



## THE RELATIONSHIP BETWEEN WEBSITE DESIGN AND POSITIVE EWOM INTENTION: TESTING MEDIATOR AND MODERATOR EFFECT

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**Abstract.** Electronic word of mouth (eWOM) has paid attention to the phenomenon of marketing strategy because of the power of online comments to behavioural consequences. The key challenge for scholars and practitioners is to explore why consumers would like to give positive reviews of products and service. However, little empirical research has been conducted on the effect of website design on eWOM intention. The objective of this paper is to investigate the impact of website design (aesthetic and usability) on eWOM intention, which is based on the adoption of the stimulus – organism – response model. To test the hypotheses, the study uses the Partial Least Squares (PLS) to test a total of 290 respondents collected from Taiwanese customers via an online survey. The outcomes show the impact of the website's design on the attitude toward it, which would lead to positive eWOM. The study also provides empirical evidence on the moderating role of online purchasing experience and the mediating effect of attitude toward a website on eWOM intention. Finally, the discussions also show implications and managerial insight for both scholars and marketers.

**Keywords:** eWOM intention, website design, aesthetic appeal, usability, attitude toward website, online purchasing experience.

**JEL Classification:** M31.

### Introduction

The rise of e-commerce and eWOM (electronic word of mouth) has had a critical impact on consumers' choice, so that understanding customers' eWOM behaviour is more useful to managers, especially marketing professionals. Consumers are able to publish their opinions, reviews, feelings about products through a variety of technology media (Cheung & Lee, 2012). Academics and practitioners have highlighted the role of positive eWOM because its role may increase consumers' purchase intention, attract consumer visits, and be useful for retailers who want to direct marketing efforts more efficiently (Y. J. Kim & H. Y. Kim, 2010),

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they are still a far cry from understanding of the antecedents of eWOM. Yang (2017) has highlighted that very little is known about the predictors of customers' participation in giving positive reviews from their experiences about products/services.

In the online context, consumers only touch, feel, search and experience products through mainly websites; therefore, the websites which are beautiful lead to pleasurable user experience and the usability of the websites play a critical role in creating a positive attitude toward an online store and revisiting websites (Lee & Kozar, 2012). Previous studies have demonstrated that aesthetic appeal and usability are the key factors in shaping consumers' attitude and behaviours, such as loyalty, satisfaction (Casaló, Flavián, & Guinalú, 2008), attitude and purchase intention (Wu, Lee, Fu, & Wang, 2013; Porat, Liss, & Tractinski, 2007). However, little attention has been paid on how these dimensions affect online consumers' and eWOM activities (Casaló et al., 2008; Ha & Im, 2012). To explain users' intention affected by online atmospheric, researchers have widely employed the Stimulus – Organism – Response (S-O-R) theory introduced by Donovan, Rossiter, Marcoolyn and Nesdale (1994). The S-O-R model suggest the stimuli as atmospheric cues, organism the consumers' emotional reaction, which affect their avoidance behaviours as response. Based on this theory, this study attempts to address this research gap by comprehensively investigating the influence of aesthetic appeal and usability on motivate to engage in eWOM intention. This study also establishes the role of attitudinal effect as an important mediator the relationship between two aspects of website design and eWOM intention.

Finally, the role moderator of users' prior experience becomes an important factor in their behaviour because customer experience has a strong effect on forming attitude (Venkatesh, 1998) and it drives the growth of Internet shopping (Elliot & Fowell, 2000). Marketers enhance deeper understanding of their potential customers' experiences as part of their overall strategy because it provides the company with an insight into customers' needs, habits, and preferences (Hsu, Chen, Yang, & Lin, 2017). Yu, Ha, Choi and Rho (2005) also suggested that online consumer behaviours are able to change when they gain experience. According to Kim and Park (2013), consumer's attitude and behaviour are influenced by the gap of online shopping experience. Consequently, this study contributes to the literature analysing whether online experience moderates the relationship between website design dimensions (aesthetic appeal and usability) and attitude toward the website.

Bearing these considerations in mind, this study presents three main objectives. Firstly, usability and aesthetic appeal is looked at as a determinant factor of website attitude and positive eWOM. Secondly, website attitude is proposed to have a mediating role in the relationship between usability and eWOM intention. Finally, the moderating effect of online purchasing experience in the relationship between website design and website attitude is investigated.

## **1. Literature review**

### **1.1. Theoretical background**

Theoretical foundation for the current study is based on environmental psychology, which attempted to explain the effect of atmospheric on consumer's behaviour based on

environmental psychology (Mehrabian & Russell, 1974). Along this same line, Donovan and Rossiter (1994) were the first to develop the stimulus – organism – response (S-O-R) framework in a retail environment.

The atmospheric cues (stimulus) are comprised of attributes influencing on consumers' perceptions. These elements are the first point of consumer behavioural process and are cues that pass-through consumers' cognition and lead them to action. Hsin Chang and Wen Chen (2008) described that online store atmosphere comprise the design of website and its layout. The stimulus cues may include aesthetic appeal, layout and functionality, financial security, customization, ambient, music and colour (Bitner, 1992; Harris & Goode, 2010; Wu, Quyen, & Rivas, 2017). Consistent with Porat and Tractinsky (2012), the current study adapted the dimensions of aesthetic appeal and usability.

The organism refers to emotional reaction that connected the relationships between the stimuli and the individual's responses. It is an internal process which captures the emotional state of the consumer with pleasure, arousal, and dominance. In past studies, organism were operationalized by measuring people's attitude toward a website for specific situations (Wu et al., 2013; Hopkins, Grove, Raymond, & LaForge, 2009). In the line of these studies, the empirical research also demonstrates that attitude toward website is described as an organism.

Finally, the response stage is represented by approach or avoidance behaviour. Approach behaviour includes all the positive behaviours such as willing to stay, explore or purchase, while avoidance is opposite. The popular response behaviour the literature addresses are behavioural intention. Intentions relate to online consumers' predictor of using and recommending a website in the future (Lee, Koo, & Noh, 2011). Ladhari (2007) suggested customer interaction through word of mouth, which can have a critical role in the consumer's response to products or service. As a result, this study puts forward a descriptive model that characterizes positive eWOM in the response behaviour of S-O-R model.

In the current study, the stimulus is composed of two attributes of website aesthetic and website usability. The organism is conceptualized with attitude toward the website during the visit. In the last stage, the response is reflected through eWOM intention as an extend S-O-R theory.

## 1.2. Definitions of construct

**Website aesthetic.** This is one of the important factors in website appeal and design (Harris & Goode, 2010). According to American Heritage Dictionary of English, aesthetic is described as "a conception of what is artistically valid or beauty". In the online setting, website aesthetic comprises of various aspects and cues through integrating of impressed beauty (Vilnai-Yavetz & Rafaeli, 2006). A website that is pleasing to the eye are going to attract more customers than other less-appealing sites (Wang, Minor, & Wei, 2011). Website aesthetic in this study is reflected through the site's overall beauty and attraction.

**Website usability.** It is another important factor to gain effectiveness, efficiency, and satisfaction in the web environment (Lee & Kozar, 2012). The concept of usability contains several aspects (Flavián, Guinalú, & Gurrea, 2006), such as easy navigation with minimal effort in

a short of time (Porat & Tractinsky, 2012), interface function visible and easily accessible (Casaló et al., 2008). In the online context, researches have adopted the basic usability characteristics to the website setting. In this study, web usability refers to the ease of navigating the site in order to achieve specific targets while visiting a website.

**Website attitude.** The term “attitude” was defined by hundreds of literature reviews (Gath, 1994). Following the theory of planned behaviour (TPB), attitude was described as “a reviewer’s overall evaluation of persons, objects, and issues” (Ajzen & Fishbein, 1980). Chen, Clifford and Wells (2002) explored that attitude toward website proposed a useful indicator of Internet advertising. In the same vein, they developed an effectiveness measurement of website attitude. Attitude toward a website is defined as an oriented response in a favourable or unfavourable manner with respect to a product/service in online setting (Goldsmith & Lafferty, 2002). In the context of online shopping, attitude toward a website refers to an overall evaluation of purchasing experience through a specific website. In addition, users’ attitude toward a shopping website is expected to positively influence their intention to use it.

**eWOM intention.** In general, WOM communication involves any information about products/services spread from one individual to another or via some communication platform. Digital technologies have changed the way consumers can search reviews from past consumers, as well as share their opinion or reviews of products (Cheung & Lee, 2012). Kim and Park (2013) developed the definition of eWOM from the traditional concept of WOM “consumers’ experiences and views conveyed through written words based on internet technologies”. While eWOM can be positive and negative, researchers have naturally noted to positive eWOM. It is considered as a key factor of the consumer purchase decision when dealing with services or intangible products (Moran, Muzellec, & Nolan, 2014). Consumers today can create and spread their reviews or opinions through a variety of technologic media such as: websites, blogs, social media. In this study, consumers’ positive opinions, comments, or reviews about websites or brands displayed in the website through social media is referred to as eWOM intention.

## 2. Hypotheses development

Website usability is one of the most critical elements of website quality (Wang, Law, Guillet, Hung, & Fong, 2015) and creates a positive attitude toward online stores (Lee & Kozar, 2012). Based on the S-O-R model, Eroglu, Machleit and Davis (2003) confirmed that website design affects cognitive response, which reflects a favourable attitude and perception toward a brand or organization. Belanche et al. (2012) explored that usability is one of key factor in overcoming fear and creating more favourable attitude toward using a website. A less usable website can form more negative attitudes toward online stores, whereas a more usable website may make the opposite outcome (Becker & Mottay, 2001). Furthermore, website usability allows marketers to predict consumers’ attitude (Park, Stoel, & Lennon, 2008) because a greater usability may reduce possible risk in online service and help consumers search information in a simple manner (Casaló et al., 2008). Therefore, taking these considerations into account, the first hypotheses regarding aforementioned relationship is proposed:

**H1:** Website usability positively affects attitude toward a website.

Wang et al. (2011) demonstrated that the aesthetic website can make consumers enjoy the online shopping experience. Drawn on the S-O-R model, several studies have tested that more attractive and exciting stimuli can create to more favourable attitudes (Cyr, Head, & Larios, 2010; Loureiro, 2015). Consumers' perceptions of the web store's aesthetics induce emotions, which, in turn, affect the consumers' attitudes toward the store and their purchase decisions (Tractinsky & Lowengart, 2007). Notably, Hopkins et al. (2009) demonstrated that all e-servicescape dimensions influenced customers' attitude toward the website, yet aesthetic had the greatest impact. Based on the above explanations, it is hypothesized that:

**H2:** Website aesthetics positively affects attitude toward a website.

The effect of attitude on consumer behaviour plays a critical role in academics and practitioners (Pengnate & Sarathy, 2017; Shaouf, Lü, & Li, 2016). This study describes behavioural intentions as a user's willingness to use the website and transmit positive word of mouth, which is called with the term of eWOM intention. Numerous studies indicated that attitude is a key role of spreading the good word about websites or goods/services (Hsu et al., 2017). According to Sandes and Urdan (2013), spreading of information plays a critical role on the online experience. At this point, Mikalef, Giannakos and Pateli (2013) indicated that intention to spread positive WOM has been showed as a key consequence of consumer's experience through the shopping process. More recent evidence (Hamouda & Tabbance, 2013) highlighted the impact of attitude toward website on behavioural intention, that is, eWOM intention. A recent review of the literature on this topic found that 71% of the prior study confirmed the relationship among attitude toward products, purchase intention and eWOM intention (Jung & Kim, 2012). With this in mind, this study has documented that customers participate in publishing positive eWOM as a consequence of favourable attitude toward a website. For reason of space, the hypothesis is suggested:

**H3:** Attitude toward website positively affects eWOM intention.

In the research about the nature of mediator variables, Baron and Kenny (1986) proposed that an organism intervenes between stimulus and response in the S-O-R theory, is the best way to explain for the formulation of mediation hypotheses. This means that the effects of stimulus on behaviour are mediated by various transformation processes internal to the organism. Consistent with the literature, attitude toward a website is described as an organism. Several studies have suggested the effect of website stimuli on attitude and satisfaction (Ha & Im, 2012), and attitude and purchase intention (Tang, Jang, & Morrison, 2012). These studies indicated that attitude toward a website is the most noteworthy indicator of website stimuli and customer response (Wu et al., 2013; Hopkins, Grove, Raymond, & LaForge, 2008). This study proposed that these website cues (aesthetic appeal and usability) would influence outcome variable 'eWOM intention' through the key mediating variable, attitude toward websites. Thus, the study expects the following:

**H4:** Attitude toward website will partially mediate the effects of (a) aesthetic appeal and (b) usability on eWOM intention.

Prior online purchasing experience is described as having such a general experience by using Internet. Consumer decision-making process depends heavily on users' prior experience due to its strong impact on their perceptions, attitude, and behaviour (Hernández, Jiménez, & Martín, 2010). Simová (2013) has also emphasized that attitude toward online shopping is hugely influenced by the experience of it. In particular, users with more experience

perceived ease of use, who access Internet more frequently are satisfied with it (Ling, Chai, & Piew, 2010), and more inclined to favour e-purchasing (Yoon, 2012). Users with more Internet experience have more experience with the beautiful interfaces; they should be better able to discover website offerings than inexperienced users (Hsin Chang & Wen Chen, 2008). Gefen, Karahanna and Straub (2003) revealed that the relationship between perceived ease of use and attitude toward website became stronger for users who obtained experience with purchasing online. Therefore, the hypothesis is tested that:

**H5:** The effect of (a) aesthetic appeal and (b) usability on attitude toward website will be stronger for highly experience customers than low experience customers.

### **3. Methodology and data collection**

#### **3.1. Methodology**

The data were obtained using an online survey of users from an apparel website in Taiwan ([www.lativ.com](http://www.lativ.com)). This website was selected because it is one of the most popular merchandise categories purchased online (Ha & Im, 2012). The questionnaire consists of two parts: demographic profile and construct items. The two dimensions of website design (website aesthetic and website usability) was adopted from the research of Harris and Goode (2010). In particular, website aesthetic includes four items of perceived visual appeal and website usability consists of six items. In addition, eight items of attitude toward website were adopted and modified from existing literature (Chen et al., 2002; Kraft, Rise, Sutton, & Rysamb, 2005). eWOM intention was measured with five items from the studies of Okazaki (2009) and Verhoef, Franses and Donkers (2002). All of the above items will be measured based on a seven-point Likert scale, with “1” indicating “totally disagree” and “7” indicating “totally agree”.

Prior online purchasing experience is measured through question that assessed the degree of customer usage Internet to buying products on the Internet. Respondents are asked “How long have you been using the Internet to purchase clothes products?”. The following choices are offered: “Never”; “Less than one year”; “1-under 2 years”; “2-under 3 years”; “More than 3 years”. In particular, customers that choose “Never” and “Less than one year” are “Low experience customers”, the rest of answer is arranged “High experience customer”.

Potential respondents received an online questionnaire with a URL link and a description of the study. By clicking the link, respondents stopped at the Lativ site for a moment. After browsing, respondents finished the questionnaire. A pilot test involving 100 respondents was administered. The result of the pilot tests indicates acceptable reliability and validity of the measurements.

#### **3.2. Sample**

The main online survey yielded 290 usable responses. Among the valid respondents, 61 percent were female; approximately 85% were under age 25; and 80 percent have a bachelor’s degree or above. The data also shows that 60 percent of the respondents had less than one year of experience in purchasing clothes via Internet. Table 1 summarize the demographic of the respondents.

Table 1. Descriptive statistics

Demographic Variables		Frequency (n = 290)%	
Gender	Male	113	39
	Female	177	61
Age	Less than 20 years old	76	26.2
	20 to 24 years old	170	58.6
	25 to 29 years old	28	9.7
	More than 30	16	5.5
Education	High school or lower	4	1.4
	Bachelor degree	226	77.9
	Master degree	58	20
	Doctoral degree	2	0.7
Social media site you frequently use to communicate with your friends	Facebook	271	93.4
	Instagram	112	38.6
	Line	38	13.1
	Other	34	11.7
How long have you been using the Internet to purchase fashion products?	Never	45	15.5
	Less than 1 year	168	57.9
	1 – under 2 years	38	13.1
	2 – under 3 years	16	5.5
	More than 3 years	23	7.9
How often have you been using the Internet to purchase clothes fashion in monthly?	Never	70	24.1
	1–3 times	196	67.6
	4–6 times	16	5.5
	More than 6 times	8	2.8
What was your total expenditure for purchasing fashion products on the Internet in monthly?	Less than 2000 TWD	197	67.9
	2001–4000 TWD	68	23.4
	4001–6000 TWD	9	3.1
	More than 6000 TWD	15	

## 4. Results and discussion

Statistical significance was analysed by using PLS software version 3.0 because PLS-SEM offers more flexibility when formative measures are involved (Hair, Hult, Ringle, & Sarstedt, 2016).

### 4.1. Measurement model

A measurement model is shown in Table 2. It can be seen that the factor loading of all items ranged from 0.764 to 0.921, exceeding the minimum recommended value of 0.6. The average variance extracted (AVE) for all constructs are ranged from 0.715 to 0.786, which exceeded

the threshold value of 0.7 recommended by Hair et al. (2016). The composite reliability of all the items is ranged from 0.936 to 0.949, which exceeded the benchmark of 0.60. The Cronbach alpha coefficients are ranged from 0.909 to 0.932, which exceed the criteria of 0.6. All above scales for evaluating these constructs reflected a sufficient of convergence reliability.

The measurement model also showed a significant convergent validity as a cross-loading matrix. Each indicator loads higher than any other indicators from the with-in row and column loadings (see Table 3).

Fornell and Larcker (1981) suggest that the discriminant validity can be assured by the AVE square root value that exceeds the constructs inter-correlations in the model (see Table 4). In this study, all constructs have discriminant validity because the square root of the variances was greater than the correlation between it and other constructs.

Table 2. Items and scales sources

Items		Loadings	Cronbach $\alpha$
<b>Aesthetic appeal (Harris &amp; Goode, 2010); CR = 0.936, AVE = 0.786</b>			
1	AA1	0.881	0.909
2	AA2	0.921	
3	AA3	0.899	
4	AA4	0.842	
<b>Usability (Harris &amp; Goode, 2010); CR = .937, AVE = 0.715</b>			
1	US1	0.859	0.920
2	US2	0.881	
3	US3	0.841	
4	US4	0.877	
5	US5	0.834	
6	US6	0.778	
<b>Attitude Toward Web (Chen et al., 2002; Kraft et al., 2005); CR = 0.949, AVE = 0.760</b>			
1	AW1	0.902	0.932
2	AW2	0.907	
3	AW3	0.887	
4	AW4	0.764	
5	AW5	0.882	
6	AW6	0.883	
<b>e-WOM intention (Okazaki, 2009; Verhoef et al., 2002); CR = 0.944, AVE = 0.771</b>			
1	EW1	0.834	0.925
2	EW2	0.918	
3	EW3	0.928	
4	EW4	0.880	
5	EW5	0.827	

Note: N = 290 consumers.

Table 3. Loadings and Cross-loadings of measurement items

	Aesthetic	Website Attitude	Usability	eWOM intention
AA1	<b>0.881</b>	0.5831	0.6183	0.4655
AA2	<b>0.9235</b>	0.6211	0.6422	0.4786
AA3	<b>0.8995</b>	0.548	0.573	0.5185
AA4	<b>0.8416</b>	0.5563	0.6532	0.4597
AW1	0.5896	<b>0.9016</b>	0.5713	0.6021
AW2	0.6081	<b>0.9064</b>	0.5981	0.575
AW3	0.6423	<b>0.8871</b>	0.6391	0.5989
AW4	0.464	<b>0.7636</b>	0.452	0.5122
AW5	0.5403	<b>0.8818</b>	0.569	0.5281
AW6	0.5484	<b>0.883</b>	0.5828	0.5849
US1	0.5893	0.5549	<b>0.8595</b>	0.4211
US2	0.6029	0.5945	<b>0.8818</b>	0.4751
US3	0.6051	0.5756	<b>0.841</b>	0.5231
US4	0.6101	0.5393	<b>0.8766</b>	0.4768
US5	0.6152	0.5305	<b>0.8347</b>	0.5064
US6	0.5358	0.5275	<b>0.7778</b>	0.4794
EW1	0.4535	0.5408	0.4464	<b>0.8359</b>
EW2	0.487	0.5239	0.4726	<b>0.918</b>
EW3	0.4885	0.5978	0.4912	<b>0.928</b>
EW4	0.4895	0.6082	0.5028	<b>0.8791</b>
EW5	0.4552	0.5795	0.5727	<b>0.8275</b>

Table 4. Assessment of discriminant validity

Constructs	Mean (SD)	AA	eWOM	US	AW
Aesthetic Appeal (AA)	4.915 (1.197)	<b>0.886</b>			
e-WOM intention (WOM)	4.672 (1.327)	0.541	<b>0.878</b>		
Usability (US)	5.001 (1.173)	0.701	0.568	<b>0.846</b>	
Attitude Toward Web (AW)	4.155 (1.226)	0.652	0.651	0.656	<b>0.872</b>

Note: N = 290 consumers.

\* The highlighted diagonal values are the square root of the average variance extracted (AVE) for each construct, the other values are the correlations among constructs.

## 4.2. Structural model

With the satisfactory results in the measurement model, this research subsequently evaluated the structural model to confirm the hypothesized relationships among various constructs through the PLS (partial least squares) method (Figure 1). Aesthetic appeal significantly influences attitude ( $\beta = 0.3, p < 0.01$ ), thus supporting H1. This finding highlights the importance of aesthetic appeal in online setting, as suggested by Lai, Chong, Ismail and Tong (2014). Aesthetic appeal dimensions plays a critical role in forming users' attitude in general, and in specific creates a happy atmosphere in the website (Kim & Stole, 2004; Porat & Tractinsky, 2012; Vila & Kuster, 2011; Wu et al., 2013).

Additionally, this study shows that usability significantly affects attitude toward website ( $\beta = 0.3, p < 0.01$ ), thereby supporting H2. The result is consistent with previous research that found the positive relationship between usability and attitude toward a website (Cyr, Head, & Larios, 2010). A usable website leads consumers to a positive attitude toward a website (Wu et al., 2017) and it also affects to consumers' attraction and retention (Karim, 2011; Pengnate & Sarathy, 2017). It also helps consumers overcome doubts and shapes a more favourable opinion of using a website (Belanche, Casal, & Guinalu, 2012).

Both outcomes are similar with the recent study of Simova and Cinkánová (2016) about the perceived customer value of shopping online. This study concluded that a friendly website with both good appearance and ease-to-use received a positive assessment about respondents' satisfaction. They also pointed out that online shoppers who are satisfied with a website will produce their positive attitudes toward it.

Attitude toward a website has a significant positive effect on eWOM intention ( $\beta = 0.652, t = 10.496, p < 0.01$ ), supporting H3, thereby implying that increasing a user's positive attitude toward a website is likely to result in high positive eWOM intention. These results are similar to Hamouda and Tabbane's (2013) study that found a positive effect of attitude on spread of positive eWOM.

The  $R^2$  value is used to explain for the power of a structural model in the final dependent constructs. Broadly speaking, aesthetic appeal and usability have a high proportion of variance (50.3 percent) in term of attitude toward a website. In addition, eWOM intention had an  $R^2$  value of 0.425. This outcome expresses a good level of predictive power as the modelled constructs explain 42.5 percent of variance in eWOM intentions to shop online (Table 5).

Table 5. Evaluation of structural model and hypotheses testing

Hypo.	Path	Standardized Estimate	t-value	R <sup>2</sup>
H1	Aesthetic -> Attitude toward website	0.378	3.145***	
H2	Usability -> Attitude toward website	0.390	2.896***	
H3	Attitude toward website -> e-WOM	0.652	10.496***	
	<b>Constructs</b>			
	Attitude Toward Website			0.503
	e-WOM Intention			0.425

Note:  $N = 290$  consumers. *n.s.* non-significant

\*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \* $p < 0.10$ .

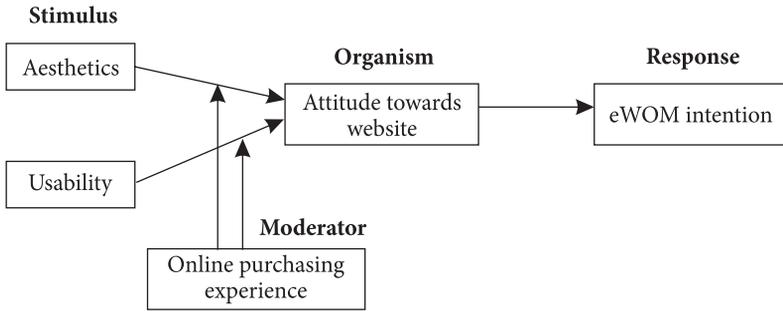


Figure 1. Hypothesis testing of structural model

**4.3. Mediating effect of attitude toward websites**

PLS performs the best method in testing mediation effects because it provides an indication of relationship that is similar to the traditional regression coefficients (Bontis, Booker, & Serenko, 2007). In this study, attitude toward website is proposed as a mediator between website design (usability and aesthetic appeal) and eWOM intention. According to Lowry and Gaskin (2014), the simple and credibility method of mediation is based on the study of Baron and Kenny (1986). In particular, the study will examine and compare the resulting path coefficients of three different models.

Firstly, the study shows attitude toward website playing a mediation role between aesthetic appeal and eWOM intention. The standardized beta of the direct path had a significant beta of 0.542. The new path had a significant beta of 0.205 after attitude toward website is added as a mediator. Importantly, the direct path between aesthetic appeal and eWOM intention was significant and reduced when the mediator is included in the model. These outcomes indicated a strong evidence that attitude toward website is as a partial mediation with a difference of 62.17 percent. The z-value provided by the Sobel test was 7.147,  $p < 0.000$ . Therefore, aesthetic exerts an indirect effect on eWOM intention through attitude toward website.

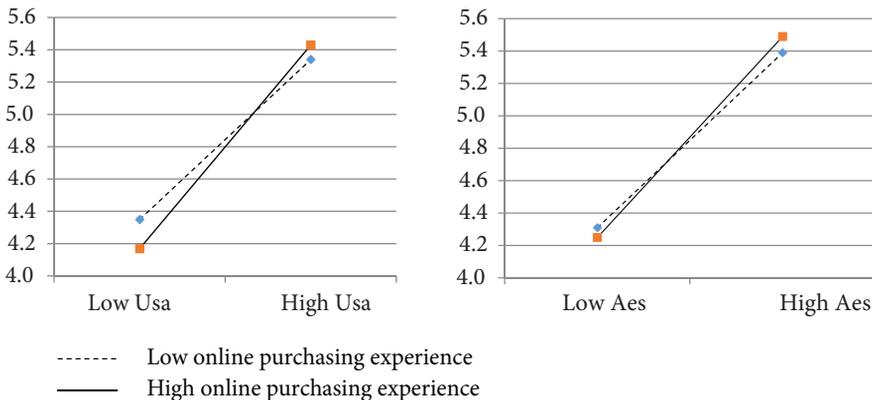


Figure 2. The roles of the online purchasing experience moderator

Similarly, the second mediation model shows website attitude playing a mediation role between usability and eWOM intention. The standardized Beta between usability and eWOM intention was 0.574 when the link was direct and 0.251 when attitude toward website was introduced as a mediator. A difference of 56.27 percent also shows a partial mediation. The z-value provided by the Sobel test was 7.757,  $p < 0.000$ .

Therefore, hypothesis H4a and H4b are supported. These outcomes show that attitude toward website is a key mediating factor in the development of positive eWOM intention in the online context. In essence, these findings provide insights to developing and maintaining attitude toward website.

#### **4.4. Moderating effect of online purchasing experience**

In order to assess the moderating role of online purchasing experience, the study employed the statistical software SPSS 20. More specific, the study divided the total sample into four groups using two dimensions of website design and the moderators (2x2) as the clustering variables in the K-means cluster analysis. These results indicated that those who are highly experience tended to have higher attitude behaviour ( $F = 35.084$ ,  $p < 0.000$ ) toward the effect of aesthetic appeal, compared to those with low online purchasing experience. Additionally, the results also indicated that those with highly experience tended to have higher attitude behaviour ( $F = 28.259$ ,  $p < 0.000$ ) toward the effect of usability, compared to those with low online experience. These results are similar to Hernández et al.'s (2010) study, which argued that experienced consumers who are familiar with the online purchasing process leads to a positive attitude toward website, if website designers can provide an attractive and usable website. Therefore, hypothesis H5a and H5b are supported (Figure 2).

### **Conclusions**

This study followed the perspective of Mehrabian and Russel (1974) in which stimulus lead to the organism and then to response behaviour. On the basis of the stimulus – organism – response framework, the influence of website design on eWOM intention fills the gap in the current online shopping scholars and marketers. Several conclusions could be readily provided from the proposed framework.

Firstly, the overall pattern of results provided strong support to the hypothesis that aesthetic appeal and usability are closely linked to the attitude, which are found to be significant antecedents of website attitude. This is consistent with the theory of the S-O-R theory, in which stimulus plays a vital role in affect to attitude toward the objects. A beauty website can create a positive impression and keep users' attention on the website. Users can be turned off by a website, if the website's overall appearance does not meet their expectations. Additionally, usability is considered as user- centred design, consumers always will be pleased with a clear and usable design because it helps them reach their goals as quickly as possible. Consequently, these observations imply that website aesthetic and website usability are significant, and are the basis for website designers when they want to improve positive attitude toward websites.

Secondly, the study investigates that attitude toward website is likely to be the most important components of eWOM intention; thereby implying that positive attitude consumers can spread the website to others than consumers who hold negative attitude. Attitude plays a critical role in influencing positive recommendation. Notably, this study suggests that website usability and aesthetic appeal influence the eWOM intention to spreading positive word for a website indirectly through consumers' attitude toward a website. These outcomes reflect a new contribution to the previous literature due to the fact that aesthetic appeal and usability have not been considered as a determinant factor of eWOM intention in the previous behaviours research.

The significant moderating effect of online experience provides important implications. The results confirm that the effect of aesthetic appeal and usability on attitude toward website is strengthened with higher experience in online consumers. When consumers who have experience in purchasing online visit the website, they often expect to look for a simple processing of selection, payment and post-purchase actions.

To sum up, the outcomes suggest that online retailers need to understand the relationship between aesthetic appeal, usability, attitudes and eWOM intention in online retail environment. One of the important findings is that aesthetic appeal and usability are a key determinant of positive consumers' attitude toward a website, especially for online retailers who sell apparel goods. Consumer attitude will be generated if the customer's expectations about beauty and usability website are satisfied. Companies should prioritize usability in websites and optimize the appearance of the sites with different colours, fonts, and icons or background images for shoppers. It is also important that online retailers should strive to maintain the platform on social networks sites such as Facebook, Instagram, YouTube, so that the spreading eWOM intention can be more easily encouraged. Finally, the effect moderator of online purchasing experience suggests that website design should effort into the most attractive visual website and the easiest to use toward high experienced users.

Although the research findings provide some new contributions to researchers and managers, the empirical study also has some limitations. Firstly, the study conduct based on a specific website, thus further research should investigate consumer positive eWOM in difference product as experience goods (movies, music) and search goods (digital cameras and printers). In addition, this study only focuses on the moderator role of online purchasing experience on the relationship between site design and attitude; the expanding research should discover its significant moderating role with behavioural intentions. In addition to this, it is encouraged to test the moderator effects of these factors as well as the effects of other factors such as loyalty on eWOM intention. Finally, the study limited online shoppers in Taiwan context; a comparative model in different cultural context may provide more generalizability of the study.

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