THE EFFECT OF BANKING DIGITALIZATION THROUGH SELF-SERVICE TECHNOLOGY ON SATISFACTION AND LOYALTY OF CUSTOMERS USERS OF SHARIA BANK DIGITAL SERVICES

Zaid Raya Argantara[1], Ahmad Choiri[2]

Institut Dirosat Islamiyah Al-Amien Prenduan Sumenep [1]
Jl. Raya Prenduan- Sumenep, Pragaan Laok, Sumenep Jawa Timur
Institut Dirosat Islamiyah Al-Amien Prenduan Sumenep [2]
Jl. Raya Prenduan- Sumenep, Pragaan Laok, Sumenep Jawa Timur

zaidrayaargantara@gmail.com[1]
choiriahmad119@gmail.com[2]

ABSTRACT

Several sectors, including the financial industry, have widely used today's technology. This is marked by the emergence of financial technology (fitech). One of Fitech in banking is self-service technology. This study aimed to determine the effect of banking digitization through self-service technology on customer satisfaction and loyalty who use Islamic banking digital services at BPRS Bhakti Sumekar. This research is quantitative research with a correlational research type. The sample in this study was 100 internet banking users at BPRS Bhakti Sumekar Sharia Bank, who were taken using a simple random sampling technique. Data collection was carried out using questionnaires, observation, and documentation. The researchers analyzed the data quantitatively with the help of SPSS. The study results show a positive effect of banking digitization through self-service technology on customer satisfaction using Islamic bank digital services at BPRS Bhakti Sumekar. The influence of banking digitization through self-service technology on customer satisfaction using Islamic bank digital services at BPRS Bhakti Sumekar is 64.7%.
Keywords: banking digitization, self-service technology, satisfaction, loyalty

INTRODUCTION

Several sectors, including the financial industry, have widely used today's technology. This phenomenon is marked by the emergence of financial technology (fintech) both as a phenomenon of new financial products and services and as market players that affect the balance of ecosystems (Halim, 2021). Banking digitalization experienced rapid growth in Indonesia, especially when the COVID-19 pandemic hit.

Bank Indonesia stated that the COVID-19 pandemic had accelerated digital adoption in Indonesia, especially regarding digital payments in every transaction. During the pandemic, digital payments thrived with an increase of 65 percent. In short, the development of digital technology will eventually open up opportunities to drive economic growth as a new growth engine amidst a contracting global and domestic economy (Avianti & Triyono, 2021).

The use of technology in banking services raises new issues or concerns from the human resources side. Using technology in several banking services reduces human work (Salmah & Murti, 2020). One of the problems of Islamic banking in Indonesia is the increasingly tight competition between banks, both between Islamic banks and conventional banks and between Islamic banks themselves. Therefore there is a need for service diversity (Rifa'i, 2019).

Diversity of service quality is essential in order to increase customer loyalty to Islamic banking. This service quality can be implemented through strengthening instruments in the promotion aspect and service quality to create a good bank image, customer trust, and satisfaction which in turn gives birth to customer loyalty (Rosyidah & Andjarwati, 2021). It needs to be implemented in all banks, including BPRS Bhakti Sumekar.

The observation results show that BPRS Bhakti Sumekar has provided digital services through self-service technology. These services include automatic teller machines (ATMs) and mobile banking services, an innovative service offered by BPRS Bhakti Sumekar that allows customers to transact banking transactions via smartphones. Next is the internet banking service, which offers convenience and speed in conducting banking transactions by assuring its customers of the security and confidentiality of BPRS Bhakti Sumekar customer data.

Based on the three digital services of BPRS Bhakti Sumekar, the level of customer satisfaction in using digital services can be measured. Therefore, the authors conducted research intending to know the effect of banking digitization through self-service technology on customer satisfaction and loyalty who use Islamic Bank digital services at BPRS Bhakti Sumekar. Researchers hope that this research can provide experience in managing banking digitization through self-service technology and can be used as material for information and experience in

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seeking the influence of banking digitization through self-service technology on customer satisfaction and loyalty using Islamic bank digital services.

METHOD

This research is quantitative research with a correlational research type. There are two variables in this study, namely, the independent variable and the dependent variable. The independent variable in this study is banking digitization through self-service technology. In contrast, the dependent variable in this study is customer satisfaction using Islamic bank digital services at BPRS Bhakti Sumekar. The population used in this study were all customers who used internet banking at the BPRS Bhakti Sumekar Sharia Bank, totaling 1,105 people.

Meanwhile, the sample in this study was 100 internet banking users at BPRS Bhakti Sumekar Sharia Bank, who were taken using a simple random sampling technique. Data collection was carried out using questionnaires, observation, and documentation. The collected data were then analyzed quantitatively with the help of SPSS.

DISCUSSION

Characteristics of Respondents

Based on the results of a questionnaire to 100 customers, the characteristics of the respondents were obtained as follows:

Table I. Characteristics of Respondents

Characteristics	Category	n	%
Gender	Male	71	71%
	Female	29	29%
Age	<25	21	21%
	26-35	47	47%
	36-55	32	32%
	>55	0	0
Last Education	S3 (Doctoral) S2 (Post-Graduated)	2	2%
	S1 (Under Graduated)	12	12%
	D3 (Diploma)	1	1%
	SMA (Senior High School)	85	85%

Based on the data presented in Table I, it is known that the average respondent is male, namely 71 people (71%). The number of respondents with an average age of 26-35 years dominated BPRS Bhakti Sumekar, namely 47 people (47%). The last educational level of the respondents in dominating the study was high school frequency with as many as 85 customers with a percentage of 85% so that the total number of education-dominating customers using Islamic bank digital services at BPRS Bhakti Sumekar.

Normality test

This normality test aims to test whether, in the regression model, the dependent variable and independent variable are normally distributed or not to detect normality using the Kolmogorov-Smirnov. The following are the results of the normality test:

Table II. Normality Test Results

N		100
Normal Parameters	Mean	.000000
	Std Deviation	2.75983001
Most Estreme Differences	Absolute	.095
	Positive	.051
	Negative	-.095
Test Statistic		.095
Asymp. Sig. (2-tailed)		.288

If the sig value <0.01, then the data under study is not normal. Conversely, the data studied is normal if the sig value > 0.01. Based on Table II, it is known that the data studied is normally distributed due to the significance value (0.288).

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Multicollinearity Test

In order to analyze the data on whether or not multicollinearity occurs in the study, it can be seen from the tolerance value, which must be greater than 0.1, or the VIF value must be less than 10. The following are the results of the multicollinearity test:

Table III. Multicollinearity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	24.083	1.876		12.837	.000		
Banking Digitization Through Self Service Technology	.286	.034	.647	8.406	.000	1.000	1.000

The multicollinearity test results in Table III show that each variable has a tolerance value above 0.1, and the VIF is below 10 for all. Then the data tested can be concluded that there is no multicollinearity

Heteroscedasticity Test

The following are the results of the heteroscedasticity test:

Table IV. Heteroscedasticity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.646	1.172		1.405	.163
Banking Digitization Through Self-Service Technology	.009	.021	.043	.429	.669

The data above shows that the Sig Variable value of banking digitization through self-service technology is 0.669. It can be seen from its significance value to determine whether heteroscedasticity occurs. If the Sig value < 0.05, there is heteroscedasticity; if Sig > 0.01 there is no heteroscedasticity problem. The sig value above does not indicate heteroscedasticity because the sig value (0.163) > 0.01.

Linearity Test

The following are the results of the linearity test:

Table V. Linearity Test Results

			Sum of Squares	df	Mean Square	F	Sig.
Satisfaction and Loyalty of Customers of Sharia Bank Digital Service Users * Banking Digitalization Through Self-Service Technology	Between Groups	(Combined)	785.648	32	24.552	3.212	.000
		Linearity	543.710	1	543.710	71.134	1.000
		Deviation from Linearity	241.938	31	7.804	1.021	.458
	Within Groups		512.112	67	7.643		
		Total	1297.760	99			

The test results above show that the data the researcher tested has a linearity significance value of 1.000, which means the sig value > 0.01. So, the results of the linearity test show that the variables above have a linear relationship.

Linearity Test

The following are the results of the linearity test:

Table VI. Linearity Test Results

Model	Unstandardized Coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	24.083	1.876		12.837	.000
Banking Digitization Through Self-Service Technology	.286	.034	.647	8.406	.000

In order to find out whether the research hypothesis is accepted, the first is to look at the sig value, which is 0.000, which is less than 0.01. The conclusion is that the working hypothesis (H1) states that "there is an effect of banking digitization through self-service technology on customer satisfaction and loyalty who use digital services." Islamic bank at BPRS Bhakti Sumekar" is accepted. While the null hypothesis (Ho), states that there is no effect of banking

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digitalization through self-service technology on customer satisfaction and loyalty using Islamic bank digital services at BPRS Bhakti Sumekar is rejected.

After finding the effect mentioned above, the researchers calculated how significant the effect was with the linear regression formula using SPSS.

Table VII. Summary Model Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.647	.419	.413	2.774

Table VII shows the magnitude of the influence of the independent variable (banking digitization through self-service technology) on the dependent variable (customer satisfaction using Islamic bank digital services). This influence is symbolized by R (correlation). As seen in the model summary table above, the value in column R is 0.647, meaning that the effect of the independent variable (banking digitization through self-service technology) on the dependent variable (customer satisfaction using Islamic bank digital services) is 64.7% (0.64.7 x 100%). However, this value can be "contaminated" by various interfering values that might cause measurement errors. For that, SPSS provides an alternative R Square value as a comparison of the accuracy of the effect. It can be seen that the R Square value is 0.419, which means 41.9%.

DISCUSSION

The results of the study show that there is an effect of banking digitization through self-service technology on customer satisfaction and loyalty who use Islamic bank digital services at BPRS Bhakti Sumekar. This research aligns with previous research conducted by Dharmawan (2018), which stated that the quality of self-service technology facilities greatly influences customer behavior, including customer satisfaction. Another study conducted by Manjhi (2017) stated that self-service technology facilities have an essential role in customer life, especially ATM facilities which are the most preferred service in customer life. The research conducted by Wicaksono (2015) explained that self-service technology facilities have a positive and significant influence on customer satisfaction and loyalty by assisting technology in helping problems.

This study's results follow the theory presented by Lupiyoadi et al. (2009), which states that self-service technology facilities are facilities provided to customers to serve their own needs without the help of bank staff. Self-service technology facilities help customers quickly make transactions and can ensure transactions are fast, effective, and efficient. Banks increasingly use new technologies in a digitized environment to provide fast and easy service interfaces for their

customers (Iqbal, 2018). The definition of *digitizing information* is converting various information or news from analog to digital formats to make it easier to produce, manage, store, or distribute to the general public (Salmah & Murti, 2020). The information presented is in text, audio, numbers, and visuals, which contain business, social, and many other information (Amrillah, 2020).

Through current technology, digital banks can offer more personalized services with their data. With the help of artificial intelligence technology, it will make it easy for digital banks to analyze customer data (Supranto, 2018) quickly. Of course, this can also be done by digital banks through artificial intelligence, which will be able to design products and services according to the characteristics of their customers. Digital banks will become faster and more responsive and avoid the bureaucracy of making decisions in the old way. Self-service technology facilities in ATMs, internet banking, and mobile banking make customers feel more independent in transactions, namely fund transfers, online bill payments, and cash payments. Customers do not need to visit a bank to make transactions; they can access transaction services using self-service technology facilities. Customer satisfaction occurs due to the satisfaction felt after operating the Mobile Banking facility in fulfilling transaction needs that can be carried out quickly, effectively, and efficiently.

CONCLUSION

Based on the results and discussion, banking digitization through self-service technology positively affects customer satisfaction using Islamic bank digital services at BPRS Bhakti Sumekar. The influence of banking digitization through self-service technology on customer satisfaction using Islamic bank digital services at BPRS Bhakti Sumekar is 64.7%.

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REFERENCES

Amrillah, M. U. (2020). Urgensi Pembentukan Undang-Undang Digital Banking Bagi Perbankan Syariah Di Indonesia. *Jurnal Renaissance*, *5(4)*, 928.

Avianti, I., & Triyono. (2021). *Ekosistem Fintech Di Indonesia*. Kaptain Komunikasi Indonesia.

Dharmawan, S. A. (2018). *Pengaruh Digitalisasi Perbankan Melalui Fasilitas Self Service Technology (SST) terhadap Perilaku Nasabah Prioritas (Studi Kasus di PT. Bank Bukopin, Tbk)*. Universitas Negeri Jember.

Halim, Y. (2021). Self-Service Technology Berbasis Android Menggunakan Rest Ful Web Service Pada Bisnis Restoran". *Journal Of Applied Computer Science And Technology (JACOST)*, *2(2)*, 75–79.

Lupiyoadi, Rambat, & Hamdani, A. (2009). *Manajemen Pemasaran Jasa Edisi Kedua*. Salemba Empat.

Manjhi, A. (2017). Analysis of Customers Preference Towards Banking Self Service Technologies in Reference to District Gorakhpur, State Uttar Pradesh. *International Journalof Research in Management, Economics and Commerce*, *7(9)*, 75–80.

Rifa'i, K. (2019). *Membangun Loyalitas Pelanggan*. Zifarama.

Rosyidah, N., & Andjarwati, A. L. (2021). Pengaruh Self-Service Technology Quality Terhadap Loyalitas Dengan Kepuasan Sebagai Variabel Mediasi (Studi Pada Pelanggan Mcdonald's di Surabaya). *Journal Image*, *10(1)*, 21.

Salmah, & Murti, A. (2020). Dampak Digitalisasi Terhadap Peran Front Office Dalam Bisnis Perbankan. *Jurnal Ilmiah Manajemen Fakultas Ekonomi*, *6(2)*, 176–147.

Supranto. (2018). *Pengukuran Tingkat Kepuasan Pelanggan untuk Menaikkan Pangsa Pasar*. Rineka Cipta.

Wicaksono, B. S. (2015). Pengaruh Self-Service Technology Terhadap Kepercayaan, Kepuasan Nasabah, Dan Loyalitas Nasabah (Survei Pada Nasabah Pt. Bank Rakyat Indonesia (Persero) Tbk. Kantor Cabang Malang Kawi Kanwil Malang). *Jurnal Administrasi Bisnis*, *25(2)*, 11–20.