

The influence of website brand equity, e-brand experience on e-loyalty: The mediating role of e-satisfaction

Nguyen Hong Quan^a, Nguyen Thi Khanh Chi^a, Duong Thi Hoai Nhung^a, Nguyen Thi Kim Ngan^a and Le Thai Phong^{a*}

^aFaculty of Business Administration, Foreign Trade University, Vietnam

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ABSTRACT

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This paper analyses the role of online satisfaction (e-satisfaction) as a mediator in the relationship between website brand equity, online brand experience (e-brand experience) and online loyalty (e-loyalty) in the context of shopping online in Vietnam. The data for this study were gathered through mail questionnaires which were distributed to target participants who reported their consumption experience with shopping online through website. The survey was conducted at three big cities of Vietnam with the sample size at 928. We used structural equation model (SEM) to evaluate the suitability of the theoretical model under analysis with respect to the empirical data, and examined the significance of the hypotheses. The results showed that the estimations of the standardized regression coefficients in which e-brand experience has the largest impact on e-satisfaction and brand awareness has the biggest effect on e-loyalty. Otherwise, e-satisfaction plays a key role in mediating between website brand equity, e-brand experience and e-loyalty.

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1. Introduction

With the outbreak of internet, the business world has experienced a dramatic culture change. More and more people have been moving to online shopping. In 2018, there are approximately 1.8 billion people worldwide purchase goods online. During the same year, global e-retail sales amounted to 2.8 trillion U.S. dollars and projections show a growth up to 4.8 trillion U.S. dollars by 2021 (Statista, 2019). In Vietnam context, the e-commerce positive trend also happens. Vietnam is one of the fastest-growing e-commerce markets in Southeast Asia (VOMF, 2018). The growth rate (CAGR) of e-commerce in Vietnam is increasing rapidly, at 30% rate in 2017 (VOMF, 2018). This ratio is more than that of Thailand and Malaysia, two Southeast Asian countries that have the same young populations, similar number of users and startups with Vietnam. This shows the potential in the development of this online market in Vietnam. Research interest in brand equity and branding has been an important topic of research in the marketing area (Rosa & Hernan, 2008). However, most of the studies focus on normal product brand while fewer pay attention to the website brands (Yoo & Donthu, 2001). Moreover, only a few scholars have carried out research on website brand equity (Page & Lepkowska-White, 2002; Nicholson & Sethi, 2002; Christodoulides & Chernatony, 2004). Following a review of the existing brand equity theories,

* Corresponding author.

E-mail address: lethaiphong@ftu.edu.vn (L. T. Phong)

the authors propose components of website brand equity and empirically test relationship between website brand equity and satisfaction and loyalty of customer's shopping online in Vietnam context (namely e-satisfaction and e-loyalty). In a turbulent e-commerce environment, Internet companies need to understand how to satisfy customers to sustain their growth and market share, engenders greater loyalty which provides an opportunity for a firm to generate predictable sales and higher profits in the market (Aaker, 1991). However, there is relative scarcity of empirical research to confirm the mediated effect of e-satisfaction in the relationship between website brand equity and e-loyalty in the online context.

Besides, development of the internet and associated technologies has changed the landscape of online branding (Rowley, 2004; Schmitt, 1999, 2000) which, as mentioned above, warrants the investigation of the brand experience in online environment (namely e-brand experience) (Khan & Rahman, 2015). The present study seeks to provide a deeper understanding of the brand experience phenomenon in online context by investigating the impact of e-brand experience on e-satisfaction and e-loyalty. The remaining part of the paper is organized as follows. First, the study begins by establishing a conceptual framework through a review of the related theories and literature. The four topics of conceptualization considered in this section are website brand equity, e-brand experience, customer e-satisfaction and e-loyalty. The hypotheses development was founded on each reviewed literature theme. Second, the study examines the influence of website-brand equity and e-brand experience on e-satisfaction and e-loyalty; meanwhile it investigates the mediation role of e-satisfaction in the relationships among website-brand equity, e-brand experience and e-loyalty. Third, this is followed by the presentation and discussion of the main results. In the final section, we outline the contribution of our findings to theory and practice, as well as present areas for future research and current study limitations.

2. Literature review

2.1 Website brand equity

The development of network technologies enables the business activities of enterprises to expand from the physical world to virtual space. The concept of website brands is significant both theoretically and practically to carry out research. According to website functions, the website brand can be categorized into two groups, namely "derivative website brand" and "pure website brand" (Liyin, 2009). Derivative brand, as suggested by name, is the derivation of a certain brand, which includes the website of a normal brand (e.g., the website of a manufacturer) and the brand of a normal product named after a certain website brand (e.g., Yahoo DVD). The pure website brand refers to the website which mainly offers online information, resources, experience as well as shopping, entertainment or communication services (e.g. tiki.com or lazada.com). Therefore, the major source of gains of pure website brand relies on sales of information resources, revenue on advertising and commission rates. In this article, the author tends to focus on pure website brands. Based on the existing definitions and the characteristics of website brand, **website brand equity** is defined as Internet users' knowledge of certain brand names of websites in the context of virtual online market as well as the induced cognition, attitudes and responses of the websites (Liyin, 2009).

2.2 Dimensions of website brand equity

2.2.1 Brand awareness

Brand awareness is a key determinant of brand equity (Aaker, 1996; Mackay, 2001; Yoo & Donthu, 2001; Washburn & Plank, 2002; Pappu et al., 2005). It is defined as an individual's ability to recall and recognize a brand (Aaker, 1996). Brand awareness creates a great association in memory about a particular brand (Malik, et al., 2013). Brand awareness is one of the main factors in creating brand added value and is also considered as one of the key factors affecting the knowledge level of consumers about the brand (Ekhveh & Darvishi 2015). Brand awareness can be a sign of quality and commitment, letting consumers become familiar with a brand and helping them consider it at the point of purchase (Aaker,

1991). Just like a traditional concept of brand awareness, a website commanding high consumer awareness would exert effective influence on the website's trust and satisfaction. This study focused on the website visitor's awareness of the website rather than the company operating the site.

2.2.2 Perceived quality

Perceived quality is defined as the customer's judgment about a product's overall excellence or superiority in comparison to alternative's brand (Zeithaml, 1988; Aaker, 1996). It is not the real quality of the product but the customer's perception of the overall quality or superiority of the product (or service) with respect to its intended purpose, relative to alternatives (Zeithaml, 1988). In an online environment, it is extremely important for marketers to understand how customers perceive and evaluate a brand website in order to deliver a superior service. Aladwani and Palvia (2002) defined perceived quality of a website as the "...users' evaluation of a website's features meeting users' needs and reflecting overall excellence of the website" (p. 469). Christodoulides et al. (2006) state that perceived quality in an online context can be associated with "fulfillment" and "trust" which can be interpreted as the perceived process and outcome of website resource delivery by net users when accessing a website. Meanwhile, a website can serve as a signal of product quality similar to how a store environment (e.g., Baker et al., 1994) serves as a signal of product quality.

2.2.3 Brand association

The role of brand associations as an important element in brand equity management has been previously documented (Im, et al., 2012). Brand association is anything "linked" in memory to a brand (Aaker, 1991). It is believed to contain the meaning of the brand for consumers. Brand association can be seen in all forms and reflects features of the product or aspects independent of the product itself (Chen, 2001). Brand association would help consumers search and deal with information (Boisvert, 2011). Three elements of brand association have been identified in the literature which include; perceived value, brand personality, and organizational associations (Aaker, 1996; Buil et al., 2013; Pappu et al., 2005). According to Zeithaml (1988), perceived value is the overall evaluation of the performance of the product. Brand personality is described as a set of characteristics of human beings that are attached to the brand (Aaker, 1997), and tends to reflect the emotions and feelings evoked by the brand (Keller, 1993). Finally, Organizational associations include corporate ability and social responsibility associations (Aaker, 1996; Chen, 2001). Consumers will consider the organization, which is related to the elements (people, values, and programs) that are connected to the brand, which can drive choice and provide meaningful differentiation in the market.

2.3 E-brand experience

Brand experiences are a set of sensations, feelings, cognitions and behavioral responses that are evoked by many different stimuli which occur when customers directly or indirectly interact with a certain brand (Brakus et al., 2009). It has been proposed that brands capable of delivering a unique and distinctive experience by managing both the functional and emotional elements of the offering (Berry et al., 2002; Haeckel et al., 2003; Morrison & Crane, 2007). Brands use their online presence as touch points with their customers. With the increasing expansion of the virtual marketplace, the topic has drawn the attention of researchers and online brand experience (namely e-brand experience) has emerged at the beginning of this century as a new research area. E- brand experience is linked to various other concepts: online customer experience (Rose et al., 2012), website experience (Constantinides, 2004; Lin et al., 2008), brand experience on the web (Ha & Perks, 2005), consumers' online flow experience (Van Noort et al., 2012), virtual experiential marketing (Luo et al., 2011) and online purchase experience (Jin & Park, 2006). The essence of all concepts remains the same. Morgan-Thomas and Veloutsou (2013) explained e- brand experience as "an individual's internal subjective response to the contact with the online brand" (p. 22). In other context, Ha and Perks (2005) discussed the "website-based brand experience" to study the consumer behavior in the internet-based marketing, and defined it as "a consumer's positive naviga-

tions (i.e. using web-based communities and participating in events) and perceptions (i.e. the attractiveness of cookies, variety and uniqueness of visual displays and value for money) with a specific website” (p. 440).

2.4 E-satisfaction

Satisfaction is a post-activity measuring index that measures the interior state of the customer’s feelings about past purchases and experiences of shopping. Measuring the degree of satisfaction of customers is rather critical since satisfaction with the distribution service influences the customer’s decision whether to continue using the channel (Lin & Sun, 2009). Customer satisfaction can be defined as customers’ evaluations of a product or service with regard to their needs and expectations (Oliver, 1980). The term satisfaction refers to “the consumer’s response to the evaluation of the perceived discrepancy between prior expectations (or some other norm of performance) and the actual performance of the product as perceived after its consumption” (Tse & Wilton, 1988, p. 204). Satisfaction has been perceived as one consequence of positive emotional and cognitive states (Kim, 2005). In the virtual environment, Anderson and Srinivasan (2003) defined e-satisfaction as “the contentment of the customer with respect to his or her prior purchasing experience with a given electronic commerce firm” (p. 125).

2.5 E-loyalty

A long-term relationship commitment held by customers with a brand shows their loyalty for that brand (Reichheld, 1996). Brand loyalty refers to the degree to which people are committed to a given brand as shown both by their inner attitudes reflected in lasting biases toward a specific brand, as well as by externally exhibited behaviors such as repeat purchases of a certain brand among several alternatives (Jacoby & Kyner, 1973; Odin et al., 2001). The advancement of the internet and related technologies has extended the brand loyalty concept to the online environment and retitled it e-loyalty. Anderson and Srinivasan (2003, p. 417) identified e-loyalty as “a customer’s favorable attitude toward an electronic business resulting in repeat buying behavior”. Studies have defined e-loyalty as a commitment to revisit a brand’s website consistently for shopping on that website without switching to other websites (Cyr, 2008). In literature, brand loyalty has been divided into two categories: behavioral and cognitive loyalty (Keller, 1993). Behavioral loyalty represents repeat purchasing of a brand (Yang & Peterson, 2004; Lee & Back, 2009; Chahal & Bala, 2010) such as amount of purchases, frequency of purchase and amount of brand switching have been offered over a period of time (Lewis & Soureli, 2006). Behavioral loyalty alone is not enough to explain how various buying situations provoke buying the same brand by consumer. So, behavior must be attended with cognitive elements. Cognitive loyalty refers to the consumers’ intention to buy the brand as the first choice (Keller, 1993; Yoo & Donthu, 2001). Another indicator of loyalty is the customer’s willingness to pay higher price for a brand in comparison with another brand offering similar benefits (Aaker, 1996; Chaudhuri & Holbrook, 2001; Srinivasan et al., 2002).

3. Theoretical framework

3.1 Hypotheses development

This study measures the effect of website brand equity and e-brand experience on two key consumer behavioral outcomes including e-satisfaction and e-loyalty. As such, studies suggested e-satisfaction and e-loyalty vital for the success of a brand (Koufaris, 2002; Oliver, 1999). More specifically, the hypotheses are proposed as follow.

3.1.1 Relationship between brand awareness, e-satisfaction and e-loyalty

Keller (2013) emphasized that one of the advantages of developing strong brand awareness is that it influences the consumer to include the brand in a set of alternatives that can be considered for future purchases. In addition, strong brand awareness can affect a consumer’s buying decision in terms of brands that are being considered (Aaker, 1992). Customers tend to make decisions swiftly regarding a product if they know about or they recognize the brand. The better the consumers can identify, recall and remember a firm’s brand the more satisfied will they be. Brand awareness has a stronger impact on the

subsequent purchasing choices, if the product once tried out fulfilled the consumer's expectations (Keller, 1993). Therefore, we predict brand awareness influence positively on e-satisfaction. Besides, it is essential to note the important impact that brand awareness has on brand loyalty. Past studies reveal that brand awareness positively influences brand loyalty (Yousaf, et al., 2012; Jing et al., 2014; Dhurup et al., 2014; Xu et al., 2015). The studies showed that brand awareness contribute significantly to the prediction of brand loyalty. Therefore, inferring from the literature and the empirical evidence above, they are hypothesized that:

- *H1a : Brand awareness has a positive effect on e-satisfaction.*
- *H1b: Brand awareness has a positive influence on e- loyalty.*

3.1.2 Relationship between perceived quality, e- satisfaction and e- loyalty

Satisfaction is the feeling of pleasure or disappointment resultant of the comparison of the waited performance of the product or service in relation to the expectations of customers (Kotler, 1997). Therefore, it is understood that the comparison between the perception of the performance of the product or service received with the customer's prior expectations should result in either the confirmation of choice (satisfaction) or in the conclusion that the choice was inadequate (dissatisfaction). Aaker (1996) stated that perceived quality reported by the loyal customers. He believed, the customers tend to become loyal to a brand which its offer is based on high quality (Hsu et al., 2012; Eren-Erdogmus & Budeyri-Turan, 2012; Mollen & Wilson, 2010). Lai et al. (2007) suggested that when customers perceive better website service quality, such as special treatment benefits, they will have more e-satisfaction; when customers feel e-satisfaction with the website, they will feel more e-loyalty; and when the website is responsive, it will directly influence the customers' e-loyalty. Therefore, the following hypotheses have been proposed.

- *H2a: Perceived quality has a positive effect on e-satisfaction.*
- *H2b: Perceived quality has a positive effect on e-loyalty.*

3.1.3 Relationship between brand association, e- satisfaction and e- loyalty

Aaker (1991) stated that brand associations can be a platform for differentiation, positioning, brand extension, and a basis for buying a particular brand. Also, consumers depend on brand associations to process, organize and retrieve messages from their memory to assist in making buying decisions (Oppong, & Phiri, 2018). It is imperative to consider the association between brand association and brand satisfaction and loyalty. Kumar (2014) proved that there is a significant relationship between brand association and customer satisfaction. When the customers put their trust on the brand and have good memory about the brand, they are likely to feel satisfied and ready to purchase more with that brand. Hence, there is the positive relationship between website brand associations and e-satisfaction. According to Atilgan et al. (2005) a strong brand association leads to higher brand loyalty. It revealed that if customers have more positive association toward a brand, they will have more loyalty toward a brand and the other way round. Moreover, many previous studies show that brand association directly influences brand loyalty (Yoo et al., 2000; Pike, et al., 2010; Buil et al., 2013). Thus, drawing from the above mentioned discussion, they are therefore hypothesized that:

- *H3a : Brand associations has a positive effect on e-satisfaction.*
- *H3b: Brand association has a positive influence on e- loyalty.*

3.1.4 Relationship between e- brand experience, e- satisfaction and e- loyalty

E-brand experience and e- satisfaction

The positive effect of customer experiences (Gentile et al., 2007; Klaus & Maklan, 2013) and brand experiences (Brakus et al., 2009; Khan & Rahman, 2015b) on brand satisfaction has been well documented in the literature. Literature suggests that superior brand experiences improve customer satisfaction with the brands. In particular, the influence of brand experiences on brand satisfaction has also been well-acknowledged in the online context (Ha & Perks, 2005; Morgan-Thomas & Veloutsou, 2013).

Therefore, on the basis of above discussion that signifies the positive influence of brand experiences on brand satisfaction, the following hypothesis has been proposed.

→ *H4a: Brand experience affects e- satisfaction positively.*

E-brand experience and e- loyalty

Many firms have tried to foster brand loyalty. Because brand loyalty results from a close relationship between a brand and its customers, it can offer a robust customer base – a strong competitive advantage (Meyer & Schwager, 2007; Pine & Gilmore, 1998). Strong brand loyalty is reflected by customers' emotional attachment to a brand and their patronage behavior toward the brand (Chaudhuri & Holbrook, 2001). As one way to build strong brand loyalty, it has been emphasized that firms need to convey positive brand experiences to consumers (Mascarenhas et al., 2006; Nysveen et al., 2013). Studies in online settings have also stated that unique brand experiences are important in determining whether customers make a repeat visit to the brand's website (Low et al., 2000; Reichheld & Schefter, 2000; Rice, 1997). It has been further argued that customers become loyal toward an online retail brand when they receive superior brand experiences (Cyr, 2008; Koufaris et al., 2002). Hence, based on literature supporting the positive influence of brand experience on brand loyalty (Brakus et al., 2009; Lin & Bennett, 2014), the present study hypothesizes that brand experience affects e- loyalty positively.

→ *H4b: Brand experience affects e-loyalty positively.*

3.1.5 Relationship between E-satisfaction and E- loyalty

Satisfaction leads the customers to repurchase and encourages them to remain loyal with the brand (Anderson & Sullivan, 1993; Oliver, 1999). The association between satisfaction and loyalty is significantly positive and its strong point varies from product to product and buyer to buyer (Dong et al., 2011; Ashraf et al., 2018). Furthermore, past studies also declared their relationship as positive in the setting of products (Brakus et al., 2009) and services (Nysveen et al., 2013). Some studies have addressed this relationship in online context. For instance, Anderson and Srinivasan (2003) investigated the impact of satisfaction on loyalty in the context of e-commerce and concluded that e-satisfaction has an impact on e-loyalty, but the relationship is moderated both by consumers' individual factors and firms' business factors. This relationship is stronger in virtual environments than in traditional ones (Shankar et al., 2003; Novak et al., 2000). Furthermore, achieving loyalty in virtual environments is more difficult and costly than in the offline world (Van Riel et al., 2001). Therefore, it is reasonable to predict that satisfied users of a website will have a higher loyalty intention toward its services.

→ *H5: E- satisfaction is positively associated with e- loyalty.*

3.2 Conceptual model

Derived from the hypotheses above, this study defined independent variables including website-brand equity (such as brand awareness, perceived quality and brand association) and e-brand experience; meanwhile dependent variables including e-satisfaction and e-loyalty. The study examines e-satisfaction as mediation factor in relationship between website-brand equity and e-brand experience with e-loyalty. The proposed conceptual framework is given in Fig. 1.

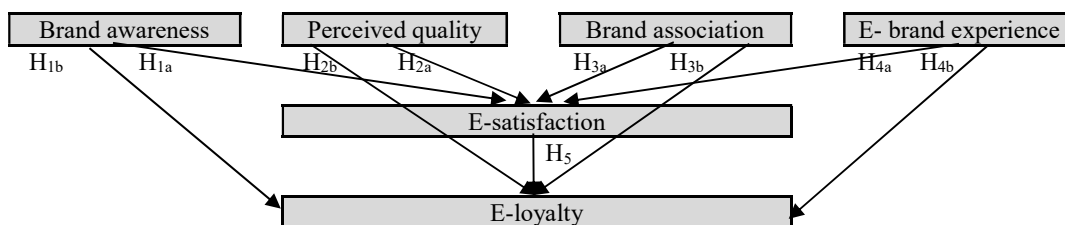


Fig. 1. The proposed conceptual model

4. Methodology

4.1 Research design

The questionnaire is divided into two parts. The first is concerned with the demographic. The second part includes independent and dependent variables. The data collection instrument is a structure questionnaire. A pool of 42 items compiled from the literature was incorporated in the questionnaire (Table 1). A Likert-scale of 1 to 5 was adopted for all measures with the anchors ‘strong disagree’ (1) and ‘strongly agree’ (5). Six test items for measuring *brand awareness* were obtained from empirical studies of Yoo and Donthu (2001). The measurement on *perceived quality* of website brand was based on the studies conducted by Lin and Sun (2009). Four items are proposed for measuring perceived quality of a website brand through the customer’s perception of the shopping website’s ability to respond to customer’s needs, be concerned about customers and provide a secure shopping environment. Four items regarding *brand association* were modified to investigate the connection between the brand and customers based on the studies of Aaker (1996) and Chen (2001). Five questions to measure e-brand experience were taken from the study by Morgan-Thomas and Veloutsou (2013) who had used those questions to measure online brand experiences. *E-satisfaction* with five items was assessed by adapting the scales developed by Anderson and Srinivasan (2003) and McKinney et al. (2002) to measure online visitors’ satisfaction in the current study. Lastly, *e-loyalty* with five items was evaluated by using scale items adapted from Anderson and Srinivasan (2003) and Zeithaml et al. (1996). The measurement of all scales in the study is presented in Table 1.

Table 1
Measurement of independent and dependent variables

No	Dimensions	Code	Items
1	Brand awareness (BWA)	BWA1	I have easily in imagining this brand in my mind.
2		BWA2	I can precisely remember website brand name.
3		BWA3	I can recognize this brand among competing brands.
4		BWA4	This brand is the only brand recalled when I need to make a purchase decision on the product.
5		BWA5	This brand comes up first in my mind when I need to make a purchase decision on the product.
6		BWA6	I am familiar with the website brand.
7	Perceived quality (PB)	PB1	When I shop again, the same shopping website personnel or records would remember my related consumption habits.
8		PB2	I am confident in buying products from the shopping website.
9		PB3	I feel secure in buying products from the shopping website
10		PB4	I trust that the shopping website can provide appropriate service to me.
11	Brand association (BA)	BA1	I consider the company and people who stand behind the brand have the expertise in producing the product.
12		BA2	I believe that this company and people who stand behind the brand are socially responsible.
13		BA3	I believe that this company does not take advantage of consumers.
14		BA4	I believe that this company is contributing to the society.
15	E-brand experience	BE1	The layout of this e- brand website is appealing .
16		BE2	This e-brand’s website is easy to navigate.
17		BE3	Results are always returned promptly when browsing this e-brand’s website .
18		BE4	The results of this e-brand’s website are always up-to-date.
19		BE5	Accurate search results are always returned when browsing this e-brand’s website.
20	E- satisfaction (BS)	BS1	After using the Website, the overall quality of provided information made me satisfied.
21		BS2	I am satisfied with this shopping website’s features .
22		BS3	Holistically speaking, I am satisfied with this shopping website’s service.
23		BS4	My choice to purchase from this Web site was a wise one.
24		BS5	I think I did the right thing by buying from this Website.
25	E-loyalty (BL)	BL1	In thinking about internet shopping, this website is my first choice .
26		BL2	As long as the present service continues, I can hardly consider changing to other shopping websites.
27		BL3	I will promote this shopping website to my close friends
28		BL4	I will definitely buy this brand of product although its price is higher than the other brand(s) of the product that offer similar benefits.
29		BL5	In future years, I would still often purchase from this shopping.

4.2 Sample and Data collection

The survey was conducted from 4/2018 to 10/2018 at three big cities of Vietnam such as Hanoi capital, Danang city and Hochiminh city. There are a large number of customers living and working at these

places. The sample size was identified at 900. Data was collected through intercepting interview methods at entertainment areas, traditional markets and supermarkets. In order to get 900 valid responses, we launched 1100 survey in three big cities. There were 948 respondents in which 20 responds were invalid due to a few missing ones. We finally obtained 928 correctly completed results with a response rate of 84.36%. Personal characteristics of customers (gender, age, job and income) are described in Fig. 2.



Fig. 2. Personal characteristics of the participants

4.3 Data analysis

4.3.1 Reliability and validity of variable measurement

In running CFA, the item BE1 of e-brand experience construct was removed as the factor loading had been smaller 0.5. Then, the items analyzed continuously were 28 rather than 29 items as explaining in the research design. The independent constructs (BWA, PB, BA and BS) achieved the overall model fit with Chi-square/df = 3.887; CFI = 0.925; TLI = 0.911; GFI = 0.944 and RMSEA = 0.056. The factor loading of each item was larger than 0.5 which showed the convergent validity. The composite and Cronbach's Alpha coefficients of each construct (BWA, PB, BA, BS) were bigger than 0.7 which showed the independent constructs in the model obtained reliability. The final model considered the relationship between the independent constructs (BWA, PB, BA and BS) with mediating construct (e-satisfaction) and dependent construct (e-loyalty). The result stated the overall model fit with Chi-square/df = 3.067; CFI = 0.920; TLI = 0.908; GFI = 0.924 and RMSEA = 0.047.

4.3.2 Hypothesis testing

We used structural equation model to evaluate the suitability of the theoretical model under analysis with respect to the empirical data, and examine the significance of hypotheses. Observing literature review, we supposed 6 constructs as all these direct factors, and then SEM was conducted. The first model result showed that the structural model obtained the overall fit with the actual data: Chi-square/df = 2.988; CFI = 0.921; TLI = 0.910; GFI = 0.923 and RMSEA = 0.046. However, the direct links between e-brand

experience (BE) and e-loyalty (BL), brand association (BA) and e-loyalty (BL) were not significant as P values were larger than 0.05. It can be concluded that brand association has not a direct impact on e-loyalty, e-brand experience has not a direct effect on e-loyalty. The final model was conducted and showed that it reached the overall fit with Chi-square/df=2.987; CFI = 0.921; TLI = 0.910; GFI = 0.923 and RMSEA = 0.046.

Table 2
The regression weights of each effect

			Estimate	S.E.	C.R.	P
BS	←	BA	0.221	0.062	3.574	<0.01
BS	←	BE	0.373	0.058	6.478	<0.01
BS	←	PB	0.324	0.055	5.855	<0.01
BS	←	BWA	0.155	0.034	4.572	<0.01
BL	←	BS	0.598	0.069	8.670	<0.01
BL	←	BWA	0.162	0.036	4.536	<0.01
BL	←	PB	0.112	0.054	2.089	0.037

In order to evaluate the total effect of each construct in the final model, we used analysis by direct, indirect and total impact. The results showed that brand experience had the largest direct impact on e-satisfaction, and perceived quality has the largest direct effect on e-loyalty (Table 3).

Table 3
The standardized direct, indirect and total effects

Dependent variable	Effect	BE	BA	PB		
BS	Direct	0.335	0.188	0.316	0.195	0.000
	Indirect	0.000	0.000	0.000	0.000	0.000
	Total	0.335	0.118	0.316	0.195	0.000
BL	Direct	0.000	0.000	0.115	0.214	0.631
	Indirect	0.212	0.118	0.199	0.123	0.000
	Total	0.212	0.118	0.315	0.337	0.631

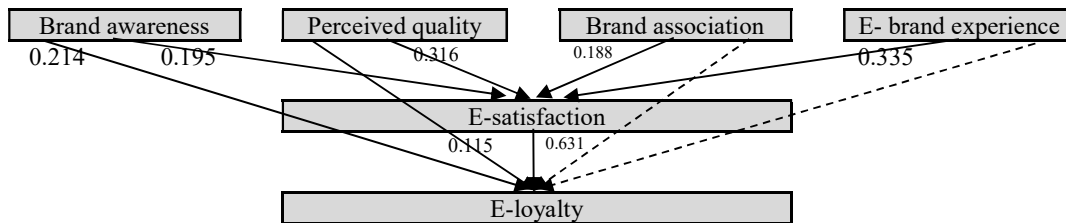


Fig. 3. The tested conceptual model

Finally, we observed that that all the coefficients estimated in these equations were significant. Fig. 3 shows the estimations of the standardized regression coefficients in which brand experience has the largest impact on e-satisfaction and brand awareness has the biggest effect on brand loyalty. Otherwise, brand equity has strong relationship with online brand satisfaction while two components of brand equity (brand experience and brand association) did not have any effect on online brand loyalty.

6. Discussion

Generally, e-brand experience was found to be the most determinant on developing online brand satisfaction in the whole brand equity, following by perceived quality, e-brand awareness and lastly brand association. Thus, H_{1a}, H_{2a}, H_{3a} and H_{4a} were supported. Some previous studies also confirmed these relationships (Lai et al., 2007; Len et al., 2007; Morgan-Thomas & Veloutsou, 2013; Jing et al., 2014; Lin & Bennett, 2014; Khan & Rahman, 2015b; Oppong & Phiri, 2018). On the other hand, our research

showed the direct impact of e-brand awareness and perceived quality on e-brand loyalty which were also proposed by other studies (Ha & Perks, 2005; Pike et al., 2010; Buil et al., 2013; Yousaf et al., 2012; Hsu et al., 2012; Lin & Bennett, 2014; Xu et al., 2015). Therefore, H_{1b} and H_{2b} were accepted. Moreover, in this paper brand awareness played the crucial role in direct relationship with e-brand loyalty versus perceived quality. Otherwise, e-brand experience and brand association in some previous research were impact on e-brand loyalty (Atilgan et al., 2005; Pike et al., 2010; Buil et al., 2013; Cyr, 2008; Brakus et al., 2009; Nysveen et al., 2013). However, we just found that e-brand experience and brand association had indirectly effect on e-brand loyalty rather than the direct impacts. Hence, H_{4b} and H_{3b} were only partially confirmed. E-brand experience seemed to have the biggest indirect effect on e-brand loyalty. Finally, it can be said that small and medium size companies in Vietnam should pay more attention in brand experience of customers and perceived quality of online service in increasing customer satisfaction and building customer loyalty.

7. Conclusion

The present paper justified a conceptual model explaining brand loyalty to the virtual establishment of shopping website through the role of a key relational variable: satisfaction. It also analyzed the mediating effect of e-satisfaction upon the influence exerted by customer-based brand equity and e-brand experience on loyalty. We have given some insights for understanding the area of customer-based brand equity and brand experience in virtual concept. These finding tallies to brand management literature that view brand experience and perceived quality as central in creating brand value. Conceptualizing brand equity from the consumer's perspective is useful since it suggests both specific guidelines for marketing strategies and tactics and areas where research can be useful in assisting managerial decision making. From the results, authors expect this work will spur efforts to look at further propositions, and lead to alternative and new directions for understanding customer-based brand equity construct in the growing online usage environment.

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