

THE IMPACT OF E-BANKING SERVICE QUALITY ON E-BANKING SATISFACTION AND E-BANKING LOYALTY

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Abstract - The usage of online payment is increasing rapidly worldwide. The increasing digitalization has led to the gradual integration of online banking services into the modern marketplace, catering to customer needs. The study aims to understand the impact of e-banking service quality on e-banking satisfaction and e-banking loyalty. Researching how e-banking satisfaction and e-banking loyalty can be achieved through e-banking service quality will help banking sectors survive in competitiveness. A quantitative methodology was used as a research design. The propositions of the study were tested using Structural Equation Modelling-Partial Least Squares (SEM-PLS). Google Form with 157 respondents was used to collect the data. The study found that there's a positive significant influence between privacy & security, as well as a positive significant influence between website/app design with e-banking satisfaction. However, there's no significant influence between reliability and customer service & support with e-banking satisfaction. Findings indicate that privacy & security and website/app design play a very important role in achieving customer satisfaction as it has become the basis of customers interpret and interacts with online banking. This research adds up considerably to the literature of bank marketing, and also academicians since it demonstrates the way internet banking service quality determinants predict e-satisfaction which ultimately raises the e-loyalty of users. This study contributes to the existing literature on e-banking service quality and provide valuable insights for e-banking businesses in Indonesia.

Keywords: Cognitive Motivational Relational Theory (CMR); Customer Service & Support; e-Banking Loyalty; e-Banking Service Quality; e-Banking Satisfaction; Reliability; Privacy/Security; Website/App Design

1. INTRODUCTION

1.1 Research Background

The rise of competition has compelled firms to continuously endeavor to enhance their production and minimize their expenses in the present era. The rapid expansion of electronic technology systems, particularly those associated with the Internet and personal computers, has caused a significant change in the trade of goods and services overall, including financial services. Technology serves as a means of connecting and facilitating information and corporate operations. Technological improvements have provided people with the ability to stay informed about global events with a simple touch. The conventional physical retail system has been replaced by an online platform that allows for customized services to be provided to customers. (Shaikh & Karjaluto, 2015).

The expansion of information technologies in the banking and other industries according to Omotayo (2020) has led to the mechanization of banking transactions and other firm

activities. Raza et al., (2020) stated the emergence of information technology has enabled new forms of contact between business entities and their customers, hence improving banking and financial services. According to Ayinaddis et al., (2023) e-banking transforming the financial services industry by promoting innovations, fostering growth, and improving both internal and external competitiveness. There have been frequent changes in the banking systems leading to a decline in a traditional banking. Currently, individuals who have bank accounts regularly prefer digital banking (Singh et al., 2017). Getting information from the consumers' opinions is essential for a company to ensure the provision of e-service in line with customer expectancy.

According to Firdous & Farooqi (2017) the increasing quality of online banking services improves customer satisfaction by providing banking customers with simple access to a wide range of financial transaction. The company provides a variety of services to its users, including checking their account balances, transferring monies between accounts, paying bills, making purchases without physical currency, and sending checks by mail (Chou & Chou, 2000). In today's dynamic and fiercely competitive business landscape, retail banks can ensure client loyalty by delivering great service quality to ensure the utmost level of customer satisfaction (Khan & Fasih, 2014). George & Kumar (2014) stated the banking sector has taken advantage of this growth by creating various channels to appeal to technologically proficient clients, enhance commercial opportunities, and protect customer loyalty. In recent times, technology has been a crucial component in managing various elements of human existence across all sectors. Particularly, in the banking industry, e-services has revolutionized the way financial activities, are conducted. E-banking offers advantages to both banks and their consumers by facilitating the promotion and provision of services or goods online in a cost-effective, efficient, and user-friendly manner. It enables users to carry out financial transactions from any location worldwide.

There is a significant increase in the need for a smooth and uninterrupted digital experience in Indonesia. The digital realm has become an integral part of everyday life, encompassing activities such as online meal ordering, purchasing cosmetics, and finding new interests. These digital platforms offer the convenience of doorstep delivery for all our daily necessities. Bank Central Asia (BCA) is a notable commercial bank in Indonesia that primarily specializes in conducting transactional activities. BCA currently caters to around 39 million user accounts and manages around 81 million transactions on a daily basis as of September 2023. They operate through a network of 1,252 branches, 18,705 ATMs, and offer 24-hour internet and mobile banking systems. Additionally, they have a 24/7 Halo BCA contact center available at bca.co.id. BCA Mobile is a mobile banking service provided by BCA bank. It allows users to do non-cash transactions using the BCA mobile app, which includes both m-BCA and KlikBCA smartphone features. Users can access these services anytime and anywhere. Top Brand Index results indicate that among the surveyed banks, the best e-channel is m-BCA which holds the first position with a significant share of 47,9%. (Source: topbrandaward.com2023).

The objective of this study is to analyze the dimensions of e-banking service quality elements that influence e-banking satisfaction and e-banking loyalty. This study has both academic and practical implications. This study contributes useful insights to the current understanding of e-banking service quality, e-banking satisfaction, and e-banking loyalty, specifically within the context of bank marketing and financial services marketing. This study determines the specific EBSQ dimensions that bank should focus to enhance customer satisfaction and cultivate loyalty towards e-banking services. While this research primarily examines the Indonesian context, it is anticipated that the knowledge gathered can contribute to a more comprehensive understanding of e-banking phenomena.

1.2 Literature Review

1.2.2 Cognitive-Motivational-Relational (CMR) Theory

CMR theory which was developed by Lazarus (1991) provide theoretical support for the association between e-banking service quality (EBSQ) and customer loyalty. This theory is used as it connects the process of analyzing different perspectives and emotional responses of humans toward evaluation (Ul Haq & Awan, 2020). This CMR theory suggests the relationship between cognitive evaluation and emotional response. According to Mansoor et al., (2020), almost all the events and how to respond to them which are significant in our lives are stimulated by emotions. Some researchers like Shankar & Jebarajakirthy (2019), Mansoor et al., (2020), Ul Haq & Awan (2020), have used CMR theory to explain the relationship between service quality and customer responses, for instance customer satisfaction, purchase intention, and customer loyalty. They suggest that service quality is closely associated with cognitive evaluation of services, while customer response, such as purchase intention and customer loyalty are associated with emotional response.

1.2.2 e-Banking Service Quality

According to Muslim (2016), offering superior quality on delivery platforms is a key strategy to gain a competitive advantage. Service quality has a crucial role in distinguishing organizations and is a key factor that influences service-based companies (Zhao & Di Benedetto, 2013). Service quality has a substantial influence on the operational efficiency and financial success of enterprises, as well as on customer satisfaction and loyalty (Malik et al., 2011). Over time, customers' view of service quality has changed. Therefore, the standard of services in the online banking sector is necessary to do (Choudhury 2013). As stated by Polatoglu & Ekin (2003), e-banking offers two main benefits. Firstly, banks can utilize a more efficient and cost effective method to advertise and deliver services and products online. Secondly, customers have the convenience of conducting banking transactions through the internet at any time and from anywhere. Kassim & Abdullah (2010) highlighted the potential of utilizing business organizations to generate additional income through online platforms, enhance customer satisfaction by offering new and improved services, and foster increased interaction between firms and customers. Muslim (2016) stated that understanding the way clients assess automated online banking and assessing the quality of online banking services are both significant.

1.2.3 Reliability

Reliability refers to the capacity to fulfill commitments and provide precisely as promised (Raza et al., 2020). Reliability refers to consistently and accurately accomplishing a task as agreed upon. Singh & Kaur (2013) stated that reliability and consistency in carrying out financial duties is fundamental in the banking sector. However, it is imperative to exhibit this reliability through online platforms as well. Chemingui & Lallouna (2013) asserted that ensuring reliability in online tasks can enhance user engagement with the service and motivate them to utilize the service again. Reliability refers to consistently and accurately providing the service that was promised (Parasuraman et al., 1988). Wolfenbarger & Gilly (2003) and Blut et al., (2015) stated that reliability is a crucial determinant in e-banking service quality (EBSQ).

1.2.4 Privacy & Security

As defined by Hussien & El Aziz (2013), privacy and security refer to customers' trust that a website can prevent unauthorized access and protect their personal information shared on the platform. Security refers to the extent to which a consumers perceive a transaction as

being safe, including the payment methods and the transmission of personal information (Thaichon et al., 2014). According to Sakhaei et al. (2014) privacy is the state in which personal information is kept confidential and the protection of credit or debit card information is guaranteed. This component relates to the website's reputation in building trust with its customers. Suhartanto et al., (2019) stated online security pertains to the degree of trust customers have in the website's ability to prevent illegal access by hackers and third parties, as well as the decreased likelihood of financial loss due to transaction or server faults. Security refers to the characteristics of a website that protect personal data and information from unwanted access during transactions (Guo et al., 2012). Eid (2011) asserts that consumers prioritize security when making online transactions. Customers of high-tech services often voice privacy concerns, which pertain to how customers view the efficacy of procedures involved in transferring and preserving personal information (Özgülven, 2011). Rita et al., (2019), found that when personal information is disclosed, consumers become concerned about the protection of their private data on websites and the possibility of being misused. Therefore, guaranteeing security and privacy is crucial in assessing the excellence of e-services.

1.2.5 Website Design

According to Maiyaki & Mokhtar (2016), website design encompasses the visual presentation of a graphical interface that is specifically tailored for users. Zhou et al., (2009) define website design as the systematic creation of web page layout, content production, and graphic design to encourage positive user interaction with the website. Website design encompasses several elements to interact with the site, including navigation, detailed information, and transaction processing (Wolfenbarger & Gilly, 2003). Nam et al. (2021) stated that website design is the determinant that online users consider of making online purchases.

1.2.6 Customer Service & Support

According to Blut et al (2015), customer service and support involve providing services to clients to meet their needs and focus to their problems. In a study conducted by Aydin & Özer (2005) in the Turkish telecom business, it was shown that properly addressing customers' issues had a beneficial influence on the overall quality of e-service. Customer service and support is the act of providing aid by a company to solve the needs or worries of customers (Kim et al., 2016).

1.2.7 e-Banking Satisfaction

According to Jameel et al., (2021), satisfaction is a psychological state that arises from the evaluation of a transaction based on both emotional and cognitive factors. Customer satisfaction, defined as the evaluation of emotions, is commonly used over some time. In the service industry, ensuring customer happiness is paramount importance (Pooya et al., 2020). Ling et al., (2016) stated that customer satisfaction is affected by the individuals who make payments for products or services and how they use these items. E-customer satisfaction refers to the experience attainment of customer satisfaction using electronics or online platforms (Zeithaml, 2002). The evaluations of attitude, known as customer satisfaction, are commonly used over time. Li & Suomi (2009) define client satisfaction as how effectively the services provided by online banking meet the expectations of customers. Osman (2014) stated that building a strong reputation, expanding the user base, and attracting new potential users to the cyber bank website is crucial for online banking to deliver outstanding service. Anderson & Srinivasan (2003) defined e-satisfaction as measure of consumer happiness determined by their past transactions or interactions. Therefore, since customers have become discerning in

defining their expectations, it is imperative for online banking to not only meet but also exceed customer satisfaction standards.

1.2.8 e-Banking Loyalty

According to Bowen & Chen (2001), consumer retention is essential process for the success of a firm. Loyal consumers exhibit a lower level of responsiveness towards price adjustments (Akbar & Parvez 2009). The main focus of consumer loyalty was to retain customers by effectively answering their inquiries and concerns related to internet banking. Participating in online banking, users immediately receive a higher level of customer service that aligns with their preferences. Therefore, loyal clients are seen as great asset for a firm. According to Bhatti et al., (2001), a strong and trustworthy rapport between a customer and the company shapes customer loyalty. Internet banking enables users to have greater flexibility by providing 24/7 access to products and services without any inconvenience (Raza et al., 2020). Gera (2011) emphasized that the quality of the interaction experience with a website is crucial in determining whether customers will return to the site and recommend it to others. According to Shankar & Jebarajakirthy (2019), loyalty refers to frequently visiting the bank's website, regularly utilizing e-banking services, and actively promoting positive comments about e-banking to others. All the criteria used in our study are essential for establishing customer loyalty. Therefore, it is imperative for online banking to provide utmost importance on e-customer loyalty to sustain their relationship with clients.

1.2.9 Hypothesis & Research Model

This section outlines the formulation of the hypotheses in the following order: reliability, privacy & security, website/app design, customer service & support, e-customer satisfaction, and e-customer loyalty.

Reliability and e- Banking Satisfaction

In their study, Liao & Cheung (2002) found a positive relationship between the reliability of e-banking and its usage. The more clients use the e-banking services, their satisfaction and trust in e-banking also increase. The reliability of the banking sector is closely correlated with the degree of trust. Siddiqi (2011) has found a direct relationship between the level of trust in a bank and the quality of service it provides. Reliability in e-commerce refers to the ability of an online shopping website to meet the diverse needs of buyers while ensuring the security of their personal information (Ashiq & Hussain, 2023). The studies done by Ul Haq & Awan, (2020); Raza et al., (2020); Khatoon et al., (2020); Haron et al., (2020); Mwiya et al., (2022) have demonstrated that reliability exerts a favorable impact on customer satisfaction. Thus, to assess the impact of reliability on the development of EBSQ, we propose the following hypothesis:

H1: Reliability in e-banking service has a positive effect on e-banking satisfaction.

Privacy and Security and e-Banking Satisfaction

The primary characteristic of an online retailer that is acknowledged for giving customers information to make decisions is the assurance of security and privacy in online transactions (Martín & Camarero, 2009). According to Thaichon et al., (2014) and Shankar & Kumari (2016), when online banking ensures secure transactions and upholds the confidentiality of personal information, consumers more inclined to use the services. Orel & Kara (2014) stated that the service provider's adherence to explicit privacy and security measures positively influences consumer response. The research undertaken by Irgui & Qmichchou (2023); Ul Haq

& Awan, (2020); Ahmed et al., (2021); Khatoon et al., (2020) have repeatedly demonstrated that privacy and security are essential factors in enhancing e-customer satisfaction. Thus, to assess the impact of privacy and security on the development of EBSQ, we propose the following hypothesis:

H2: privacy and security in e-banking service has a positive effect on e-banking satisfaction

Website/App Design and e-Customer Satisfaction

E-service providers typically structure their websites to offer comprehensive information, minimize the need for extensive searching, and improve user contact (Kim et al., 2009). According to Kim et al., (2009); Vera & Trujillo (2013), and Muslim (2016), an advanced and user-friendly e-banking website interface enhances client satisfaction and boosts the propensity to use online banking services more frequently (Li & Yeh, 2010). The studies conducted by Giao et al., (2020) and Kim et al., (2009) have demonstrated that the design of a website significantly influences consumer loyalty, trust, satisfaction, and perception of the quality of an internet store. Furthermore, Wardhani (2020) stated website design significantly influences the likelihood of a purchase being made. The visually appealing and innovative website design enhances favorable customer interaction with the store. According to a study by Wolfinbarger & Gilly (2003), website design had a positive effect on customer satisfaction. Thus, in order to examine the impact of website design on the development of EBSQ, we propose the following hypothesis:

H3: Website design in e-banking service has a positive effect on e-banking satisfaction

Customer Service & Support and e-Customer Satisfaction

Customer service and support provide assistance to customers in resolving issues or difficulties they have encountered. Within the domain of e-banking, clients actively seek expert support and help when encountering any challenges when using internet banking. Thaichon et al., (2014) stated that client often seek technical support when e-banking enhances their technologies and websites. Customers are more inclined to trust service providers when the online customer care support team rapidly addresses difficulties and transparent recovery approach (Blut et al., 2015); (Quach et al., 2016). Customer service and support were found to have a favorable impact on customer satisfaction (Wolfinbarger & Gilly, 2003). However, Ul Haq & Awan (2020) contended that customer service and support has no positive relationship with e-banking satisfaction. Therefore, to test the contribution of customer service & support in developing EBSQ, we propose the following hypothesis:

H4: Customer service and support in e-banking service have a positive effect on e-banking satisfaction.

e-Banking Satisfaction and e-Banking Loyalty

Customer satisfaction is vital for the service sector. As stated by Raza et al., (2020), customer satisfaction is the measure of how well a user perceives that a facility meets or exceeds their expectations by fulfilling their criteria. Researchers have found that the degree of enjoyment that online clients experience has a direct impact on their loyalty to the online platform. A significant influence between e-customer satisfaction and e-customer loyalty was identified by Ramseook-Munhurrin & Naidoo (2011). Banks should acknowledge that customer satisfaction with e-services leads to increased e-loyalty (Ahangar, 2011). Kim et al., (2009) stated when clients are satisfied with the goods and services provided by the firm or a bank, they exhibit more pleasure and a greater sense of security when doing transactions. When customers experience higher satisfaction on online platforms, they are more likely to exhibit

loyalty towards the business Gautam & Sah (2023); (Irgui, A., & Qmichchou, 2023); Ashiq & Hussain (2023); and Ul Haq & Awan (2020). Thus, to evaluate the impact of website design on the development of EBSQ, we propose the following hypothesis:

H5: e-banking satisfaction has a positive effect on e-banking loyalty

Based on the foregoing hypotheses, the conceptual model in Figure 1 reflects the direction of influence in the relationships being explored.

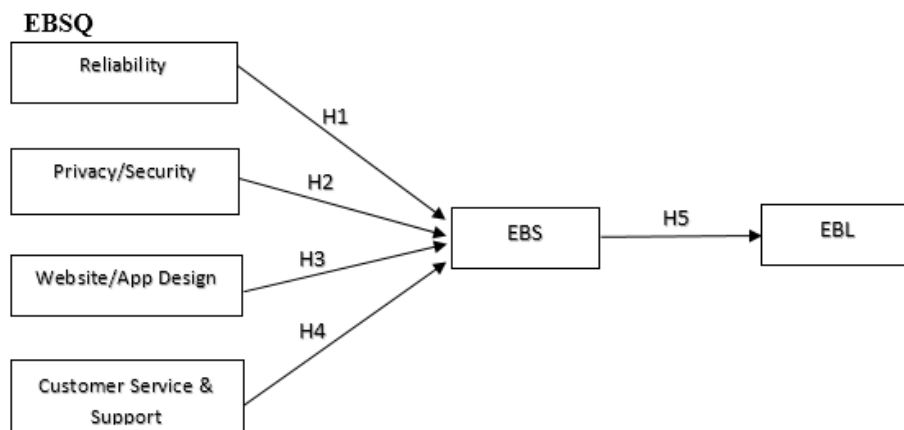


Figure 1: Research Model

2. RESEARCH METHODOLOGY

2.1 Research Design

A quantitative research methodology is used in this study. Nonprobability sampling is used as a sampling technique. The study focused on the entire group of users who utilize BCA mobile banking. Nonprobability sampling is used in the sampling technique. A five-point Likert Scale is used in assessing the research variables with a score of 1 representing strongly disagree and 5 representing strongly agree. In addition, purposive sampling was employed in the sample design. The research requires the samples to meet specific requirements. The sampling criteria in this study consist of two groups, the first group includes the customers of BCA, while the second group comprises active users of BCA e-banking service, which encompasses both online banking and mobile banking. The Reliability of the study was measured by four items that were previously used by Jayawardhena (2004) and Haq & Awan (2020). The assessment of Privacy and security was carried out with three items that were previously utilized by Quach et al., (2016) and Haq & Awan (2020). Four items for evaluating website design were adopted by Jayawardhena (2004) and Ul Haq & Awan (2020). Five items for evaluating customer service and support were selected from the studies conducted by Quach et al., (2016) and Ul Haq & Awan (2020). The e-customer satisfaction was assessed with five items that were previously used by Ramseook-Munhurrin & Naidoo (2011) and Muslim (2016). The e-customer loyalty measurement comprised five items that were adapted and modified from the studies conducted by Amin & Nasharuddin (2013), Ramseook-Munhurrin & Naidoo (2011), and Muslim (2016). The questionnaire was created in both Bahasa Indonesia and English to ensure clarity, and its content validity was meticulously validated by two Indonesian experts.

2.2 Data Collection

The data collection method used was a questionnaire consisting of inquiries provided to participants to complete based on their current circumstances. The questionnaire is a methodological approach to gathering data, involving a sequence of written or spoken questions that are responded to by the participants (Malhotra, 2020). There were 157 participants involved in this study. The survey was distributed from 10 January 2024 to 9 March 2024. Google Form is used to collect the data for 60 days. Structural Equation Modeling-Partial Least Square (SEM-PLS) examined the causal link among variables. This study examines the exogenous latent factors of reliability, privacy/security, website/app design, and customer service & support, e-banking satisfaction is a mediating variable, and e-banking loyalty is the endogenous latent variable. This research used multiple stages: (1) developing a questionnaire instrument; (2) selecting a sample of respondents; (3) administering the online survey; (4) utilizing SEM-PLS survey to process the data; and (5) interpreting and evaluating the data.

3. RESULT AND DISCUSSION

3.1 Respondents' Profile

The respondents exhibited a higher proportion of females (51.59%) in comparison to males (48.41%). The majority of the participants (73) were young adults, aged between 20-30 years, accounting for 46.50% of the total. The next largest age group was 20 years or below, comprising 20.38% of the participants. The age range of 40-50 years accounted for 12.74%, followed by 30-40 at 11.46% and the smallest group was 50 years or more, making up 8.92%. The monthly income varied between 2.500.000 to a maximum of 20.000.000. Approximately 38.22% of the respondents had a salary equal to below 2.500.000. Only a small fraction (12.10%) of them have an income ranging from 5.000.000 to 10.000.000. The majority of the respondents (56.69%) are students, while 20.38% are working in the private sector. The majority of the bank account holders (50.96%) possessed a bachelor's degree, while 24.20% of the respondents had achieved a level of education beyond a bachelor's degree. Table 1 presents the extensive demographic information of the sample.

Table 1. Respondents' Profile

Category	No. of Respondents	(%)
<i>Gender</i>		
Male	76	48.41%
Female	81	51.59%
<i>Age</i>		
20 or Below	32	20.38%
20-30	73	46.50%
30-40	18	11.46%
40-50	20	12.74%
50 or Over	14	8.92%
<i>Monthly Income (IDR)</i>		
2,500,000 or Less	60	38.22%
2,500,000 - 5,000,000	32	20.38%
5,000,000 - 10,000,000	19	12.10%

Category	No. of Respondents	(%)
10,000,000 - 20,000,000	25	15.92%
20,000,000 or Higher	21	13.38%
<i>Profession</i>		
Advocate	1	0.64%
Civil Servant	4	2.55%
Entrepreneur	13	8.28%
Housewife	11	7.01%
Lecturer	6	3.82%
Private Employee	32	20.38%
Student	89	56.69%
Self Employed	1	0.64%
<i>Education Level</i>		
High school	24	15.29%
Diploma I - Diploma III	15	9.55%
Bachelor's Degree	80	50.96%
Higher than Bachelor's Degree (Magister or Doctorate)	38	24.20%

Source: Data Processing (2024)

3.2 Measurement Model Assessment

Measurement analysis is advisable to ensure the reliability and validity among constructs (Hair et al., 2010). The examination of convergent and discriminant validity involved analyzing factor loadings, average variance extracted (AVE), and composite reliability (CR) values (Cheah et al., 2018). The loading value must be equal to or more than 0.70 or 0.50. Additionally, Cronbach's alpha and CR values falling between 0.60 and 0.70 are considered acceptable (Hair et al., 2010). The appropriate values for AVE values should be equal to or greater than 0.50 as determined by comparing the diagonal values with the correlation coefficients for each construct in the corresponding relevant rows and columns Cheah et al., 2018). Table 2 shows that all the values are in a specified range. Figure 2 displays the graphical depiction of the assessment of the measurement model. The discriminant validity was assessed by calculating the Hetrotrait-Monotrait (HTMT) according to the specified criteria outlined (Sarstedt et al., 2019). According to the data presented in Table 3, all of the ratios are within the specified range. The convergent validity was verified using the Fornell-Lacker criterion and all the values were within the specified range and criteria. The values were discovered within the specified range and are presented in Table 4.

Table 2. Cronbach's Alpha, AVE, and CR Values

Items	Statements	FL
Reliability AVE (0.62), CR (0.87) α (0.80)	Application/E-banking website provides the services exactly as promised	0.805
	E-banking always provides the services at the promised time	0.764
	Using e-banking. I can retrieve the transaction details on my account	0.791
	The information provided over the application/e-banking website is accurate	0.787
Privacy and Security AVE (0.78), CR (0.92) α (0.86)	My personal information is protected on the e-banking platform	0.897
	My financial information is protected on the e-banking platform	0.922
	The transactions over the e-banking website are secure	0.835

Items	Statements	FL
Website/App Design AVE (0.64), CR (0.87) α (0.81)	The application/e-banking website is updated regularly	0.710
	The application/e-banking website is well organized	0.862
	The application/e-banking website includes interactive features	0.808
	The application/e-banking website is easy to use	0.804
Customer Service and Support AVE (0.71), CR (0.93) α (0.90)	Customer service personnel are knowledgeable of e-banking services	0.882
	Customer service personnel are always willing to help me with matters relating to e-banking	0.879
	My queries relating to e-banking are answered promptly	0.822
	E-banking customer care team has customers' best interests at heart	0.885
E-banking Satisfaction AVE (0.72), CR (0.93) α (0.90)	E-banking customer care team can be accessed at any time (24/7 operating hours)	0.746
	I am generally pleased with this bank's online services	0.818
	I am very satisfied with this bank's online services	0.874
	I am happy with this bank	0.860
E-banking Loyalty AVE (0.74), CR (0.93) α (0.91)	The website of online bank is simple to use	0.830
	I am satisfied with overall online bank's products and services	0.862
	I will recommend the online banking to other people	0.849
	I prefer this online banking above others	0.825
	I would like to say positive things about online banking to other people	0.888
	I would recommend online banking to someone who seeks advice	0.896
	I intend to continue using the online banking platform	0.843

Source: Data Processing (2024)

Table 3. Discriminant Validity (HTMT Ratios)

	1	2	3	4	5	6
1 Customer Service & Support						
2 E-Banking Satisfaction	0.852					
3 E-Banking Loyalty	0.758	0.883				
4 Privacy & Security	0.623	0.715	0.583			
5 Reliability	0.743	0.741	0.677	0.741		
6 Website/App Design	0.808	0.763	0.638	0.693	0.786	

Source: Data Processing (2024)

Table 4. Convergent validity (Fornell-Lacker Criterion)

	1	2	3	4	5	6
1 Customer Service & Support	0.845					
2 E-Banking Satisfaction	0.770	0.849				
3 E-Banking Loyalty	0.689	0.805	0.861			
4 Privacy & Security	0.546	0.632	0.519	0.885		
5 Reliability	0.626	0.632	0.583	0.620	0.787	
6 Website/App Design	0.692	0.664	0.564	0.584	0.632	0.798

Source: Data Processing (2024)

3.3 Structural Model Assessment

Table 5 provides a summary of the hypothesis tests conducted after performing statistical analysis. It includes the information about the paths, the *T* indicators obtained via bootstrapping, and the significance of the results for these paths.

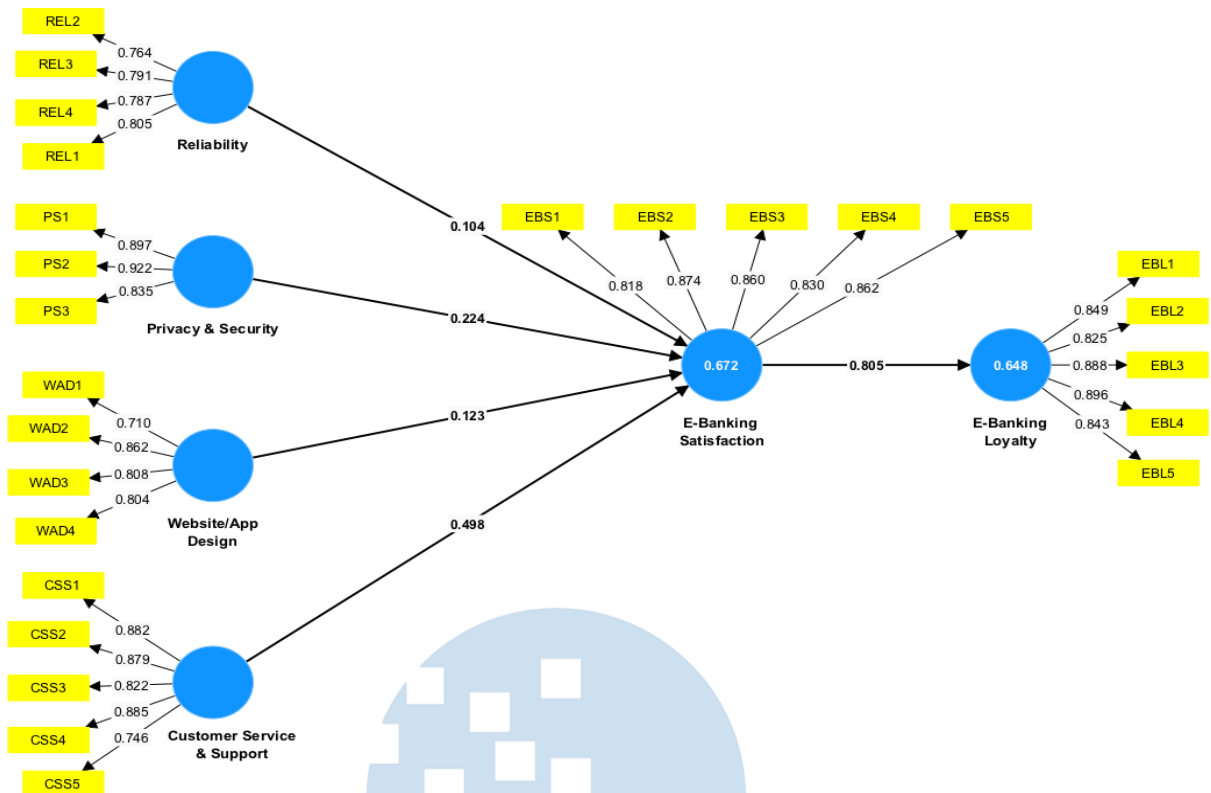


Figure 2. Measurement Model Assessment
 Source: Data Processing (2024)

Table 5. Hypothesis Test Result

Hypothesis	Std. Beta	Std. Error	t-value	p-value	Discussion
H1 R → EBCS	0.104	0.097	1.073	0.284	Not Supported
H2 P&S → EBCS	0.224	0.075	2.988	0.003	Supported
H3 WD → EBCS	0.498	0.101	4.936	0.000	Supported
H4 CSS → EBCS	0.123	0.164	0.753	0.451	Not Supported
H5 EBCS → EBL	0.805	0.037	21.472	0.000	Supported

Source: Data Processing (2024)

3.4 Discussion

The purpose of this study is to analyze the impact of e-banking service quality on e-banking satisfaction and e-banking loyalty within the framework of BCA internet banking in Indonesia. H1 reveals that reliability had no positive influence on e-banking satisfaction. The result of this study is inconsistent with the previous findings of Liao & Cheung (2002), Ul Haq & Awan (2020), Raza et al., (2020), Khatoon et al., (2020), Haron et al., (2020) and Mwiya et al., (2022). They argued that reliability had a positive and significant influence on e-banking satisfaction. This study indicates that users of BCA’s e-banking service do not view reliability as a factor that affects their satisfaction level. Similar results were found in a study by Kaur & Kaur (2014), because of internet services lack face to face interaction, this dimension may not be significantly necessary for customer satisfaction. Another finding by Stevano et al., (2018) argued that respondents believe that internet banking must consistently offer services, so it does not significantly enhance customer satisfaction. H2 stated that privacy & security had a positive influence with e-banking satisfaction. Research revealed that a higher degree of privacy & security has a major impact on the overall happiness of e-banking users. In addition to links

between privacy & security and e-banking satisfaction, the prior study conducted by Irgui & Qmichchou (2023), Ul Haq & Awan (2020), Wolfinbarger & Gilly (2003), Khatoon et al., (2020) demonstrated that privacy & security had a positive influence with e-banking satisfaction. The privacy & security is demonstrated by protecting BCA user's personal and financial information, as well as securing their transactions.

H3 stated that website/app design had a positive influence on e-banking satisfaction. The finding is consistent with the prior studies by Kim et al., (2009), Vera & Trujillo (2013), Muslim (2016), and Giao et al., (2020). They argued that website/app design had a positive and significant influence on e-customer satisfaction. Website/app design is demonstrated by the website/app is updated regularly, well organized, and easy to use. H4 revealed that customer service & support had no positive influence on e-banking satisfaction. The result in this study is inconsistent with previous findings of Thaichon et al., (2014), Blut et al., (2015), Quach et al., (2016), and Wolfinbarger & Gilly (2003). They concluded that customer service & support had positive and significant influence on e-banking satisfaction. However, the present research finding is consistent with the finding by Ul Haq & Awan (2020) that confirmed there is no positive relationship between customer service & support on e-banking customer satisfaction. In this study, customer service & support was not relevant to form the e-banking service quality perception for BCA online banking users. According to Wolfinbarger & Gilly (2003), not every customer requires assistance every time they make a transaction, so the connection between customer service & support with e-banking service quality is minimal.

H5 stated that e-banking satisfaction had a positive influence on e-banking loyalty. In addition to relationships between e-banking satisfaction and e-banking loyalty, this study is consistent with the findings of Gautam & Sah, (2023), Irgui, & Qmichchou (2023), Garcia et al., (2020), Ashiq & Hussain (2023), Ul Haq & Awan (2020), Muslim (2016), Raza et al., (2020), Haron et al., (2020) and (Mwiya et al., 2022). They argued that e-banking satisfaction had positive and significant influence on e-banking loyalty. This study shows that the satisfaction of BCA's e-banking users will result in their continued loyalty to the service over time. Customer satisfaction is contemplated by the happiness customers feel when they receive banking services that fulfill their financial needs. While customer loyalty is indicated by their recommendation of online banking to others, telling positive things, and their intention of continue using the online banking. According to Gautam & Sah (2023), customer loyalty is significantly impacted by how satisfied customers with the quality of e-banking service

In this study, website/app design is found to be the key factor of e-banking service quality it means that BCA's e-banking users are looking for the website/app that have interactive features, well organized and easy to use. In other words, BCA's e-banking users are paying more attention into website/app design than other dimensions as the main factor in developing the connection with the bank. Apart from website/app design, privacy & security factor is also the concerned of BCA's e-banking users. They want their personal information, financial information and their transaction are protected and secured. Theoretical and practical implications related with e-banking service quality factors is provided in this study. Empirical evidence can be used as a finding of this study that explains the positive influence of website/app design and privacy/security on e-customer satisfaction and the positive influence of e-customer satisfaction on e-customer loyalty. On the contrary, there is no significant influence between reliability and customer service & support on e-customer satisfaction. Therefore, based on the findings in this study, it is suggested that BCA policymakers should focus on the factors related with website/app design and privacy & security to gain customer satisfaction and enhance customer loyalty.

4. CONCLUSION

This study investigates the impact of e-banking service quality on e-banking satisfaction and e-banking loyalty. E-banking satisfaction served as a mediator to highlight the connection between e-banking service quality and e-banking loyalty. The findings have confirmed that privacy & security, as well as website/app design have a significant impact on e-banking satisfaction. However, the factors of reliability, and customer service & support do not have a significant impact on e-banking satisfaction. Additionally, it has been discovered that e-banking satisfaction plays a vital role as a mediator and predictor of e-banking loyalty. This study contributes to the scholarly literature on bank marketing. Furthermore, it gives insights for strategic decision making and improvements in digitalization.

5. LIMITATION

This study has some limitations. To get accurate results, it is necessary to increase the total number of internet banking users, expand the sample size, and include a wider range of locations in the study. Future researchers may include examining additional dimensions of internet service quality, such as interactivity and website services ability (Muslim, 2016). In addition, Dahlstrom et al. (2014) and Yu et al., (2015) suggested that perceived risk and trust constructs as determinant of e-customer satisfaction and loyalty should be considered for future research.

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