

Causal Influences on Brand Loyalty Case Study: Second-hand Real Estate Agents in Bangkok Metropolitan

By

Chonmani Tananpang

College of Social Innovation, Rangsit University, 52/347 Muang-Ake, Phaholyothin Road, Lak-Hok, Muang, Pathumthani 12000 Thailand.

Choochart Taeshapotiwarakun

Thammasat Business School, Thammasat University, 2 Prachan Road, Pranakorn, Bangkok 10200 Thailand. Email: chonmani.t@gmail.com

Abstract

This quantitative research aimed 1) to study the level of perception of product quality, brand image, brand equity, and brand loyalty, and real estate agents and 2) to study causal influences on brand loyalty among real estate agents in the second-hand real estate market in Bangkok Metropolitan. The sample included 400 service users or participants in the decision to use real estate agent in the second-hand real estate market in Bangkok and Metropolitan during the first and second quarters in 2022. The statistics used included percentage, mean, standard deviation, and analysis of structural equation modeling. The analysis results revealed that most participants were female (62.5 percent), aged 31-40 years old (59.3 percent), business owners (37.5 percent), with bachelor's degrees (59.5 percent) and income of 30,001-45,000 baht (33.5%) and also found that the level of perceived product quality, brand image, brand equity, and brand loyalty overall was at a high level. The analysis of the structural equation modeling revealed that the model was fit with the empirical data as follows: $\chi^2 = 131.769$, df=108, $\chi^2 / df = 1.220$, p-Value = 0.060, SRMR= 0.021, RMSEA= 0.023, GFI= 0.967, CFI= 0.996, and NFI= 0.977. Perceived product quality influenced brand image, brand equity, and brand loyalty. Perceived product quality indirectly influenced brand image and brand loyalty. To sum up, service users perceived product quality, brand image, and brand equity but brand equity slightly affected the decision to use real estate agents in the second-hand real estate market.

Keywords: causal influences, loyalty, brand, real estate, real estate agent

Background and Significance

Real estate is one of the substantial businesses for the expansion of the country's economy since it is related to many other businesses. It is currently in a process of continuous adjustment due to many factors caused by the economic factors both domestically and internationally and the spread of COVID-19 that had a big impact all over the world. Now, we have seen signs of a steady recovery from the crisis, causing the market to slow down and develop more unique projects (Government Housing Bank, Real Estate Information Center, 2020). Real estate business influences the country's economy involving trade, manufacturing, and banking sectors. Moreover, the marketing strategies must be adjusted to keep up with the changing situations and attain the needs of consumers. According to the survey of the first quarter of 2022, the situation of second-hand homes for sale in the market indicated a significant increase compared to the same period in 2021. Based on data collected from the



announcement of the sale through the website from state financial institutions, a public asset management company, and the Legal Execution Department through the second-hand home market websites, it was found that the number of units and value of second-hand homes nationwide announced for sale in the first quarter of 2022 included 137,957 units per month increased by 20.2% year over year with a value of 937,992 million baht per month, increased by 25.1% year over year. A month with the highest number of units and value of second-hand homes announced for sale in the first quarter was March, with a total of 155,027 units and a total value of 1,027,953 million baht (Government Housing Bank, Real Estate Information Center, 2020).

In the second quarter of 2022, the average units per month were 162,716 and the average value per month was 995,488 million baht, which is the largest number of units and value in the past 6 quarters and there was an increase compared to the quarter over quarter by 17.9% in almost every type of housing. The second-hand house type with the highest announcement for sales was detached houses of 64,392 units, followed by flats of 49,250 units and townhouses of 42,626 units, respectively. The type with the highest QoQ expansion was flats with the highest increase of 21.1%, followed by commercial buildings at 19.9%, townhouses at 17.1%, and detached houses at 16.6%, respectively but semi-detached houses at 1.9% (Government Housing Bank, Real Estate Information Center, 2020). It can be seen that the second-hand real estate market began to expand in all types of residences. Therefore, the growth of the second-hand real estate market in terms of supply and demand as mentioned above affected real estate agents as the middleman between buyers and sellers to grow as well. Foreign firms also exploited share in the market.

Therefore, brand loyalty is essential for firms to gain a competitive advantage (Dick and Basu, 1994). As real estate agents provide services and experiences for customers, they need to impress the customers to create confidence and trust in the company to take care of their assets (EI Nagger and Bendary, 2017). Therefore, the researchers are interested in studying causal influences on brand loyalty among real estate agents in Bangkok Metropolitan for useful information for developing a brand loyalty model in the real estate agency business as a guideline to develop brand loyalty and sustainable growth of the second-hand real estate agency business.

Objective

- 1. To study the level of perceived product quality, brand image, brand equity, and brand loyalty among real estate agents in the second-hand real estate market in Bangkok Metropolitan.
- 2. To study causal influences on brand loyalty among real estate agents in the secondhand real estate market in Bangkok Metropolitan.

Literature Review and Hypothesis

Based on a literature review, key variables can be summarized as follows:

1. Perceived Quality (PQ) refers to how consumers perceive the difference between their expectations and the quality they experience. The evaluation of product quality included 5 dimensions, namely performance, feature, reliability, durability, and fit and finish (Supattra Pangaria and Sumalee Sawang, 2018). Perceived product quality overall lad to the strategic success of a business affecting its financial success and also other aspects of the brand. Good product quality led to a positive customer attitude (Aaker's study, 1997). Perceived product quality can be evaluated but intangible. Product quality is one of the key marketing positioning *Res Militaris*, vol.13, n°1, Winter-Spring 2023



tools. Effective product quality is involved with its value and satisfaction concerning the product's features which can directly affect customer's expectation (Kotler et al., 2017). Such factors influenced brand image and brand loyalty (Abudllah, 2015), and brand equity (Shamindra N., and Saroj K., 2011), concluded as hypotheses as follows:

H1: Perceived product quality directly influences brand image. H2: Perceived product quality directly influences brand loyalty.

H3: Perceived product quality directly influences brand equity.

2. Brand Image (BI) refers to a positive brand image that appeared in the minds of target consumers who have just seen or perceived brand information from marketing communications, thus creating a sense of perceived information and brand elements (Devendra, 2013). Therefore, it can be said that brand image is a marketing tool that will make consumers perceive products that the owner wants to disseminate to the market for creating a good product image, brand recognition, and perceived product quality, benefits, and functions. These factors affect the brand image. Brand image is a strategy that marketers use to create perceived brand equity. Therefore, brand image is related to strength, preference, and uniqueness preserved in consumers' memory (Kotler, 2009). These factors directly influenced brand loyalty (Abudllah, 2015) and brand equity (Sebchart Anthachai, 2022), concluded as hypotheses as follows:

H4: Brand image directly influences brand loyalty.

H5: Brand image directly influences brand equity.

3. Brand Equity (BE) refers to the added value of products and services that will reflect the feelings as well as consumer behavior who consume that product. It prioritizes the brand as same as market share, including profitability for the organization. Brand equity is an intangible asset with psychological and financial value to the firm (Kotler, 2009). This in line with the concept of Keller (1993) who said that brand equity also had different effects of brand knowledge on consumer responses to brand marketing. Such factors directly influenced brand loyalty (Sebastion et.al, 2019), concluded as a hypothesis as follows:

H6: Brand equity directly influenced brand loyalty.

4. Brand Loyalty (BY) refers to the positive feelings of consumers towards the brand through experience that can satisfy their needs and create a bond with the brand, including repeated buying behavior for a long time (Assael, 1998), and the word of mouth of the brand to the society.

A study by Kaewvises (2011) examined the relationship between branding factors and the brand loyalty of a bank customer, and it was found that the customer's loyalty level was at a high level. The analysis revealed for factors influencing customer loyalty on bank brands, the highest level was customers' confidence in the bank, followed by brands entering the heart of customers at the highest level while the relationship between branding factors and brand loyalty was at a moderate level.

From the literature review, a research conceptual framework can be formulated shown in Figure 1.



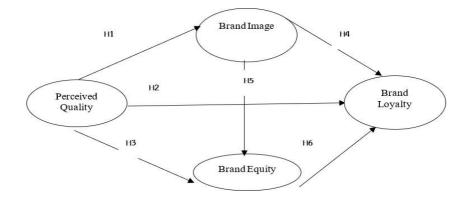


Figure 1: Conceptual Framework

Research Scope

- **Content:** Four variables were studied in this research, namely 1) perceived product quality, 2) brand image, 3) brand equity, and 4) brand loyalty.
- Area: This study collected data from real estate agents' clients in the second-hand real estate market in Bangkok Metropolitan.

Time: January to June 2022

Methodology

Population included clients or participants in the decision to use real estate agents in the second-hand real estate market in Bangkok Metropolitan during the first and second quarters of 2022.

Sample included 200 clients or participants in the decision to use real estate agents in the second-hand real estate market in Bangkok and Metropolitan during the first and second quarters of 2022 through accidental sampling with a simple principle to set a minimum sample number of 200 (Kline, 2011). The questionnaire's link was posted on 10 websites that rent and trade real estate in Thailand and are reputable and certified by the Department of Business Development. There were 450 respondents and 400 complete questionnaires were received by considering the sample size suitable for package analysis program.

Research Instrument

This study employed an online questionnaire in the form of a 7-rating scale as a tool for data collection by examining 5 types of tools as follows:

- Validity was tested by 5 experts in terms of content validity. All Item Objective Congruency (IOC) values were greater than 0.5. All, indicating questionnaire had content validity and can be used as a questionnaire (Rovinelli and Hambleton, 1977). This study had IOC between 0.70 to 1.00.
- 2) Convergent validity can be determined by factor loading, which must be greater than 0.5 (Said, Badru, and Shahid, 2011).
- 3) Contract validity can be determined by composite reliability (CR) which must be greater than 0.6 (Fornell and Larker, 1981; Hulland, 1999).
- 4) As for reliability by Cronbach's alpha coefficient, every variable must have a Cronbach's alpha coefficient of greater than 0.70 (Thanin Silcharu, 2014: 419) to be acceptable. The statistical package was used to calculate reliability. The alpha coefficient of the overall data was 0.94. When analyzing each aspect, perceived product quality was 0.88. Brand image was 0.88. Brand equity was 0.85, and brand loyalty was 0.85, which were all considered reliable. Therefore, it is appropriate for data collection in the study.



5) Discriminant validity can be measured by the AVE of a variable which must have R-Square of the remaining variables (Fornell and Larker, 1981).

Data Analysis

This study employed quantitative data analysis methods based on the objectives as follows:

Research objective 1 is to use mean and standard deviation (S.D.) for the analysis of the respondents' level of experience.

Research objective 2 is to study causal influences on brand loyalty among real estate agents in the second-hand real estate market in Bangkok Metropolitan. Factor analysis was employed, including Exploratory Factor Analysis (EFA) to analyze the reliability of variables and Confirmatory Factor Analysis (CFA) to analyze the suitability of the variable measurement to confirm whether the factors obtained from the confirmation factor analysis match the structural model or the theory. Then, analyze the structural model to test the hypotheses and analyze the direct influence and indirect influence of variables

Results

Objective 1 is to show data analysis result using descriptive statistics.

The results of general data analysis revealed that as for respondents involved in deciding to use real estate agents in the second-hand real estate market in Bangkok Metropolitan, 250 people were female, representing 62.5%. 237 people aged 31-40 years, representing 59.3%. 250 people were business owners, representing 37.5%. 238 people had bachelor's degrees, representing 59.5%, and 134 people earned 30,001-45,000 baht, representing 33.5%.

As for the results of the study on the level of perceived product quality, brand image, brand equity, and brand loyalty among real estate agents in the second-hand real estate market in Bangkok Metropolitan, a level of opinion was overall high in perceived product quality with mean of 5.80 and standard deviation of 0.70. A level of opinion was overall quite high in product image with a mean of 5.18 and a standard deviation of 0.71. A level of opinion was high in product equity with a mean of 5.55 and a standard deviation of 0.66. A level of opinion was overall high in product loyalty with a mean of 5.77 and a standard deviation of 0.63.

Objective 2 is to study causal influences on brand loyalty among real estate agents in the second-hand real estate market in Bangkok Metropolitan.

Exploratory Factor Analysis (EFA) employed a statistical package to perform factor extraction by principal component factoring (PCF). Orthogonal rotation was performed using Varimax method.

It was found that the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) was 0.907 indicating that the analyzed dataset is suitable for factor analysis and Bartlett's Test of Sphericity is statistically significant ($p \le .05$), indicating that the H1 hypothesis is accepted or variables were correlated and can be used in factor analysis.

Factor extraction was considered with communalities with the package program by estimating the maximum likelihood and performing the orthogonal factor rotation by Varimax method. It was found that the value extracted was between 0.531 to 0.802.



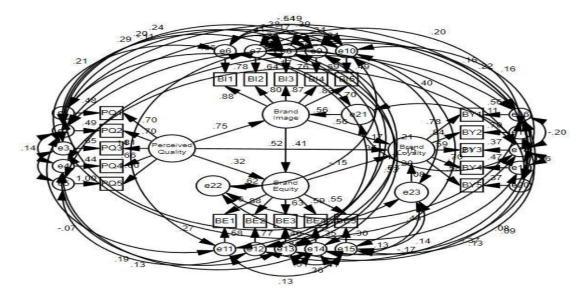
The result of factor loading analysis by selecting the weight of the most valuable factor in the same factor, resulting in 4 factors. Loading factor was shown as follows:

- **Factor 1:** Perceived product quality consists of a manifest of 5 questions. Factor loading was between 0.695 to 0.875.
- **Factor 2:** Brand image consists of a manifest of 5 questions. Factor loading was between 0.700 to 0.881.
- Factor 3: Brand equity consists of a manifest of 5 questions. Factor loading was between 0.546 to 0.876
- **Factor 4:** Brand loyalty consists of a manifest of 5 questions. Factor loading was between 0.583 to 0.837

The measurement model of each latent variable was tested by standard regression weights (λ) and Average Variance Extracted (AVE or ρv) of each factor loading to determine the reliability of the measure in the presentation of the model results as follows:

Confirmatory Factor Analysis (CFA) is to examine the measurement model in terms of perceived product quality, brand image, brand equity, and brand loyalty. It was found that the important index values, the IOC, the reliability analysis results, and extracted variances were optimal, reliable, and discriminately valid across all variables. The results of the structural model of casual influences on brand loyalty among second-hand real estate agents in Bangkok Metropolitan had model variables, namely 1) perceived product quality (PQ), 2) brand image (BI), 3) brand equity (BE), and 4) brand loyalty (BY). The model was consistent with empirical data with acceptable indexes based on criteria.

The results of the data analysis to answer the research hypotheses revealed causal influences on brand loyalty among real estate agents in the second-hand real estate market in Bangkok Metropolitan overall was fit to the empirical data after adjusting fit indexes as follows: $\chi^2 = 131.769$, df=108, $\chi^2 / df = 1.220$, p-Value = 0.060, SRMR= 0.021, RMSEA= 0.023, GFI= 0.967, CFI= 0.996, and NFI= 0.977 as shown in Figure 2.



Chi-square = 131.769, Chi-square/df = 1.220, df = 108, p = .060, CFI = .996, GFI= .967, NFI= .977, RMSEA = .023, RMR=.021 Figure 2: Analysis Results of Structural Equation Modeling of Causal Influences on Brand Loyalty of Real Estate Agents in the Second-hand Real Estate Market in Bangkok



Metropolitan

From Figure 2, when considering the influences of perceived product quality, brand image, brand equity, and brand loyalty, it was found that variables directly and mostly influenced brand loyalty of real estate agents in the second-hand real estate market in Bangkok Metropolitan overall included brand image ($\beta = 0.745$, p <0.001), followed by brand loyalty ($\beta = 0.517$, p <0.001) and brand equity ($\beta = 0.323$, p >0.001). As for the indirect influence, it was found that perceived product quality was indirectly influenced by brand image and brand loyalty ($\beta = 0.485$, p <0.001).

Table 1: Summary of Hypotheses

Hypothesis	Result
H1: Perceived product quality directly influences brand image.	Accepted
H2: Perceived product quality directly influences brand loyalty.	Accepted
H3: Perceived product quality directly influences brand equity.	Accepted
H4: Brand image directly influences brand loyalty.	Accepted
H5: Brand image directly influences brand equity.	Accepted
H6: Brand equity directly influenced brand loyalty.	Rejected

Conclusion and Discussion

The study on causal influences on brand loyalty among real estate agents in the secondhand real estate market in Bangkok Metropolitan had research results which can be discussed based on objectives as follows:

Objective 1 is to study the level of perceived product quality, brand image, brand equity, and brand loyalty among real estate agents in the second-hand real estate market in Bangkok Metropolitan.

The results of the study on the level of perceived product quality, brand image, brand equity, and brand lovalty among real estate agents in the second-hand real estate market in Bangkok Metropolitan influenced brand loyalty with a significance of 0.05, indicating that perceived product quality was a key factor for brand loyalty in real estate business, namely perceived product quality, brand image, brand equity, and brand loyalty, especially brand image which had a lower level of perception than others. Therefore, real estate agents should discover ways to create a brand image's perception experience of their company to the public or the target consumers. These experiences will lead to a competitive advantage for real estate agents. This is consistent with the study of Akarawit Chuaree and Nak Kulis (2013) who studied factors affecting Greyhound brand loyalty among consumers in Bangkok and found that good brand image and creating a constant image would make consumers proud of the brand, resulting in brand loyalty. Moreover, Abudllah Awad Alhaddad (2015) studied the perceived quality, image, and reliability of brand determined brand loyalty. It was found that the reliability of the brand directly influenced brand loyalty. This is also in accordance with the study of Pannawat Patcharawalai (2016) who studied satisfaction towards service quality and perceived image of Specialized Banks affecting lovalty in service of people in Bangkok and found that satisfaction in terms of reliability affected loyalty of customers who use specialized banks so that customers still choose to use the service with specialized banks with enhanced loyalty in using the service.

Objective 2 is to examine causal influences on brand loyalty among real estate agents in the second-hand real estate market in Bangkok Metropolitan.

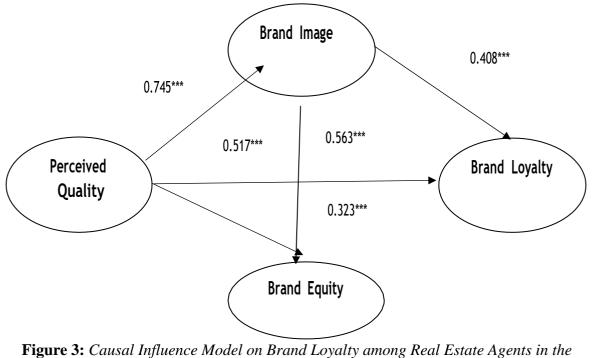
Based on the analysis results, perceived product quality directly influenced brand *Res Militaris*, vol.13, n°1, Winter-Spring 2023 1548



image, brand loyalty, and brand loyalty according to Hypothesis 1, Hypothesis 2, and Hypothesis 4, respectively. This is in line with the study by Abdullah Alhaddad (2015) while perceived product quality directly influenced brand equity according to hypothesis 3, this is in line with the concept of Tammay C., (2010) and the results of brand image that directly influenced brand equity. This supports the research findings of Suebchart Anthachai (2015) who studied brand image that directly influenced brand equity.

However, brand equity did not directly influence brand loyalty (rejecting Hypothesis 6), indicating that real estate agents' clients in the second-hand real estate market in Bangkok Metropolitan did not give importance to brand equity in the context of the real estate business. This may be because the business is quite specific. The assets traded are highly unique in terms of location, form, shape, size, price, and surrounding environment of the asset. Especially for a second-hand asset, limitations are infinite. Consequently, clients still focus on the traded assets rather than the real estate agent's brand. Moreover, limitations in meeting the client's needs, they may want real estate that may not match what that company has for sale. This is in line with the concept of Sebastion (2019) who studied consumer-based brand performance models for assessing brand association and found that brand equity did not influence brand loyalty as well.

Although the situation of Covid-19 in Thailand has affected the real estate business causing the behavior and way of life of Thai people to change, the research findings on perceived product quality, brand image, brand equity, and brand loyalty of real estate agents in the second-hand real estate market in Bangkok Metropolitan overall were at a high level. The analysis of structural equation modeling revealed that the model was fit with the empirical data. Perceived product quality influenced brand image, brand equity, and brand loyalty. Perceived product quality influenced brand image and brand loyalty, causing new knowledge. This is a study on the causal influence model on brand loyalty among real estate agents in the second-hand real estate market in Bangkok Metropolitan as shown in Figure 3.



Signe 3. Causal Influence Model on Brand Loyally among Real Estate Agents in the Second-hand Real Estate Market in Bangkok Metropolitan Note: *** a statistical significance of 0.001, ** a statistical significance of 0.01 * a statistical significance of 0.05



In conclusion, clients perceived product quality, brand image, and brand equity but brand equity slightly influenced the decision to use real estate agents in the second-hand real estate market. In addition to an understanding of product quality, brand image, and brand equity, brand loyalty should be created through brand equity since brand equity helps create competitive advantages, leading to superior competitive efficiency and ultimately sustainable business progress.

Recommendation

- 1. This study aimed at real estate agents in Bangkok Metropolitan. In future studies, the developed structural equation modeling may be applied in new business segments or new areas to obtain different research findings. A mixed methodology may also be employed in the next study.
- 2. In future research, other variables should be studied to further examine the relationship with brand loyalty, such as brand trust, word of mouth, and brand experience to enhance the knowledge.

References

- Aaker, D. A. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. New York, NY.: The Free Press.
- Abudllah, A.A. (2015). a structural model of the relationships between brand image, brand trust and brand loyalty. *International Journal of Management Research & Review*, 5(3), 137-144.
- Andhachai, S. (2565). The influence of brand awareness on the image and equity, regulatory transmission of quality perception: A Study of the Nakha Fabric Market, Udon Thani. *NIDA Business Administration Journal*. Retrieved from http://mba.nida.ac.th/th/books/volume30.
- Chua-ara, A. and Kulis, N. (2556). *Factors Affecting the Greyhound Brand Loyalty of Bangkok Consumers (Unpublished Master's thesis)*. Srinakharinwirot University, Nakhon Pathom.
- Devendra, J. (2013). Effect of Brand Image on Buying Behavior. A Multidisciplinary Journal of Global Macrotrends, 7(2), 156-162.
- Dick, A. S., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *Journal of The Academy of Marketing Science*, 22(2), 99-113.
- El Naggar, R. A. A., & Bendary, N. (2017). The impact of experience and brand trust on brand loyalty, while considering the mediating effect of brand equity dimensions, an empirical study on mobile operator subscribers in Egypt. *The Business & Management Review*, 9(2), 16-25.
- Fornell, C., & Larker, D. (1981). Structural equation modeling and regression: Guidelines for research practice. *Journal of Marketing Research*, 18(1), 39-50.
- Government Housing Bank, Real Estate Information Center. (2021). *Bangkok Residential Market Situation - Second Quarter of 2020 and the First Half of 2020.* Retrieved from https://www.reic.or.th/Research/Index/239.
- Government Housing Bank, Real Estate Information Center. (2022). Second-hand Residential Market Situation across the Country in the Second Quarter of 2022. Retrieved from https://ddc.moph.go.th/viralpneumonia/faq_more.php.
- Government Housing Bank, Real Estate Information Center. (2565). Second Hand Home Market Busier than Expected, Summary of Hot Hits from Q1 of 2022. Retrieved from https://www.reic.or.th/Knowledge/SuggestionHomeDetail/115.



- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 20(2), 195-204.
- Kaewvises, P. (2011) *The relationship between brand building factors and brand loyalty in one of backing customers*. Nakornpathom: Silpakorn University Press. [in Thai].
- Keller, K. L. 1993. Conceptualizing, Measuring, and Managing Customer-Based Brand Equity, Journal of Marketing Research, 29: 1-22.
- Kline, R. B. (2011). Convergence of structural equation modeling and multilevel modeling. In M. Williams & W. P. Vogt (Eds.), *The SAGE handbook of innovatio in social research Methods*. (pp. 562-589). London, UK: Sage.
- Kotler, P. (2009). Marketing Management Millennium Edition. New Jersey: Prentice Hall.
- Kotler et al. (2017). *Principles of Marketing (Global edition) (17th ed.)*. United Kingdom: Pearson Education.
- Pangariya, S. and Sawang, S. (2561). Customer perceived value and relationship quality affecting pharmacy customer loyalty in Thailand. Journal of Economics and Business Administration Review. 14(1): 14-36.
- Patcharalai, P. (2559). The effect of satisfaction with service quality and image perception of the bank on consumers' loyalty to specialized financial institutions (Unpublished Master's thesis). Bangkok University, Pathum Thani.
- Rovinelli, R. J., & Hambleton, R. K. (1977). On the use of content specialists in the assessment of criterion referenced test item validity. *Dutch Journal of Educational Research*, 2, 49-60.
- Said, H., Badru, B. B., & Shahid, M. (2011). Confirmatory factor analysis (CFA) for testing validity and reliability instrument in the study of education. *Australian Journal of Basic* and Applied Sciences, 5, 1098-1103.
- Sebastian, M., Yuksel E., & Arnold, J. (2019). A consumer-based brand performance model for assessing brand success. *International Journal of Marketing Research*, 61(1), 93-110.
- Shamindra, N., & Saroj, K. (2011). The effect of perceived quality on brand equity: an empirical study on generic drugs. *Asia pacific of Marketing and Logistics*, 23(5), 604-625.
- Silcharu, T. (2557). *Research and Statistical Analysis with SPSS and AMOS*. Bangkok : Business R&D.