transaction expectations for the site.

Antecedents of Intent to Purchase Online from the Site

Figure 1 identifies eight potential determinants of intent to purchase online from the web site -- online transaction expectations for the web site, attention to the WebTrust seal, general attitudes toward online purchasing and the five consumer-identified factors arrived at through open-ended questions. Results of a regression analysis between these variables and intent to purchase online from the site are shown in Table 5. The independent variables in the regression model explain 41% of the variability in intent to purchase online from the web site. Results suggest that all three measured variables -- online transaction expectations for the web site, attention to the WebTrust seal and general likelihood of purchasing online -- are significantly related to intent to purchase online from the web site ($p < .05$).

Of the consumer-identified variables, only two were significantly related to intent to purchase online from the web site ($p < .05$). As ex-

Table 4
Regression Results for Online Transaction Expectations for the Web Site¹

Factor	Regression Coefficient	Expectations Type 3 F(p)
Intercept	2.23	
General Attitude Toward Online Transactions	.35	62.37 (.0001)
Attention to the WebTrust Seal	.09	9.61 (.0022)
Low Information Security	-.02	.17 (.6843)
Previous Online Experience	.12	2.49 (.1157)
Desire for Personal Contact	-.13	4.79 (.0296)
Perceived Convenience	.14	7.41 (.0070)
Perceived Credibility of the Web Site	.08	5.39 (.0212)

¹ N = 231; R² = 35%

Table 5
Regression Results for Intent to Purchase Online from the Web Site¹

Factor	Regression Coefficient	Expectations Type 3 F(p)
Intercept	-.78	
Online Transaction Expectations for the Site	.83	26.93 (.0001)
General Likelihood of Purchasing Online	.29	27.40 (.0001)
Attention to the WebTrust Seal	.20	6.49 (.0115)
Low Information Security	-.29	6.50 (.0114)
Previous Online Experience	.32	2.35 (.1270)
Desire for Personal Contact	-.13	.65 (.4218)
Perceived Convenience	.01	.00 (.9651)
Perceived Credibility of the Web Site	.29	10.04 (.0017)

¹ N = 231; R² = 41%

pected, low information security was negatively related to intent to purchase online and perceived credibility of the web site was positively related to intent to purchase online from the web site. The remaining variables -- previous online experience, desire for personal contact and perceived convenience -- were not significantly related to intent to purchase online from the web site.

Limitations and Conclusions

The results reported in the previous section point to some interesting conclusions about consumers and WebTrust. However, it is important to remember that these results were obtained using a single web site and a single consumer population. Significant differences between this web site and others, or between these consumers and other online consumer groups could affect the reported results. While these limitations should be considered in evaluating the results, this study still makes a meaningful contribution to our understanding of factors, including WebTrust, that influence consumers' decisions to use online distribution channels.

Specifically, the results of our study suggest that online transaction expectations for a

web site are significantly influenced by attention to the WebTrust seal and general attitudes toward online transactions. The study further suggests that consumers' intent to purchase online from a web site is significantly related to online transaction expectations for the web site. In addition, attention to the WebTrust seal and general likelihood of purchasing online both have direct effects on consumers' intent to purchase online. The significance of attention to the WebTrust seal supports not only the value of the service, but it also shows the importance of prominently displaying the seal. On the other hand, the significance of general attitudes toward online transactions on online transaction expectations of the site and general likelihood of purchasing online on intent to purchase online from the site suggest that stable characteristics of the individual consumer must also be considered.

In addition, this study provides insight regarding other factors which consumers report as determinants of their decisions to purchase online. These other factors are low information security, previous online experience, desire for personal contact, perceived convenience and perceived credibility of the web site. Of these, desire for personal contact, perceived conven-

ience and perceived credibility of the web site all significantly influenced online transaction expectations for the site. Additionally, low information security and perceived credibility of the web site had significant, direct effects on consumers' intent to purchase online from the site. These results imply that practitioners can add value to their WebTrust services by helping clients recognize and adequately respond to these factors. For example, clients can increase the consumers' perceptions of their credibility by ensuring the attractiveness, navigability and information content of the web site or bringing attention to the security features of the web site.

Suggestions for Future Research

Though this study provides preliminary evidence of the antecedents to decisions to use online distribution channels, future research can better define the role of each of the factors identified here. Future research should examine each of these factors in a controlled setting, testing the effects of manipulating these factors. Additionally, future research could examine the relative importance of each of these factors in different industries and online environments. Finally, the importance of general attitudes toward online transactions and general likelihood of purchasing online in predicting choice of distribution channel suggests that future research in the area should address the extent to which these general attitudes can be positively influenced.

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Notes