

THE EFFECT OF BRAND TRUST ON CUSTOMER LOYALTY OF BANK SYARIAH INDONESIA WITH CYBER SECURITY AS A MODERATION VARIABLE

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Abstract

This study aims to determine the significant impact of brand trust on customer loyalty at Bank Syariah Indonesia, with cybersecurity serving as a moderating variable. The population for this study comprises teachers, administrators, and staff of the Madinatul Qur'an Islamic Boarding School Depok who are customers of Bank Syariah Indonesia. The sample size consisted of 120 customers, selected using a saturated sampling technique. Data were collected through questionnaires. The data analysis technique employed is Structural Equation Modeling (SEM) using SmartPLS version 3.0. The results of the study indicate that brand trust has a positive and significant effect on customer loyalty at Bank Syariah Indonesia. However, the moderating effect of cybersecurity—interacting with the constructs of brand trust and loyalty—showed negative and insignificant results concerning customer loyalty at Bank Syariah Indonesia. In conclusion, the study finds that higher levels of customer trust in the Bank Syariah Indonesia brand are associated with greater customer loyalty, regardless of the cybersecurity factor.

Keywords: Brand Trust, Loyalty, Cyber Security, Structural Equation Modeling (SEM).

A. INTRODUCTION

As times progress, brand competition in Indonesia, encompassing both local and international brands, has become increasingly intense. Consequently, a company's brand must not only survive but also continue to grow. Consumers are more likely to trust a brand that consistently meets their needs and expectations. This principle applies to banks in Indonesia as well. Banks are organizations that rely heavily on customer trust; without it, they cannot conduct their business effectively. Thus, it is crucial for banks to build and maintain this trust.

Customer satisfaction brings numerous benefits, including fostering closer relationships between the company and its customers, creating a positive impression, and generating recommendations from one customer to another, all of which can enhance the company's reputation and customer loyalty. Customer loyalty is a valuable asset for banks. To retain loyal customers, banks must prioritize maintaining existing customer privileges rather than focusing solely on acquiring new customers.

In parallel, technological advancements have significantly impacted finance, with social transformation manifesting in the widespread adoption of cashless transactions and the emergence of financial technology. However, despite the conveniences and benefits provided

by digital technology in banking, challenges persist. Rapid technological advancements can lead to issues related to data security, commonly referred to as cybersecurity, particularly in the management of e-banking services.

According to Tempo (2023), Bank Syariah Indonesia was reported to have experienced a ransomware attack—a type of malware that encrypts files on May 8, 2023. Given the risks associated with data breaches and ransomware, Bank Syariah Indonesia must focus on enhancing its security measures and maintaining high standards of trust to minimize customer risk perceptions.

Literature Review and Hypotheses Development

According to Lau and Lee (1999), brand trust is defined as the consumers' willingness to rely on a brand despite the potential risks, based on the expectation that the brand will deliver favorable outcomes.

Griffin (2002) defines customer loyalty as the strength of the relationship between an individual's attitudes and repeat purchases. For banks to build loyalty, they must focus on the value of their products, service quality, and overall customer experience to demonstrate their ability to meet consumer needs and build strong relationships. Customer loyalty can be fostered through two key factors: a strong attachment to a specific product compared to competitors' products and repeated purchases.

This study aims to evaluate whether cybersecurity has a positive or negative effect on the relationship between brand trust and customer loyalty.

According to the International Organization for Standardization (ISO), cybersecurity is defined as efforts to maintain the confidentiality, integrity, and availability of information in cyberspace. Cyberspace is a complex environment resulting from the interaction between people, software, and services on the internet, supported by information and communication technology (ICT) devices and global network connections. In the banking sector, cybersecurity efforts focus on ensuring security and maintaining confidentiality, integrity, and availability in banking operations.

Apriliani (2019) conducted a study titled "The Influence of Brand Trust, Brand Equity, and Brand Image on Customer Loyalty: A Study of Sosro Bottled Tea Customers in Wonosobo." This research, which involved a sample of 97 participants and employed multiple linear regression analysis, found that brand trust, brand equity, and brand image all positively influence customer loyalty.

In another study by Putri et al. (2023), titled "Perceived Usefulness and Informational Security on Loyalty Through Trust as a Mediating Variable," it was concluded that perceived usefulness significantly affects trust, informational security does not positively affect trust, perceived usefulness does not significantly affect loyalty, informational security does not significantly affect trust or loyalty, trust has a positive effect on loyalty

B. RESEARCH METHODS

This study employs a descriptive research approach. Data collection was conducted directly in the field through the distribution of questionnaires. The population for this study consists of teachers, administrators, and staff of the Madinatul Qur'an Depok Islamic Boarding School who are customers of Bank Syariah Indonesia and are aged 21-60 years, totaling 120 individuals. The study utilizes a saturated sampling technique, where all members of the population are included as samples. This method is used when the population is relatively small, also known as a census (Sugiono, 2016).

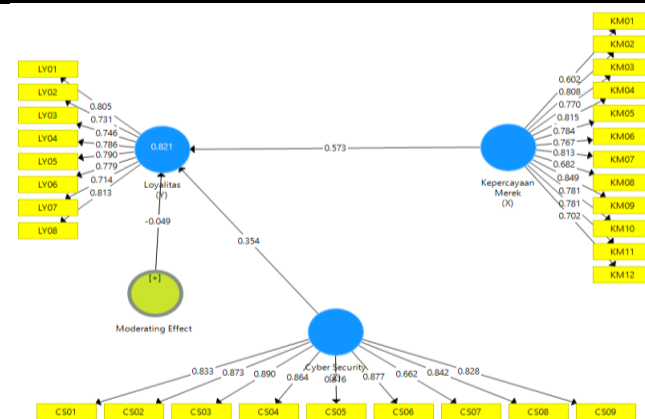
The sampling criteria for this study are as follows customers of Bank Syariah Indonesia, male and female, muslim, in possession of an ID card, aged 21-60 years, teachers, administrators, and staff of the Madinatul Qur'an Islamic Boarding School Depok.

The variables examined in this study include Brand Trust (X), Customer Loyalty at Bank Syariah Indonesia (Y), Cybersecurity as a moderating variable (Z).

The data analysis technique used is Structural Equation Modeling (SEM) with SmartPLS version 3.0. SEM is a statistical method designed to analyze the relationships between variables and their indicators. This study employs Partial Least Squares (PLS) as part of the SEM approach to derive latent variables aimed at prediction. The choice of SEM-PLS is due to the study's focus on developing a theory oriented towards prediction. SmartPLS 3.0 is used because it accommodates relatively small sample sizes and does not require the data to be normally distributed

C. RESULTS AND DISCUSSION

Outer Model



Source: SmartPLS 3.0 data processing results

Figure 1. Loading factor

The loading value for individual reflective measures is considered high if it exceeds 0.70. However, in research at the development stage, a loading value between 0.50 and 0.60 is also deemed acceptable.

- Validity Test
Convergent validity

Table 1. Moderation Convergence Validity

	Cyber Security_(Z)	Brand Trust_(X)	Loyalty_(Y)	Moderating Effect _
CS01	0.833			
CS01 * KM01				0.787
CS01 * KM02				1.208
CS01 * KM03				1.126
CS01 * KM04				1.252
CS01 * KM05				1.111
CS01 * KM06				1.181
CS01 * KM07				1.142
CS01 * KM08				0.908
CS01 * KM09				1.259
CS01 * KM10				1.160
CS01 * KM11				0.944

CS01 * KM12		0.938
CS02	0.873	
CS02 * KM01		0.784
CS02 * KM02		1.219
CS02 * KM03		1.155
CS02 * KM04		1.211
CS02 * KM05		1.120
CS02 * KM06		1.217
CS02 * KM07		1.199
CS02 * KM08		0.819
CS02 * KM09		1.195
CS02 * KM10		1.195
CS02 * KM11		1.029
CS02 * KM12		0.972
CS03	0.890	
CS03 * KM01		0.983
CS03 * KM02		1.330
CS03 * KM03		1.282
CS03 * KM04		1.314
CS03 * KM05		1.266
CS03 * KM06		1.276
CS03 * KM07		1.242
CS03 * KM08		1.123
CS03 * KM09		1.295
CS03 * KM10		1.330
CS03 * KM11		1.078
CS03 * KM12		1.065
CS04	0.864	
CS04 * KM01		1.050
CS04 * KM02		1.194
CS04 * KM03		1.094
CS04 * KM04		1.211

CS04 * KM05		1.095
CS04 * KM06		1.154
CS04 * KM07		1.209
CS04 * KM08		0.899
CS04 * KM09		1.197
CS04 * KM10		1.170
CS04 * KM11		1.194
CS04 * KM12		0.880
CS05	0.816	
CS05 * KM01		1.066
CS05 * KM02		1.221
CS05 * KM03		1.022
CS05 * KM04		1.215
CS05 * KM05		1.162
CS05 * KM06		1.192
CS05 * KM07		1.253
CS05 * KM08		1.127
CS05 * KM09		1.205
CS05 * KM10		1.220
CS05 * KM11		1.208
CS05 * KM12		1.072
CS06	0.877	
CS06 * KM01		0.853
CS06 * KM02		1.202
CS06 * KM03		1.189
CS06 * KM04		1.287
CS06 * KM05		1.137
CS06 * KM06		1.251
CS06 * KM07		1.250
CS06 * KM08		1.269
CS06 * KM09		1.317
CS06 * KM10		1.192

CS06 * KM11		1.062
CS06 * KM12		1.146
CS07	0.662	
CS07 * KM01		0.522
CS07 * KM02		1.071
CS07 * KM03		0.830
CS07 * KM04		0.941
CS07 * KM05		0.905
CS07 * KM06		0.965
CS07 * KM07		0.987
CS07 * KM08		0.776
CS07 * KM09		0.935
CS07 * KM10		1.024
CS07 * KM11		0.727
CS07 * KM12		0.626
CS08	0.842	
CS08 * KM01		0.832
CS08 * KM02		1.225
CS08 * KM03		0.994
CS08 * KM04		1.104
CS08 * KM05		1.178
CS08 * KM06		1.230
CS08 * KM07		1.184
CS08 * KM08		1.216
CS08 * KM09		1.230
CS08 * KM10		1.225
CS08 * KM11		0.974
CS08 * KM12		0.999
CS09	0.828	
CS09 * KM01		0.972
CS09 * KM02		1.327
CS09 * KM03		1.243

CS09 * KM04	1.273
CS09 * KM05	1.178
CS09 * KM06	1.237
CS09 * KM07	1.231
CS09 * KM08	1.222
CS09 * KM09	1.257
CS09 * KM10	1.314
CS09 * KM11	1.178
CS09 * KM12	1.038
KM01	0.602
KM02	0.808
KM03	0.770
KM04	0.815
KM05	0.784
KM06	0.767
KM07	0.813
KM08	0.682
KM09	0.849
KM10	0.781
KM11	0.781
KM12	0.702
LY01	0.805
LY02	0.731
LY03	0.746
LY04	0.786
LY05	0.790
LY06	0.779
LY07	0.714
LY08	0.813

Source: SmartPLS 3.0 data processing results

Discriminant validity

Table 2. Moderation Discriminant Validity

	AVE	\sqrt{AVE}
<i>Cyber Security_(Z)</i>	0.696	0.834
Brand Trust_(X)	0.586	0.766
Loyalty_(Y)	0.595	0.771
<i>Moderating Effect _</i>	0.600	0.774

Source: SmartPLS 3.0 data processing results

To test discriminant validity, the square root of the Average Variance Extracted (AVE) for each construct is compared with the correlations between that construct and other constructs. A good indicator of discriminant validity is when the square root of the AVE for each construct is greater than its correlations with other constructs. Additionally, each construct should have an AVE value greater than 0.50.

The table indicates that the square root of the AVE for each construct exceeds the correlations with other constructs, and each construct has an AVE value greater than 0.50. Therefore, it can be concluded that the model meets the criteria for discriminant validity.

- Reliability Test

Table 3. Moderation Reliability

	<i>Cronbach's Alpha</i>	<i>Composite Reliability</i>
<i>Cyber Security_(Z)</i>	0.945	0.954
Brand Trust_(X)	0.935	0.944
Loyalty_(Y)	0.902	0.921
<i>Moderating Effect _</i>	0.994	0.994

Source: SmartPLS 3.0 data processing results

The rule of thumb for assessing reliability is that both the composite reliability value and Cronbach's Alpha should be greater than 0.60. Values above this threshold indicate that the constructs are reliable and the research can proceed. The table above demonstrates that all constructs in this study meet this criterion and are thus deemed reliable.

- Model Fit

Table 4. Moderation Model Fit

	<i>Saturated Model</i>	<i>Estimated Model</i>
SRMR	0.066	0.066

Source: SmartPLS 3.0 data processing results

To ensure a good model fit, the Standardized Root Mean Square Residual (SRMR) should be less than 0.08. According to the table above, the SRMR value for this research model is 0.066, which is less than the threshold of 0.080. Therefore, it can be concluded that the research model fits well.

Inner Model

- Adjusted R Square (R^2)

Table 5. Moderation Adjusted R Square (R^2)

	<i>R Square</i>	<i>R Square Adjusted</i>
Loyalty_(Y)	0.821	0.816

Source: SmartPLS 3.0 data processing results

The rule of thumb for interpreting the influence of exogenous variables on endogenous variables is as follows: an R-squared value of 0.67 or higher indicates a strong model, 0.33 signifies a moderate model, and 0.19 represents a weak model. A higher R-squared value reflects a better-fitting research model. According to the table above, the R-squared value is 0.821, which indicates that this study represents a strong and well-fitting model.

- Hypothesis

Table 6. Moderation Hypothesis

<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation (STDEV)</i>	<i>T Statistics (O/STDEV)</i>	<i>P Values</i>	<i>Result</i>

<i>Cyber Security</i> _(Z) -> Loyalty_(Y)	0.354	0.355	0.078	4.526	0.000	Accepted
Bran Trust_(X) -> Loyalty_(Y)	0.573	0.570	0.077	7.416	0.000	Accepted
<i>Moderating Effect</i> _ -> Loyalty_(Y)	-0.049	-0.055	0.044	1.123	0.262	Rejected

Source: SmartPLS 3.0 data processing results

The table above indicates that both cybersecurity constructs and brand trust have a positive and significant effect on customer loyalty. However, the moderating effect of cybersecurity on the relationship between brand trust and loyalty shows a t-statistic of 1.123, which is less than the critical value of 1.96, and a p-value of 0.262, which is greater than 0.05. This suggests that cybersecurity does not significantly affect or moderate customer loyalty at Bank Syariah Indonesia.

The analysis conducted using SmartPLS 3.0 reveals that brand trust has a positive and significant effect on customer loyalty, with a t-statistic of 7.416 (greater than 1.96) and a p-value of 0.000 (less than 0.05). This finding indicates that customers of Bank Syariah Indonesia trust and rely on the brand, even when there are risks associated with their transactions or entrusted funds.

The hypothesis test results, as shown in Table 6, confirm that the moderating effect of cybersecurity on the relationship between brand trust and customer loyalty is negative and insignificant, with a t-statistic of 1.123 and a p-value of 0.262. This implies that cybersecurity does not significantly influence (either strengthen or weaken) the impact of brand trust on customer loyalty. Consequently, customers maintain their trust in the Bank Syariah Indonesia brand regardless of its cybersecurity measures

D. CONCLUSIONS AND RECOMMENDATIONS

The Brand Trust variable has a positive and significant effect on customer loyalty at Bank Syariah Indonesia. This indicates that brand trust is a key factor influencing the level of customer loyalty. As customer trust in Bank Syariah Indonesia increases, so does their loyalty. Among the indicators of brand trust, "brand liking" has the highest average value, followed by "trust in the company." Conversely, "brand reputation" has the lowest value.

The Cybersecurity variable does not significantly impact the interaction between brand trust and customer loyalty. This suggests that cybersecurity does not moderate the relationship between brand trust and loyalty in this study. Customers' trust in the brand remains strong irrespective of cybersecurity concerns, with a greater emphasis on "brand liking" and "trust in the company" rather than on cybersecurity. Within the cybersecurity construct, the indicator with the lowest value is "availability," indicating that respondents felt the distribution of BSI ATMs was insufficient for convenient access. On the other hand, the highest-rated indicator is "authentication system," reflecting respondents' belief that Bank Syariah Indonesia has a reliable system for verifying customer identity.

Recommendations for Future Research: It is suggested that future studies increase the sample size and explore broader scopes. Additionally, considering cybersecurity as an independent variable may provide insights into its potential positive and significant effects on customer loyalty. For Bank Syariah Indonesia, it is recommended to maintain high levels of brand liking, improve brand reputation, and enhance the availability of services.

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