The Influence Of Webtrusttm On Purchases

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ABSTRACT

We investigate the effect of the AICPA's WebTrust seal on a company's web site on the decision to purchase a product from a traditional store or on-line via the Web. We also assess the effect of providing training about web certification on subject's decisions to purchase via a traditional store or on-line. In this study, we find that the presence of a WebTrust seal is not associated with more on-line purchases than when the WebTrust seal is not present. Further, we find that providing training about web certification does not increase the likelihood of a purchase being made on-line rather than through a traditional store.

INTRODUCTION

hile estimates of consumer business activity on the Internet vary greatly, data indicate a tremendous growth in sales and staggering sales volumes in years to come. It is also widely recognized that some consumers lack trust and confidence in web sites and the security of their information. These factors deter many people from using the Internet for purchases (Odom, Kumar, and Saunders 2002; Gray and Debreceny 1998; Melancon 1997). Some consumers forego the Internet entirely, while others use the net to find a product, but purchase through an alternative method such as mailing a form that was printed from the web site or calling a toll-free number to place an order.

To help alleviate consumer concerns about web sites and information security, several institutions have marketed third-party assurances that retailers can provide consumers. These include BBB OnLine (Better Business Bureau), TRUSTe (Electronic Frontier Foundation and CommerceNet), and WebTrust (AICPA/CICA). Each of these products attempts to target a segment of the consumers' concerns regarding information security and web site integrity. Yet, little is known about the actual effect these assurance services have on consumers.

This study evaluates the effect of the AICPA's WebTrust seal on consumer decisions regarding the acquisition of a product. Subjects' were required to procure an item and were given the option of purchasing from the Internet or a traditional retail store. This study found that the existence of a WebTrust seal did not influence the purchase decisions of the subjects. In addition, the results were not affected by the subject's age, Internet experience, or computer availability.

The details of the study are presented as follows: Section 2 discusses WebTrust and prior research. Section 3 provides the hypothesis development. Section 4 describes the methodology. Section 5 presents an analysis of results and Section 6 states our conclusions.

WEBTRUST And PRIOR RESEARCH

The WebTrust Seal

WebTrust is designed to increase consumer trust and confidence in electronic commerce. At the time this study was conducted the WebTrust seal provided the following assurances to the consumer:

• Business Practice Disclosure--The entity discloses its business practices for electronic commerce transactions and executes transactions in accordance with its disclosed business practices;

- Transaction Integrity--The entity maintains effective controls to ensure that customers' orders placed using electronic commerce are completed and billed as agreed; and
- Information Protection--The entity maintains effective controls to provide reasonable assurance that private customer information obtained as a result of electronic commerce is protected from uses not related to the entity's business.

The AICPA has changed the professional guidance for WebTrust Certification since this study was conducted. The AICPA and the Canadian Institute of Chartered Accountants (CICA), developed WebTrust Service to provide assurance on the reliability of Internet websites to consumers and SysTrust Service that focused on a company's system as a means of increasing the reliability of business-to-business computer transactions. The guidelines for these two services have been combined as a common Trust Services framework that addresses risks and technological opportunities for both of these assurance services. In general, a practitioner who is performing a Trust Service today must address the following principles: security, availability, processing integrity, privacy, and confidentiality.

A specially licensed CPA or CA is hired by the business to render the WebTrust assurance service for its web site. The entity is allowed to display the WebTrust Seal as long as the entity adequately maintains the assurances required as verified by examination of the business and web site every three months. For disclosure purposes, consumers are able to access: (1) the business policies; and (2) the auditor's opinion regarding business practice disclosures, transaction integrity, and information protection by clicking on the WebTrust seal.

Prior Research

Odom, Kumar, and Saunders (2002) conducted a set of three studies that focused on determining online consumers fears and concerns, examining whether the leading brands of web assurance seals could help alleviate those fears, and gaining insights into the process by which web assurance seals could influence consumers' online purchase decisions. They found seven distinct consumer concerns regarding online purchases that included security of transactions, customer support, and quality of product or service, legitimacy of the selling firm, price, privacy, and documentation. Their studies also found that there was a gap between the concerns of online customers and their perceptions of the assurances offered by web assurance seals. In their second study, they found that recognition and familiarity of web assurance seals influenced consumer online purchase decisions. They also found that the number of relevant associations that online consumers made with a particular web assurance seal affected purchase decisions for VeriSign, TRUSTe, and Good Housekeeping but not for CPA WebTrust. Because they believed that the findings for WebTrust were due to the low level of recognition and familiarity displayed by the WebTrust seal, they conducted a third experiment that replicated their second study using accounting students who were more familiar with WebTrust. In the third study they found that the WebTrust seal significantly affected the purchase decisions of online consumers who recognized the seal.

Mauldin and Arunachalam (2002) conducted an experiment that examined alternative forms of web assurance for business to consumer e-commerce. They investigated the effects of assurance on purchase intent relative to retailer disclosures, information risk, and familiarity. They found a higher intent to purchase was associated with web assurance only when consumers did not observe retailer disclosures and were less familiar with the product. They did not find a significant relationship between intent to purchase online and the provision of a web assurance seal.

Kovar, Burke, and Kovar (2000) (hereafter referred to as KBK) evaluated the Web Trust's influence on a prospective "customer's online transaction expectations and intent to purchase online (p. 17)." KBK was based on the theories of consumer purchase expectations and of purchase intentions. Expectations are defined as prepurchase beliefs about the product (Oliver and Winer 1987) and may be derived from any of three different sources: direct observation of the product or experience with the product, product information received from the environment (such as advertising or recommendations), and customer's active reasoning processes (processing consumer information relevant to the purchase).

Purchase intentions represent the probability that consumers will purchase the product. KBK notes that several marketing studies indicate that intentions are effective predictors of consumer behavior (e.g., Juster 1964). Marketing research indicates that satisfaction with a product or service is a function of the degree to which consumers' expectations are confirmed or disconfirmed regarding product or service quality. When products or services do not meet expectations, the consumer is unlikely to make a similar purchase decision in the future. Purchase intentions remain the most useful measure available when actual behavior cannot be observed (KBK 2000).

In the KBK study, subjects were "instructed to assume they were interested in buying a specific product from CreativeKids." The subjects were then asked to evaluate the likelihood of making an online purchase of the product offered by CreativeKids using a 5 point Likert-type scale anchored by "strongly disagree" and "strongly agree". KBK (2000) developed several propositions stating that:

Consumers who notice the seal can elaborate based on seeing both the CPA insignia and the familiar "VeriSign" name and calling to mind the previous exposures to them. Consumers who click on the seal and its related links are exposed to substantive communications about WebTrust and the business policies of the company. The WebTrust disclosures encourage consumers and provide additional opportunities to elaborate on online transactions and WebTrust and these policies increase security. (p. 22)

KBK (2000) demonstrated that consumers who notice the WebTrust seal were influenced by its presence on the web site. Further, the consumer was influenced if s/he elected to review the WebTrust material by clicking on the WebTrust seal. In addition, the study found that familiarity with the WebTrust seal influenced the consumer's intent to purchase decision.

KBK (2000) indicate that there are two key components of the decision to purchase on the Internet. These components are the product decision and the distribution (purchase) channel decision. KBK affirm that to effectively predict behavior in an Internet-purchasing decision, intentions related to the product itself and the distribution channel should be examined separately. In light of this statement, our study focuses exclusively on the distribution-channel decision.

Our model focuses on the distribution-channel decision. Participants were given a specific product that they were required to purchase. Consequently, issues regarding factors incorporated into the decision regarding intent to purchase the product are not material to this study. For example, subjects in our study did not evaluate product quality, features, or manufacturer. Our model begins with the intent to purchase a specific product already established and focuses on the decision to purchase that product online or through traditional channels (i.e., a retail outlet). By isolating the distribution-channel decision, we can better test consumer behavior with regard to Internet purchases and analyze the effect of WebTrust on this decision.

In an online transaction the customer evaluates the web site for indications that s/he wants to purchase via the Internet. These indications may include company name recognition (e.g. Amazon, Fogdog, Bestbuy.com), consumer perks (e.g. no shipping charges), availability of secure transactions, computer access, prior experience with online purchases, shipping risk, or third party assurances (e.g. TRUSTe, WebTrust). In contrast, consumers who consider traveling to a retail site to make a purchase have a different set of criteria to evaluate. In this instance, the consumer is evaluating the merchant as opposed to the web site provided by the merchant. The evaluation criteria may include convenience of the merchant's location, the ability to receive personal sales assistance, prior experience with the merchant, and the immediate receipt of the product. The evaluation of the elements of the merchant and the web site will lead the consumer to select a purchase channel. Further, the consumer will evaluate their decision and use the experience in making the next purchase decision.

HYPOTHESES DEVELOPMENT

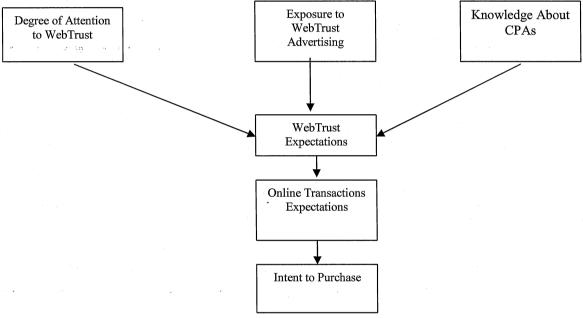
There may be many reasons why a person chooses not to buy a product, and these reasons may not be linked to the sales channel or the consumers' attitude toward the Internet. Our study attempts to further separate the

purchase decision from the distribution channel decision. Subjects were told that a purchase was required and they had the option of purchasing the product online or at a retail outlet.

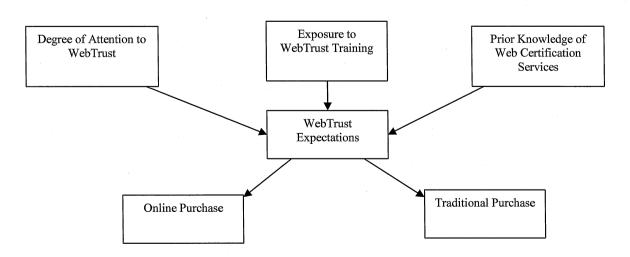
Figure 1, Panel A, is a reproduced figure from the KBK study. In this Figure the authors place those factors they believe will influence the user's expectations of WebTrust. Figure 1, Panel B, indicates how our study examines these elements in a different manner. While KBK evaluated the knowledge of potential purchasers concerning CPAs, it is our contention that a more important issue is the knowledge potential purchasers have regarding web certification services. Therefore, the first issue we examine is whether the knowledge of web certification services influenced the consumers' distribution-channel decision.

Figure 1
Webtrust Factors Influencing Consumer Expectations And Intent To Purchase Online

Panel A: Reproduced from Kover, Burke, and Kovar (2000)



Panel B: Our Model



We isolate elements of web certification knowledge and their effects. Prior researchers have speculated that consumer's familiarity and understanding of web assurance seals may have been a possible explanation for their lack of significant findings. It is reasonable to believe that consumers who have training or knowledge of certification services would more frequently recognize seals and logos that indicate the inclusion of such a service than consumers who are unfamiliar with web certification. To that end, we investigate whether prior knowledge of certification services affects the recognition of the WebTrust seal. Hypothesis 1, stated in the alternative, indicates that consumers will be influenced by prior knowledge of web certification services.

H₁: Consumers recognition of the WebTrust seal will be influenced by prior knowledge of web certification services

As previously discussed, KBK (2000) investigates whether the WebTrust seal influences the consumer's intent to purchase online. In our study, subjects make a decision regarding which distribution channel to use. We investigate if the presence of the WebTrust seal changes consumer decisions and hypothesis two sets forth our expectations.

 H_2 : Consumers that have a WebTrust seal on the web site will choose the online distribution channel more often then those consumers that do not have a WebTrust seal on the web site.

It is possible that consumers who view a web site do not recognize that a certification is present even when a web seal is present. In this instance it is difficult to believe that the web certification will influence purchase decisions. Therefore, it may be more informative to evaluate only those consumers that viewed the web site and recognized the existence of the WebTrust seal. Hypothesis three asserts that consumers who recognize the WebTrust seal will choose the online distribution channel more frequently than consumers who do not recognize the seal.

H₃: Consumers that recognize the presence of a WebTrust seal will choose the online distribution channel more often then those consumers that do not recognize the presence of a WebTrust seal.

KBK (2000) used "exposure to WebTrust advertising" as one factor influencing the consumer expectations and intent to purchase online (Figure 1, Panel A). While we agree with this construct, we believe that the low level of WebTrust advertising targeted at consumers limits its usefulness at this time. Therefore, in this study, we manipulate exposure through the training materials received by the subjects (see Figure 1, Panel B).

Some of the subjects received information concerning web certification in the training materials. It is posited that additional knowledge about web certifications will heighten consumers' awareness of certification seals displayed on a web site. This heightened awareness will cause the consumers to rely on the third-party assurance to reduce the perceived risks. Therefore, consumers with this additional information regarding web certification should be more willing to select the online distribution channel when the web seal is present. Conversely, consumers with this additional information regarding web certification should be reluctant to select the online distribution channel when no web seal is present. This leads to the following hypotheses:

 H_{4a} : Consumers who have training regarding WebTrust and have a web site that contains the WebTrust seal will choose the online distribution channel more often then those consumers that have no training of WebTrust and have a web site that contains the WebTrust seal.

 H_{4b} : Consumers who have training regarding WebTrust and do not have a web site that contains the WebTrust seal will choose the traditional retail distribution channel more often then those consumers that have a web site that contains the WebTrust seal.

METHODOLOGY

The effects of a WebTrust seal on a purchase decision were tested with an experimental design using 248 undergraduate students (see Table 1) enrolled at a single Midwestern University. Ashton and Kramer (1980) indicate that college students are acceptable proxies for the general population in information processing and decision making

tasks. Subjects were provided experimental information regarding a need for a digital camera for their employer. The make and model of camera was specified and the certainty of need was specified. In the same experimental material that included the need for a digital camera, students were provided information concerning a web site called DigitalCamera.com and a store called Shutter Shack. Because these outlets were fictitious, it is believed that name recognition was not a factor in the decision process. An advertisement from Shutter Shack was included with the experimental material (see appendix). The advertisement included the needed camera at the same price listed on the web site. The introductory materials eliminate the decisions of whether to purchase, and what to purchase; and focused the participants on the distribution channel decision (see appendix for training material).

Table 1
Subject Demographics

	# Subjects	Percentage of Subjects
Total Number of subjects	248	
Gender		
Male	129	52.0%
Female	116	46.8%
Did not answer gender question	3	1.2%
Prior Web Purchasing Experience		
Experienced (5 or more prior web purchases)	73	29.4%
Some experience (1-4 prior web purchases)	82	33.1%
No experience (Never purchased on the web)	93	37.5%
Age		
19-21	171	69.0%
22-25	61	24.6%
Over 25	12	4.8%
Did not answer age question	4	1.6%

Because improving knowledge about WebTrust and web certifications in general might change the consumers' expectations, approximately half of the subjects received experimental materials that included a paragraph regarding web certifications (training). It was expected that subjects that received additional information on web certifications would rely on the web seal more frequently then those that did not receive the additional training. In addition, approximately half the students viewed web sites that included the WebTrust seal. This provided a two (presence/absence of WebTrust seal) by two design (training/no training) as follows:

Experimental Design

	WebTrust	No WebTrust
Training	Group 1: 68 subjects	Group 2: 67 subjects
No Training	Group 3: 60 subjects	Group 4: 53 subjects

The four groups in this table are as follows:

- Group 1: Students received training regarding WebTrust and reviewed a web site that included a WebTrust seal.
- Group 2: Students received no training regarding WebTrust and reviewed a web site that included a WebTrust seal.
- Group 3: Students received training regarding WebTrust and reviewed a web site that did not include a WebTrust seal.
- Group 4: Students received no training regarding WebTrust and reviewed a web site that did not include a WebTrust seal.

Participants were randomly assigned to one of the four groups and each participant was required to make a purchase decision. Following the purchase decision they were required to complete a purchase requisition form indicating the vendor of choice and the reason for selecting that vendor. After completing the purchase requisition.

subjects completed a questionnaire indicating their reasons for purchase-channel decision, use of WebTrust in the decision process, prior experiences with web purchases, and demographic information.

ANALYSIS OF RESULTS

Table 2, Panel A, provides descriptive statistics concerning the subjects' recognition of the WebTrust seal. Of the 228 subjects, only 68 (30%) correctly identified whether the Web Trust Seal had been present or absent, and the majority (158, 64%) were uncertain regarding whether the Web Trust Seal had been present. Of the 128 subjects that were provided a web site with the WebTrust seal, only 49 (38%) indicated that their site contained a WebTrust seal. The majority of the subjects that had a web site with a WebTrust seal were uncertain as to whether the web site contained a seal (70; 55%). Further, a majority of the total sample (158; 64%) was uncertain as to whether the web site contained a seal. It is interesting to note that 8 of the 120 subjects that did not have a web site that contained a WebTrust Seal indicated that their site contained the seal. In addition, four of the 128 subjects whose web site did contain a Web Trust Seal indicated that it did not.

Table 2
Subject's Recognition Of WebTrust Seal

Panel A: Recognition Of WebTrust Seal

	Web Tri	ust Seal
Number who	Present	Absent
indicated their site contained a seal	49 (38%)	8
indicated they were uncertain about whether the site contained a seal	70 (55%)	88
indicated that their site did not contain a seal	4 (3%)	19
did not view the web site	4 (3%)	4
did not answer question	1 (1%)	1
Total	128 (100%)	120

Panel B: Influence Of Prior Knowledge On Recognition Of WebTrust Seal

	Aware of Web Certification prior to Participation (Column 1)	Not aware prior but I am now (Column 2)	I do not know what web certification services mean (Column 3)	Total Number of Subjects
Seal was present and the subject said it was present	27	17	5	49
Seal was present and the subject said it was not	1	1	2	4
Seal was present and the subject said they were uncertain	26	18	26	70
Subtotal of subjects that viewed the web site	54	36	33	123
Seal was present and the subject did not view the web site	1	0	3	4
Total	55	36	36	127

Table 2, Panel B, disaggregates the sample into those subjects who indicated that they had some knowledge of web certifications. This knowledge may have been acquired prior to the experiment (column 1), or may have been acquired by reading the training materials (column 2). Of those subjects that claimed they are aware of web

certifications (columns 1 and 2), 44 of the 91 (48%) subjects that had a web site with a WebTrust seal indicated that their site contained the seal. If we compare the total sample of 127 subjects that had a WebTrust seal on their web site (Panel A, seal present column for subjects responding to the question) with the subsample of 91 subjects that had knowledge of Web certification the recognition of the WebTrust seal improved from 38.5% to 48% recognition. Using a one tailed binomial test of equal proportions, this number is statistically significant at the .10 level (p= .075). In addition, for those students that indicated that following the experiment they did not have knowledge of web certification (column 3), only 5 of the 33 subjects (14%- see subtotal in Table 2, Panel B) indicated the presence of a WebTrust seal. When compared to the group with prior knowledge of web certification (column 1), 27 of 54 (49%) indicated the presence of a WebTrust seal when they were given a site that contained a seal, which is statistically different from the group with no knowledge at the .05 level (p=.036). If we compare the group that had no prior knowledge of web certifications but is now aware of web certification (column 2) (17 of 36; 47%) to the group that has no knowledge of web certification (column 3), the difference is statistically significant (p=.067). Finally, if we combine the groups in column 1 and 2 and compare them to the group in column 3, thee difference is a statistically significant (p=.03). Based on these results we find evidence to support hypothesis 1 that recognition of the WebTrust seal is influenced by prior knowledge of certification services.

Table 3, Panel A, indicates the subjects' distribution-channel preference. Both those subjects with a WebTrust seal on the web site and those that did not have a WebTrust seal on the web site elected the web distribution channel approximately 75% of the time. A binomial test of equal proportions fails to show a statistically significant difference between the two groups (p= 0.55). Based on these results we cannot find evidence in support of hypothesis 2 that the WebTrust seal on the web site induces subjects to choose the online distribution channel more often.

Table 3
Influence Of Webtrust Seal On Distribution Channel Decision

Panel A: WebTrust Seal Present on Web Site

	Web Trust Seal Present?				
	Yes (Groups 1 and 3)		No (Grou	ps 2 and 4)	
Purchased from Web	94	73.4%	93	77.5%	
Purchased from store	34	26.7%	27	22.5%	
Total	128	1.0	120	1.00%	

To test H_2 , a binomial test of equal proportions for those who bought from the web versus those who bought from the store was conducted. The resulting p value=.55.

Panel B: Subjects' Recognition of WebTrust Seal.

			WebTrust	Seal Present?		
		Yes			No	
Percentage who bought from	Indicated Seal Present (N=49)	Indicated Seal Absent (N=4)	Indicated Uncertain (N=70)	Indicated Seal Present (N=8)	Indicated Seal Absent (N=19)	Indicated Uncertain (N=88)
web	75.5%	75%	73%	100%	79%	75%
store	24.5%	25%	27%	0	21%	25%

The results in Table 3, Panel A evaluate subjects solely on whether or not the WebTrust seal was present on the web site. Based on the fact that many individuals failed to recognize the presence of the WebTrust seal on their web site, this analysis may be unreliable. Table 3, Panel B, indicates the subjects' distribution-channel preference based on their recognition of the presence of the WebTrust seal. Still, 75% of the subjects that indicated the presence of the WebTrust seal on their web site elected the online distribution channel. Based on these results, we cannot find evidence in support of hypothesis 3 that subjects that recognize the presence of the WebTrust seal on the web site will choose the online distribution channel more often.

Table 4, Panel A, provides the results for those subjects that had web certification training included in their materials compared to those that had no web certification materials in their training. Consistent with the results in Table 3, Table 4, Panel A, indicates that approximately 75% of the subjects choose the online distribution channel regardless of the training provided (p= 0.99).

Table 4 Influence Of Training On Distribution Channel Decision

Panel A - All subjects who had training in their package materials

	Training with web seal (Group1)		Training with no we	b seal (Group 2)
	Number of subjects	Percentage	Number of subjects	Percentage
Purchased from web	51	75%	50	74.6%
Purchased from store	17	25%	17	25.4%
Total	68	100%	67	100%

Panel B: Subject's awareness of web certification training

WebTrust included in training materials?	Aware of Web Certification prior to participation	Not aware prior but I am now	I do not know what web certification services mean	Total number of subjects
Yes (Groups 1 and 2)	63	40	30	133
No (Groups 3 and 4)	47	27	38	112
Total	110	67	68	245*

^{*} Three subjects did not answer the question regarding awareness of web certification services.

Panel C: Subjects who had training in their package materials and reported that they were aware of web certification services

	Training with web seal (Group 1)		(Group 1) Training with no web seal (Gro	
Purchased from	Number of Subjects	Percentage	Number of Subjects	Percentage
web	37	69.8%	40	80%
store	16	30.2%	10	20%
Total	53	100%	50	100%
A Binomial test of equal	proportions failed to indicate	e a significant differer	ice in these proportions (p-valu	e=.26)

Table 4, Panel B, indicates the subjects' awareness of web certification. Thirty (23%) of the 133 subjects who received training materials that included WebTrust information indicated at the end of the experiment that they were still unaware of the meaning of a web certification service. There can be many reasons for this including: the subject's incomplete reading of training materials, the subject's inattention in responding to questions, the subject's reading but not retaining training information, and ineffectiveness of the training material itself.

However, we cannot ignore the possibility that the training material was ineffective. Accordingly, we reanalyzed the data for Table 4, Panel A, omitting the subjects who had training materials included in their experimental packets but who reported that they did not know what web certification services mean in answering the post experimental questions. Table 4, Panel C, evaluates the distribution channel decision for those subjects that had training in their package materials and reported that they were aware of web certification services. With subjects who did not appear to attend to the web certification training removed, 69.8% of the subjects who were exposed to training materials and had a web seal on their web site purchased from the Web while 80% of the subjects who were exposed to training but did not have a web seal present purchased from the Web. A binomial test fails to indicate a statistically

significant difference in these two proportions (p=0.26). The results of the analysis in reported in Table 4, Panel C, do not support Hypothesis 4a.

Many subjects that that did not receive web certification training in their materials had prior knowledge of web certification before agreeing to participate in this experiment. Classifying these individuals as having "no training" may bias the results. Therefore, Table 5 evaluates the distribution channel decision for those subjects that had either web certification training in their materials (and indicated that they were aware of web certification services in the post experimental questionnaire) or prior knowledge of web certifications. Even with these additional subjects added to the evaluation, approximately 75% of each group elected to use the online distribution channel. Regardless of the composition used to describe subjects "trained" regarding WebTrust and web certifications, there is no evidence to support Hypothesis 4a that consumers that have training regarding WebTrust and have a web site that contains the WebTrust seal, will choose the online distribution channel more often. Further, there is no support for the converse Hypothesis 4b that consumers who have training regarding WebTrust and do not have a web site that contains the WebTrust seal, will choose the traditional distribution channel more often.

Influence Of Training Or Prior Knowledge On Distribution Channel Decisions

	Training or prior knowledge with web seal		Training or prior knowle	edge with no web seal
	Number of subjects	Percentage	Number of subjects	Percentage
Purchased from web	56	72.7%	58	79.5%
Purchased from store	21	27.3%	15	20.5%
Total	77	100%	73	100%
A Binomial test of equal 1	proportions failed to indic	ate a significant difference	e in these proportions (p-value	e=.347)

In addition to the results reported in this section, the data were evaluated for sensitivity to the following demographic information: gender, prior internet experience, and age.

The results presented in Tables 3-5 did not differ when demographic data was included in the analysis.

The demographic questionnaire asked subjects to indicate the reasons used in making their purchase-channel decisions. Table 6 summarizes the reasons listed by our subjects. Panel A shows that 124 subjects identified convenience and 102 subjects identified price as factors that led them to purchase from the web. These two factors were noted much more frequently than others. Since the price for the camera from the store was identical to the price for the web site, any price differential resulted from the difference between savings on sales taxes and the shipping fee charged by the web retailer. Timeliness (36 subjects) and availability of information about the company (19 subjects) were also cited by several subjects. The reasons noted for not purchasing from the Internet are shown in Panel B. The four most common reasons noted were trust (16 subjects), delivery time (15 subjects), cannot see product 11 subjects), and safety of credit card number/security (11 subjects).

CONCLUSION

This study was motivated by the fact that in the KBK study, only 21 of the 248 subjects had previous exposure to the WebTrust seal. KBK indicated that additional research examining the effects of exposure to advertising was warranted. Consistent with the KBK results, it appears that providing training about web certification can raise consumer awareness concerning web certification seals. Yet, it appears that this heightened awareness provides no competitive advantage when consumers are faced with a distribution-channel decision. In our study consumers used the online distribution channel approximately 75% of the time regardless of prior knowledge, training, or experience; and this result was not associated with any demographic variable. KBK (2000) speculate that "... consumer confidence in online purchasing seems to have risen dramatically.... This increase in spending, coupled with the study's results indicating that relatively few participants paid attention to the seal, suggests the possibility that consumers have less need for an assurance seal." (p. 34)

Our findings provide empirical evidence to support this statement. We found that subjects made the same purchase decisions, with or without the presence of the Web Trust Seal. This result holds even if students had just received training about web certification services.

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Table 6 Reasons For Making A Particular Purchase-Channel Decision*

Panel A

Reason noted for purchasing from the Internet	Number of students who listed this reason
Convenience	124
Price	102
Timeliness	36
More information was available about the company	19
WebTrust Seal was present	6
Purchased from the Internet previously	5
Insurance	4
Delivery time was acceptable	4
Trust	2
Safe	2
Service	1
Security of web site	1
Quality of after sale policies	1
Return policy	1
Reliability	1

Panel B

Reason noted for not purchasing from the Internet	Number of students who listed this reason
Trust issues	16
Délivery time	15
Cannot see product	11
Safety of credit card number/ security	11
There is no need to purchase from the Internet	4
Deal with problems directly with seller	4
Prefer to deal with a person	3
Web retailer was not a local company	2
Web certification does not guarantee service and product	2
quality	
Did not see web certification	1
Price might be higher plus shipping and insurance	1
Drive to store is acceptable	1
Privacy	1
Arbitration clause	1
Not an Internet user	1

^{*} If subjects noted more than one reason for making their decision, all reasons were included in the counts.

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