

The Impact of Website Design Dimensions on Online Brand Trust in E-Commerce Industry: Special Reference of “Kapruka.Com” Sri Lanka

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Abstract

Despite exponential growth in e-commerce, there is limited research on its potential effect on online brand trust, website design factors, and consumer online purchase intentions. This conceptual paper makes an important contribution to fill the existing gap in the literature and creating the fundamental linkages between level of website design factors and the effects of the extent on online brand trust. The importance of this empirical study lies in to identify the role played by the website design factors in the creation of online brand trust. This study empirically examines the relationship between website design factors and online brand trust created through “Kapruka.com”. This study conducted for total population group of “Kapruka.com” facebook fan page. Among 331,000 facebook fans of “Kapruka.com”, about two hundred (200) customers have been responded to the uploaded questionnaire within the required time frame. The respondents provided the data by means of a close-ended questionnaire. Data were analyzed

and evaluated by Univariate and Bivariate techniques. Pearson’s Correlation was used for testing the hypotheses. Data analysis was conducted using SPSS Software. While both the variables individually have high level attributes, the Pearson’s correlation analysis explores a positively significant linear relationship between website design factors (0.817**) and online brand trust created through “Kapruka.com”. The regression analysis indicates that the website design factors for “Kapruka.com” is useful to explain the variation in online brand trust created through the “Kapruka.com” Sri Lanka. This study provides outcomes that could be valuable to e-commerce industry for strategic planning and to compete in the industry.

Keywords:

Website design factors, Online Brand Trust and E-commerce Industry

1. INTRODUCTION

The Internet and Technology advancements have extend into an important marketing channel and modifying how online vendors interact with their customers. In the time of substantial competition and emergence of online business, fulfilling the aims of new marketing approaches in the companies depends to a great extent on the trust of their customers. Online Trust is believed to influence attitude change towards online shopping intensions. This fact is particularly evident in the electronic commerce industries. According to Hussin et al (2006), the nature of e-commerce imposes a physical distance between consumers and the online merchant and is not able to take a substantial look at their products. Thus, it becomes more significant establish mutual trust for stimulating purchases over the internet (Ha, 2004; Alam and Mohd Yasin, 2010). When a customer is satisfied with a particular online store, he or she is purchase continuously (Khalifa and Liu, 2007).

According to Doney and Cannon (1997) *et al*, to create long-term customer relationships, firms need to strengthen customer trust. Since the nature of e-commerce imposes a physical distance between consumers and the online vendor and is not able to take a substantial look at

their products Hussin et al (2006). Thus, it becomes more important build trust for boosting purchases over the online (Ha, 2004; Alam and Mohd Yasin,2010). To develop a successful e-commerce, companies need an extended understanding of how online trust is formulated and how it affects consumer behavioral intention in the online context.

Therefore, this study particularly in the Sri Lankan context empirically investigates the online brand trust, Because of the intensified perception of risk associated with the virtual market; trust is regarded as difficult to create. During every business transaction, the parties involved should feel trust with the people and the companies. Hence, this study specifically focuses e-commerce organization (Kapruka.com) for testing the website design factors that influence online brand trust. The results of this study indicate that the website design factors have positively related to the OBT, where the website design factors explain 66.5% variations of Online Brand Trust. Further analyses reveal that the website design factors and Positive online brand trust individually indicate a high level attributes in the mind-set of customers. The rest of this study is organized as literature review of the study, conceptual framework

and hypothesis, method, results, conclusion.

2. PROBLEM STATEMENT AND OBJECTIVES OF THE STUDY

There are already substantial studies regarding factors influencing online brand trust that have summarized large bodies of evidence. Alam, S. & Yasin, N. (2010), Ha, H. (2004) and Seyed Mohammad, A. (2015), offer a valuable discussion of influential factors on online brand trust such as *Quality of Information, Security, Privacy, Word-of-Mouth, Brand Name and Online Experience*. However, a literature review that focuses on trust-inducing website design features is still missing. The main goal of this paper is therefore to identify what elements of website design play a crucial role in online brand trust. Hence, this study attempts to explore the role of website design factors in influencing the OBT of “kapruka.com” Sri Lanka. Therefore, the specific research question of this study is:

“How far the role of website design factors influence on Online Brand Trust of Kapruka.com”

Therefore, the primary objective of this study is to examine the role of website design factors that influencing on online

brand trust among customers in the context of e-commerce industry. Further, as the secondary objective, this study also focuses on identifying the level of website design factors and OBT in relation to Kapruka.com.

3. LITERATURE REVIEW

Online Brand Trust: Due to the expansion of e-commerce, online brand trust has often been identified as an essential component. Because the e-commerce industry is highly competitive with many online vendors that look for acquiring customers, it is essential that a business comes up with a marketing strategy that creates online brand trust. A positive and memorable trust of a company gives its business a competitive edge. According to Ribbink, D. (2004), Trust defined as *“The extent of belief customers experience in online exchanges”*

Brand trust may play a more critical role in online businesses than brick-and-mortar stores (Jones and Kim, 2010; Rios and Riquelme, 2008) because online businesses are essentially intangible and their consumers cannot use physical and tangible features to infer trust. According to Li and Zhang (2002), consumers’ trust in a retailer can reduce perceived risk associated with context of online transactions.

According to Schlosser *et al* (2005), website's design that influences consumer trust and consequently impacts online purchase intentions. The look and feel of a website serves as a basis for consumers to form a first impression of the e-retailer, to develop an opinion of its trustworthiness, and to ultimately form their behavioral intent. Web site design is a critical part of electronic marketing strategy and an important element in building online trust (e.g., Hoffman, Novak and Peralta 1999; Shankar, Urban and Sultan 2002; Urban, Sultan and Qualls 2000).

Web site design: According to Ruparelia *et al* (2010), Web site design can improve brand trust also Cyr *et al*, (2008) pointed out that web design elements have been considered antecedents of trust, satisfaction and loyalty as well. Web site design plays a significant role in shaping store image and creating the first impression of a store. Srinivasan, (2004) indicated that when a potential customer visits a e-commerce site for the first time, his or her initial perceptions of that website are based on features that are visible on the website's main page. Web site cues such as font color, background color, animated images, and interactivity features positively influence the emotions or moods felt by online shoppers (Ha and Im, 2012). Several

studies have been concerned with identifying the factors that affect website design formation, such as: Cyr *et al* (2008) argue that “*information architecture*”, “*information design*”, “*visual design*” and “*navigation design*” important determinants of website design formation. Yang, Hu and Chen (2005) show that (1) “*graphic design dimension*” (2) “*structural design dimension*” (3) “*content design dimension*” (4) “*social-cue design dimension*” are dimensions of web site design model. The study found that Perceived ease of use, Navigation and Personalization have a significant and positive relationship with the website design formation.

Even though there are various effective factors have been known for online brand trust, major factors are related to website. Regarding to absence of prior experience, users mainly rely on their knowledge of website for making initial trust. In addition, information quality (content) has been found effective for initial trust. Other factors like website attraction and usability affect online consumers' initial trust. Koufaris and Hampton-Sosa (2002), described how the web site experience can influence customer trust in the company itself through customer beliefs about the web site. They

also discovered that if customers found a company's web site easy to use and useful then consequently customers viewed the company more favorably and perceive organization as being more trustworthy. When consumers perceive a site as useful and easy to use, they are more likely to search information from that particular website.

To create long-term customer relationships, firms need to build customer trust (e.g.,

Doney and Cannon 1997). Shankar *et al* (2003) indicates that customer trust is particularly important in the online context since customers increasingly rely on the Internet for information and purchases and can be more loyal online. A lack of trust towards online vendors is one of the main element discouraged consumers to engage in online shopping [Beatty et al. 2011].

4. CONCEPTUAL FRAMEWORK AND HYPOTHESIS

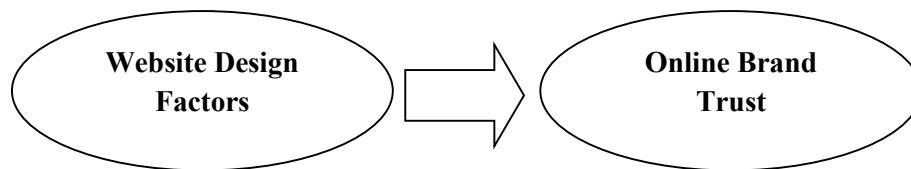


Figure 1: Conceptual Framework

Source: Adapted from Farhod P. Karimov, Malaika Brengman & Leo Van Hove. (2011)

According to Farhod P. Karimov (2011), variables were conceptualized as follows in order to analyze the role of website design in the creation of Online Brand Trust regarding “Kapruka.com” Sri Lanka. As Farhod P. Karimov (2011) indicates that Website Design Factors is positively influence on Online Brand Trust, the Hypothesis 1 (H1) of this study is:

H₁: Website Design Factors has a positive relationship with Online Brand Trust

According to Gurvinder S Shergill (2005), the website design factors is measured through “Perceived ease of use”, “Navigation” and “Personalization”, these dimensions played an essential role in building customer trust as these attributes replace the salesperson and physical surroundings of a traditional retail store,

therefore hypothesis have been formulated as follows:

H₂: Perceived ease of use of website has a positive relationship with Online Brand Trust

H₃: Navigation of website has a positive relationship with Online Brand Trust

H₄: Personalization has a positive relationship with Online Brand Trust

5. METHODOLOGY

Study Setting and Data Collection-

This study conducted for total population group of “Kapruka.com” facebook fan page. Totally 331,000 fans have liked (as at 20.06.2014) the Evaluating the attributes of dimensions and variables individually based on the response in the questionnaires. For this secondary objective, mean values and

“Kapruka.com”. Questionnaire was simply post on the “wall” of “Kapruka.com” facebook fan page in the form of a web link by using “Google Drive” which can easily open by all 331,000 fans in “Kapruka.com” facebook fan page.

Among 331,000 fans in facebook “Kapruka.com” page, about two hundred (200) fans have been responded to the uploaded questionnaire within the required time frame.

5.1 Method of Data Analysis and Evaluation

5.1.1 Univariate analysis

standard deviation of the dimensions and variables are taken into consideration. In this context, the following assumptions have been made.

Where;

X_i = mean value of a dimension/variable, σ = standard deviation, Z = value of the 95% confidence limit and, σ_x = standard error of the mean.

5.1.2 Bivariate analysis

Table 1: Decision Criteria for Univariate Analysis

Range for decision criteria	Decision Criteria	Decision Attribute
$X_i < (3-Z \sigma_x)$	$X_i < 3$	Low Level
$(3-Z \sigma_x) \leq X_i \leq (3+Z \sigma_x)$	$X_i = 3$	Moderate Level
$X_i > (3+Z \sigma_x)$	$X_i > 3$	High Level

(Source: developed for study purpose)

Bivariate analysis used to measure the magnitude and direction of the relationship between website design factors and Online Brand Trust. Correlation can be categories based on possible ranges in relation to appropriate decision attributes in a corresponding way. The significance level of the correlation coefficient is considered to explore the meaningful linear relationship and analyze the hypothesis.

6. RESULTS

6.1 Levels of website design factors and Its Dimensions

The website design factor is assessed with three dimensions: Perceived ease of use, Navigation and Personalization. The independent variable website design factor has high level attribute of the

customers (Mean $X_4 = 3.791$ and see Table 2). Notably, most of the customers expressed the common opinion regarding the variable of OBT (Standard deviation = 0.640). With individual analysis, it is also noted that all customers have high level attribute for website design factor.

Indicatively, all dimensions of website design factor have high level attributes of customers in relation to their mean values (mean values of Perceived ease of use $X_1 = 3.88$, Navigation $X_2 = 3.88$, and Personalization $X_3 = 3.62$). Among these dimensions, Perceived ease of use and Navigation of website design factor has high value of mean than Personalization.(see Table 2).

Table 2: Overall Measures of Independent Variable

Description	Dimensions			Independent Variables
	Perceived ease of use (X_1)	Navigation (X_2)	Personalization (X_3)	Website Design Factor (X_4)
Mean	3.88	3.88	3.62	3.791
Standard Deviation (SD)	0.922	0.756	0.889	0.640
Standard Error of Mean	0.065	0.053	0.063	0.053
Minimum	1.00	2.00	1.00	1.67
Maximum	5.00	5.00	5.00	5.00
Decision Attribute	High Level	High Level	High Level	High Level

(Source: Survey Data)

6.1 *Extent of online brand trust and Its dimensions*

The online brand trust is assessed with five dimensions: Quality of information, Security and privacy, Word of mouth, Brand name, online experience. The dependent variable online brand trust has high level attribute of the customers (Mean $X_3 = 3.6952$ and see Table 3). Notably, most of the customers expressed the common opinion regarding the variable of online brand trust (Standard deviation = 0.5288). With individual analysis, it is also noted

that all customers have high level attribute for online brand trust.

Indicatively, all dimensions of online brand trust have high level attributes of customers in relation to their mean values (mean values of Quality of information $X_5 = 3.7233$, security and privacy $X_6 = 3.4900$, Word of mouth $X_7 = 3.4367$, Brand name $X_8 = 3.6600$, Online experience $X_9 = 3.6050$, Among these dimensions, quality of information of online brand trust has high value of mean; and Word of mouth is comparatively lower than other dimensions in contribution to online brand trust (see Table 3).

Table 3: Overall Measures of Dependent Variable

Description	Dimensions					Dependent Variable
	Quality of information (X_5)	Security & Privacy (X_6)	Word of mouth (X_7)	Brand name (X_8)	Online experience (X_9)	Online Brand Trust (X_{10})
Mean	3.7233	3.4900	3.4367	3.6600	3.6050	3.6952
Std. Error of Mean	0.0459	0.0470	0.0449	0.0488	0.0618	0.0374
Std. Deviation	0.6489	0.6649	0.6344	0.6905	0.8734	0.5288
Minimum	1.67	2.00	2.33	1.00	1.00	2.05
Maximum	5.00	5.00	5.00	5.00	5.00	5.00
Decision Attribute	High Level	High Level	High Level	High Level	High Level	High Level

(Source: Survey Data)

6.2 **The Relationship between website design factor and OBT**

The correlation analysis is initially carried out to explore the linear

relationship of Website Design Factor with online brand trust, if it exists. Results indicate that there is statistically linear significant and positive relationship ($r = 0.817$, $p < 0.01$) between

Website Design Factor and online brand trust (see Table 4). Thereby, accept the Hypothesis 1 H1 – i.e., website Design Factor significantly influences on online brand trust.

Table 4: Correlation between Website Design Factor and online brand trust

Correlations		
		Online Brand Trust
Website Design Factor	Pearson Correlation	.817**
	Sig. (2-tailed)	.000
**. Correlation is significant at the 0.01 level (2-tailed).		

(Source: Survey Data)

Further analysis carried out to confirm how each independent variable has associated with each dimension of dependent variable. According to the correlation matrix, it is obvious that most of the correlations are significant at the 5% level (see Table 5). However, it

is noted that all dimensions of a dependent variable have significant relationship with independent variables, even at the 5% level (i.e., significant relationships of Website Design Factor with all dimensions of OBT).

Table 5: Correlation between the Independent Variables and Dimensions of OBT

Correlations							
		QI	SP	WM	BN	OE	OBT
Perceived Ease of use	Pearson Correlation	.490**	.408**	.525**	.543**	.478**	.696**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000
Navigation	Pearson Correlation	.243**	.347**	.373**	.260**	.267**	.451**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000
Personalization	Pearson Correlation	.499**	.427**	.462**	.583**	.434**	.660**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000
Website Design Factor	Pearson Correlation	.562**	.530**	.612**	.632**	.535**	.817**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000
**. Correlation is significant at the 0.01 level (2-tailed).							

(Source: Survey Data)

6.3 Regression of Website Design Factor on Online Brand Trust

Regression analysis indicates that 1 unit of Website Design Factor for “Kapruka.com” is significantly (significant level 0.01) converted as ($\beta_1 =$) 0.674 times into Online Brand Trust created through Website Design Factor for “Kapruka.com”.

The constant value ($\beta_0 = 1.139$, significant level 0.01) implies that Online Brand Trust created for “Kapruka.com” can be estimated as 1.139 as combined effect of Website Design Factor together with other factors, when Website Design Factor is zero for “Kapruka.com” (see Table6).

Table 6: Regression analysis between dependent and independent variables

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.139	.130		8.747	.000
	Website Design Factor	.674	.034	.817	19.908	.000
a. Dependent Variable: OBT						

(Source: Survey Data)

The analysis indicates that the correlation of coefficient (r) was 0.817 between Website Design Factor and Online Brand Trust, which was significant at 0.00 level. This result confirms the Farhod P. Karimov (2011), The effect of website design dimensions on initial trust. The model

indicates that about (adjusted R^2) 66.5% variation of Online Brand Trust (see Table 7) can be explained by Website Design Factor for “Kapruka.com”. These results confirm that Online Brand Trust is the outcome of the Website Design Factor as indicated by Farhod P. Karimov (2011).

Table 7: Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.817 ^a	.667	.665	.30601
a. Predictors: (Constant), WD				

(Source: Survey Data)

7.CONCLUSION

This study considers Website Design Factor as independent variable and Online Brand Trust as the dependent variable. While these variables individually have high level attributes of the customers, the Pearson's Correlation analysis explores a positive significant linear relationship between Website Design Factor and Online Brand Trust. The correlation coefficient (r) was 0.817 at the 1% level. This implies that Online Brand Trust for "Kapruka.com" can be predicted with Website Design Factor. Hence, we accept the hypothesis H1: Br Website Design Factor has a positive relationship with Online Brand Trust.

The correlation coefficient between the Website Design Factor and Online Brand Trust indicates that the Website Design Factor is useful to explain 66.5% of variation in Online Brand Trust. If a "Kapruka.com" service provider comes to know the status of Website Design Factor, the service provider can predict

66.5% of Online Brand Trust. According to Farhod P. Karimov (2011), Website Design Factor can have positive effect on online brand trust and this is consistent with Ali Sanayei (2013). This study also has the same positive effect of Website Design Factor on online brand trust.

This study focuses only one independent variable Website Design Factor to explain the online brand trust and to explore the relationship between them. However, it is explicit that there may be other variable(s) to be considered to explain the variation of online brand trust. Future studies can be devised to identify those additional variable(s) for explaining the online brand trust.

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