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## Role of Trust and Involvement in the Effectiveness of Digital Third-Party Organization Endorsement


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## **Cover Page Footnote**

Authors thank Qimei Chen for research assistance.

# Role of Trust and Involvement in the Effectiveness of Digital Third-Party Organization Endorsement

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**Abstract** -- In this research, an online experiment was conducted to investigate the effect of the mere presence of digital third-party organization (TPO) endorsement and the quality of information conveyed by a digital TPO, referred to as the endorsement information value effect. Involvement and institution-based trust were tested as moderators of the endorsement information value effect. The results confirm the intuitive belief of managers that the mere presence of a digital TPO endorsement benefits websites by reducing risk perceptions, improving attitudes and increasing choice likelihood. The findings from this research revealed that effectiveness of digital TPO endorsement information value was contingent upon the level of involvement with the effects being found only among high involvement consumers but not among low involvement consumers. Similarly, effectiveness of digital TPO endorsement information value is also contingent on institution-based trust, with the effect of endorsement information value emerging only for low institution-based trust consumers but not for high institution-based trust consumers. Thus, a higher information value digital TPO will increase choice over a low information value digital TPO only if the consumer is highly involved or has low institution-based trust.

**Keywords** – Endorsement, Seals, Trust, Involvement

## Introduction

Since the commercialization of the web, e-commerce has come a long way in terms of website sophistication, product recommendations and social media integration. However, despite these improvements, consumer concerns over privacy of their information and security of their financial information remain.

In today's e-business environment, interactions with new web sites are becoming commonplace. In 1998 approximately 1.5 million new web pages appeared each day (Ventures, January 1999). These sites became frontiers on which to win new consumers; even for companies with well-known brand names. However, "the rapid expansion of e-commerce presents a series of unique challenges for retailers, many of whom appear unable to respond appropriately and effectively" (Kolsaker & Payne, 2002). One of the reasons that prevent consumers from shopping online is the consumer trust issue, i.e. consumer considers the risk to be quite substantial. There are a number of concerns that can cause an escalation of perceived risk: (1) credit card or debit card information will not be securely transmitted and safely stored in the vendor's information system, (2) vendor will distribute private information about the buyer to other organizations, (3) vendor does not exist, and/or (4) vendor will not stand behind a faulty product (Lala *et al.*, 2002). Buyers in online marketplaces have to rely on electronic information without having the ability to physically inspect the product; hence, they are vulnerable to additional risks because of potentially incomplete or distorted information provided by sellers (Lee, 1998). These challenges prompt marketers to search for ways to assure consumers. One of the ways is to include an endorsement from an online third party organization via a link on the website.

Recently, marketing researchers have observed a rapid growth in the usage of product endorsements by a TPO (Hal Dean and Biswas, 2001). This observation is particularly pronounced in the new e-business venue. For example, the development of WebTrust™ in the late 1990s by the American Institute of Certified Public Accountants (AICPA) and the Canadian Institute of Chartered Accountants (CICA) is one of the initiatives of using third-party endorsement online. Some other similar advances include those of Better Business Bureau On-Line (BBB On-line™), TrustE™, and VeriSign™.

One reason contributing to this growth is online vendors' realization of the importance of trust in online transactions. A study that aggregated data from over 100 research organizations identified "online trust" as an emergent critical success factor (e-Marketer, 2001). Therefore, the enormous potential of B2C commerce (Wang *et al.*, 1998) can only be realized if consumers feel comfortable transacting over the new medium with unfamiliar vendors (Gefen and Straub, 2002, McKnight *et al.*, 2002). Previous research suggests that TPO endorsement is an effective way to promote consumers' trust in the online transaction (Lala *et al.* 2002). For example, TPO endorsement may function as a signal of unobservable product quality (performance, reliability, and durability of the product) thereby reducing consumer uncertainty and risk perception in a purchase situation. TPO

endorsement shows a lot more potential in the e-business market since there are obvious needs for consumers to obtain a risk reliever when they complete transaction with an online vendor, particularly an unknown online vendor (Lala et al., 2002). Therefore, while TPO endorsement has focused more on the product risk dimension, Internet-based assurance seals generally focus on vendor risk. The TPO endorsement seals could vary in terms of their information quality, i.e. how much vendor risk is relieved by a given seal. For example, BBB On-Line™ simply provides information on whether a vendor exists. WebTrust™, on the other hand, addresses a much wider scope of the vendor risk. While TPO endorsement has been utilized by traditional marketers as signals of product quality in advertising (Hal Dean and Biswas, 2001), and by online vendor as signals of assurance (Lala et al., 2002), the literature is inconclusive as to the effectiveness of TPO endorsement in different transaction contexts. Thus, there appears to be a gap in our knowledge about TPO endorsement in the new e-business venue. From the companies' perspective, it is difficult to decide which E-commerce assurance seal to adopt from a cost/benefit perspective. On one hand, although the scope of assurance WebTrust™ offer is a lot wider, the cost to acquire a WebTrust™ seal is significantly higher than alternative seals (Lala et al., 2002). On the other hand, it's unknown whether consumers are able to differentiate between the information content of alternative seals. If consumer cannot differentiate among different seals' quality, then the acquisition of WebTrust™ with its higher costs would not be an economically prudent decision.

Therefore, this study aims to examine: (1) the effect mere presence of a digital TPO endorsement, (2) the moderating role of involvement and institution-based trust in explaining the conditions under which the information value of a digital TPO becomes consequential. In doing so, the current study aims to guide marketers in the adoption of perceived risk reducing assurance seals.

## Literature Review

A TPO endorsement is defined as product advertising that incorporates the name of a TPO and a positive evaluation of the advertised product that is attributed to the TPO. TPO endorsement may take one of three general forms: (1) the product is ranked against competing products in its class on one or more criteria, (2) the product is awarded a "seal" of approval by the TPO, or (3) a subjective, non-comparative statement is made about one or more product attributes. Although the information conveyed by these three general forms of TPO endorsement is sometimes ambiguous, the most visually striking form proves to be the second, the seal of approval. The stylized graphics of the seal often resemble the TPO corporate logo, triggering a memory within the observer and drawing attention. TPO endorsement could be classified based on several criteria, including nonprofit versus for-profit TPOs, use of experts to evaluate versus evaluation by typical consumers, the range of products evaluated by the TPO (wide versus restricted), and the familiarity of the TPO to the consumers (well-known versus relative unknown).

The effect of TPO endorsement is assumed to vary depending on the characteristics of the TPO.

The increasing use of TPO endorsements in online venue equips the TPO endorsement with new function and new characteristics specific to the e-business domain. While traditional TPO endorsement almost exclusively endorses products, digital TPO endorsement extends the scope to endorse the online vendor (Lala et al., 2002). The focus of this study, therefore, is on TPO endorsement effect online - the “digital TPO endorsement” effect. Specifically, we focus on the endorsement effect on online vendors that are awarded a digital “seal” of approval by the TPO.

Salaun and Flores (2001) posit that in situations where there exists good quality information between supplier and consumer, a quality symbol may reinforce the bond of trust that has already been established. It seems unlikely, however, that on its own a trust symbol would convince the user of the integrity of the e-tailer (Salaun and Flores, 2001).

Prior research has suggested that TPO endorsements may be very effective in communications. For example, TPO endorsements may function as signals of unobservable product quality (performance, reliability, and durability of the product). By providing an evaluation of the products based on these experience characteristics, TPO endorsements may reduce consumer uncertainty and risk perception in a purchase situation. This is particularly true to online vendors since consumers are expected to rely more on evaluation instead of product experience to make their ultimate purchase decision, hence,

**H1:** Compared to an online vendor without a digital TPO endorsement, one with a digital TPO endorsement will have:

- a. lower perceived risk relating to the purchase of the product,
- b. higher attitude toward the vendor, and
- c. higher choice likelihood.

Although marketers use TPO endorsements as signals of product quality in advertising, the literature is inconclusive as to the relative effectiveness of TPO endorsements (Hal Dean and Biswas, 2001). There is even less literature on the effect of the information value of the seal. In summarizing the prior research in the area of third-party endorsement seals, Beltramini and Stafford (1993) note that generally seals seem to have a positive impact on consumers if an actual seal is observable (as opposed to mention of an organization’s name as providing approval). What is less clear is whether consumers are able to differentiate between the information value provided by different seals.

Considering the fact that high information value seals (e.g., WebTrust) cost much more than low information value seals (e.g., BBB Online), organizations displaying these seals would be interested in knowing whether they differ in

effectiveness. If consumers focus simply on the presence or absence of a seal, then assurance seals that offer low information value may be just as effective as seals with high information value. Beltramini and Stafford (1993) conducted a broad study of 12 different seals and found that generally consumers were confused as to the factual (e.g., are claims true), evaluative (e.g., this product is better than another), and warranty (e.g., replacement or refunding for defective purchase) content of the seals studied. Even more disconcerting, consumers in the Beltramini and Stafford (1993) study had no measurable increase in believability about an organization's products with a seal than those same products without a seal. By contrast, Arnold et al. (2001) reported that users favor improved information value in information systems assurance environments. Arnold et al. (2001), however, tested this preference in a traditional attestation reporting format rather than a certification seal environment.

These inconsistent findings reported by the previous studies suggest the possible existence of moderating effects. Based on a review of research discussed above, two possible moderating variables identified and investigated in this study: consumer involvement and institution-based trust. These two variables are proposed to interact with endorsement information value to moderate endorsement effectiveness.

### **Involvement**

Previous research has found that TPO endorsements function as signals of unobservable product quality (performance, reliability, and durability of the product). In the context of digital TPO endorsement, we believe that the dual process model of persuasion will emerge. The dual process models of persuasion, the Elaboration Likelihood Model (ELM) and the Heuristic Systematic Model (HSM), provide extensive documentation of the processing issues related to persuasion (Aaker and Patti, 1998). These models suggest that two concurrent modes of information processing exist (Chaiken, 1980; Petty and Cacioppo, 1979). Systematic processing is viewed as comprehensive and effortful information processing in which individuals scrutinize and elaborate on all available attribute-relevant information to form an evaluation. It is evidenced in settings where consumers are more likely to engage in effortful processing such as under conditions of high motivation, high involvement and/or high levels of ability. Heuristic processing or the elaboration of heuristic cues dominates when motivation, involvement, and/or ability for systematic processing are inadequate. Under such conditions, evaluations are likely to be based on the processing of the heuristic cues with minimal input from the attribute-relevant information. In the context of digital TPO endorsements, one would expect low involvement consumers to make their decision using heuristic processing (e.g. consumers focus simply on the presence of the Digital TPO endorsement seal) while high involvement consumers would make their decision using systematic processing (e.g. consumer focus on the message i.e. information quality of the digital TPO endorsement). Therefore,

**H2:** High involvement consumers are more likely to choose an online vendor endorsed with a high information value TPO than an online vendor endorsed with a low information value TPO.

**H3:** Low involvement consumers will not show any preference toward an online vendor endorsed with either a high or low information value TPO.

### **Institution-based Trust: Perceptions of the Internet Environment**

McKnight and his colleagues (2002) argue that institution-based trust is the belief that structural conditions are present (e.g. on the Internet) to enhance the probability of achieving a successful outcome in an endeavor like e-commerce. Institution-based trust comes from sociology, which deals with the structures (e.g., protections) that make an environment feel trustworthy. “Just as legal systems of justice and protection took time to set up in the ‘wild, wild west’ of 19<sup>th</sup>-century America, so procedure and structures of security and protection are now being established in the ‘wild, wild web’ of the 21<sup>st</sup> century” (p. 339 McKnight *et al.*, 2002).

Two dimensions of institution-based trust are defined in previous research (McKnight *et al.*, 2002): structural assurance and situational normality. Structural assurance means one believes that structures like guarantees, regulations, promises, legal recourse, or other procedures are in place to promote success (Shapiro, 1987; Zucker, 1986). For example, a person with high Web-related structural assurance would believe that legal and technological Internet protections like encryption safeguard one from loss of privacy, identity, or money. Situational normality means one believes that the environment is in proper order and success is likely because the situation is normal or favorable (Baier, 1986, Garfinkel, 1963, Lewis and Weigert, 1985). A consumer who perceives high situational normality would believe the Internet environment is appropriate, well ordered, and favorable for doing personal business. They would believe that, in general, a vendor in the environment has the attributes: competence, benevolence, and integrity. In other words, such consumers would have a high level of trust in a vendor.

It is important to note that institution-based trust is different from the trusting beliefs about a specific vendor (McKnight *et al.* 2002). TPO endorsement that addresses general security may enhance perceptions about the Internet, but not beliefs about a specific vendor. On the other hand, a TPO endorsement may influence a customer’s trusting beliefs in a specific vendor, but may do nothing to appease the consumer’s uneasiness about the general security of the Web. However, when consumers have high institution-based trust toward Internet, they might have less motivation to spend more effort to check upon the vendor. Hence, these consumers will be more likely to make their purchase decision based on the simple presence of the digital TPO endorsement seal instead of engaging in comprehensive and effortful information processing to scrutinize and elaborate on all available attribute-relevant information such as the differences of the seal information value. By comparison, consumers with low institution-based trust



toward the Internet are more skeptical about purchasing online and they may be willing to spend more effort to investigate all the available information and will be more likely to discern the differences between the information value amongst seals. Therefore,

**H4:** Low institution-based trust consumers are more likely to choose an online vendor endorsed with a high information value TPO than an online vendor endorsed with a low information value TPO.

**H5:** High institution-based trust consumers will not show any preference toward an online vendor endorsed with either a high or low information value TPO.

## Research Method

The hypotheses were tested in an experiment using a 3 (Digital TPO Endorsement: control vs. low information value endorsement, control vs. high information value endorsement, and low vs. high information value endorsement) x 2 (Involvement: low/high) x 2 (Institution-based Trust: low/high) between-subjects design. Digital TPO endorsement was manipulated while involvement and institution-based trust were measured.

### Stimulus

In order to facilitate observation of Internet-based purchasing behavior, a web site was constructed specifically for the experiment. The web site was a travel site (named CruiseFinder) comparable in design to contemporary travel web sites such as Travelocity and Expedia (See Figure 1). Prior research has indicated that a high-risk product such as travel would serve to benefit the most from assurance seals (e.g. Hunton et al., 2001). Given the interest in observing comparative purchasing choices for different manipulations of assurance seals, the site was modified to present two web sites side-by-side.

CruiseFinder was presented as a travel web site that searched the web for travel packages that matched a potential buyer's travel plans. Once CruiseFinder identified web sites providing travel packages that matched the buyer's interests, the alternatives were presented on one screen side-by-side. The buyer could then review each of the travel alternatives before selecting the preferred package to purchase.



**Figure 1: CruiseFinder.com**

CruiseFinder was set-up to allow the participants to select alternative travel destinations on the first page of the web site, but all subsequent pages were set to the Panama Canal packages participants would evaluate and select. The two packages were set-up to model two different actual existing web sites to enhance realism, but each was carefully constructed to approximate a near indifferent state. In other words, the packages basically offered the same amenities, cruise stops, and cruise lengths at prices that differed only marginally. One cruise departed from Miami and terminated in San Diego, while the other cruise departed from San Diego and terminated in Miami. The two cruise options were always presented in the same order on the screen. The design factors of these two cruise packages therefore neutralized each other to help eliminate the possible confounds of these variables on the main endorsement effect (see Monroe, 1976).

WebTrust™ was adopted as the digital TPO endorsement with high information value. This TPO endorsement was linked to a page detailing the available assurance areas provided by WebTrust™: (1) business practices and

disclosures, (2) transaction integrity, (3) information protection, and (4) information privacy (CICA 2001). BBB On-Line™ was adopted as the digital TPO endorsement with low information value. This TPO endorsement was linked to a page detailing the limited assurance provided by BBB On-Line™. The program was randomized as to which digital TPO endorsement would appear on which web sites during a buying session. Three combinations of seals were possible: (1) no endorsement and BBB On-Line™, (2) no endorsement and WebTrust™ seal, or (3) BBB On-Line™ and WebTrust™. The combinations were randomized to further eliminate the effects of web-page design preferences and screen order (i.e., left versus right side of the screen). Each travel site contained five screens of information to facilitate the assessment of the packages for potential purchase. If a cruise vendor was endorsed by a TPO seal, it would be displayed on the first page of the web site and again on the last (fifth) page of the web site when payment information was entered.

**CruiseFinder.com**

Flights | Cars | Lodging | Vacations | **Cruises** | Destination Guides | Deals

**Compare Your Favorite Cruises**

Here are the two cruises you selected to compare. The websites offering the cruises are shown side by side to help you compare features of these packages. For more information about detailed pricing and availability of each package click on the "Check Pricing and Availability" button at the bottom of this page.

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**Figure 2: Treatment-High Versus Low TPO Information Value**

Once the buying decision was complete, the participant was taken through a set of measures in a web-based questionnaire. In order to prevent the subject from moving backwards through the program to change responses, the Back button was disabled on the web pages. All data was automatically recorded to a Microsoft Access database file.

## Participants

Students attending marketing and accounting graduate and undergraduate classes at a major state university participated in the research for extra credit points. In order to obtain a more diversified sample, snowball sampling strategy was adopted and the respondents are encouraged to refer their acquaintances who were (1) over 18 years old, and (2) non-student to participate the survey. A total of 414 responses were collected, 8 of which were dropped due to incompleteness. Therefore, a total of 406 complete responses were left for further data analysis. Of the 406 respondents, 40.9% were female and a majority (64.5%) of the respondents were 21-30 years old. On average, the respondents had 4.52 years of experience using computers, 4.44 years of experience in using the Web, and spent 3.04 hours surfing the Web in a typical week. Average respondent experience in navigating the web in comparison to their peers was 3.15 on a 5-point scale (1=very little, 5=great deal). In sum, the snowball sampling strategy yielded a more diversified sample than a conventional student sample. The demographic information of the study participants is shown in Table 1.

**Table 1: Demographic Information**

	FREQUENCY	PERCENT
<b>GENDER</b>		
Female	166	40.9
Male	240	59.1
<b>AGE</b>		
20 or under	105	25.9
21-30	262	64.5
31-40	11	2.5
40+	28	6.9
<b>INCOME</b>		
20,000 or less	119	29.5
20,001-40,000	95	23.5
40,001-60,000	84	20.8
60,001-100,000	68	16.8
100,000+	38	9.4
<b>PC at Home</b>		
Yes	389	95.8
No	17	4.2

## Procedure

All experimental sessions were conducted in a computer lab in groups ranging from 20 to 45 participants. The subject groups were first instructed on how to access the web site for the session. The experiment administrator (same for each session) then explained the experimental task to the group. The participants were told that they were going to use CruiseFinder to search for a vacation package that they were going to purchase as a gift for their parents' 25th wedding anniversary. The scenario selected was perceived as a relatively high-risk product with substantial financial risk. Additionally, using their parents and the significance of the anniversary event was expected to increase perceptions of other risk components, including performance, social, psychological, and safety.

The experiment instructor explained to the participants that CruiseFinder was a vacation cruise comparison web site designed to help them locate alternative travel sites that offered available cruise packages. CruiseFinder allowed the buyer to compare various packages from the different sites. All instructions and explanations were provided on a written sheet that the participants could reference during the experiment.

In order to select a package, the participants were instructed to fill out the traveler and payment information for the package they wished to select. In order to enhance realism, this payment screen asked all of the information that would normally be required for an on-line purchase. However, participants were instructed not to use their personal credit card information but one that was supplied to them in the instruction sheet given to them.

## Measures

### *Dependent Measures*

Perceived risk is very powerful in explaining consumers' behavior since consumers tend more often to avoid mistakes than to maximize utility in purchasing (Mitchell, 1998). In particular, perceived risk is higher in Internet shopping than in the shopping from traditional channels because, for example, a consumer will not be able to physically examine the appropriateness of a product before a purchase decision is made. Perceived risk in purchasing each product was operationalized using a six-item, seven-point scale anchored by "extremely improbable" to "extremely probable," similar to Murray and Schlacter (1990). This scale measured the probability of loss (financial, performance, physical, psychological, social and convenience) that a subject perceived to be associated with the purchase of the product (Cunningham 1967). Coefficient alpha for this scale was .90.

Attitude toward the vendor is defined as the degree to which the participants feel safe in their transaction with the vendor, feel comfortable in purchasing the cruise package, feel confident in their decision, and trust toward the vendor. This four-item, five-point scale was anchored by "strongly disagree" to "strongly agree". Coefficient alpha for this scale was .95.

Finally, purchase decision is assessed by participants' final choice of the cruise vendor. In doing so, this research employs a real behavioral measure rather than a measure of intention to buy. This represents a strong test of the hypotheses.

### *Moderator Measures*

Since both involvement and institution-based trust are personal variables, we used participants' self-report rather than an experimental manipulation to capture these two moderating variables. Involvement was captured using a three-item, five-point summated semantic differential rating scales adopted from Ratchford (1987). This scale measures the degree of importance a person places on a purchase decision for certain product and the amount of attention devoted to it. Coefficient alpha for this scale was .88. A seven-item, five-point scale was used to measure Institution-based trust: "Web site purchases always meet my expectations," "Web sites can be counted on to make good offers," "I cannot always trust purchase made from web site to be delivered as promised," "The internet is a reliable medium for purchases," "The quality of products sold on web sites are consistently high," "I worry that the purchase I make from a web site will not be a good one," and "I am concerned that the purchase I make from a web site will not be worth the money." Coefficient alpha for this scale was .65.

## **Results**

### **Main Endorsement Effect**

Table 2 reports the test of the main effect of digital TPO endorsement and the main effect of digital TPO endorsement information value. Test of equality of percentage of participants' cruise vendor choice under each experiment condition was reported. A t-test was performed to compare responses on risk perception and attitude toward vendor across experimental conditions. Specifically, in BBB vs. no endorsement condition, a significantly higher proportion of participants chose a cruise vendor endorsed by BBB (57.9%) over a cruise vendor with no endorsement (42.1%). These participants also reported a lower level of risk perception and a more positive attitude toward the unknown cruise vendor they chose, although the differences are not statistically significant. In WebTrust vs. no endorsement condition, again, a significantly higher proportion of participants chose a cruise vendor endorsed by WebTrust (58.4%) over a cruise vendor with no endorsement (41.6%). These participants also reported a lower level of risk perception and a more positive attitude toward the unknown cruise vendor they had chosen, although the differences are not statistically significant. Hence, H1c is supported and but results for H1a and H1b although in the predicted direction are not statistically significant.

**Table 2: Main Effects of Digital TPO Endorsement and Digital TPO Endorsement Information Value**

Digital TPO Endorsement Condition	H1: Mere Presence of Digital TPO				Endorsement Information Value	
	No TPO vs. Low Information TPO (n=95)		No TPO vs High Information TPO (n=101)		Low Information TPO vs. High Information TPO (n=199)	
	No TPO (N=40)	Low Info. TPO (N=55)	No TPO (N=42)	High Info. TPO (N=59)	Low Info. TPO (N=90)	High Info. TPO (N=109)
Risk Perception	3.68	3.72	3.45	3.59	3.55	3.62
Attitude Toward Vendor	3.35	3.44	2.98	3.33	3.50	3.31
Cruise Vendor Choice (% within treatment)	42.1% <sup>a</sup>	57.9% <sup>a</sup>	41.6% <sup>b</sup>	58.4% <sup>b</sup>	45.2%	54.8%

<sup>a</sup> No TPO vs. Low Information TPO difference is significant at 5% level

<sup>b</sup> No TPO vs. High Information TPO difference is significant at 5% level

<sup>c</sup> Low Information TPO vs. High Information TPO difference is significant at 5% level

### Moderating Effects

In the low vs. high information value condition, the proportion of participants who chose the cruise vendor that employed the low information value BBB seal (45.2%) was not significantly different from the proportion of respondents who chose the high information value WebTrust seal (54.8%). We examine the conditions under which the differences emerge in H2 – H5. To test these hypotheses we examined the interaction of the digital TPO information value with involvement and institution-based trust. To construct a high/low involvement factor, first, the average of the three-item scales was used to represent involvement; then, the midpoint was used as a cutting point to group participants to either high involvement group (n = 141) or low involvement group (n = 58). In the same manner, we created two groups of institution-based trust, high (n = 86) and low (n = 113) institutional trust group.

Next, we compared study participants' cruise vendor choice under high and low involvement. These are reported in Table 3. In the high involvement condition, a

significantly higher proportion of participants chose cruise vendor endorsed by high information value digital TPO (59.6%) over cruise vendor endorsed by low information value digital TPO (40.4%). By comparison, in low involvement condition, no significant difference was found, indicating that participants didn't show any preference toward online vendor endorsed with high or low information value TPO. These findings are consistent with H2 and H3. Figure 3 plots this relationship.

**Table 3: Endorsement Information Value by Involvement**

Involvement	Endorsement Information Value Low (BBB) vs. High (WebTrust) (n=199)	
	Low (n=90)	High (n=109)
Low (n=63)	35 (55.6%)	28 (44.4%)
High (n=136)	55 (40.4%) <sup>a</sup>	81 (59.6%) <sup>a</sup>

<sup>a</sup> Low Information TPO vs. High Information TPO difference is significant at 5% level

Next, we compared study participants' cruise vendor choice under high and low institution-based trust. The results are reported in Table 4. Under low institution-based trust, a significantly higher proportion of participants chose the cruise vendor endorsed by the high information value digital TPO (61.4%) over the cruise vendor endorsed by the low information value digital TPO (38.6%). By comparison, in high institution-based trust condition, no significant difference was detected, indicating that participants didn't show any preference toward online vendor endorsed with high or low information value TPO. These findings resonate with H4 and H5.



**Table 4: Endorsement Information Value by Institution-based Trust**

Institution-Based Trust	Endorsement Information Value Low (BBB) vs. High (WebTrust) (n=199)	
	Low (n=90)	High (n=109)
Low (n=114)	44 (38.6%) <sup>a</sup>	70 (61.4%) <sup>a</sup>
High (n=85)	46 (54.1%)	39 (45.9%)

<sup>a</sup> Low Information TPO vs. High Information TPO difference is significant at 5% level

## 1. Conclusions

In this research, an online experiment was conducted to investigate the effect of the mere presence of digital TPO endorsement and the quality of information conveyed by a digital TPO, referred to as the endorsement information value effect. In addition, involvement and institution-based trust were tested as moderators of the endorsement information value effect. The findings from this research support the moderating role of involvement and institution-based trust in the main effect of digital TPO endorsement information quality, as suggested by the heuristics. The effectiveness of digital TPO endorsement information value was most pronounced among highly-involved participants. However, for low involvement consumers, the effect disappeared. Similarly, the effectiveness of digital TPO endorsement information value was most pronounced among participants with low institution-based trust. When institutional-trust increased, such effects leveled off. The effectiveness of digital TPO endorsement information quality was not significant among participants with high institution-based trust. The inclusion of the moderating variable seems to be very crucial, since it helps to explain the seemingly non-significant main effect of endorsement information value.

An important contribution of this study is the identification of digital TPO endorsement as a peripheral cue. The observed moderating effect of involvement could be attributed to participants placing less reliance on the TPO endorsement as they engaged in more effortful processing of the variation of the different information value. Similar information processing also occurs when participants' institution-based trust decreases.

Effectively communicating with one's target market is the key to success. The failure of many dot-coms in the early days of the Internet may be partially

attributable to the mismatch between the venture's offerings and its promotion strategies (Clemons and Aron, 2002). This study offers an initial solution of this mismatch by prompting e-marketers to gain a better understanding of their consumers. As consumers are likely to differ in their involvement and institution-based trust, the selection of digital TPO endorsement should be based on the level of involvement and institution-based trust of the target market of a specific vendor. If the vendor is dealing with highly-involved, skeptical consumers, it should consider investing in a digital TPO with more information value. On the other hand, if the vendor is interacting with low-involvement, or trusting consumers, they should adopt a digital TPO endorsement with low information value.

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