Digital Savings Customer Satisfaction at Digital Banks in DKI Jakarta Province

Nila Prastyaningsih[1], Ayi Wahid[2], Widya Nengsih[3]
[1]STIAMI, Jakarta, Indonesia, nilaprastyaningsih@stimami.ac.id
[2]Universitas Siber Indonesia, Jakarta, Indonesia, ayi.wahid@cyber-univ.ac.id
[3]Universitas Mitra Bangsa, Jakarta, Indonesia, widyanengsih@stimaimmi.ac.id

Corresponding Author: ayi.wahid@cyber-univ.ac.id[1]

Abstract: This research aims to prove and analyze the increase in digital savings customer satisfaction through increasing e_service quality and brand image. The research analysis unit is digital savings customers at 7 Digital Banks in DKI Jakarta Province. The research method used was a descriptive and explanatory survey with a minimum sample of 80 respondents. The data analysis method used is Structural Equation Modeling with the SmartPLS 9.3.2 statistical analysis tool. The research results show that e_service quality and brand image partially or simultaneously have a positive and significant effect on digital savings customer satisfaction. E_service quality partially has the most dominant influence on digital savings customer satisfaction. Managerial implications, to increase digital saving customer satisfaction can be done by improving the quality of e_service, especially by increasing the reliability aspect of the service feature functions running smoothly and quickly), and supported by improving the brand image, especially the user image aspect of the digital saving service used.

Keyword: E Service Quality, Brand Image, Customer Satisfaction, Digital Saving

INTRODUCTION

In the current era of globalization, where the growth of e-commerce has increasingly developing, the banking industry is required to be able to follow trends in digital transactions, including cashless payments, branchless banking, to the form of e-computing, fintech, and internet-based financial services, and this trend continues to increase in Indonesia. The banking industry is also not only experiencing digital transformation, but also must seize the opportunities seen in consumers who are increasingly moving towards changes in a digital world that better understands consumer behavior, and are increasingly moving towards a digital field that can be personalized to customer needs.

Digital Bank is an Indonesian Legal Entity Bank that carries out business activities primarily using electronic channels without a physical office other than the head office, or with limited use of a physical office (Financial Services Authority, 2021). Digital bank operations

in Indonesia can be carried out in two ways, namely by establishing a new Indonesian Legal Entity Bank as a Digital Bank, or by transforming an existing Indonesian Legal Entity Bank into a digital bank.

Digital Banks generally present superior digital savings products which make it easier for customers to open savings via an online application without having to visit a branch office (Indonesia, 2021). By opening a digital savings account that uses eKYC technology, customers can save without a minimum balance, free of administration fees, and can enjoy competitive interest rates. Several other advantages of digital saving (Indonesia, 2021) are opening an online account just by providing an E-KTP and an active cellphone number; administration fee Rp. 0,-, no monthly administration fee; daily interest is given automatically to customer accounts every month; transaction features can make transfers, purchases, payments for customer needs.

With several advantages from digital savings at Digital Banks, the net profit obtained by Digital Banking in Indonesia should continue to increase. However, in reality, net profit experiences relatively high fluctuations every year.

Table 1. Digital Banking Net Profit

Bank Digital	Growth Net Profit (%)				
	2020	**2021**	**2022**	**2023**	**Average**
PT Bank Jago Tbk	-55.00	145.00	-82.00	335.00	**85.75**
PT Allo Bank Indonesia Tbk	201.00	420.00	40.00	65.00	**181.50**
PT Bank Aladin Syariah Tbk	-42.00	-371.00	-119.00	14.00	**-129.50**
PT Bank Raya Indonesia Tbk	-39.00	-9843.00	100.00	113.00	**-2417.25**
PT Bank Neo Commerce Tbk	-1.00	-6342.00	20.00	27.00	**-1574.00**
PT Bank Amar Indonesia Tbk	-86.00	-52.00	-3888.00	215.00	**-952.75**
PT Bank MNC Indonesia Tbk	-49.00	23.00	310.00	48.00	**83.00**
Average	**-10.14**	**-2288.57**	**-517.00**	**116.71**	**-674.75**

Source: Indonesia stock exchange, 2024

Based on net profit data for the 7 digital banks above (Table 1), during 2020-2023 the average fluctuation is still relatively high. The highest net profit growth was achieved by PT Allo Bank Indonesia Tbk with an average growth of 181.50%, followed by PT Bank Jago Tbk (85.75%) and PT Bank MNC Indonesia Tbk (83.00%). While the net profit which is still relatively low is PT Bank Raya Indonesia Tbk with an average of (-2417.25%), the next ones which are still low in sequence are PT Bank Neo Commerce Tbk (-1574.00%), PT Bank Amar Indonesia Tbk (-952.75%), and PT Bank Aladin Syariah Tbk (-129.50%).

According to Maritseda & Tarigan (2020), customer satisfaction shows an influence on customer loyalty and the company's financial performance. The results of other research show that e-service quality, e-trust, e-satisfaction have a positive effect on e-loyalty among banking customers in Indonesia (Mariana & Aidil Fadli, 2022). These results indicate that customer loyalty will provide an increase in banking performance. In line with the results of this research, Williams & Naumann (2011) stated that there is a significant relationship between the level of satisfaction and the company's finances and market. More specifically, there is a strong relationship between customer satisfaction and retention, revenue, earnings per share, share price. Likewise, research results from Leo, Gani, & Jermias (2009) also state that customer satisfaction is positively and significantly related to company performance in terms of return on assets and market value of equity.

The description above shows that fluctuations in Digital Bank performance are partly caused by the low level of customer satisfaction with Digital Banks. This is shown by the

relatively high level of customer dissatisfaction, both when opening an account and when making transactions, with an average of 17.66% (Observation data, 2024). The highest number of user complaints is the length of disbursement of purchase and payment transactions reaching 23.00%, complaints about opening an account reaching 18.00%, and complaints about the transfer process, especially interbank transfers, reaching 12.00% (Observation data, 2024).

According to Yuliana, Soegiarto, & Nurqamarani (2019), stated that e-service quality which includes efficiency, reliability, fullfillment, privacy and contact has a significant influence simultaneously or partially on user satisfaction of the Enseval Mobile Order System application). E-service quality has a significant effect on OVO application customer satisfaction and loyalty, and satisfaction has a significant influence on OVO application customer loyalty (Akhmadi & Martini, 2020). Meanwhile, Suryani & Koranti (2022), stated that electronic service quality has no influence on customer satisfaction and security on user attitudes. In fact, the trust factor is the factor that has the most significant influence on customer satisfaction through user attitudes (Suryani & Koranti (2022)).

Faktor lain yang diduga penyebab masih rendahnya kepuasan nasabah Bank Digital adalah Brand Image. Menurut (Kusuma & Marlena, 2021) citra merek memiliki pengaruh positif yang signifikan pada kepuasan pelanggan. Hal ini sejalan dengan (Scorita & Nurmahadi, 2018), yang menyatakan service quality berpengaruh positif dan signifikan terhadap customer satisfaction, hasil serupa dengan pengaruh positif dan signifikan juga untuk brand image pada kepuasan   pelanggan.   Sementara hasil penelitian dari (Izzuddin & Ilahiyyah, 2022) menyatakan bahwa user interface dan literasi digital berpengaruh signifikan secara parsial terhadap kepuasan menggunakan bank digital, sedangkan brand image tidak berpengaruh signifikan terhadap kepuasan menggunakan bank digital.

Another factor that has thought to be the cause of the low satisfaction of Digital Bank customers is Brand Image. According to (Kusuma & Marlena, 2021) brand image has a significant positive influence on customer satisfaction. This is in line with (Scorita & Nurmahadi, 2018), which states that service quality has a positive and significant effect on customer satisfaction. Results are similar to the positive and significant effect also for brand image on customer satisfaction. Meanwhile, research results from (Izzuddin & Ilahiyyah, 2022) state that user interface and digital literacy have a partially significant effect on satisfaction with using digital banks, while brand image has no significant effect on satisfaction with using digital banks.

Based on the description of the phenomenon and research gap above, it is suspected that digital savings at Digital Banks in Indonesia must be able to improve e_service quality and brand image in order to create increased customer satisfaction with digital savings at Digital Banks which can ultimately improve company performance.

METHOD

The approach taken in this research was a quantitative method approach. A quantitative approach in research based on the philosophy of positivism was a method organized to combine the logic of deduction with precise empirical observations of individual behavior to discover and confirm behavior to discover and confirm a set of causal laws that can be used to predict general patterns of human activity (Neuman, 2014). The data analysis techniques used are descriptive statistical analysis and inferential analysis. The statistical analysis technique used in this research was the Structural Equation Model approach with the Smart PLS 3.9.2 statistical data processing tool. The population of this research was Digital Bank customers in DKI Jakarta Province. The sampling technique used in this research was one of the techniques of non-probability sampling, namely purpose sampling, which was a sampling technique using criteria (Sugiyono, 2016). Meanwhile, the method for determining the minimum sample size uses a ratio of 1: 5 (Hair et. el., 2010), so the minimum sample size was 16 x 5 = 80 respondents.

RESULTS AND DISCUSSION
E_Service Quality

E-Service Quality has a theory developed from service quality provided or carried out on the internet network. Service quality is one of the main forces that drives the sustainability of a business and a competitive advantage for a company (Puriwat and Tripopsakul, 2017). E-Service Quality is a comprehensive evaluation and assessment from customers regarding the excellence and quality delivered via the internet. Apart from that, E-Service Quality is broadly the extent to which a website can facilitate efficient and effective shopping or transaction activities (Puriwat and Tripopsakul, 2017). E-Service Quality has five dimensions, namely as follows (Puriwat and Tripopsakul, 2017), namely (1) Interface Design, ease and comfort in using websites or online applications; (2) Reliability, the technical function of a service or site that can run correctly and smoothly, and the security of the services provided by the company; (3) Responsiveness, the ability to respond or handle quickly in providing assistance to customers if there are problems or questions; (4) Trust, the level of customer trust or confidence in the services provided clearly and correctly by the company; (5) Personalization, the ability to provide or provide personalized services and features to meet customer needs.

Brand Image

Brand image has a representation of the overall perception of a brand which is formed based on information and past experiences with the brand (Kotler & Armstrong, 2016). This understanding shows that brand image is a set of brand associations that consumers can feel and think about which are created and maintained by marketers so that they are formed in consumers' minds. Several indicators for measuring brand image according to Kotler in Alma (2013) consist of the level of physical attributes (completeness of the product and promotional media used by a brand), functional impact (benefits of a product obtained by customers in the long term), and psychological impact (perceived impact in a customer when using a product). Simamora (2008) states that the indicators that form a brand image include corporate image (the image of the company itself), product image (the image of a product is related to needs, desires and expectations consumers), and users (images from experiences with users of a brand).

User Satisfaction

Satisfaction is a pleasurable fulfillment, namely the fulfillment of customer/customer expectations satisfactorily (Aaker, et al., 2010). Customer satisfaction is an after-purchase evaluation, where the perception of the performance of the selected product/service alternative meets or exceeds expectations before purchase (Lovelock and Jochen, 2011). Tjiptono (2017) customer satisfaction is a customer response to the evaluation of perceptions of the difference between initial expectations before purchase and the actual performance of the product as perceived after using the product. Based on the description of the theory, it is concluded that user satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a performance or perceived result to an electronic product or service based on expectations. User satisfaction is measured by indicators of satisfaction with the speed of digital saving services, ease of use of digital saving, and satisfaction with accurate information digital saving.

Satisfaction has pleasureable fulfillment, namely the fulfillment of customer expectations satisfactorily (Aaker, et al., 2010). Customer satisfaction has a post-purchase evaluation, where the perception of the performance of the selected alternative product/service meets or exceeds expectations before purchase (Lovelock and Jochen, 2011). Tjiptono (2017) customer satisfaction is the customer's response to the perception evaluation of the difference between initial expectations before purchasing and the actual performance of the product as

perceived after using the product. Based on the description of this theory, it can be concluded that user satisfaction is a person's feeling of happiness or disappointment resulting from comparing the performance or perceived results of an electronic product or service based on expectations. User satisfaction is measured by indicators of satisfaction with the speed of digital saving services, ease of use of digital saving, and satisfaction with accurate digital saving information.

Model Analysis

The results of remodeling with the SmartPLS 3.9.2 program consist of the PLS Algorithm model and the Bootstrapping model as shown in Figure 2, which is the final model that fits the data.
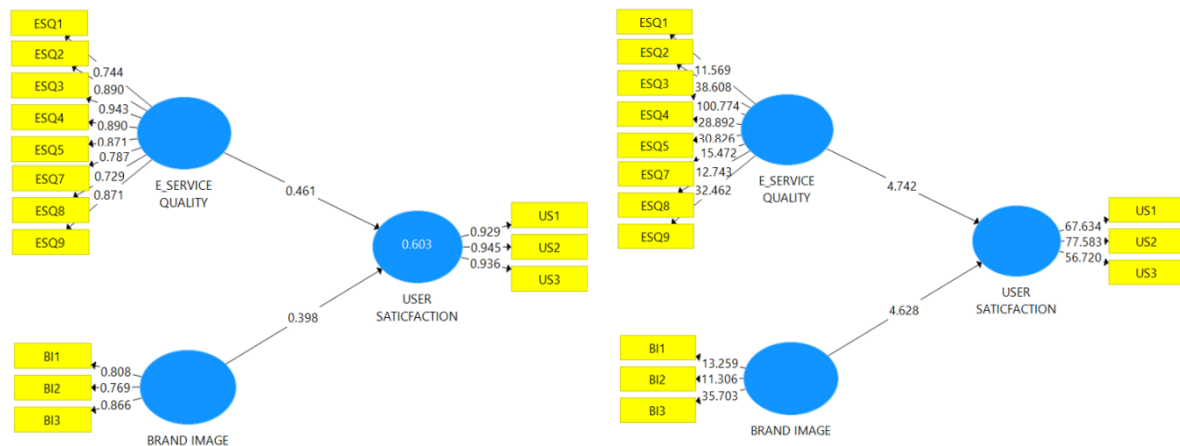
Source: Primary Data Processing, 2024
Figure 2. Final Model Algorithm & Bootstraping SmartPLS

Measurement Model Analysis

The results of the measurement model calculation using Partial Least Square (PLS) in Figure 2 above are presented in the table below.

Table 2. Measurement Model

Variable	Indicator	Loading Factor	STDEV	t Statistics	P Values	Cronbach's Alpha	CR	AVE
E_Service Quality (ESQ)	ESQ1 <- ESQ	0.744	0.064	11.569	0.000	0.941	0.952	0.712
	ESQ2 <- ESQ	0.890	0.023	38.608	0.000			
	ESQ3 <- ESQ	0.943	0.009	100.774	0.000			
	ESQ4 <- ESQ	0.890	0.031	28.892	0.000			
	ESQ5 <- ESQ	0.871	0.028	30.826	0.000			
	ESQ7 <- ESQ	0.787	0.051	15.472	0.000			
	ESQ8 <- ESQ	0.729	0.057	12.743	0.000			
	ESQ9 <- ESQ	0.871	0.027	32.462	0.000			
Brand Image (BI)	BI1 <- BI	0.808	0.061	13.259	0.000	0.766	0.856	0.665
	BI10 <- BI	0.769	0.068	11.306	0.000			
	BI2 <- BI	0.866	0.024	35.703	0.000			
User Satisfaction (US)	US1 <- US	0.929	0.014	67.634	0.000	0.931	0.955	0.877
	US2 <- US	0.945	0.012	77.583	0.000			
	US4 <- US	0.936	0.016	56.720	0.000			

Source: Primary Data Processing, 2024

Table 2 shows that the indicators used to measure the variables e_service quality, brand image, and user satisfaction have a loading factor value greater than 0.70, so they can be declared valid in measuring the variables. All variables measured by these indicators have a Composite Reliability (CR) value of more than 0.70, Cronbach's Alpha more than 0.70, and an Average Variance Extracted (AVE) value of more than 0.50, so that the indicators that measure the variables can be declared reliable.

Structural Model Analysis

Evaluation of the inner model was by testing the Coefficient of Determination or R-Square (R^2) value for the User Satisfaction contracts, as in table 3 below.

Table 3. *R-Square (R^2)*

Variabel	Cronbach's Alpha	CR	AVE	R Square
E_Service Quality (ESQ)	0.941	0.952	0.712	-
Brand Image (BI)	0.766	0.856	0.665	-
User Satisfaction (US)	0.931	0.955	0.877	0.603

Source: Primary Data Processing, 2024

E_service quality and brand image are able to explain the variability of the user satisfaction construct of 0.603, this value was included in the category of having a strong influence (Hair et al., 2014; Hopkins, 2015).

Evaluation of the predictive power of the model from exogenous latent constructs using Cross Validated Redundancy (Q^2 predictive). Cross Validated Redundancy (Q^2 predictive) values are as shown in the table below.

Table 4. *Q^2 predictive*

Variable	SSO	SSE	Q² (=1-SSE/SSO)
User Satisfaction (US)	240.000	117.191	0.512

Source: Primary Data Processing, 2024

The index construct cross-validated redundancy (Q^2 predictive) for the User Satisfaction (US) constructs was still greater than 0 (Q^2 predictive > 0), namely 0.512, this shows that the e_service quality and brand image constructs have still good predictive relevance for the User Satisfaction.

Path coefficient was a regression coefficient that shows the direct influence of exogenous variables on endogenous variables in a path model. Based on Figure 2, the following are the estimated output results from the structural model.

Table 5. *Path Model*

Path Model	Std. Loading Factor	Std. Deviation	t Statistics	P Values
E_Service Quality (ESQ) -> User Satisfaction (US)	0.461	0.097	4.742	0.000
Brand Image (BI) -> User Satisfaction (US)	0.398	0.086	4.628	0.000

Source: Primary Data Processing, 2024

The results of the path analysis test show that all path models are significant at an error level of 5% as indicated by t statistics > 1.96 and p values < 0.05.

The effect size (f^2) value can be calculated by noting the change in R^2, when certain constructs are removed from the model. This value was used to see whether the exogenous latent influence on the endogenous latent variable has a substantive influence.

Table 5. Efek Size (f^2)

Variabel	User Satisfaction (US)
E_Service Quality (ESQ)	0.323
Brand Image (BI)	0.241

Source: Primary Data Processing, 2024

The E_Service Quality (ESQ) construct has an effect size (f^2) value of 0.323 on User Satisfaction. This value shows that the effect size of the E_Service Quality construct, whether present or not in the model, is in the moderate influence category (Hair et al., 2014; Hopkins, 2015) on User Satisfaction at the structural level. Likewise, the Brand Image (BI) construct has an effect size (f^2) value of 0.244 on User Satisfaction. This value shows that the effect size of the Brand Image construct, whether present or not in the model, has in the moderate influence category (Hair et al., 2014; Hopkins, 2015) on User Satisfaction at the structural level.

Hypothesis Test

The results of hypothesis testing based on this research consist of three hypotheses, as in the table below.

Table 6. Hypothesis Test

	Hypothesis	Loading Factor	Std. Deviation	t/F Statistics	P Values	Result
H1	E_Service Quality (ESQ) -> User Satisfaction (US)	0.461	0.097	4.742	0.000	Significant
H2	Brand Image (BI) -> User Satisfaction (US)	0.398	0.086	4.628	0.000	Significant
H3	E_Service Quality & Brand Image (BI) (ESQ) -> User Satisfaction (US)	0.777	0.010	58.477	0.000	Significant

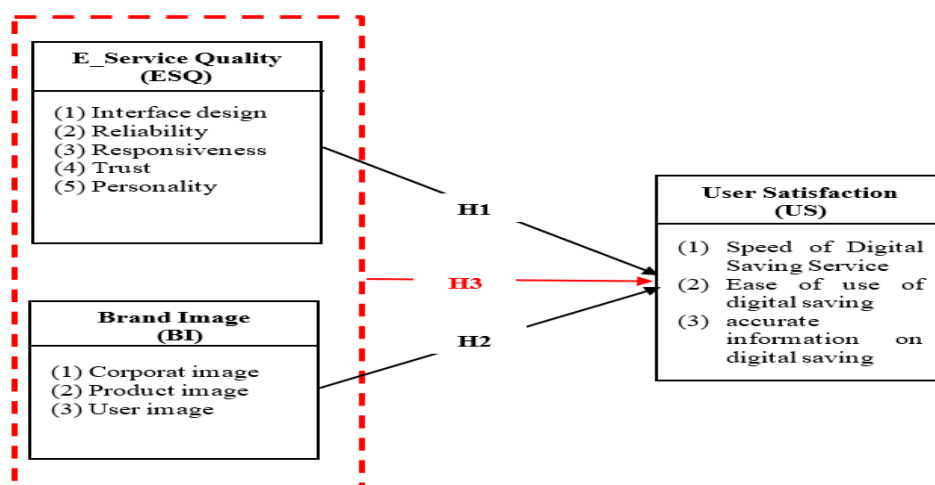Source: Primary Data Processing, 2024

Framework

Figure 1. Conceptual Framework

Hypothesis
H1: There was an influence of e_service quality on digital savings user satisfaction at Digital Banks in DKI Jakarta.
H2: There was an influence of brand image on digital savings user satisfaction at Digital Banks in DKI Jakarta.
H3: There was was a simultaneous influence of e_service quality and brand image on digital savings user satisfaction at Digital Banks in DKI Jakarta.

CONCLUSION
1) E_service quality has a positive and significant effect on digital savings user satisfaction at Digital Banks in DKI Jakarta. These results indicate that increasing digital saving user satisfaction, especially satisfaction with the ease of using digital saving, can be done by increasing e_service quality, especially increasing the reliability aspect in which service feature functions run smoothly and quickly).
2) Brand image has a positive and significant effect on digital savings user satisfaction at Digital Banks in DKI Jakarta. These results indicate that increasing digital saving user satisfaction, especially satisfaction with the ease of using digital saving, can be done by increasing brand image, especially increasing aspects of the user's image regarding the digital saving services used.
3) E_service quality and brand image simultaneously have a positive and significant effect on digital savings user satisfaction at Digital Banks in DKI Jakarta. These results show that a 60.30% increase in digital saving user satisfaction, especially satisfaction with the ease of using digital saving, can be done by simultaneously increasing e_service quality and brand image, especially increasing aspects of reliability and image of digital saving users.

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