

BUSINESS REVIEW

THE CAUSAL RELATIONSHIP MODEL OF FACTORS AFFECTING BRAND EQUITY IN THAI BANK SECTOR

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ABSTRACT

Purpose: This study investigates the effects of self-service technology and service qualities on the brand equity of retail bank customers living in six Bangkok districts, Thailand.

Theoretical framework: Recent research on the effects of self-service technology and onsite service quality on brand equity, particularly in the banking industry, has been limited. Even though research has been conducted on the effects of these technologies and service qualities, the majority of prior research has focused on the effects of these precedents on dependent variables, such as customer satisfaction (Raheman, 2017) and customer loyalty (Miguel-Dávila et al., 2010), which are indirectly related to brand equity. Moreover, it is frequently studied outside the banking industry (ArulPrasad, 2021). The results of these previous studies frequently corroborate the positive effects of self-service technology and onsite service quality on such dependent variables, suggesting that these precedents may have an effect on brand equity in the banking sector.

Design/Methodology/Approach: We analyzed the 450 valid questionnaires collected from retail bank customers living in six Bangkok districts using EFA and SEM.

Findings: Improving the quality of self-service technology and on-site service can increase brand equity.

Research, Practical & Social implications: Top bank managers need to focus on investing in service technology and training bank officers on customer service skills. Qualitative research should be conducted to better understand the relationships between self-service technology quality, on-site service quality, and brand equity. Moreover, the model should be extended to consider factors that act as moderators or mediators.

Originality/Value: Investing in self-service technologies and bank officers' service capabilities can enhance the brand equity of the banking sector.

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O MODELO DE RELAÇÃO CAUSAL DOS FATORES QUE AFETAM O PATRIMÔNIO DA MARCA NO SETOR BANCÁRIO TAILANDÊS

RESUMO

Objetivo: Este estudo investiga os efeitos da tecnologia de auto-atendimento e qualidades de serviço sobre o patrimônio da marca dos clientes de bancos de varejo que vivem em seis distritos de Bangkok, Tailândia. **Estrutura teórica:** Pesquisas recentes sobre os efeitos da tecnologia de autoatendimento e da qualidade do serviço no local sobre o patrimônio da marca, particularmente no setor bancário, têm sido limitadas. Embora tenham sido

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realizadas pesquisas sobre os efeitos dessas tecnologias e qualidades de serviço, a maioria das pesquisas anteriores concentrou-se nos efeitos desses precedentes sobre variáveis dependentes, como a satisfação do cliente (Raheman, 2017) e a fidelidade do cliente (Miguel-Dávila et al., 2010), que estão indiretamente relacionadas ao patrimônio da marca. Além disso, é frequentemente estudada fora do setor bancário (ArulPrasad, 2021). Os resultados destes estudos anteriores freqüentemente corroboram os efeitos positivos da tecnologia de autoatendimento e da qualidade do serviço no local sobre tais variáveis dependentes, sugerindo que estes precedentes podem ter um efeito sobre o patrimônio da marca no setor bancário.

Design/Metodologia/Abordagem: Analisamos os 450 questionários válidos coletados de clientes de bancos de varejo que vivem em seis distritos de Bangkok usando EFA e SEM.

Descobertas: A melhoria da qualidade da tecnologia de auto-serviço e do serviço no local pode aumentar o patrimônio da marca.

Pesquisa, implicações práticas e sociais: Os principais gerentes de bancos precisam se concentrar em investir em tecnologia de serviço e treinar os funcionários dos bancos nas habilidades de atendimento ao cliente. Uma pesquisa qualitativa deve ser conduzida para entender melhor as relações entre a qualidade da tecnologia de autoatendimento, a qualidade do serviço no local e a equidade da marca. Além disso, o modelo deve ser estendido para considerar fatores que atuam como moderadores ou mediadores.

Originalidade/Valor: O investimento em tecnologias de auto-serviço e a capacidade de serviço dos funcionários dos bancos pode aumentar o patrimônio da marca no setor bancário.

Palavras-chave: Qualidade da Tecnologia de Auto-serviço, Qualidade do Serviço no Local, Patrimônio da Marca, Setor Bancário, SEM, Tailândia.

MODELO DE RELACIÓN CAUSAL DE LOS FACTORES QUE AFECTAN AL VALOR DE LA MARCA EN EL SECTOR BANCARIO TAILANDÉS

RESUMEN

Objetivo: Este estudio investiga los efectos de la tecnología de autoservicio y las cualidades del servicio en el valor de marca de los clientes de bancos minoristas que viven en seis distritos de Bangkok (Tailandia).

Marco teórico: Las investigaciones recientes sobre los efectos de la tecnología de autoservicio y la calidad del servicio in situ en el valor de marca, sobre todo en el sector bancario, han sido limitadas. Aunque se han realizado investigaciones sobre los efectos de estas tecnologías y calidades de servicio, la mayoría de las investigaciones previas se han centrado en los efectos de estos precedentes sobre variables dependientes, como la satisfacción del cliente (Raheman, 2017) y la fidelidad del cliente (Miguel-Dávila et al., 2010), que están indirectamente relacionadas con el valor de marca. Además, se estudia con frecuencia fuera del sector bancario (ArulPrasad, 2021). Los resultados de estos estudios previos corroboran con frecuencia los efectos positivos de la tecnología de autoservicio y la calidad del servicio in situ sobre dichas variables dependientes, lo que sugiere que estos precedentes pueden tener un efecto sobre el valor de marca en el sector bancario.

Diseño/Metodología/Enfoque: Analizamos los 450 cuestionarios válidos recogidos de clientes de bancos minoristas residentes en seis distritos de Bangkok utilizando EFA y SEM.

Resultados: La mejora de la calidad de la tecnología de autoservicio y del servicio in situ puede aumentar el valor de marca.

Investigación, implicaciones prácticas y sociales: Los altos directivos de los bancos deben centrarse en invertir en tecnología de servicios y en formar a los empleados de los bancos en técnicas de atención al cliente. Deberían realizarse investigaciones cualitativas para comprender mejor las relaciones entre la calidad de la tecnología de autoservicio, la calidad del servicio in situ y el valor de marca. Además, el modelo debería ampliarse para considerar los factores que actúan como moderadores o mediadores.

Originalidad/Valor: La inversión en tecnologías de autoservicio y en la capacidad de servicio de los agentes bancarios puede aumentar el valor de marca del sector bancario.

Palabras clave: Calidad de la Tecnología de Autoservicio, Calidad del Servicio in Situ, Valor de Marca, Sector Bancario, SEM, Tailandia.

INTRODUCTION

Banks are integral financial institutions that are pivotal in driving economic growth and stability, serving as financial intermediaries and performing a range of activities. These activities include collecting deposits, financing business operations, generating financial information, managing risk, and regulating asymmetric information (Okuda et al., 2006). As the economy has evolved, banks have become deeply intertwined with companies and economic activities, and have become key players in influencing economic growth.

During the period of financial liberalization, 1980–1989, when a number of countries attempted to improve the performance of their financial sectors, the effort to develop bank business became more apparent. This financial liberalization aims to change numerous aspects of the financial sector, such as privatizing and restructuring the banking sector, liberalizing interest rates, eliminating direct credit extension, stimulating capital flows, and enhancing the function of financial markets (Beju et al., 2012). This financial liberalization increased competition, weakened the market dominance of banks, and decreased profit margins (Cubillas et al., 2014). As a result, banks have been indirectly compelled to engage in risky behavior by engaging in a wide range of businesses in which they may not have expertise. In addition, the bank's market position has been weakened by the introduction of FinTech, which allows financial institutions that invest in this technology to reduce customer switching costs.

The liberalization efforts in Thailand, which began in June 1989, have been instrumental in transforming the Thai financial system by removing interest rate caps on time deposits, liberalizing all foreign exchange transactions, and loosening restrictions on the capital account. Moreover, these efforts have been undertaken to increase competition in the local financial system, expand financial services activities, and create a financial hub in Thailand. As a result, the Bank of Thailand has enabled commercial banks and other related institutions to expand into new areas, making them ever more vulnerable to competition from both domestic and foreign entities (Leightner et al., 1998).

In order to increase their competitive advantage and market dominance in this cutthroat sector, banks implement multiple management strategies concurrently. These include developing human resources to foster accountability (Leichtfuss, 2003), improving service quality (Mehtap-Smadi, 2010), applying new technologies (Miguel-Dávila et al., 2010), reinvesting in corporate governance (Owino & Kivoi, 2016), expanding distribution channels by increasing the number of branches and ATMs (Vora-Sittha, 2016), and offering superior services through, e.g., PayPal, Apple Pay, and Google Wallet (Danisman, 2018).

Additionally, creating a strong brand based on the concept of brand equity is an effective option to engage customers and ensure market dominance (Suyoto & Tannady, 2022). However, creating this equity is not a simple task, and previous research has identified a range of strategies to achieve this goal, such as building consumer trust (Sharma & Jain, 2019), leveraging social media and digital media (Kushwaha et al., 2020), and improving service quality (Ren et al., 2023).

However, research into this equity, particularly in the Thai banking sector, is limited. This study aims to contribute to this research area by proposing a model that links the two major elements, namely self-service technology and on-site service quality, with the expectation that it will have an impact on brand equity in the Thai banking sector. To achieve this objective, the remainder of this work was structured as follows: Following will be a discussion of academic works that supported the research framework. After presenting the research methodology, the results and a brief discussion will follow.

LITERATURE REVIEW

Following are the three main concepts utilized in the construction of the research model.

Brand Equity

In marketing, a brand is perceived as a valuable asset of a business, as it is what consumers consider before purchasing. Branding is more than just placing a symbol or name on a product to identify the manufacturer; it is rather a set of attributes that have a meaning, an image, and associations with a product (Chan, 2022). In the late 1980s, the concept of brand equity was introduced and defined as the collection of brand assets and liabilities associated with the brand's name and logo.

Brand equity can both detract from and add to the value of a product or service, providing value to both customers and a company (Aaker, 1992). Furthermore, brand equity can be viewed from three perspectives, namely financial, brand extension, and consumer, as an intangible asset that creates an association between the brand and its consumers (Tanveer & Lodhi, 2016). This concept has generated intense interest among branding professionals from a variety of industries (Brahmbhatt & Shah, 2017).

Brand equity can be measured through various dimensions, such as brand evaluation, brand attitude, brand image, perceived quality, brand awareness, brand association, brand meaning, brand benefit, brand uniqueness, brand sympathy, brand trust, brand loyalty (Pinar et.

al., 2012; Esmaeilpour & Barjoei, 2016), price-brand appropriateness, and worth paying (Liao et. al., 2017). In the banking sector studies, brand equity was measured by dimensions such as bank preference, a feeling of competence when utilizing bank services (Hafez, 2018), a preference to use bank services, being proud and smart about using bank services (Loureiro & Sarmento, 2018), being willing to pay, anticipating a superior performance, and trusting in the bank (Shaalan et al., 2022).

Self-Service Technology Quality

Technology has become an essential component of service companies' infrastructure and an integral part of the human elements of service (Narasimhan, 2004). Overtime companies are increasingly recognizing the value of self-service technologies (SSTs) in providing a satisfactory customer experience (Wang et al., 2022). Particularly, in the e-commerce setting, technology have the significant impact on customers' experiential values, leading to increased brand association, loyalty, brand equity, and repurchase intention (Tomar et al., 2022).

Banks are no exception, they have adopted various self-service technologies, such as ATMs, SMS banking, mobile phone banking, and internet banking, to improve their service quality. These modern technologies offer significant benefits to banks, as they enable a faster task completion, efficiency, and cost savings (Elkhaldi & Abdullah, 2022) which enable banks to better serve their customers and increase customer satisfaction (Khadim & Islam, 2022)

In order to improve the quality of this technology, it is necessary to consider the measuring concept. A variety of concepts, including acceptability, availability, cohesiveness, compatibility, system documentation, learning simplicity, economizations, efficiency, development speed, flexibility, functionality, implementation ability, maintaining simplicity, portability, dependability, scalability, safety, confidentiality, promptness, visibility (Avison & Fitzgerald, 2003), response time, accessibility, fulfillment of user requests, error correction, output accuracy, output precision, output liability, output format, output capacity (Platisa & Balaban, 2009), responsiveness, communications, tangibility, competence (Ongori, 2013), ease of use, convenience, fulfillment, privacy of personal information (Narteh, 2015), on-line call center, and customer rights (Liang & Pei-Ching, 2015) can be used to evaluate the quality of this technology.

In previous studies, it has been demonstrated that technology can have a significant impact on service quality in a variety of settings. In the service industry, it was found that service providers' IT capabilities have a significant impact on their competitive advantage and

service quality (Lai et al., 2008). Moreover, technology-based service encounters (TBSEs) were found to have a direct impact on service quality in the retail industry (Hung et. al., 2013). In the banking industry, the new technology dimension was identified as being crucial for the service quality perceived by customers and influencing their loyalty (Miguel-Dávila et al., 2010). Furthermore, the quality of self-service technologies was found to influence customer satisfaction (Raheman, 2017). These findings indicate that technology plays a major role in service quality and can be a useful tool for service providers. Therefore, we propose the following hypothesis:

H1: There is a direct positive effect of self-service technology quality on the on-site service quality.

On-site Service Quality

Superior service is a significant competitive advantage for businesses, providing customers with an attractive reason to purchase their products and services (Zeithaml et al., 1988). Service quality is defined as the degree to which the service level delivered meets customer expectations, ensuring a consistent level of quality with each customer interaction (Parasuraman et al., 1985). Alternatively, service quality can be viewed as the consumer's assessment of a product's overall excellence or superiority (Zeithaml, 1988).

It is widely recognized that determining the quality of a service is more difficult than determining the quality of a product because service quality is intangible and must be experienced in the moment. Service quality is a complex phenomenon, relying not only on standardization and verification, but on human interaction-based skills, knowledge, and education (Beckford, 2002). The quality of service delivery cannot be verified or audited after the transaction has been completed; it is dependent on how the parties involved feel about what actually took place (Erasmus, 2017). Ultimately, service quality reflects the level of customer service achievement, and is dependent on customers' evaluations and perceptions. Therefore, to effectively manage service quality, it is necessary to continuously improve customer focus, quality measurement, root cause corrective action, employee involvement and empowerment, statistical thinking, value enhancement, and on-time delivery performance (Berk & Berk, 2000).

Measuring on-site service quality can be achieved through several models, e.g., the SERVQUAL model (Zeithaml et al., 1988) which assesses the gap between expectations and perceptions in five dimensions: tangibles, reliability, responsiveness, assurance, and empathy;

the SERVPERF model (Cronin Jr & Taylor, 1994) which measures only perceptions in the same five dimensions as the SERVQUAL model; and the PAKSERV model (Raajpoot, 2004) which comprises six dimensions: tangibility, reliability, assurance, sincerity, personalization, and formality.

In the banking industry, service quality is measured by various dimensions, such as systemization of service delivery, responsiveness, reliable communication (Abdullah et al., 2011), station quality (corporate image, tangibles, and accessibility), interaction quality (reliability, assurance, empathy, and responsiveness), outcome quality (functional, tactical, and financial benefit) (Hossain et al., 2015), service portfolio, price, access, and effectiveness (Narteh, 2018).

Service quality has been found to be a key factor in building brand equity. Empirical studies have demonstrated that there is a correlation between service quality and brand equity across multiple business sectors. For example, in the fast food business, it was found that the entire dimension of service quality in the SERVQUAL model has a positive and significant impact on brand equity (Esmaeilpour et al., 2016). Additionally, the relationship between service quality and brand equity in service businesses was demonstrated. However, customer loyalty mediated this relationship (Zameer et al., 2019). In the telecommunication sector, tangibility and assurance, two service quality dimensions, have been identified as influencing brand equity (ArulPrasad, 2021). Regarding the banking business, staff engagement, an item of service quality, and value for money were found to be the most relevant indicators in shaping the overall bank experience and can enhance the perception of brand equity (Loureiro & Sarmento, 2018). Furthermore, the effect of perceived quality on total brand equity was found to be mediated by brand loyalty (Shaalan et al., 2022). Based on these results, we propose the following second hypothesis:

H2: There is a direct positive effect of the on-site service quality on brand equity.

MATERIAL AND METHODOLOGY

This study's samples were collected from the six districts of Bangkok, Thailand: Min Buri, Lat Krabang, Saphan Sung, Bangkapi, Lat Phrao, and Chatuchak. In order to obtain representative samples from the various districts, the data collection process employed a survey approach utilizing stratified and random sampling techniques.

This work utilized questionnaires to collect data on 1) demography and 2) Perception of self-service technology quality, measured by the 5-point Likert Scale of Agreement in Benefits

of technology adapted from the works of Gunawardana & Perera (2015), Susianto & Fachira (2015), and Shahid Iqbal et al. (2018). 3) Perception of service qualities was measured by the 5-point Likert Scale of Agreement in Service Practices, adapted from the works of Parasuraman et. al. (1988), Cronin Jr & Taylor (1994), and Dabholkar et al. (1996). 4) Perception of brand equity was measured by using 5-point Likert scales of agreement in customer action, adapted from the works of Rambocas et al. (2014), Salehzadeh et al. (2018), and Hafez (2021).

The item objective congruence index (IOC) (Rovinelli & Hambleton, 1976) was conducted, and the reliability was tested by piloting 30 questionnaires, which yielded a Cronbach's alpha (Cronbach, 1990) that exceeded the cut-off criteria of 0.7 (Nunnally and Bernstein, 1994). Despite the numerous criteria for determining sample size, such as the ratio between samples and observed variables of 10:1 (Nunnally and Bernstein, 1967) or 20:1 (Lindeman et al., 1980), or the ratio between samples and estimated parameters of 5:1 (Hair et al., 1998), when the variables are reliable, the effects are strong, and the model is not too complicated, small sample sizes can still be sufficient (Bearden et al., 1982; Bollen, 1990) and samples larger than 200 is acceptable to use for analysis (Hoe, 2008; Iacobucci, 2010; Chou et al., 2012). In this study, after verifying the validity and reliability, one thousand questionnaires were sent out, and 531 were received back. Of the 531 responses, a total of 450 were deemed valid for analysis.

RESULTS AND DISCUSSION

Figure 1 illustrates the results of the demographic analysis, and Tables 1 and 2 provide the results of the exploratory factor analysis (EFA).

Figure 1. (a) Gender, (b) Age, (c) Education, and (d) Average income (a) (b) (c)

Source: Author's presentation

(d)

Tables 2 with Kaiser-Meyer-Oklin (KMO) large than 0.50 and p-value <0.001 indicate the sufficiency of samples. Since the factor loadings of nine factors based on the Promax rotation in Table were all greater than a cut-off point of 0.4, the obtained factors were suitable. Construct reliability (CR) indices indicate good reliability for all factors when they are all above 0.70. For the convergent and discriminant issues, they were not the points of concern since the indices of convergent validity indicated slight validity concerns, i.e., most factors had an AVE that was less than CR and greater than 0.50. In addition, the indices of discriminant validity indicate good validity for all factors, as all AVE are markedly higher than MSV (Hair, 2014; Almén et al., 2018).

Table 1. KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy	.815
Bartlett's test of sphericity	.000

Source: Author's calculation

Table 2. Results of EFA and CFA

Factors	Variables	EFA	CFA
Self-Service Technology (TT)			
Parsimony (TTA)	TU1	.744	.744
Eigenvalue= 5.152 , $CR = 0.852$, $AVE = 0.491$,	TU2	.745	.745
MSV = 0.222	TU3	.723	.723
	TE1	.765	.765
	TE2	.774	.774
	TE3	.792	.792

Affirmation (TTB)	TR1	.809	.809	
Eigenvalue= 2.418 , $CR = 0.877$, $AVE = 0.544$,	TR2	.808	.808	
MSV = 0.199	TR3	.786	.786	
	TS1	.817	.817	
	TS2	.749	.749	
	TS3	.748	.748	
Convenience (TTC)	TC1	.855	.855	
Eigenvalue= 1.975 , $CR = 0.858$, $AVE = 0.669$,	TC2	.876	.876	
MSV = 0.286	TC3	.908	.908	
Service quality (SQ)				
Eligibility (SQA)	ST2	.869	.869	
Eigenvalue= 2.637 , $CR = 0.889$, $AVE = 0.666$,	ST3	.859	.859	
MSV = 0.222	SL1	.859	.859	
	SL2	.879	.879	
Dependability (SQB)	SL3	.872	.872	
Eigenvalue= 2.021 , CR = 0.879 , AVE = 0.644 ,	SR1	.820	.820	
MSV = 0.215	SR2	.850	.850	
	SR3	.883	.883	
Assurance (SQC)	SA1	.841	.841	
Eigenvalue= 1.941 , $CR = 0.881$, $AVE = 0.649$,	SA2	.876	.876	
MSV = 0.285	SA3	.859	.859	
	SM1	.857	.857	
Empathy (SQD)	SM2	.854	.854	
Eigenvalue= 1.941 , $CR = 0.721$, $AVE = 0.564$,	SM3	.901	.901	
MSV = 0.998				
Brand equity (BE)				
Affiliation (BEA)	BE1	.914	.914	
Eigenvalue= 1.727 , CR = 0.704 , AVE = 0.544 ,	BE2	.838	.838	
MSV = 0.998				
Passion (BEB)	BE3	.838	.838	
Eigenvalue= 1.358 , CR = 0.853 , AVE = 0.592 ,	BE4	.840	.840	
MSV = 0.286	BE5	.844	.844	
	BE6	.802	.802	

Source: Author's calculation

The results in Table 2 demonstrate three key factors which define the quality of self-service technology: parsimony (TTA), affirmation (TTB), and convenience (TTC). Parsimony reflects technology that is easy to use and requires minimal effort. Affirmation reflects technology that is reliable and secure. Convenience reflects technology that is easily accessible. For service quality, four factors are defined: eligibility (SQA), dependability (SQB), assurance (SQC), and empathy (SQD). Eligibility reflects the appropriateness of the bank branch and service. Dependability reflects prompt, reliable services. Assurance reflects the level of trust that customers have in the service. Empathy reflects the feeling that customers are being taken care of. Brand equity is composed of two factors: affiliation (BEA), which reflects the feeling of connection to the bank, and passion (BEB), which reflects the feeling of enthusiasm for using the bank's services.

The congruence of factors obtained from EFA was tested by the primary model fit indices of confirmatory factor analysis (CFA), i.e., CMIN/DF, GFI, CFI, IFI, NFI, and

RMSEA. It found that all indicators shown in Table 3 satisfied the cut-off value, which indicated that the model was fit to the empirical data (MacCallum et al., 1996; Hair, 2014). Furthermore, Figure 2 displays a visual representation of the CFA model.

The indices in Table 4 indicate the fit of the structural model. Also, tables 5 and 6 show the significance of the directions and effects, both direct and indirect. Figure 3 displays a visual representation of the structural model.

Table 3. Fit indices for 1 st order CFA Model

CMIN/DF≤3	<i>GFI</i> ≥0.90	<i>CFI</i> ≥0.90	<i>IFI</i> ≥0.90	NFI≥0.90	RMSEA≤0.08
1.769	.907	.947	.948	.888	.041

Source: Author's calculation

Table 4. Fit indices for structural model

$CMIN/DF \le 3$	<i>GFI</i> ≥0.90	<i>CFI</i> ≥0.90	<i>IFI</i> ≥0.90	<i>NFI</i> ≥0.90	RMSEA≤0.08
1.388	.910	.973	.973	.909	.029

Source: Author's calculation

Table 5. Direct and indirect effect

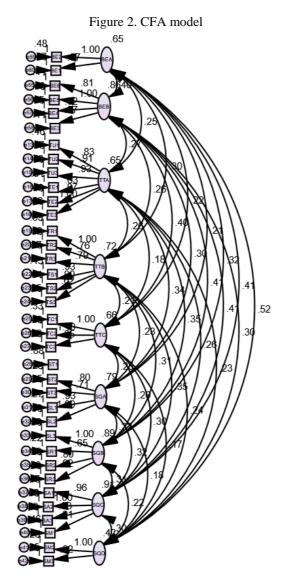
		TT	SQ	BB		
	DE	1.094	-	-		
\mathbf{SQ}	ΙE	-	-	-		
	TE	1.094	-	=		
ВВ	DE	-	1.236	-		
	ΙE	1.351	-	-		
	TE	1.351	1.236	=		

Source: Author's calculation

Table 6. Summary of the structural model

Path description	Hypothesis	Standardized path estimates	Result
$TT \rightarrow SQ$	H_{11}	1.094***	Supported
$SQ \rightarrow BE$	H_{12}	1.236***	Supported

Source: Author's calculation



Source: Author's presentation

Figure 3. Structural model

Source: Author's presentation

The results of the analysis are consistent with the findings of the studies presented in the literature review, which indicated that advancements in self-service technology can lead to enhancements in service quality, thereby boosting brand equity. The possible explanations for these findings are as follows:

According to the results, the direct effect of self-service technology quality on on-site service quality has the following implications. Service quality is improved when self-service technology is of high quality. This is due to the fact that customers are able to resolve their own issues without the need to visit a service desk or queue. This, in turn, reduces wait times and improves the overall customer good experience. Moreover, an appropriated self-service technology can support an improvement in the promptness of dependable services and guarantee the solution that customers obtain from on-site service. Also, through high-quality self-service technology, customers can learn and collect service information that is readily available for exchange with bank personnel when they require on-site service. This should facilitate service interactions between customers and bank personnel. Moreover, if self-service technology can impress the customer, they will visit the bank branch with a positive attitude that should support a positive evaluation of the quality of service provided on-site. While selfservice technology can be a convenient way to get things done quickly, it's important to remember that, in the case of banks, poor quality self-service technology can lead to longer wait times, errors in account balances, and other problems. Thus, to ensure that customers receive the best possible service, it's important for banks to invest in high-quality self-service technology. By doing so, they can ensure that their customers have a positive experience and that they continue to do business with the bank.

The effects of on-site service quality on brand equity suggest that on-site service quality can enhance the customer's sense of connection with the bank and desire to use the bank's services. The perception of high on-site service quality, which reflects the value customers derive from on-site service, can link customers to the bank's brand, because when customers are satisfied with on-site service, they are more likely to feel connected to the bank and to be enthusiastic about using bank services. The effects of on-site service quality on brand equity are especially true for banks that have a strong customer service focus. Banks that provide good customer service create a positive customer experience, which leads to customer loyalty and positive word-of-mouth. Good customer service also results in higher customer satisfaction, which leads to repeat business and referrals. Satisfied customers are more likely to continue using a service and to recommend it to others, while unhappy customers are more likely to take

their business elsewhere. This is particularly true in the banking industry, where customers have a wide range of choices when it comes to where they do their business. Thus, to improve brand equity, training staff to provide excellent on-site customer service becomes an important strategy.

CONCLUSION

This study proposed a structural equation model (SEM) to investigate the effects of two crucial factors, namely the quality of self-service technology and the quality of on-site service, on brand equity in the Thai banking sector. This work drew upon related concepts and empirical research to contribute to this research area and build on the previous recognition of creating brand equity as a potential strategy for business units in the competition environment. To conduct the analysis, a total of 450 valid questionnaires were collected from bank customers living in six distinct of Bangkok, Thailand. Results of the analysis revealed that the proposed model was supported by the empirical data and that self-service technology quality had a significant effect on the on-site service quality, which in turn had a significant effect on brand equity.

The results of this study have important implications for bank top managers in terms of ensuring long-term success. To ensure the quality of bank self-service technology, it is essential for banks to invest in technology that provides customers with a more convenient way of conducting transactions. Not only does this help to provide customers with an effortless experience, but it can also help to create a positive emotional connection with the bank brand. In addition, on-site service quality is a critical factor that should be addressed by banks. This includes everything from the way employees greet customers to the way they handle transactions. By providing customers with positive interactions, quick and convenient help, and quality customer service, banks can help to create a strong emotional connection with their brand. This will help to give customers a reason to choose the bank's services over those of competitors..

This study suggests a connection between self-service technology quality, on-site service quality, and brand equity. However, the mechanisms through which these three are connected remain largely unexplored. Therefore, more research is needed to examine the linkages between self-service technology quality, on-site service quality, and brand equity. Moreover, other factors such as moderators or mediators should be taken into consideration when constructing the model. Additionally, this is an area-specific research conducted during

the Covid-19 pandemic period, when people tend to access services via online channels. Therefore, when generalizing the results to different contexts, one should exercise caution.

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