The Impact Of Website Design Features On Behavioral Intentions

Chun-Chin Chiu, Hao-Erl Yang

Abstract: The design of a website interface plays an important role in online purchasing, and customers are more likely to visit and buy from better-designed websites. However, previous studies have not provided consistent information about the features a website should provide. Based on Hausman and Siekpe's (2009) comprehensive model, this study aims to empirically verify whether the model can be applied in e-service markets to predict and explain website users' behavioral intentions (trade intentions and revisit intentions). Based on the data from a survey of 303 Internet users, the results indicate that computer factors and human factors, the key website design features, are significantly related to website users' experiences: perceived usefulness, perceived entertainment value, and perceived informativeness, in turn, significantly affect the intermediary outcomes of attitude toward the site and, ultimately, influence users' behavioral intentions.

Index Terms: Website Design Features, Uses and Gratifications Theory, TAM, Irritation, Flow Theory, Behavioral Intentions.

1 INTRODUCTION

Recently, firms have made efforts to apply Internet technologies to improve the design of their websites to ensure quality in customers' interaction experience (Al-Qeisi, Dennis, Alamanos, & Jayawardhena, 2014). In online shopping environments, a website interface serves as the "online storefront" for customers to interact with the online retailer, and to experience and evaluate the quality of service manifested by the website design (Zhang & von Dran, 2002). Previous studies have found that the website design interface plays an important role in online purchasing during customers' initial experiences with an online retailer, as the website design elements and the interaction experience influence customers' initial beliefs and subsequent behavioral intentions (Wells, Valacich, & Hess, 2011; Al-Qeist et al., 2014) and customers are more likely to visit and buy from better-designed websites (Mithas, Ramasubbu, Krishnan, & Fornell, 2007). However, previous studies have not provided consistent information about the features a website should provide. For example, Hausman and Siekpe(2009)used computer factors and human factors, which can be referred to as utilitarian and hedonic characteristics, as the web interface features; Seckler, Heinz, Forde, Tuch, and Opwis (2015) suggested that the website characteristics include five dimensions: graphic design (visual design), structure design(usability), content design(security signs), social-cue design(customer service), and personal and social proof (users'social proof); Hasan (2016)proposed a three-dimensional model(visual design, navigation design, and information design). Hausman and Siekpe (2009) argued that effective website design should include both high task-relevant computer factors (e.g., technical aspects) and low-task human factors (e.g., visual appearance such as color and graphics) to create a more effective online shopping experience.

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In Internet banking context, most businesses and customers use online banking transactions, not only because of the high efficiency and low cost of the channel but also because of the great potential for development (Lu, 2001). Some studies have pointed out that many consumers finish buying goods at the site, but Internet trading platforms do not complete the payment transaction so customers feel disappointed. This cannot produce a satisfactory consumer experience and may even make consumers think that companies ignore customers' needs (Nielsen, 2000 ; Rosen & Purinton, 2004). Many types of research have attached attention in the direction of the human-machine interface; through experience and ease of use, research has measured the quality of website operation conditions (Preece et al., 1994). This study focuses on factors that have a direct impact on online transactions. Hausman and Siekpe (2009) critically examined both machine and human elements of web design, first categorizing design elements, then linking these elements to managerial outcomes. They developed a comprehensive model including elements from several areas such as technology acceptance model (TAM), extrinsic motivation theory, uses and gratifications theory (U&G), and the concept of flow and attitude for explaining customer trade intentions and revisit intentions. In addition, they included the perceived irritation construct, which is scarcely investigated in the study of the effects of website design factors in online shopping contexts, in their comprehensive model (Hasan, 2016). Therefore, based on Hausman and Siekpe's (2009) model, this study aimed to verify whether the model can be applied in e-service markets to predict how website design factors (computer factors and human factors) influence shoppers' positive and negative perceptions and attitudes and, in turn, to predict and explain their behavioral intentions (trade intentions and revisit intentions).

2 RESEARCH MODEL AND HYPOTHESES DEVELOPMENT

2.1 Technology Acceptance Model

The technology acceptance model (TAM) proposed by Davis (1989) suggests that perceived usefulness and perceived ease of use determine an individual's attitude towards usage and intention to use a new technology or service, and perceived usefulness is also considered to be affected directly by perceived ease of use. TAM has been widely extended and used to explore the adoption and continued use of new technology or services, such as the use of service websites in

online service contexts. The findings of previous studies revealed that both computer factors and human factors of website design were positively related to perceived usefulness. For example, Heijden (2003) suggested a link between perceived visual attractiveness (human factors), perceived usefulness, and perceived enjoyment; Calisir and Calisir (2004) found that perceived ease of use, system capability, and user guidance (computer factors) are determinants of perceived usefulness; and Hausman and Siekpe (2009) reported that both computer factors and human factors of website design features have a positive and significant impact on perceived usefulness. Therefore, we propose the following hypothesis:

H1: a) Computer factors and b) human factors have a positive effect on perceived usefulness.

2.2 Uses and Gratifications Theory

Uses and gratifications theory (U&G) is considered a useful approach for understanding users' motivations and how they actively seek out specific media/information technology to fulfill specific needs(Luo, Chea, & Chen, 2011). The primary U&G theory is based on the psychological needs of consumers, in which the assumption is that users themselves can take the initiative to select the media path and generate a psychological assessment (Lee, Xiong & Hu, 2012). U&G studies have noted that other features of the site provide interactive entertainment business value, so it is possible to provide users with escape, kill-time, and aesthetic or emotional release (Ducoffe, 1996). Recent research on the adoption of web-based information services (WISs) indicated that both hedonic and utilitarian needs drive an individual's information technology adoption decision. Previous studies have suggested that people use the Internet for retrieving information and seeking entertainment. These studies have reported the following motivations for using the Internet: convenience, information seeking, entertainment, and social interaction. WISs are growing rapidly, which empowers users by enabling them to personalize services and gratify their entertainment and information needs (Ferguson & Perse, 2000; Papacharissi & Rubin, 2000; Luo et al., 2011). In addition, Hausman and Siekpe (2009) found that computer factors and human factors have a positive and significant impact on informativeness and computer factors have a positive and significant impact on perceived entertainment. Therefore, we propose the following hypotheses:

H2: Informativeness is positively influenced by a) computer factors and b) human factors.
H3: Perceived entertainment is positively influenced by human factors.

In traditional shopping contexts, perceived irritation among consumers has been widely recognized and investigated in the literature, as it has shown negative effects on various aspects of consumer purchasing behavior. However, investigations into perceived irritation in online shopping environments are limited in the literature (Hasan, 2016). Thus, the antecedents and consequences of perceived irritation in online shopping deserve further investigation and understanding. In the measure related to site usage, the factors encompass both human and computer factors. Computer factors include the page design, up-to-date information, and assurance of privacy, all of which affect consumers' evaluation (Schneiderman & Designing, 1997). Negative incentives cause users to feel distressed and unhappy or confused when using the site; in severe cases, they give up or complain (Ducoffe, 1996; Chen & Wells, 1999). Human factors include a global search feature, humor, language options, and feedback features, which provide easy-to-use navigation. Many previous studies have noted that poor quality of a site causes a decline in the value of advertising and consumer motivation, generating severely negative comments. Therefore, in online shopping contexts, poorly designed websites may impede consumers' ability to effectively navigate the websites and assess certain types of products (Wells et al., 2011). Thus, an attractively designed website is expected to have a negative effect on perceived irritation. Hausman and Siekpe (2009) hypothesized that computer factors and human factors of website design features are positively related to perceived irritation. However, their results showed that computer factors have a negative and significant effect on perceived irritation and this, in turn, has a negative and significant effect on attitude toward the site. Hasan (2016) found that two website design characteristics have negative effects on perceived irritation. Therefore, we propose the following hypothesis:

H4: Perceived irritation is negatively influenced by a) computer factors and b) human factors.

2.3 Attitude toward the Sites

TAM posits that perceived ease of use and perceived usefulness influence individuals' attitudes toward using an information technology, which in turn influences intentions to use the technology. Chen, Gillenson, and Sherrell (2002) in their study on "Enticing online consumers -- an extended TAM" showed that attitude toward the site is positively influenced by perceived usefulness. Several studies have tested the effects of entertainment, informativeness, and organization on attitude toward the site, where organization is operationalized by four adjectives: not messy, not cumbersome, not confusing, and not irritating. The results showed that entertainment, informativeness, and organization have positive and significant influences on the attitude toward the site and explain most of the variance in the attitude toward the site ($R2 = 0.63$ and $R2 = 0.87$ for two studies) (Chen & Wells, 1999; Chen, Gillenson, & Sherrell, 2002). Hausman and Siekpe (2009) combined perceived usefulness, entertainment, informativeness, and irritation (organization) into a comprehensive model and tested their effects on attitude toward the site. The results show that perceived usefulness, entertainment, and informativeness have a positive effect on attitude toward the site; perceived irritation has a negative effect on attitude toward the site. In a study on consumers' attitudes and intentions toward online shopping via an Internet-enabled TV (IETV), Wagner, Schramm-Klein, and Steinmann (2016) found that the attitude toward IETV shopping is primarily influenced by the hedonic shopping motivations of enjoyment and comfort and by the utilitarian motivations of usefulness and convenience. Thus, attitude has an influence on intention to inform and intention to purchase. In addition, perceived irritation has demonstrated negative effects on consumer purchasing behavior such as attitude, purchasing intention, and eventual buying behavior (Gao & Wu, 2010; Azeem, 2012). Therefore, we propose the following hypothesis:

H5: Attitude toward the website is positively influenced by a) perceived usefulness, b) perceived informativeness, c) perceived entertainment, but negatively affected by d) perceived irritation.

2.4 The Concept of Flow

Flow was first described by Csikszentmihaiyi (1975) as the process of optimal experience in a situation where individuals act with a sense of total control, concentration, deep involvement, and enjoyment (Bilgihan, Nusair, Okumus, & Cobanoglu, 2015). Flow theory was first applied to online environments by Hoffman and Novak (1996), who argued that online flow can be experienced when one is completely immersed in an online activity. The flow construct is important for understanding the nature of the consumer experience and is recognized as a useful variable for explaining online consumer behavior. Also, flow consists of a process state that requires a set of antecedents to occur and results in a set of consequences (Obada, 2013). Prior research has demonstrated that website interactivity has an impact on online consumers' cognitive, affective, and behavioral responses: online flow, the website users' complete immersion in an online activity, which in turn leads to more browsing, shopping, and, ultimately, repeat purchase (Smith & Sivakumar, 2004; Van Noort, Voorveld, & Van Reijmersdal, 2012). Hoffman and Novak (1996) suggested that flow mediates the effects of interactivity while navigating across websites; online flow mediates the relationship between website interactivity and responses of concern to marketers, such as consumers' generated product and website impressions, attitudes, and behavioral responses. In an online travel community study, Wu and Chang (2005) argued that online flow mediates interactivity effects on behavioral responses. Empirical support for the effects of perceived usefulness, entertainment, informativeness, and irritation on online flow is provided by Hausman and Siekpe (2009) in two e-commerce website studies. The suggestion is that greater interaction with a visually appealing, entertaining, informative, or perceived-as-useful website may lead consumers to experience a state of flow. Therefore, we propose the following hypothesis:

H6: Perceived flow is positively influenced by a) perceived usefulness, b) perceived informativeness, c) perceived entertainment, but negatively affected by d) perceived irritation.

2.5 Behavioral Intentions

Attitude is a key determinant of behavior or behavioral intention in the online purchase context (Wells et al., 2011). Several studies have demonstrated that attitude toward the site positively influenced behavioral intentions. For example, by applying extended TAM, Chen, Gillenson, and Sherrell(2002) found that attitude toward the site mediated the effect of perceived usefulness on behavioral intention to use the site and attitude toward the site positively influenced behavioral intentions. Based on U&G theory applied to the interactivity context, Ko, Cho, and Roberts (2005) found a positive relationship between user website attitude and purchase intentions. Hausman and Siekpe (2009) reported a positive relationship between user website attitude and purchase intentions and revisit intentions. Recently, Wagner et al. (2016) found that the attitude toward IETV shopping has a positive and significant influence on intention to inform and intention to purchase. Therefore, we propose the following hypothesis:

H7: a) Intention to trade from the website and b) Intention to revisit the website are positively influenced by the attitude toward the website.

In online service contexts, flow variables are related to attractive outcomes, such as positive attitudes toward websites (Huang, 2003), future intentions to revisit, and repurchase transaction intentions (Smith & Sivakumar, 2004; Siekpe, 2005; Wu & Chang, 2005). Meanwhile, Wu and Chang (2005) showed that online flow mediates interactivity effects on behavioral responses. Hausman and Siekpe (2009) found that perceived flow has a positive and significant effect on purchase intention and revisit intention. Therefore, we propose the following hypothesis:

H8. a) Intention to trade from the website and b) intention to revisit the website are positively influenced by the perceived level of flow.

3 METHODS

This study was intended to examine how online service website features affect consumer trade intentions and revisit intentions through consumers' online surfing experiences and attitude toward the site. Before formally starting this study, we performed preliminary research on related literature. Results were used as the basis for the implementation of this study. We then asked subjects to participate in the survey and answer the questions in the questionnaire about their perceptions of the characteristics of the website they used and their behavioral intentions.

3.1 Subjects and Data Collection

The target population of this study was service website users from Taiwan. First, we conducted a pilot study by using the data from 30 website users. Based on their responses and suggestions, minor modifications were made to the questionnaire. We then conducted a self-administered survey. A total of 346 questionnaires was returned, and after discarding 43 that were unusable, 303 valid questionnaires were used for further analysis.

3.2 Research Model

Based on Hausman and Siekpe's (2009) comprehensive model, this study proposed the research model shown in Figure 1. The conceptual model demonstrates that website design factors drive Internet behavioral intentions, mediated by customers' experiences in using the site and their attitude toward the site and online flow.

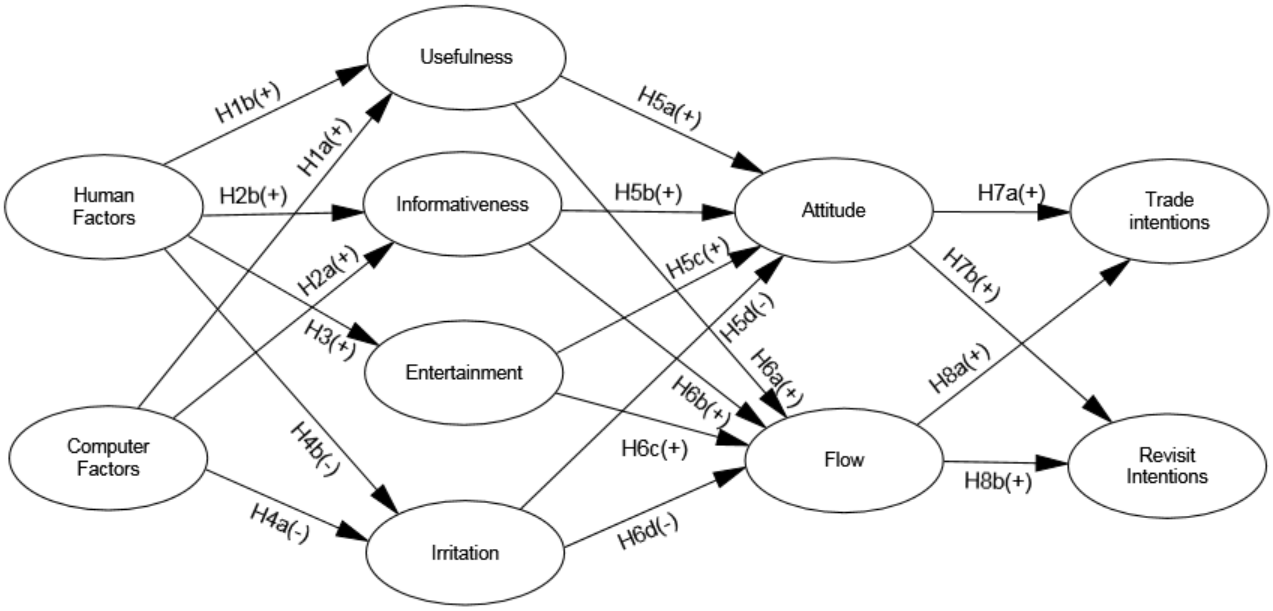

Figure 1 . *Research Model*

4 Data Analysis and Results

To empirically test the proposed research hypotheses, the data from a sample of 303 respondents were analyzed by using the statistical packages of SPSS 21.0 and AMOS 21.0. The analysis methods included descriptive statistics, confirmatory factor analysis, reliability and validity analysis, and structural equation modeling. The results are described in detail below.

4.1 Descriptive Statistics

The 303 respondents included 158 males (52.1%) and 145 females (47.9%), with 52.5% between the ages of 21 and 30, 33.3% between the ages of 31 and 40, 10.6% between the ages of 41 and 50, and 2.3% older than 50. Most respondents worked in the service industry (54.8%); 11.2% were in business, 6.6% were public servants, 5.3% worked in the communications industry, 5% were self-employed, 4% were students, 8.9% worked in other industries, and 0.3% worked in agricultural industries. Most respondents (39.3%) used the Internet for 4-9 hours per week, 36.6% used it for more than 10 hours a week, and 24.1% used it for less than 3 hours a week.

4.2 Measurement Model Analysis

Table 1. *Square Root of AVE and Correlations among Constructs*

	HU	CP	US	EN	IN	IR	AT	FL	TR	RE
HU	**.754**									
CP	-.025	**.832**								
US	.534	.637	**.909**							
EN	.750	.480	.340	**.921**						
IN	.586	.634	.617	.634	**.906**					
IR	.032	-.109	.055	.128	.036	**.933**				
AT	.683	.643	.753	.542	.637	.024	**.842**			
FL	-.189	-.025	-.045	-.129	-.072	-.611	-.128	**.933**		
TR	.471	.422	.585	.327	.403	.136	.58	-.110	**.897**	
RE	.506	.463	.539	.450	.586	.065	.555	-.034	.664	**.928**
CR	.902	.94	.95	.944	.932	.953	.924	.953	.953	.925
AVE	.569	.692	.826	.848	.821	.871	.709	.871	.804	.861

Note: Numbers on the diagonal are the square root of relevant AVEs. Other are the correlations of all constructs.

Abbreviation: HU= Human Factors, CP=Computer Factors, US= Usefulness, EN= Entertainment, IN= Informativeness, IR= Irritation, AT= Attitude, FL=Flow, TR= Trade intentions , RE= Revisit Intentions.

CR= Composite Reliability, AVE= Average Variance Extracted.

All study constructs were assessed by the measurement scales adapted from those used by Hausman and Siekpe(2009). To validate the constructs, we performed confirmatory factor analysis on all scales to estimate the research measurement model. The indexes of the model provided a acceptable fit: $\chi 2/df = 1.945$, which was less than 3;

IFI = 0.929, TLI = 0.922, and CFI = 0.928, all were greater than 0.9; RMSEA = 0.07(<0.08). The results revealed that all measurement items loaded properly on their intended constructs and all factor loadings were significant (p<0.01) and greater than the acceptable threshold of 0.6. Two indicators of convergent validity were calculated basing on factor loadings: composite reliability (CR) and average variance extracted (AVE). As shown in Table 1, the composite reliability (CR), ranging from 0.902 (Human factors) to 0.953 (perceived flow), greater than the threshold of 0.7 and the average variance extracted (AVE) for each construct was between 0.569 (Human factors) and 0.871 (perceived flow), higher than 0.5 , indicating all CR and AVE values of constructs were sufficient in this study. In addition, the correlation coefficients of different constructs were lower than any of their square root of AVEs, indicating that the discriminant validity was adequate in this study (Table 1)

4.3 Structural Model Analysis

Structural equation modeling (SEM) was performed to test the structural model and hypotheses. The fit indexes of structural model were: $\chi 2/df$ =2.137 which was less than 3; IFI = 0.929, TLI = 0.922, and CFI = 0.928, all were greater than 0.9; RMSEA = 0.06(<0.08), all within the accepted thresholds suggested in the literature, indicating that the hypothesized model fit the data well. The results of testing the proposed hypotheses were shown in Table 2. Computer factors (β=0.499, p<0.001) and human factors (β=0.210, p=0.002) were found to have positive and significant influences on perceived usefulness, indicating that H1a and H1b were supported. Computer factors (β=0.226, p=0.001) and human factors (β=0.606, p=0.001) had positive and significant influences on perceived informativeness, indicating that H2a and H2b were supported. Human factors (β=0.760 , p<0.001) had a positive and significant influence on perceived entertainment, indicating that H3 was supported. Computer factors (β=-0.271, p<0.001) had a negative and significant influence on perceived irritation, indicating that H4a was supported. However, the standardized coefficient of the path linking human factors(β=0.245, p=0.001) to perceived irritation was positive and significant, indicating that H4b was not supported. The effects of two website design factors on perceived usefulness and perceived informativeness were different. Computer factors had a more influential impact on usefulness and human factors had a more influential impact on informativeness. Perceived usefulness (β=0.604, p=0.005), perceived entertainment (β=0.275, p=0.001), and perceived informativeness (β=0.120, p=0.029) had a positive and significant influence on attitude toward the site, respectively, but the effect of perceived irritation(β= -0.027 , p=0.320 on attitude toward the site was not significant, indicating that Hypotheses 5a-5c were supported, but not H5d. On the other hand, the impacts of perceived usefulness (β=0.020, p=0.811), perceived informativeness(β= -0.050, p=0.454), and perceived entertainment(β= -0.041, p=0.548) on perceived flow were non-significant, thus H6a-6c were not supported. However, perceived irritation(β=-0.607, p<0.001) had a negatively significant impact on attitude toward the site, thus H6d was supported.

Table 2. *Hypotheses Testing Results*

Hypothesis	Parameter Estimation	Path(β)	p-value	Results
H1a(+)	Computer factors→Usefulness	**0.499**	**0.000**	**Supported**
H1b(+)	Human factors→ Usefulness	**0.210**	**0.002**	**Supported**
H2a(+)	Computer factors→ Informativeness	**0.226**	**0.001**	**Supported**
H2b(+)	Human factors→ Informativeness	**0.606**	**0.001**	**Supported**
H3(+)	Human factors→ Entertainment	**0.760**	**0.000**	**Supported**
H4a(-)	Computer factors→ Irritation	**-0.271**	**0.000**	**Supported**
H4b(-)	Human factors→ Irritation	0.245	0.001	Not Supported
H5a(+)	Usefulness→ Attitude toward the site	**0.604**	**0.001**	**Supported**
H5b(+)	Informativeness→ Attitude toward the site	**0.120**	**0.029**	**Supported**
H5c(+)	Entertainment→ Attitude toward the site	**0.275**	**0.000**	**Supported**
H5d(-)	Irritation→ Attitude toward the site	-0.027	0.320	Not Supported
H6a(+)	Usefulness -→ Flow	0.020	0.811	Not Supported
H6b(+)	Informativeness→ Flow	-0.050	0.454	Not Supported
H6c(+)	Entertainment→ Flow	-0.041	0.548	Not Supported
H6d(-)	Irritation→ Flow	**-0.607**	**0.000**	**Supported**
H7a(+)	Attitude toward the site→ Trade intentions	**0.614**	**0.000**	**Supported**
H7b(+)	Attitude toward the site→ Revisit intentions	**0.619**	**0.000**	**Supported**
H8a(+)	Flow→ Trade intentions	-0.044	0.335	Not Supported
H8b(+)	Flow→ Revisit intentions	0.017	0.686	Not Supported
indirect	Computer factors→ →Trade intentions	**0.199**	**0.000**	**Significant**
effects	Human factors → →Trade intentions	**0.256**	**0.001**	**Significant**
	Computer factors→ →Revisit intentions	**0.211**	**0.000**	**Significant**
	Human factors → →Revisit intentions	**0.245**	**0.001**	**Significant**

Finally, the impacts of attitude toward the site on both trade intentions (β=0.614, p<0.000) and revisit intentions (β=0.619, p<0.001) were significant, indicating that H7a and H7b were supported. However, the impact of perceived level of flow on both revisit intentions (β=0.017, p=0.686) and trade intentions (β=-0.044 , p=0.335)were non-significant. Thus, H8a and H8b were not supported. When we examined the standardized indirect effects of computer factors and human factors on trade and revisit intentions, as shown in Table 2, we found that both computer factors (0.199(p<0.001), 0.211(p<0.001))and human factors (0.256 (p=0.001), 0.245 (p=0.001) have positively significant indirect effects on trade intentions and revisit intentions with human factors having a more influential impact on trade and revisit intentions, respectively.

Table 3. *The Important Influential Paths toward Behavioral Intentions*

Website feature	Experience	Attitude toward site	Intentions	Effect
Computer factors →	Usefulness →	Attitude toward site →	Revisits intentions	0.187
Computer factors →	Usefulness →	Attitude toward site →	Trade intentions	0.185
human factors →	Entertainment →	Attitude toward site →	Revisits intentions	0.129
human factors →	Entertainment →	Attitude toward site →	Trade intentions	0.128
human factors →	Usefulness →	Attitude toward site →	Revisits intentions	0.079
human factors →	Usefulness →	Attitude toward site →	Trade intentions	0.078
human factors →	Informativeness →	Attitude toward site →	Revisits intentions	0.045
human factors →	Informativeness →	Attitude toward site →	Trade intentions	0.045
Computer factors →	Informativeness →	Attitude toward site →	Revisits intentions	0.017
Computer factors →	Informativeness →	Attitude toward site →	Trade intentions	0.017

5. Discussion and Suggestions

This study employed a comprehensive website design structural model to examine how computer factors and human factors of website design features influence website users' behavioral intentions. First, we checked the effects of both computer factors and human factors on website users' experiences: perceived usefulness, perceived entertainment value, perceived informativeness, and perceived irritation. We found that both computer factors and human factors are important predicators of usefulness and informativeness, with computer factors (β=0.499) having a more influential effect on usefulness than human factors(0.210) and, in contrast, human factors(0.606) having a more influential effect on informativeness than computer factors (0.226). Human factors had positive and significant impacts on entertainment and irritation, and computer factors had a negative impact on irritation. Their strong impact on these three experience variables suggests their importance in website design. Second, we examined how website users' experiences influenced their attitude toward the site and its flow. As shown in Table 2, the impacts of perceived usefulness (0.604), perceived entertainment value (0.275), and perceived informativeness (0.125) on attitude toward the site were significant, whereas the impact of perceived irritation (-0.027) was not. On the contrary, the impacts of perceived usefulness (0.020), perceived entertainment value (-0.041), and perceived informativeness (-0.050) on flow were not significant, but the impact of perceived irritation (-0.607) on flow, as expected, was negative and significant. Third, we found that the effects of attitude toward the site on trade intentions (0.614) and revisit intentions(0.619) were very strong. However, the effects of flow on trade intentions (-0.040) and revisit intentions (0.017))were not significant. Finally, when we checked how human factors and computer factors influence customers' behavioral intentions, we found that the most important path, with a total indirect effect value of 0.187, as shown in Table 3, was:

Computer factors→ Usefulness→ Attitude toward site→ Revisits intentions

The following important paths, as shown in Table 3, are listed in order. From Table 3, we can see that attitude toward the site constitutes the primary driver of online behavioral intentions. This is consistent with previous research indicating that customers' intention to revisit or purchase from a website is a result of their attitude toward using the technology involved in the site. Furthermore, attitude toward the site was mainly influenced by usefulness, perceived entertainment value, and perceived informativeness; computer factors and human factors were necessary but indirect antecedents of online behavioral intentions via attitude toward the site, indicating that Internet designers should add more human and computer features that affect the website's appearance, including images, colors, fonts, shapes, animations, and layout, and relevant, current, and easy-to-understand information. The organization and structural layout of the site's pages and content should add up to an easy-to-use website (Hasan, 2016). Meanwhile, surprisingly, we found that perceived flow did not have any impact on trade intentions and revisit intentions. These results consist to the findings by Bilgihan et al., (2015) they proposed a hypothesis that the flow experience on a hotel booking website has a positive impact on loyalty to the website, was not supported. But the results differed from those found by Hausman and Siekpe(2009), who found that the impacts of flow on both trade intentions and revisit intentions were positive and significant. In addition, we found that the impact of human factors (0.245, p=0.001) on perceived irritation was positive and significant, which is inconsistent with H4b. Further studies may investigate why these inconsistent results occur.

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