

# THE EFFECT OF BRAND EQUITY ON INVESTOR LOYALTY IN ONLINE SECURITIES TRADING USING THE TECHNOLOGY ACCEPTANCE MODEL

**Puncharat Borirakcharoenkit**

Faculty of Management Sciences, Prince of Songkla University, Songkhla, Thailand

**Sasiwemon Sukhabot**

Faculty of Management Sciences, Prince of Songkla University, Songkhla, Thailand

**Idsaratt Rinthaisong**

Faculty of Management Sciences, Prince of Songkla University, Songkhla, Thailand

**Nimit Soonsan**

Faculty of Management Sciences, Phuket Rajabhat University, Phuket, Thailand

## ABSTRACT

According to branding theory, the more equity a brand has, the stronger its behavioral loyalty. This research adopted the technology acceptance model framework to explain the impact of brand equity on investors' loyalty in online securities trading. Our data was collected via a multi-method approach, and, using a structured survey, the impact of brand equity on behavioral loyalty was tested. The findings indicate that brand equity impacts behavioral loyalty but does not influence mediators. This research also suggests that perceived ease of use and usefulness play an important role in mediating variables. Our findings impact retailers and brand owners in a variety of ways.

**Keywords:** Investor, brand equity, loyalty, Technology Acceptance Model (TAM)

DOI: <http://dx.doi.org/10.15549/jeecar.9i2.829>

## INTRODUCTION

Brand managers work tirelessly to build strong brand equity with the ultimate aim of attaining high levels of behavioral loyalty. The advantages of strong behavioral loyalty include reduced information searching, help with positive word-of-mouth, cheaper marketing expenditures, and increased market share (Moore & Lehmann,

1980; Westbrook, 1987; Aaker, 1991; Chaudhuri and Holbrook, 2001). For many businesses, however, strong brand equity does not necessarily translate into advantages. Given the high costs and lengthy process of creating brand equity in the first place, this presents a management challenge.

The fields of information technology, economics, social sciences, culture, and politics,

among other things are advancing very fast in today's age. Particularly concerning are technology advancements that have an impact on community behavior in everyday activities. Individuals are becoming more dependent on technology for daily activities ranging from communication to browsing and studying to doing business and even investing.

Many people are starting to understand the significance of investing, whether in real estate, gold, stocks, or other types of land. However, not everyone believes that what they invest in is secure, if the return value is assured at the level they anticipate, etc. Communications information and technology have changed business practices in different sectors (Pham and Doan, 2014; Pham et al., 2019a, 2019b, 2019c), and it is valid for brokerage firms (Roca et al., 2009).

In the past, a traditional trading environment was one in which investors had to visit SET and contact the brokers of companies for buying or selling shares (Lin and Wei, 1999). In the current era, due to the internet, consumers may buy or sell stocks by just using a mobile device or a computer. There are 39 SET's members companies<sup>1</sup> in Thailand but there is only one application which is used for online stock trading - "Streaming"<sup>2</sup>. Nowadays, customers are not required to physically communicate with business representatives (Yang and Fang, 2004). Instead, through the internet, consumers and brokerages conduct trading transactions through online stock trading (Roca et al., 2009). As a result, individual investors may trade securities swiftly and conveniently utilizing a desktop computer connected to the internet (Huang et al., 2005). Second, online stock trading saves investors' money and time (Liu, 2015). Customers may access a number of the stock brokerage company's online services without calling or visiting the firm (Feng et al., 2014). Furthermore, internet services help the traders easily monitor different things, such as checking accounts, trading stocks, and getting market updates.

Moreover, the profitability may be enhanced further by providing more value-added services at different platforms to customers, such as letting the clients manage their investment portfolio. Despite their attempts to enhance the online trading process and services, different

firms are falling short of meeting increasing customer expectations (Feng et al., 2014). Online securities trading is very competitive; therefore, to resolve these issues, brokerage organizations provide high-quality services to customers to survive. Client satisfaction is essential for customer retention when it comes to online securities trading services. Hence, it is worthwhile to investigate the willingness of Thai consumers towards online trading.

Prior research in the branding literature has shown a significant positive connection between some components of brand equity (for example, brand trust) and behavioral or attitude-based loyalty measures. Chaudhuri and Holbrook (2001) looked through over a hundred brands. Furthermore, Netemeyer et al. (2004) investigated the connection between consumer-based brand equity characteristics, willingness to pay, and future purchase intentions, and investigated that the impact of brand equity on attitudes and behaviors on different brands is positive.

Different studies have demonstrated the link between customer satisfaction and loyalty in the literature (Long and Vy, 2016; Pham et al., 2018a, 2018b). In addition, numerous research adopted TAM as an online trade prediction for customer satisfaction (Long and Thanh, 2016). Moreover, these variables affect the pleasure of end-users with an information technology (IT) system (Long et al., 2011). On the other hand nowadays, the online security trading system is considered as one of the main components of the IT system.

The literature mentioned above indicates that perceived ease of use and usefulness are linked to customer satisfaction. It also indicates that customer satisfaction is important, and by falling back in customer satisfaction companies may lose business. Not many studies in the past discussed the importance of these aspects and highlighted the model's integrity. This study aims to fill the above-mentioned gap in the literature by investigating and proposing that perceived ease of use, brand equity, and perceived usefulness factors influence the behavioral loyalty of online investment applications users.

Our study provides the following theoretical advances. First, we propose a model and technique through which brand managers may find factors affecting brand equity and behavioral

loyalty. Second, the study identifies which variable is of importance for mediation. Finally, our mediators are based on perceived usefulness and ease of use which may provide new guidelines.

## LITERATURE REVIEW

### Behavioral Loyalty

In line with Keller's brand equity idea, consumers with a high brand stock level will have a better response to their products. Keller and Swaminathan (2020) say that one of the hallmarks of companies with excellent brand equity is that they have a high level of customer loyalty. Several previous research in branding literature (e.g., Choudhuri and Holbrook, 2001) have experimentally shown a significant link between brand equity and brand loyalty attitude. Furthermore, behavioral loyalty means the level of customer relationship with the company, regardless of other competitors. Service recipients have a habit of willingly buying or using the service consistently. This creates a good connection, which in the future will lead customers to re-use the service (Bourdeau, 2005). The current study focuses on four dimensions: partner loyalty, word of mouth, advocacy and retention, to customers (Raimondo, "Nino" Miceli & Costabile, 2008) in the context of online stock trading.

### Brand Equity

Brand Equity plays an important role in marketing communication, whether the company's products and services are at a satisfactory price for the customers. Its research looks into three dimensions of brand equity: customer awareness, attitude, and ethics (Aaker 1991; Ilici & Webster 2015; Kotler 2011). Customer awareness reflects the business being outstanding to the customers (Chan, Boksem, & Smidts, 2018), and this can increase sales and effectively promote marketing (Datta, Ailawadi, & van Heerde, 2017), which consequently affects the sustainability and existence of the business (Świtała, Gamrot, Reformat, & Bilińska-Reformat, 2018). The literature indicates that the measures for customer awareness are easy recognition, familiarity, and good reputation (Aaker 1991; Kotler, Kartajava & Setiawan 2019; Ilici &

Webster 2015). Attitude is important in building trust for customers or service users (Aminu & Oladipo, 2015). Attitude measures in this research include meeting needs, being a complete and suitable product, and having an outstanding and reliable image (Keller 2008; Kotler 2011; Blair & Chiou 2012). The third perspective, ethics, is an important factor in convincing customers to finance a company and moral values of a high level (Rakoto, 2015), differentiating the business from its competitors (Quader & Sohel, 2018). Ethics becomes a key strategy in the organization's management in controlling risks and generating sustainable development (Adelstein & Clegg, 2011). The ethics measures in this research are well accepted, giving confidence in using the service and professional expertise (Aminu & Maupetit 2015; Haerudin & Santoso; Adelstein & Clegg 2016). We propose our initial baseline hypothesis based on these results as mentioned in Figure 1, and which is as follows;

H1. Brand equity influences behavioral loyalty.

### Perceived Ease of Use (PEU) and Perceived Usefulness (PU)

People feel that technology and systems enhance results, defined by the application's perceived usefulness (Davis, 1989). The perceived ease of use is the extent to which someone believes that using technology or a system is mentally or physically easy (Davis, 1989). These are the two significant elements of TAM (Huy et al., 2019b). Plus, the literature also has indicated that when perceived ease of use and usefulness is high, it is a likelihood that the technology will be highly used (Pham et al., 2013). Furthermore, several studies have demonstrated that technology has perceived ease of use and usefulness influences customers' satisfaction (Pham et al., 2018a). However, it should be evident that individuals may engage in stock trading without putting more mental or physical effort (Roca et al., 2009). The e-commerce, e-banking, and online securities trading environments have shown that the confidence felt, and the perceived usefulness and ease of usage are positively correlated (Pavlou, 2003). On the basis of the above discussion, the study proposes:

H2. Brand equity positively influences

- perceived ease of use.
- H3. Brand equity positively influences perceived usefulness.
- H4. The perceived ease of use positively influences behavioral loyalty.
- H5. The perceived ease of use positively influences perceived usefulness.
- H6. The perceived usefulness positively influences behavioral loyalty.

- H7. The perceived ease of use plays a mediating role between brand equity and behavioral loyalty.
- H8. The perceived usefulness plays a mediating role between brand equity and behavioral loyalty.
- H9. The perceived ease of use and perceived usefulness play a double mediating role between brand equity and behavioral loyalty.

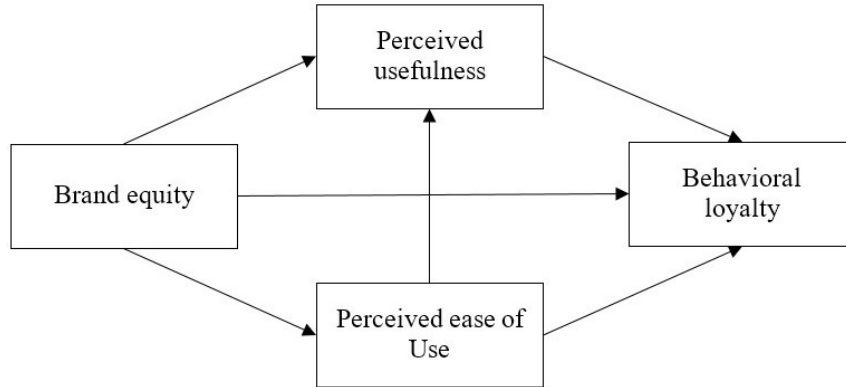


Figure 1. Conceptual research framework

Figure 1: Conceptual Research Framework

**METHOD**

This research involves quantitative research. According to Martono (2011), quantitative research is “research done by gathering data in the form of numbers”. The numerical data is subsequently processed and examined to get the scientific knowledge hidden behind the numbers.” The research conclusion is expressed in the form of computations that include the drawing or interlacing of variables.

The study sample consists of investors who have made investments in Thailand's stock exchange (SET). Thailand's Stock Exchange portfolio is the best among ASEAN countries. In June 2020, it was the second-biggest stock exchange market in the perspective of market capitalization. Also, it remains the region's biggest IPO market, floating between \$17.8 billion since June 2015. Plus, SET is also known as the most active stock market in the ASEAN stock markets (SET Focus, 2020). It has had five hundred fifty-six registered companies since 2019, one hundred and sixty-nine alternative investment markets (AIM), and two hundred twenty-eight

bond markets.

The sample was selected with the non-probability purposive sample technique. Consequently, this research utilized just 1208 completed questionnaires, which is still a sufficient sample size for using structural equation model analysis (Hair et al., 2010). The targeted sample was 1600 investors in SET; further, it was divided into four regions with each sample size 400, including North, South, East, and Northeast of Thailand. Out of the 1600 target samples, 1208 respondents returned their questionnaire, as mentioned in Table 1.

The data collecting instrument is a questionnaire designed and developed by the researchers. It contains 25 question items and is further divided into three sections. The brand equity items were adopted from Zeithaml, Lemon, and Rust (2001), another side the perceived ease of use and perceived usefulness measurement measures adopted from Davis (1989), and the measurement scale of loyalty was adopted from Yang and Peterson's (2004). Section 1 contains nine items of personal information (gender, age, education, status, income,

occupation, experience, behavioral trade); Section 2 contains 17 questions items.

**Table 1.** Personal data

Item	Frequency	Percentage	Item	Frequency	Percentage
<b>Gender</b>			<b>Income (per year)</b>		
Male	538	44.5	Less than 1 million baht	534	44.2
Female	670	55.5	1-3 million baht	330	27.3
<b>Age</b>			3-5 million baht	152	12.6
30 years or less	217	18	5-10 million baht	104	8.6
31-40 years	306	25.3	10 million baht or more	88	7.3
41-50 1 years	302	25	<b>Experience</b>		
51-60 years	258	21.4	Less than 1 year	208	17.2
Higher than 60 years	125	10.3	1-3 years	222	18.4
<b>Education</b>			3-5 years	250	20.7
Secondary level or below	84	7	5 years or more	528	43.7
Diploma	105	8.7	<b>Behavioral trade</b>		
Bachelor's degree	642	53.1	Every day	245	20.3
Master's degree or higher	377	31.2	Once a week	227	18.8
<b>Occupation</b>			Once a month	433	35.8
Students	134	11.1	6 months/time	170	14.1
Business owners	357	29.6	1 year or more	133	11
Government officials	234	19.4	<b>Status</b>		
Companies employees	349	28.9	Single	459	38
Housewife & not working	45	3.7	Married	631	52.2
Retired	84	7	Widow or Divorced	118	9.8
Others	5	0.4			

Furthermore, these are divided into four subsections of factors. The first-factor, brand equity, consists of "I always put this company first in my mind," "I can recognize the symbol or logo of this company," "I am very familiar with this company, "I think the company has a strong and well-established brand," "This company has innovative financial solutions that meet the needs of its customers," "There are complete and suitable products for each group of customers and "This company has a complete and suitable product range for each group of customers." The second factor, perceived ease of use, contains three items "The website is suitable and fast to use," "Processing is accurate and provides accurate data," and "This company's technology

has helped me save time and money in doing financial businesses. The third factor, perceived usefulness, consists of three items, "The company's technology is easy and convenient to use," "I did not have to put much effort into using the system," "I can follow the instructions on the company website." The last factor, behavioral loyalty, consists of five items, "I have been a long-standing stock trading client," "I will continue to use the services of this company even if there are competitors," "I like this company more than other competitors," "I received a fair service that was easy to shop for" and "I am willing to regularly participate in the events organized by the company." Three scholars reviewed the questionnaires in the related areas, and it was

tested further for validity and reliability ( $\alpha=0.97$ ). The questionnaires were distributed later through electronic mails to 1600 investors, and 1208 questionnaires were returned, representing a 75.5% response rate, adequate for model testing (Hair, Anderson, Babin, & Anderson, 2010).

Descriptive analysis techniques were carried out to obtain demographic information, as was a two-stage technique of testing the hypotheses (Anderson & Gerbing, 1988). Initially, the model was tested for confirmatory factor analysis, followed by a structural equation modelling investigation for testing the research model.

**RESULTS**

**Measurement Model**

There were four components in this research: brand equity as an independent variable, two mediating factors (perceived usefulness and ease of use), and behavior loyalty in terms of the dependent variable. The first model was assessed

with all four components and the results indicate the model is consistent with the data obtained, ( $\chi^2= 743.004$  ( $p = .000$ ),  $df = 113$ ,  $CFI = 0.955$ ,  $TLI = 0.946$ ,  $RMSEA = 0.068$ ,  $SRMR = 0.032$ ), and it outperformed by a considerable margin. Following the process, the hypotheses for each of the four components of the measurement model were evaluated in this study's analysis, including brand equity, perceived usefulness, perceived ease of use, and behavioral loyalty.

The CFA was performed to analyze the survey to reduce measurement error, as given in Table 2.

The first component, brand equity, consisted of six elements with a standard weight ranging between 0.67 and 0.83, and perceived ease of use, comprised of three elements, each with a standard weight ranging between 0.84 and 0.85 points. The third component, perceived usefulness, comprised three items with standard weights between 0.81 and 0.87. Finally, the fourth component, behavioral loyalty, comprised five questions with a standard weight ranging from 0.69 to 0.87.

**Table 2.** Mean, standard deviation, and confirmatory factor analysis

Factors/Items	Mean	SD.	CFA loading factor
<b>Brand equity</b>			
1. I always put this company first in my mind.	3.69	0.72	0.67
2. I can recognize the symbol or logo of this company.	3.64	0.73	0.77
3. I am very familiar with this company.	3.62	0.74	0.81
4. I think the company has a strong and well-established brand.	3.65	0.69	0.83
5. This company has offered financial innovation and a variety of products to respond to customer needs.	3.74	0.72	0.77
6. This company has a complete and suitable product range for each group of customers	3.75	0.70	0.71
<b>Perceived ease of use</b>			
1. The website is suitable and fast to use.	3.72	0.71	0.85
2. Processing is accurate and provides accurate data.	3.69	0.70	0.86
3. This company's technology has helped me save time and money in doing financial business.	3.73	0.70	0.85
<b>Perceived usefulness</b>			
1. The company's technology is easy and convenient to use.	3.72	0.72	0.81
2. I did not have to put much effort into using the system.	3.68	0.74	0.87
3. I can follow the instructions on the company website.	3.71	0.73	0.84
<b>Behavioral loyalty</b>			
1. I have been a long-standing stock trading client.	3.77	0.70	0.71
2. I will continue to use the services of this company even if	3.76	0.66	0.87

**Table 2.** Mean, standard deviation, and confirmatory factor analysis

Factors/Items	Mean	SD.	CFA loading factor
there are competitors.			
3. I like this company more than other competitors.	3.74	0.68	0.86
4. I received a fair service that was easy to shop for.	3.78	0.66	0.76
5. I am willing to regularly participate in the events organized by the company.	3.66	0.74	0.69

The statistical significance was determined for all variables at 0.001, indicating that they were all significant as mentioned in Table 3. In addition, the coefficient of Pearson correlation varied between 0.57 and 0.63, and the Cronbach alphas ranged from 0.88 and 0.89, showing that

the variables are reliable in their findings. Also, it was discovered that the composite reliability (CR) varied from 0.88 to 0.89, which was significantly better than 0.70, indicating that all survey questions were reliable (Carmines and Zeller, 1988; Hair et al., 2010).

**Table 3.** Mean, standard deviation, Cronbach's alphas, average variance extracted, composite reliability, and correlation coefficient

Factor/Item	Mean	S.D.	Cronbach's Alpha	CR	AVE	1	2	3	4
Brand equity	3.68	0.58	0.89	0.89	0.58	1			
Perceived ease of use	3.71	0.63	0.89	0.89	0.73	.626**	1		
Perceived usefulness	3.70	0.65	0.88	0.88	0.71	.572**	.790**	1	
Loyalty	3.74	0.57	0.88	0.89	0.61	.598**	.562**	.568**	1

Note: \*\*  $p < .01$

Squared correlations are below the diagonal.

Square roots of AVE are presented on the diagonal.

Convergence validity testing revealed that the AVE is between 0.58 and 0.73, and as noted by Fornell & Larcker (1981) and Hair et al. (2010), the AVE should be higher than 0.50. In contrast, if the CR surpassed 0.60, an AVE greater than 0.40 is acceptable. As a result, all data were sufficient for structural equation modeling (Fornell & Larcker, 1981). We examined the square root of each variable's AVE and correlation coefficient for discriminant validity (Fornell & Larcker, 1981). The findings indicate that the square root of the AVE for each variable is diagonal and more significant than the correlation coefficient between all variables, indicating that the survey questions have adequate discriminant validity. To summarize, all factors are consistent with the empirical evidence, and they are significant and reliable for further tests.

**Structural Model and Hypothesis Testing**

According to the analysis findings, all indices have a high degree of fitness  $\chi^2 = 743.004$  ( $p = .000$ ),  $df = 113$ ,  $CFI = 0.955$ ,  $TLI = 0.946$ ,  $RMSEA = 0.068$ ,  $SRMR = 0.032$ , as mentioned in Table 3. The structural model's findings show that the suggested structural model does indeed match the data. The direct effect of brand equity and behavioral loyalty ( $\beta = 0.49$ ,  $p < .01$ ) illustrates a significant positive relationship, supporting H1. Another H2 direct effect of brand equity is positive and significant on perceived ease of use ( $\beta = 0.69$ ,  $p < .01$ ). The H3 brand equity does not illustrate a positive and significant impact on perceived usefulness ( $\beta = 0.034$ ,  $p > .05$ ). Furthermore, H4 perceived ease of use does not significantly influence behavioral loyalty ( $\beta = 0.036$ ,  $p > .05$ ), and H5 perceived ease of use

positively influences perceived usefulness ( $\beta = 0.863, p < .01$ ). Moreover, hypothesis H6 on perceived usefulness positively and significantly impacts behavioral loyalty ( $\beta_{\text{perceived ease of use} \rightarrow \text{behavioral loyalty}} = 0.329, p < .01$ ).

**Test of Mediating Effect**

Current research has adopted two mediators, perceived ease of use and usefulness, evaluated using Baron and Kenny's assumptions (1986). In addition, the findings show that the perceived

ease of use mediator has played a non-significant role between brand equity and behavioral loyalty ( $\beta = 0.024, p > .05$ ). The other mediating variable, perceived usefulness in hypothesis 8, also does not illustrate a significant mediating role between brand equity and behavioral loyalty ( $\beta = 0.011, p > .05$ ). This study also tested double mediation. In hypothesis 9, the perceived ease of use and perceived usefulness plays a double mediating role between brand equity and behavioral loyalty, and it is significant and positive ( $\beta = 0.198, p < .01$ ) as mentioned in Table 4.

**Table 4.** Direct effect, Indirect effect, Total effect

Hypothesis	Direction	Results
H1. Brand equity influences behavioral loyalty.	(BE > BL = 0.426***)	Supported
H2. Brand equity positively influences perceived ease of use.	(BE > PE = 0.696***)	Supported
H3. Brand equity positively influences perceived usefulness.	(BE > PU = 0.034)	Not Supported
H4. The perceived ease of use positively influences behavioral loyalty.	(PE > BL = 0.036)	Not Supported
H5. The perceived ease of use positively influences perceived usefulness.	(PE > PU = 0.863***)	Supported
H6. The perceived usefulness positively influences behavioral loyalty.	(PU > BL = 0.329***)	Supported
H7. The perceived ease of use plays a mediating role between brand equity and behavioral loyalty.	(BE > PE > BL = 0.024)	Not Supported
H8. The perceived usefulness plays a mediating role between brand equity and behavioral loyalty.	(BE > PU > BL = 0.011)	Not Supported
H9. The perceived ease of use and perceived usefulness play a double mediating role between brand equity and behavioral loyalty.	(BE > PE > PU > BL = 0.198***)	Supported

**Remarks:**  $R^2_{\text{Perceived ease of use}} = 48.5, R^2_{\text{Perceived usefulness}} = 78.7, R^2_{\text{Behavioral Loyalty}} = 51.1$

\*\*\*  $p < 0.001, ** p < 0.01, * p < 0.05$

Model:  $\chi^2 = 743.004 (p = .000), df = 113, CFI = 0.955, TLI = 0.946, RMSEA = 0.068, SRMR = 0.03$

**DISCUSSION**

The emphasis of this research was on how investor attitudes affect SET investments, with particular attention to investor behaviors, perceived utility, and perceived simplicity of use. Additional research was done to investigate the mediating effects of perceived utility and perceived ease of use on the relationship between brand equity and behavioral loyalty in SET investors in Thailand. This study corroborated earlier findings and explored the brand equity-to-behavioral loyalty link using SET-specific factors; something which includes brand equity, behavioral loyalty, perceived usefulness, and perceived simplicity of use. More details about the findings and contributions of this study

are included in the next section.

Based on the brand equity study findings, it was found that brand equity increases behavioral loyalty in a person. The results show that the results of the previous research, according to Keller's brand equity theory, brand equity customers would respond positively in return (Hariharan, Desai, Talukdar & Inman, 2018). According to Keller (2020), one of the characteristics of marks with high brand equity is a sense of commitment and devotion. Moreover, past brand equity research (for example, Chaudhuri and Holbrook, 2001) discovered a strong relationship between brand equity components (e.g., brand confidence) and



attitudinal measures on brand loyalty. Hariharan, Desai, Talukdar, and Inman (2018) also found that brand equity and behavioral loyalty positively correlate, and they also verified the effect that exposure has on connecting brand equity and behavioral loyalty.

The dimensional analysis has shown that a focus on quality (as opposed to overall equity) leads to more significant overall brand equity and improves the link between brand equity and customer behavior by increasing the total brand experience. According to the study, consumers who believe that the brand's presence is weak would have a lower rise in behavioral loyalty due to improved perceived brand quality. The results also support previous research by Yulianto and Tanamal (2019) that explains that brand equity is the most influential variable. That is, strong brand equity will result in high behavioral loyalty, as shown below. The findings contribute to filling a gap in the literature by discussing the perception of the Thai consumer in the perspective of brand equity, customer satisfaction and by examining the connections between those variables in the setting of a SET shareholder.

A strong positive correlation was found between brand equity and ease of use, which directly affects perceived ease of use. According to the results of the present research, this point of view is novel in the literature. The significance of trust in influencing consumer satisfaction has been previously stressed. Research has shown that the connection between trust and ease of use and usefulness is more evident (Hanafizadeh & Khedmatgozar, 2012). The results also explain that the Thai investors found the SET online platform easy to use. In contrast, brand equity does not illustrate a positive and significant impact over perceived usefulness. This assumption is not as per the supposed hypothesis and indicates that perceived usefulness does not influence Thai online investor's loyalty behavior. As the literature suggested, perceived usefulness is one motivating factor that keeps the online investor connected to the organization when the application is upgraded. PEOU is used to ascertain a person's readiness to think that using the system would be easy (Yulianto & Tanamal, 2019).

Furthermore, PEOU did not show significant

influence over behavioral loyalty. The items of PEOU are website suitability, fast to use, accurate processing, provides accurate data, saves time and money. Another side of loyalty is long-term stock trading, continued use of services of the same company that even competitors offer, like company over other competitors and fair service and easy to shop. This indicates that the PEOU does not affect behavioral loyalty, and also indicates that Thai investors do not find the SET online portal fast to use, accurate, and saving time and money. The past studies suggested that the PEOU affects the purchase intention (Yulianto & Tanamal, 2019), but it does not impact loyalty.

The result mentioned above are in line with other studies that show that ease of use increases perceived usefulness (Nguyen, Pham, Williamson, & Hung, 2020). However, this study is in regard to the brand equity and behavioral loyalty perspective in Thailand (Hariharan, Desai, Talukdar & Inman, 2018). As a result, our study contributes to previous studies on SET internet investors. Brand equity is a critical factor in determining customer loyalty, and investors have to be pleased with a service provider before demonstrating their loyalty. Customer satisfaction may result in future good behaviors such as positive word-of-mouth, desire to return, and making quality payments (Chun et al., 2019; Jani & Han, 2014; Martinez, 2015).

Moreover, the results of perceived usefulness positively and significantly influence behavioral loyalty. As the literature has suggested, there are many indications of perceived usefulness: increased productivity, enhanced/facilitated work, efficiency, effectiveness, and enhanced performance (Fatmawati, 2015), and it illustrates that these aspects are important, changing the loyalty behavior of the investors. The current study indicates that these aspects influence Thai online SET investors. The study thus concludes that the SET online platform influences online Thai investors, and their behavior will be loyal to the SET.

Although perceptions of ease of use do not play a statistically significant mediating function in brand equity and behavioral loyalty, the mediating variables conclude that perceived ease of use is not relevant to the relationship between these two characteristics. The following

proposition is in opposition to the current assumption. A literature study shows that investors are more likely to make online investments if they think they are easy to use, and the user's interest in the system may also be determined by how easy it is to use (Yulianto & Tanamal, 2019). Another aspect to consider is the expected positive connection between the perceived ease of use of an online securities trading system and customer happiness (Yulianto & Tanamal, 2019), which indicates that Thai online investors are not satisfied with the online platform, and it may not lead to their intention to be loyal.

The second mediating variable, perceived usefulness, also plays a non-significant mediating role among brand equity and behavioral loyalty, which contrasts with the assumption of the research hypothesis. According to the literature, the degree to which someone believes a system would boost their performance at work is meant to be reflected by the perceived usefulness variable. The system's benefits may be shown via its use in different ways (Yulianto & Tanamal, 2019). The assumption is that if a user believes the system can be useful, they will use it; however, if the user does not believe the system has the potential to be useful, they will not use it. The result of the second mediating variable is in the contrasts of the Yulianto and Tanamal (2019) study, which indicates that Thai online traders do not perceive that the system is not potentially useful and can enhance job performance. This mediating variable result also indicates that Thai online stock traders will lose their interest and move to the competitors.

This study has found a positive and significant double mediation. The perceived ease of use and usefulness play a significant and positive double mediating role among brand equity and behavioral loyalty. Different studies have illustrated that the role of both variables is very important in the perspective of online IT systems use and in creating the trust of the investors. As such, trust is important for customer happiness, and that it may also be connected to how easy and useful something is to use (Hanafizadeh & Khedmatgozar, 2012). Another study has demonstrated that the perceived ease of use and the perceived usefulness of a product are positively correlated, as is the desire to take

advantage of technical advancements (Pham et al., 2013). Furthermore, another research also has indicated that the perceived ease of use and usefulness of a particular technology affect the user's happiness (Pham et al., 2018a). This research has found that both mediating factors are beneficial in helping online investors develop behavioral loyalty.

To understand how customer happiness and behavioral loyalty are linked, an extensive systematic study was carried out to explore the relationship between brand equity and behavioral loyalty in Thailand. The TAM takes into account brand equity, ease of use, usefulness, and loyalty. Customers may defect if the level of customer loyalty fluctuates, but this coherent model has a strong forecasting ability, so it is easy to explain why that happens. The findings indicate that brand equity benefits the easy use and helpful perceptions of Thailand's online trading environment; easy use perceptions enhance useful perceptions. Both of these effects have a positive impact on customer loyalty. Because of this, efforts to improve the ease of use and usefulness may influence behavioral loyalty in a significant way. It is also possible that brand equity will create a certain degree of individual investor loyalty.

## CONCLUSION

In Thailand, which has a freshly developing economy, this research is one of its kind in the perspective of the methodical and detailed research on the connection between brand equity and customer loyalty stock trading in an online environment. According to the results, individual investors' brand equity and loyalty may be explained better by including perceived ease of use and perceived usefulness into the TAM.

It has been shown that brand equity is linked to behavioral loyalty; it positively affects how consumers evaluate the ease of use. Brand equity does not influence how helpful a product is, and the perception of ease of use is irrelevant to behavioral loyalty. However, the perceived usefulness mediating variable has a positive effect on those who are loyal. It is known that the perceived ease of use of a mediating variable has a positive effect on the perceived utility of a given product.

Regarding brand equity and behavioral loyalty, the perceived ease of use plays a mediating function, and it plays a mediating role in perceived usefulness. Regarding brand equity and behavioral loyalty, the perceived usefulness does not play a mediating role. Contrary to what was found in previous research, the current study shows that both perceived ease of use and perceived usefulness are both important mediators in double mediation, in which brand equity and behavioral loyalty play a double mediating role. Additionally, the combined model accounts for 48.5% of the reported ease of use variation, 78.7% of the variation in perceived usefulness, and 51.1% of the variation in behavioral loyalty. The perceived ease of use is improved by reviewing strategies and action plans to boost easiness and loyalty, which helps enhance stock firms' and brokerage businesses' contentment with individual investors. However, despite these findings, there are still significant limitations to this research.

The first limitation of this research is that it includes individual investors from one of Thailand's biggest stock companies as a part of its sample. In order to avoid misinterpretation of the findings, this research recommends that future researchers test other stock brokerages in Thailand and other developing economies.

Behavioral loyalty in this research was not affected by brand equity, and it was not observed that brand equity was affected in this investigation. Additional mediating variables have no mediating effect on the relationship between brand equity and behavioral loyalty. Though an explanation may be temporarily acceptable for non-statistical relationships, the variables may have more complex processes or circumstances. A third disadvantage is that the integrated research model has a high capacity to forecast these variables. However, many other elements may influence them, and the model has not accounted for them. Because this study's findings have yet to be validated and its conclusions extrapolated to other stock brokerages in other developing market nations, further research must consider these limitations. In conclusion, this research solely addresses the geographical setting of Thailand. Cross-national research is encouraged to examine, in this context, the function of culture and test if the

quality of online services has comparable impacts on the result of brand equity.

### CONTRIBUTION

Developing a loyal client base is a primary objective of stock brokerage companies. Customer satisfaction is critical for stock brokerage companies to attract loyal clients. These companies need to diversify their products further and improve the quality of their products. In their contacts and interactions with the stock business, if customers encounter a variety of high-quality services, they perceive extra value and build loyalty towards the company.

Our findings have implications for theory as well. We add new factors to previous research that either boosts or reduces the connection between brand equity and customer loyalty in the digital marketplace. Next, we figure out which of the brand's dimensions are most important for managers to focus on to ensure that intermediaries do not dilute their brand.

Second, simplifying the assessment of brand equity is a significant theoretical advance. We combine brand equity behavioral literature to develop a concise, reliable, unidimensional brand equity measure with a high level of validity. Our thorough review of the literature shows that brand equity has many and sometimes overlapping attitudinal aspects. Based on theoretical reasoning and statistical analyses, we have integrated them into a single construct. The solution for a single component shows the alignment of the five dimensions, simplifying the functioning of brand equity.

### REFERENCES

- Aaker, D. A. (1991). *Managing Brand Equity* New York.
- Adelstein, J., & Clegg, S. (2015). Code of Ethics: A Stratified Vehicle for Compliance. *Journal of Business Ethics*, 138(1), 53-66. doi:10.1007/s10551-015-2581-9
- Aminu, A. A., & Oladipo, O. O. (2016). Application of Financial Ethics in Annual Financial Reporting of Banks. *Journal of Economic and Social Development*, 3(1), 66.

- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach, *Psychological Bulletin*, *103*(3), 411-423, doi:10.1037/0033-2909.103.3.411
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182. doi:10.1037/0022-3514.51.6.1173
- Blair, T. C., Wu, J. Y., Chiou, S. C., Kung, S. F., & Shieh, M. D. (2012). Brand Image Communication through Multicultural. *International Journal of Knowledge, Culture and Change Management*, *11*(3), 85-98. doi:10.18848/1447-9524/cgpv11i03/49630
- Bourdeau, B. L. (2005). A new examination of service loyalty: Identification of the antecedents and outcomes of an attitudinal loyalty framework. The Florida State University.
- Carmines, E. G., & Zeller, R. A. (1988). *Reliability & validity assessment*. Sage: California. doi:10.4135/9781412985642
- Chan, H.-Y., Boksem, M., & Smidts, A. (2018). Neural profiling of brands: Mapping brand image in consumers' brains with visual templates. *Journal of Marketing Research (JMR)*, *55*(4), 600-615. doi:10.1509/jmr.17.0019
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *Journal of Marketing*, *65*(2), 81-93. doi:10.1509/jmkg.65.2.81.18255
- Datta, H., Ailawadi, K. L., & van Heerde, H. J. (2017). How well does consumer-based brand equity align with sales-based brand equity and marketing-mix response? *Journal of Marketing*, *81*(3), 1-20. doi:10.1509/jm.15.0340
- Davis, F. D. (1989) 'Perceived usefulness, perceived ease of use, and user acceptance of information technology', *MIS Quarterly*, Vol. 13, No. 3, pp.319-339. doi:10.2307/249008
- Fatmawati, E. (2015). Technology Acceptance model (TAM) untuk menganalisis penerimaan terhadap sistem informasi di perpustakaanM INFORMASI PERPUSTAKAAN. *Iqra: Jurnal Perpustakaan dan Informasi*, *9*(1), 196942.
- Feng, T. T., Tien, C., Feng, Z. Y., & Lai, P. J. (2014). Web Site Quality and Online Trading Influences on Customer Acceptance of Securities Brokers. *Asia Pacific Management Review*, *19*(1).
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measure. *Journal of Marketing Research*, *18*, 39-50. doi:10.1177/002224378101800104
- Haerudin, & Santoso, B. (2016). The role of islamic work ethic, spiritual leadership and organizational culture toward attitude on change with organizational commitment and job involvement as mediator on bank Pembiayaan Rakyat Syari'ah(BPRS) Indonesia. *International Review of Management and Business Research*, *5*(3), 827-843.
- Hair, J. F., Anderson, B. W., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis with reading* (Vol. 4th). Prentice-Hall: NJ.
- Hanafizadeh, P. and Khedmatgozar, H.R. (2012) 'The mediating role of the dimensions of the perceived risk in the effect of customers' awareness on the adoption of Internet banking in Iran', *Electron. Commerce Res.*, Vol. 12, No. 2, pp.151-175. doi:10.1007/s10660-012-9090-z
- Hariharan, V. G., Desai, K. K., Talukdar, D., & Inman, J. J. (2018). Shopper marketing moderators of the brand equity-behavioral loyalty relationship. *Journal of Business Research*, *85*, 91-104. doi:10.1016/j.jbusres.2017.12.002
- Huy, L., Nguyen, P., Pham, L. and Berry, R. (2019b) 'Technology readiness and satisfaction in Vietnam's luxury hotels', *International Journal of Management and Decision Making*, Vol. 18, No. 2, pp.183-208. doi.org/10.1504/ijmdm.2019.098648
- Ilicic, J., & Webster, C. M. (2015). Consumer values of corporate and celebrity brand associations. *Qualitative Market Research: An International Journal*, *18*(2), 164-187. doi: 10.1108/QMR-06-2013-0037.
- Jani, D., & Han, H. (2014). Personality, satisfaction, image, ambience, and loyalty: Testing their

- relationships in the hotel industry. *International Journal of Hospitality Management*, 37, 11-20.  
Doi:10.1016/j.ijhm.2013.10.007
- Keller, K. L. (2008). Strategic Brand Management.
- Keller, K. L., & Swaminathan, V. (2020). Strategic brand management: Building, measuring, and managing brand equity. Harlow: Pearson.
- Kotler, P. (2011). Reinventing marketing to manage the environmental imperative. *Journal of Marketing*, 75, 132-135.  
doi:10.1509/jmkg.75.4.132
- Kotler, P., Kartajaya, H., & Setiawan, I. (2019). *Marketing 4.0: Bergerak dari Tradisional ke Digital*. Gramedia Pustaka Utama. ISBN:9786020621180
- Liu, C.H. (2015) 'The impact on switching intention of e-trading systems for the securities industry', *Global Journal of Business Research*, Vol. 9, No. 1, pp.5-88.
- Long, P. and Thanh, L.T. (2016) 'NegotiAuction: an investigation of its possible adoption', *International Journal of Strategic Decision Sciences*, Vol. 7, No. 3, pp.1-16.  
doi:10.4018/ijds.2016070104
- Long, P. and Vy, PD (2016) 'Internet banking service quality, customer satisfaction and customer loyalty', *International Journal of Strategic Decision Sciences*, Vol. 7, No. 1, pp.1-7, <https://doi.org/10.4018/IJSDS.2016010101>.
- Long, P., Lan, N.P. and Duong, T.T.N. (2011) 'Determinants of e-commerce adoption in Vietnamese small and medium sized enterprises', *International Journal of Entrepreneurship*, Vol. 15, pp.45-62. Retrieved from <https://www.proquest.com/scholarly-journals/determinants-e-commerce-adoption-vietnamese-small/docview/885244576/se-2?accountid=15637>
- Martinez, P. (2015). Customer loyalty: Exploring its antecedents from a green marketing perspective. *International Journal of Contemporary Hospitality Management*, 27(5), 896-917. DOI 10.1108/IJCHM-03-2014-0115
- Martono, N. (2011). Metode Penelitian Kuantitatif: Analisis Isi dan Analisis Data Sekunder, Cetakan ke-2. Penerbit PT RajaGrafindo Persada. Jakarta.
- Moore, W. L., & Lehmann, D. R. (1980). Individual differences in search behavior for a nondurable. *Journal of Consumer Research*, 7(3), 296-307. doi:10.1086/208817
- Netemeyer, R. G., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Dean, D., ... & Wirth, F. (2004). Developing and validating measures of facets of customer-based brand equity. *Journal of Business Research*, 57(2), 209-224.  
doi:10.1016/s0148-2963(01)00303-4
- Nguyen, H., Pham, L., Williamson, S., & Hung, N. D. (2020). Individual investors' satisfaction and loyalty in online securities trading using the technology acceptance model. *International Journal of Management and Decision Making*, 19(2), 239-266.  
Doi:10.1504/IJMDM.2020.108233
- Pavlou, P.A. (2003) 'Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model', *International Journal of Electronic Commerce*, Vol. 7, No. 3, pp.69-103.  
doi:10.1080/10864415.2003.11044275
- Pham, L. and Doan, N.P.A. (2014) 'Intention to use e-banking in a newly emerging country: Vietnamese customer's perspective', *International Journal of Enterprise Information Systems*, Vol. 10, No. 2, pp.103-120. doi:10.4018/ijeis.2014040106
- Pham, L., Cao, N.Y., Nguyen, T.D. and Tran, P.T. (2013) 'Structural models for e-banking adoption in Vietnam', *International Journal of Enterprise Information Systems*, Vol. 9, No. 1, pp.31-48, doi:10.4018/ijeis.2013010102.
- Pham, L., Cao, N.Y., Nguyen, T.D. and Tran, P.T. (2013) 'Structural models for e-banking adoption in Vietnam', *International Journal of Enterprise Information Systems*, Vol. 9, No. 1, pp.31-48, doi:10.4018/ijeis.2013010102.
- Pham, L., Kim, K., Walker, B., DeNardin, T. and Le, H. (2019a) 'Development and validation of an instrument to measure student perceived e-learning service quality', *International Journal of Enterprise Information Systems*, Vol. 15, No. 2, pp.15-42. doi:10.4018/ijeis.2019040102

- Pham, L., Limbu, Y., Bui, T., Nguyen, H. and Pham, H. (2019c) 'Does e-learning service quality influence e-learning student satisfaction and loyalty? Evidence from Vietnam', *International Journal of Educational Technology in Higher Education*, Vol. 16, No. 7, pp.1-26. doi:10.1186/s41239-019-0136-3
- Pham, L., Pham, N., Le, H. and Luse, D. (2018a) 'Technology readiness and customer satisfaction in luxury hotels: a case study of Vietnam', *International Journal of Entrepreneurship*, Vol. 22, No. 2, pp.6-25. Retrieved from <https://www.proquest.com/scholarly-journals/technology-readiness-customer-satisfaction-luxury/docview/2125189694/se-2?accountid=15637>
- Pham, L., Williamson, S. and Berry, R. (2018b) 'Student perceptions of e-learning service quality, e-satisfaction, and e-loyalty', *International Journal of Enterprise Information Systems*, Vol. 14, No. 3, pp.19-40. DOI: 10.4018/IJEIS.2018070102
- Pham, L., Williamson, S., Mohebbi, C., Nguyen, B. and Nguyen, H. (2019b) 'The mediating role of perceived value in the effect of multi-dimensional risk in mobile banking', *International Journal of Enterprise Information Systems*, Vol. 15, No. 4, pp.1-25. DOI: 10.4018/IJEIS.2019100101
- Quader, M. S., & Sohel, S. M. (2018). Strategic brand experience to Differentiate B2B service offering: A case study analysis. *European Journal of Management Studies*, 23(1), 49-82. Retrieved from <http://hdl.handle.net/10400.5/15380>
- Raimondo, M. A., "Nino" Miceli, G., & Costabile, M. (2008). How relationship age moderates loyalty formation: the increasing effect of relational equity on customer loyalty. *Journal of Service Research*, 11(2), 142-160. doi:10.1177/1094670508324678
- Rakoto, P. (2015). Financial reporting quality, executive stock options and business ethics. *GSTF Business Review (GBR)*, 4(2), 99-105. DOI 10.7603/s40706-015-0024-3
- Roca, J.C., García, J.J. and de la Vega, J.J. (2009) 'The importance of perceived trust, security and privacy in online trading systems', *Information Management and Computer Security*, Vol. 17, No. 2, pp.96-113. doi:10.1108/09685220910963983
- SET Focus (2020). SET Focus July 2020. SET website, accessed on August 30-2021, available at [https://www.set.or.th/en/news/econ\\_mkt\\_dev/files/202007\\_SET\\_Focus.pdf](https://www.set.or.th/en/news/econ_mkt_dev/files/202007_SET_Focus.pdf)
- Świtała, M., Gamrot, W., Reformat, B., & Bilińska-Reformat, K. (2018). The influence of brand awareness and brand image on brand equity - an empirical study of logistics service providers. *Journal of Economics & Management*, 33(3), 96-119. doi:10.22367/jem.2018.33.06
- Westbrook, R. A. (1987). Product/consumption-based affective responses and postpurchase processes. *Journal of marketing research*, 24(3), 258-270. doi:10.2307/3151636
- Yulianto, S., & Tanamal, R. (2019). The Influence of Brand Equity, Trust, Price, PEOU, and PU on Online Based Crowdfunding Investment. *Jurnal Teknologi Sistem Informasi dan Aplikasi*, 22), 53-58. doi:10.32493/jtsi.v2i2.2733
- Zeithaml, V. A., Lemon, K. N., & Rust, R. T. (2001). Driving customer equity: How customer lifetime value is reshaping corporate strategy. Simon and Schuster.

#### CORRESPONDING AUTHOR

Nimit Soonsan, email: [nimit.s@pkru.ac.th](mailto:nimit.s@pkru.ac.th)

**Dr. Nimit Soonsan** is an Assistant Professor in Business Administration at the Faculty of Management Science, Phuket Rajabhat University, Thailand. He is interested in research field regarding business administration, tourism, and hospitality management.