



TECHNOLOGICAL DISRUPTION AND THE THREAT TO ISLAMIC BANKING MARKET SHARE IN ACEH: EVALUATING THE ENFORCEMENT OF QANUN LKS NO. 11/2018

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Abstract

The Islamic banking industry in Aceh plays a strategic role as the backbone of the regional financial system, especially after the enactment of the Sharia Financial Institution (LKS) Qanun No. 11 of 2018 which requires all financial institutions to operate exclusively based on sharia principles. Normatively, this regulation is expected to be able to strengthen the market share of Islamic banking. However, empirical evidence shows that despite almost fully controlling banking assets, Islamic banks in Aceh still face ongoing challenges in digital penetration, financial inclusion, and competition with fintech. This study aims to examine two main challenges faced by the banking industry in Aceh, namely: the effectiveness of the enforcement of Qanun LKS and the impact of technological disruption on the market share of Islamic banking in Aceh. This refers to the theory that technology can influence customer loyalty which will lead to an increase in the market share of Islamic banking by using an explanatory quantitative approach, data was collected from 120 respondents through purposive sampling and analyzed using Structural Equation Modeling with WarpPLS. The results showed that technological disruption did not have a significant direct effect on the market share of Islamic banking ($\beta = -0.112$, $p > 0.05$). However, the moderation effect of Qanun LKS enforcement was shown to significantly weaken the relationship ($\beta = -0.152$, $p < 0.05$). Factors that affect the market share of Islamic banking are financial literacy, service innovation, and customer trust. This research contributes to the literature by highlighting the paradox between regulatory enforcement and technological disruption in a fully sharia-based financial ecosystem. The findings of this study reveal a paradox in the implementation of Qanun LKS No. 11 of 2018 in Aceh. Normatively, this qanun is supposed to strengthen the dominance of Islamic banking, but the results of the analysis show that the stricter enforcement is carried out, the more market share is under pressure. This happens because the limitations of digital services and the flexibility of Islamic bank products encourage people to switch to more innovative non-bank fintech. This is contradictory, technology should have a significant effect on increasing the market share of Islamic banking, especially supported by the existence of Qanun about Islamic financial institutions, but in reality technology and Qanun cannot increase the market share of Islamic banking in Aceh. These findings confirm that regulation alone is not enough to expand the market; synergy between qanun enforcement, digital transformation, financial literacy, and service quality improvement is needed so that Islamic banking in Aceh is able to

maintain its market share sustainability in the midst of technological disruption. This finding actually enriches the insight that the fintech capabilities of Islamic banking are still laggard compared to conventional banks, causing its influence on the increase in market share to be limited.

Keywords: *Islamic banking; market share; technological disruption; qanun LKS; aceh*

A. INTRODUCTION

The Islamic banking industry in Aceh has a strategic role as the backbone of the regional financial system, especially after the enactment of the Sharia Financial Institution (LKS) Qanun No. 11 of 2018. This regulation requires all financial institutions in Aceh to operate based on sharia principles, effectively replacing conventional banking operations. Normatively (*das sollen*), this policy framework should be able to significantly increase the market share of Islamic banking and place Aceh as a model for the successful implementation of the full Islamic financial system in the dual banking system environment in Indonesia.

However, empirical reality (*das sein*) shows that the development of the Islamic banking market share in Aceh has not fully met expectations. Data from the Financial Services Authority (OJK, 2023) indicates that even though Islamic banks in Aceh control almost 100% of banking assets, there are still challenges related to service penetration, financial inclusion, and digital literacy. At the same time, the rapid pace of technological disruption—through digital banking, fintech innovation, and mobile-based financial services—is posing a new threat to market share stability. The younger generation, in particular, is increasingly interested in the convenience, speed, and flexibility of fintech services, which often surpass Islamic banks in terms of digital innovation and customer experience (Simahatie & Inuzula, 2022).

This creates a paradox: on the one hand, the enforcement of Qanun LKS aims to strengthen the dominance of Islamic banking; but on the other hand, the industry faces external pressures from disruptive technologies as well as internal limitations in digital adaptation. Thus, a crucial question arises: *To what extent does the enforcement of Qanun LKS really strengthen the position of the Islamic banking market in Aceh, and how does technological disruption reshape the dynamics of competition?*

In theory, technology has a great influence on the market share of banking, including Islamic banking. Some of the underlying theories and concepts include: Technology Acceptance Model (TAM) - Davis (1989) states that the adoption of technology by users is influenced by perceived usefulness and perceived ease of use. In the context of banks, if technology is easy and useful, it will increase customer loyalty and acquisition, thus having an impact on market share. Furthermore the Theory of Competitive Advantage (Porter)- The use of technology can create a competitive advantage, such as faster and more efficient services Wider digital access, banks that are superior in technology tend to capture a larger market, the next Innovation Diffusion Theory (Rogers, 2003) Banks that are quick to adopt and deploy new technologies will be more quickly accepted by the market, Technologies such as mobile banking, fintech, AI, digital onboarding help banks reach new market segments and increase market

share.

From an academic perspective, this issue highlights the existence of a research gap. Previous studies (e.g. Chapra, 2016; Karim, 2020; OJK, 2022) emphasizes more the positive role of the regulatory framework in supporting the development of Islamic finance. Similarly, the literature related to technological disruption generally focuses on its potential in increasing efficiency, innovation, and customer engagement in financial services, further research on GHRM, Leadership Style and employee satisfaction. However, empirical research exploring the intersection between regulatory enforcement in Islamic finance and technological disruption is still very limited, especially in the socio-legal context of Aceh as the only province in Indonesia that fully implements Islamic banking through regional legal instruments. So that the opportunity for Islamic banks to develop is better (Noor et al., 2023) (Belias et al., 2015) (Alwi et al., 2021). In addition, a solid banking organization will have a good impact on the development of the banking sector (Dubey et al., 2020)

Therefore, this study seeks to fill this gap by analyzing the dual challenges faced by Islamic banking in Aceh: the threat posed by technological disruption and the effectiveness of Qanun LKS enforcement in maintaining and increasing market share. This study is not only relevant to understand the sustainability of Islamic banking in Aceh, but also contributes to a broader discourse on Islamic financial resilience in the digital age. (Nisaa et al., 2024)

B. LITERATURE REVIEW

1. Qanun Aceh and the Implementation of Sharia Finance

Qanun is a special legislation that applies in Aceh Province in the context of the implementation of special autonomy as stipulated in Law Number 11 of 2006 concerning the Government of Aceh. One of the important qanun is Qanun Aceh Number 11 of 2018 concerning Sharia Financial Institutions (LKS) which requires all financial activities in Aceh to be carried out through sharia-based financial institutions. The purpose of this qanun is to build an Islamic economic system that is just, free from usury, and in accordance with sharia principles (Zahara, 2020; Azwar, 2022). However, in its implementation, this qanun poses various challenges, especially in infrastructure readiness, community financial literacy, and adaptation of economic actors.

2. Sharia Banking and Financial System Conversion

Islamic banking is a banking system based on Islamic principles, such as the prohibition of *riba*, *gharar*, and *maisir*, and is based on sharia contracts such as *mudharabah*, *musyarakah*, *murabahah*, *ijarah*, and others. Along with the implementation of Qanun LKS, all conventional banks in Aceh were closed and replaced with Islamic financial institutions. According to Yusuf, the success of the Islamic banking system is greatly influenced by public literacy, product innovation, and service efficiency. In the context of Aceh, the conversion of this system has not

been completely smooth due to limited facilities, public understanding, and limited Islamic bank networks, especially in remote areas (Bank Indonesia, 2021). (Yusuf et al., 2023)

3. Variabel Independen (X) – Technological Disruption

Disruptive Innovation Theory – Christensen (1997)

According to Christensen, *disruption* occurs when new innovations emerge and shift old technologies, thereby changing the structure of the market. *Disruptive technology* usually starts from a neglected market segment (*low-end market*) with simpler, cheaper, and more accessible products or services, and then gradually takes over the main market. In the context of banking, digital technologies such as *mobile banking*, *internet banking*, and *fintech* are forms of disruption that have the potential to replace conventional methods of financial services. Describe the factors of technological change that have the potential to disrupt the market share of Islamic banking. Indicators:

- a. Digitalization of Financial Services (mobile banking, internet banking, fintech)
- b. Customer Preference Shifts
- c. Competition from Fintech & Digital Banks (kehadiran pesaing non-bank)
- d. Service Efficiency & Speed (convenience, speed, and cost of digital transactions)

4. Variabel Moderating (M) – Enforcement of Qanun LKS No. 11/2018

The role of the qanun as a regulator of the Islamic financial system in Aceh can strengthen or weaken the influence of technological disruption. Indicators:

- a. Regulatory Compliance (financial institution compliance with Qanun LKS)
- b. Government Supervision (the effectiveness of supervision by the OJK, BI, MPU, and the Government of Aceh)
- c. Public Awareness (public understanding of LKS obligations)
- d. Legal Enforcement (strictness of the application of sanctions and regulations)

5. Variabel Dependen (Y) – Market Share of Islamic Banking in Aceh

Market share is the percentage of sales of a company or institution in an industry compared to the total sales of that industry in a given period. In other words, market share shows how much of the market share a company manages to control compared to its competitors. In the context of Islamic banking, market share describes how large the assets, financing, or third-party funds (DPK) of an Islamic bank are compared to the total assets, financing, or deposits of the banking industry as a whole (conventional + sharia). Definition According to Kotler & Keller (2016), market share is the proportion of a company's sales compared to the total sales in the same market. Describing the position of Islamic banking dominance in the financial industry in Aceh.

Indicator:

- a. Growth of Islamic Bank Assets
- b. Deposit and Financing Share
- c. Customer Base Expansion (number of active customers)

- d. Comparative Market Position (comparison of sharia vs conventional/fintech market share)

C. METHOD

This type of research is an explanatory quantitative research, aiming to test the influence between variables using the Structural Equation Modeling (SEM) approach based on Partial Least Squares (PLS) with the help of WarpPLS software. This Research Analysis Approach uses the Variance-Based SEM approach because the main focus is to predict and explain the relationships between constructs. This method is suitable for use for formative models, where indicators are considered to be the constituents of latent variables. Data Collection Technique The data was collected through a closed questionnaire using a 5-point Likert scale, from respondents selected based on the purposive sampling method. Data Analysis Techniques Data analysis is carried out using WarpPLS version X software, with the following stages:

1. Outer Model Evaluation

Because the model is formative, the evaluation is carried out through:

- a. Collinearity (VIF) between indicators (VIF < 5 recommended)
- b. Significance of the indicator path to the latent construct ($p < \text{value } 0.05$)
- c. Doesn't use AVE or Composite Reliability (because it's not reflective)

2. Inner Model Evaluation

- a. R-Square (R^2): To measure the apparent power of a dependent construct
- b. Path Coefficient: To know the direction and strength of the influence
- c. T-statistic & p-value: For hypothetical decision-making

3. Hypothetical Decision Making

- a. If the $p\text{-value} < 0.05$ and the $t\text{-statistic} > 1.96$, then the hypothesis is accepted
- b. A positive β coefficient indicates a one-way influence, β negative indicates the opposite effect

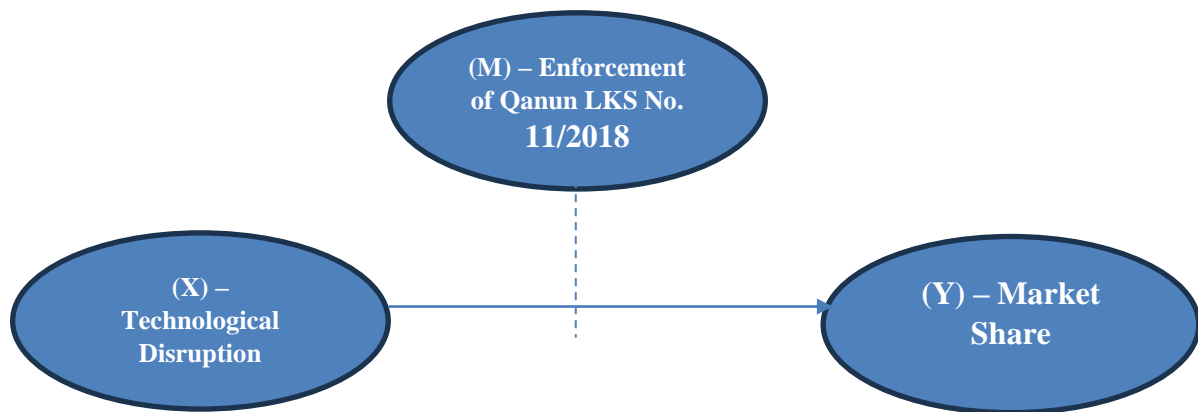
Measurement Scale in this study All constructs use formative indicators, meaning that indicators form constructs, not reflects. The use of a Likert scale of 1–5, from strongly disagree (1) to strongly agree (5).

The object and location of the research is in the province of Aceh

The population consists of all Islamic banking customers in Aceh who use mobile banking, where according to reports, BSI has a total of up to 2.9 million customer accounts in Aceh. However, it is not explained whether this includes all active accounts (savings, current accounts, credits, etc.) and from all customer segments, According to Bisnis Indonesia data as of October 2024: There are 8 Islamic commercial banks, 5 Sharia Business Units (UUS), and 12 BPRS (Sharia People's Financing Banks) active in Aceh, where it is difficult to obtain exact data for each total number of customers. So in this study, the way to determine the sample in this study is to take an opinion that the sample size is around 5-10 times the number of parameters/indicators in one research

model. The number of indicators in this research model is as many as 15 indicators, so based on the opinion of Hair et al in Ferdinand (2016:34), the number of samples can amount to 5-10 times the number of indicators in the model, this study took samples as many as 10 times from the number of indicators (10×12) = 120 people (Hair et al., 2011).

Figure 1.
Frame of Mind



Source: Processed researcher

Hipotesis:

H1: Technological Disruption has a significant positive effect on the Market Share of Islamic Banking in Aceh

H2: Enforcement of Qanun LKS moderates the influence of Technological Disruption on the Market Share of Islamic Banking in Aceh

D. RESULT AND DISCUSSION

1. Measurement Model (Outer Model)

In this study, because the research model used is **formative**, the model evaluation procedure is different from the **reflective** model. In formative models, indicators are seen as **constituents of latent constructs**, not reflections of constructs. Therefore, the evaluation is carried out through the following stages:

a. Collinearity (VIF) antar indikator

The first evaluation was carried out by looking at the value of the Variance Inflation Factor (VIF) for each indicator. The goal is to ensure that there is no problem of multicollinearity between formative indicators. The recommended VIF value is less than 5, so the indicator used can be said to be free from high collinearity problems.

b. Significance of the indicator path to latent constructs

The next step is to test the significance of each indicator's contribution to the formative construct. This test is carried out by looking at the p-value on the path between the indicator and the latent construct. An indicator can be declared significant if $p < 0.05$, which means that the indicator makes an important contribution to the formation of constructs.

c. Not using AVE or Composite Reliability

In contrast to reflective models that emphasize convergent validity and internal consistency reliability (AVE, Cronbach's Alpha, or Composite Reliability), formative models do not use such measures. This is because the indicators in the formative model do not have to be highly correlated with each other, but rather each indicator contributes a unique aspect in the formation of the construct. Thus, the focus of the evaluation of the formative model is to ensure that there is no multicollinearity between indicators and to assess the significant contribution of indicators to the construct, rather than on internal reliability or convergent validity. So in this study, the following are the outer weigh values:

Table 1.
Outer Weigh

	X	M	And	M*X	TYPE	HERSEL F	P.VALU E	BRIGH T
X1_1	(0.177)	0.000	0.000	0.000	Formative	0.087	0.023	1.377
X1_2	(0.248)	0.000	0.000	0.000	Formative	0.086	0.002	1.533
X1_3	(0.249)	0.000	0.000	0.000	Formative	0.086	0.002	1.566
X1_4	(0.209)	0.000	0.000	0.000	Formative	0.087	0.009	1.453
X2_1	(0.148)	0.000	0.000	0.000	Formative	0.088	0.048	1.867
X2_2	(0.237)	0.000	0.000	0.000	Formative	0.086	0.003	2.665
X2_3	(0.218)	0.000	0.000	0.000	Formative	0.086	0.007	2.238
X3_1	(- 0.081)	0.000	0.000	0.000	Formative	0.089	0.184	2.014
X3_2	(- 0.109)	0.000	0.000	0.000	Formative	0.089	0.110	1.768
X3_3	(- 0.177)	0.000	0.000	0.000	Formative	0.087	0.022	2.026
X4_1	(- 0.121)	0.000	0.000	0.000	Formative	0.089	0.088	1.727
X4_2	(- 0.125)	0.000	0.000	0.000	Formative	0.089	0.081	2.336
X4_3	(- 0.119)	0.000	0.000	0.000	Formative	0.089	0.090	1.867
M1_1	0.000	(- 0.076)	0.000	0.000	Formative	0.090	0.199	1.620

M1_2	0.000	(-0.117)	0.000	0.000	Formative	0.089	0.095	1.682
M2_1	0.000	(0.067)	0.000	0.000	Formative	0.090	0.227	1.660
M2_2	0.000	(0.030)	0.000	0.000	Formative	0.091	0.371	1.516
M3_1	0.000	(0.266)	0.000	0.000	Formative	0.085	0.001	2.418
M3_2	0.000	(0.249)	0.000	0.000	Formative	0.086	0.002	2.284
M3_3	0.000	(0.256)	0.000	0.000	Formative	0.086	0.002	2.441
M4_1	0.000	(0.254)	0.000	0.000	Formative	0.086	0.002	2.327
M4_2	0.000	(0.241)	0.000	0.000	Formative	0.086	0.003	2.366
M4_3	0.000	(0.231)	0.000	0.000	Formative	0.086	0.004	2.253
Y1_1	0.000	0.000	(-0.204)	0.000	Formative	0.087	0.010	1.629
Y1_2	0.000	0.000	(-0.230)	0.000	Formative	0.086	0.004	1.664
Y2_1	0.000	0.000	(-0.152)	0.000	Formative	0.088	0.043	1.755
Y2_2	0.000	0.000	(-0.227)	0.000	Formative	0.086	0.005	1.759
Y3_1	0.000	0.000	(0.254)	0.000	Formative	0.086	0.002	1.689
Y3_2	0.000	0.000	(0.286)	0.000	Formative	0.085	<0.001	1.701
Y4_1	0.000	0.000	(0.294)	0.000	Formative	0.085	<0.001	1.621
Y4_2	0.000	0.000	(0.288)	0.000	Formative	0.085	<0.001	1.637
	0.000	0.000	0.000	-1.000	Reflective	0.071	<0.001	

Source: warp PLS

This research model is **formative**, so the construct evaluation is carried out by paying attention to two main things: (1) collinearity between indicators (VIF), and (2) the significance of the indicator's contribution to the construct (p-value).

1. Collinearity (VIF)

In general, all indicators have a VIF value below 5, ranging from 1.37 to 2.66. This shows that there is no problem of multicollinearity between indicators in the formative model, so that each indicator contributes unique information to the latent construct.

2. Significance of Indicator Path → Construct

Most indicators show a **p< value of 0.05**, making it significant in forming latent constructs. With the following details:

- a. X1.2, X1.3, X1.4 (Digitization of financial services) → significant with a p-value of < 0.01.

- b. X2.2 and X2.3 (Customer behavior) → significant with p-value < 0.01.
- c. M3.1, M3.2, M3.3, M4.1, M4.2, M4.3 (Enforcement of Qanun LKS) → very significant with a p-value < 0.01.
- d. Y3.1, Y3.2, Y4.1, Y4.2 (Islamic banking market share) → significant with a p-value of < 0.01.

However, there are some indicators that are not significant ($p > 0.05$), such as X3.1, X3.2, X4.1, X4.2, X4.3, M1.1, M1.2, M2.1, M2.2. This shows that the contribution of these indicators to formative constructs is relatively weak.

Konstruk Technological Disruption (X) is strongly formed by the indicators of digitization of services (X1) and digital customer behavior (X2), while the indicators X3 and X4 contribute weakly. However, the indicator is not removed from the model, because it has a VIF value of < 5.

The Construct Enforcement of Qanun LKS (M) is strongest formed by the M3 and M4 indicators (regulatory implementation and supervision), while the M1 and M2 indicators contribute insignificantly.

The construct of market share of Sharia Banking (Y) is significantly shaped by customer growth indicators (Y3) and market share control (Y4), while other indicators (Y1, Y2) tend to contribute weakly.

2. Structural Model Analysis (Inner Model) (Significance Test of Direct and Indirect Influences)

The following is a table of the results of the research from the effect size that has been obtained based on data processing:

1. Direct Influence

Effect of Exogenous Variables on Endogenous Variables

Table 2.
Significance Test of Direct Effect

Path coefficient

X	M	And
X		
M		
And	-0,112	
M*X		

P. Value

X	M	And
X		
M		
And	0,105	
M*X		

Source: Warp. PLS

Based on the results of data processing with Warp PLS, the path coefficient and p-value values were obtained for the direct influence between variables. The effect of Technological Disruption (X) on Sharia Banking Market Share (Y). The path coefficient value = -0.112 with p-value = 0.105 . That is, the influence of X on Y is negative but not significant (because $p > 0.05$). Thus, technological disruption does not have a direct effect on the market share of Islamic banking in Aceh. (HYPOTHESIS REJECTED)

Table 3.
R-square

	X	M	And
R-squared			0,043
Adj. R- Squared			0,027

R-Squared ($R^2 = 0,043$)

The R^2 value of 0.043 indicates that independent variables (Technological Disruption – X and Enforcement of Qanun LKS – M) are only able to explain 4.3% of the variation in the Sharia Banking Market Share (Y). This means that the contribution of these two variables to changes in market share is very small.

Adjusted R-Squared (Adj. $R^2 = 0,027$)

The Adjusted R^2 value is used to correct for R^2 taking into account the number of independent variables and the number of samples. The Adj. R^2 value of 0.027 means that after adjustment, the variables X and M are only able to explain 2.7% of the Y variation. The difference between R^2 and Adj. R^2 which is not too large ($0.043 \rightarrow 0.027$) shows that the model does not overfit, but indeed the explainability is low.

Implication

These results indicate that as many as 95.7% of the factors that affect the Sharia Banking Market Share (Y) are external factors that may be more dominant, including: public financial literacy, level of trust in Islamic banks, product innovation, service quality, as well as local socio-cultural and political factors

2. Indirect Influence

Table 4.
Indirect effects for paths with 2 segments

	X	M	And	M*X
X				
M				
And				-0.152
M*X				

Table 5.
P values for total effects

	X	M	And	M*X
X				
M				
And				0.044
M*X				

Indirect Effect of Moderation (M*X) on Market Share (Y)

The value of the indirect path coefficient was recorded as -0.152 with $p\text{-value} = 0.044$. This means that the indirect influence of $M*X \rightarrow Y$ is significant at the level of 5% (because $p < 0.05$), with a negative influence direction. These findings indicate that the interaction between Technological Disruption (X) and Enforcement of Qanun LKS (M) actually weakens the contribution to increasing the market share of Islamic banking.

Indirect Effects Results Conclusion

The $X \rightarrow M \rightarrow Y$ lines are not significant, so the enforcement of Qanun LKS does not mediate the influence of technological disruption on market share. However, the $M*X \rightarrow Y$ moderation path is significant, despite the negative direction of influence. This indicates that when the enforcement of Qanun LKS interacts with the development of digital technology, there is a decrease in contribution to the market share of Islamic banking.

3. Model Fit Testing (Goodness of fit)

Next, the internal model testing of the Goodness of fit and determination coefficient was carried out.

The next stage is to conduct a structural evaluation (inner model) which includes model fit, path coefficient, and R model suitability, there are 8 test indices, namely average path coefficient (APC) < 0.05 , average R-squared (ARS) < 0.05 , Average adjusted R-squared (AARS) < 0.05 , average variance factor (AVIF) < 5 , Simpson's paradox ratio (SPR) > 0.7 , R-squared contribution ratio (RSCR) > 0.9 , Statistical suppression ratio (SSR) > 0.7 , NLBCDR > 0.7 . (Sholihin & Dwi Ratmono, 2013). The following are the output results of the fit indices model presented in the table

Table 4.
Hasil Output Model Fit Indices

Fit Indices	Index	p-value	Criterion	Ket
Average Path Coefficient (APC)	0.132	P=0.035	$p < 0.05$	Meet
Average R-squared (ARS)	0.043	P=0.158	$p < 0.05$	Under-compliant
Average adjusted R-	0.027	P=0.192	$p < 0.05$	Under-

<i>squared (AARS)</i>			compliant
Average Variance Inflation Factor (AVIF)	1.055	AVIF < 5	Meet
Simpson's paradox ratio (SPR)	1.000	SPR > 0,7	Meet
R-squared contribution ratio (RSCR)	1.000	RSCR > 0.9	Meet
Statistical suppression ratio (SSR)	1.000	SSR > 0,7	Meet
NLBCDR	1.000	NLBCDR > 0,7	Meet

Description of Model Fit and Quality Indices Warp PLS

- Average Path Coefficient (APC = 0.132; $p = 0.035$) The APC value was significant at $p < 0.05$. This means that on average, the relationship path between variables in the research model has a significant influence.
- Average R-squared (ARS = 0.043; $p = 0.158$) The ARS value shows that the independent variable is only able to explain the 4.3% variation in the dependent variable. Because $p > 0.05$, ARS is not significant. This indicates that the overall ability to explain the model is still low.
- Average Adjusted R-squared (AARS = 0.027; $p = 0.192$) AARS value of 2.7% and insignificant ($p > 0.05$). This means that after correcting for the number of variables and samples, the model's predictive capabilities remain weak.
- Average block VIF (AVIF = 1.055) This value is well below the threshold of 5 (ideal ≤ 3.3). This means that there is no problem of multicollinearity between the indicator blocks.
- Average full collinearity of VIF (AFVIF = 1.032) Similar to AVIF, the AFVIF value is also very low. This shows the model is free of full collinearity problems, both horizontal and vertical.
- Tenenhaus GoF (GoF = 0.135) The GoF value is above 0.10 so that it meets the small fit category, but has not yet reached the medium level (≥ 0.25). This means that the overall model fit is still weak.
- Sympon's Paradox Ratio (SPR = 1,000) SPR value = 1, higher than the threshold of 0.7. This means that the model does not contain the Simpson paradoxical problem and is reliable.
- R-squared Contribution Ratio (RSCR = 1,000) RSCR Value = 1 (ideal). This means that the contribution of R^2 in the model is perfect and consistent.
- Statistical Suppression Ratio (SSR = 1,000) SSR value = 1 (ideal). Indicates there are no statistical suppression problems in the model.
- Nonlinear Bivariate Causality Direction Ratio (NLBCDR = 1,000) NLBCDR value = 1 (ideal). That is, the direction of causality between variables in the model is in accordance with the theory that is constructed.
- Pros: The model is free of collinearity issues (low AVIF & AFVIF), and meets the fit requirements related to SPR, RSCR, SSR, and NLBCDR.

- l. Weaknesses: The explanatory power of the model is still low (ARS = 4.3%; AARS = 2.7%), and the model fit was only in the small GoF category (0.135).
- m. Thus, although the model is stable and free of technical problems, the influence of research variables on the market share of Islamic banking is still relatively small.

4. Coefficient of Determination

According to Kuncoro (2004), the determination coefficient (Adjusted R Square) essentially measures how far the model's ability to explain the variation of bound variables is. The fundamental disadvantage of using the coefficient of determination is the bias towards the number of independent variables that are included in the model.

The interpretation of the Adjusted R Square for each latent variable is the same as the interpretation in the regression, the change in the value of the Adjusted R Square can be used to assess the influence of the variable on Entrepreneurship Education and startups on Sustainable Tourism Development, whether it has a substantive influence.

Table 5.
R2 Value on Latent Variables

Variable Leave	Adjusted Square	R	Conclusion
Market Share	0.027		low

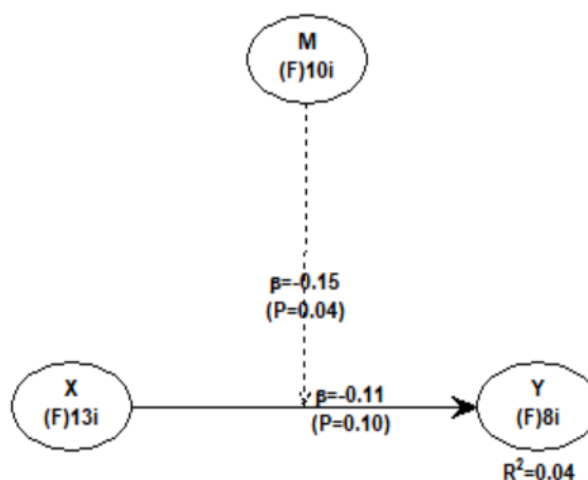
'Source: Data Processing Results, 2025

Structural Model Path Analysis

Structural Model pathway analysis (SEM WarpPLS)

To see how much the exogenous variable customer satisfaction affects the endogenous variable customer loyalty through startups as an intervening variable, you can see the following figure 1:

Figure 2. Structural Model Results and WarpPLS Calculation Results



For statistically implicit measurement, a linear regression model is used in this study, which uses attitude toward behavior, subjective norms, perceived behavioral control as exogenous variables, intention as intervening variables and behavior as endogenous variables. One of the advantages of regression analysis is that it provides a model for all the attributes in forming an overall value.

The structural similarities in this study are as follows:

$$Y = -0.11X - 0.15M + z$$

with:

- a. Y = Market Share
- b. X = Technological Disruption
- c. M = Enforcement of Qanun LKS (moderator / additional independent)
- d. ζ = error (residual)

Thus, the model explains that increases X and M actually decrease Y, even though only the M → Y pathways are statistically significant.

From the equation it can be explained that: every increase of 1 standard unit in Technological Disruption is associated with a decrease of 0.11 standard units in Market Share, assuming other variables are constant. Furthermore, every increase of 1 standard unit in the Enforcement of Qanun LKS is associated with a decrease of 0.15 standard units in Market Share, with other variables constant.

Significance: $p = 0.04 \rightarrow$ significant at $\alpha = 0.05$, so this negative effect is considered statistically real.

Discussion

The Effect of Technological Disruption on Market Share The results of the analysis show that *Technological Disruption* has a negative effect on the *Market Share* of Islamic banking with a path coefficient of -0.11 and a value of $p = 0.10$. Although the direction of the relationship shows a tendency to decline *in market share* due to increasing technological disruption, this effect is not statistically significant.

In theory, Christensen (1997) in the concept of *Disruptive Innovation Theory* explains that technological disruption occurs when new innovations replace old technologies and change market structures. However, the impact of this disruption does not necessarily directly increase the market share of existing companies, especially when technology adoption is not balanced with organizational and consumer readiness. In the context of Islamic banking in Aceh, the development of financial technology such as *mobile banking*, *internet banking*, and fintech services has not been able to directly strengthen market share, due to the limitations of digital literacy, people's habits of using conventional methods, and the bank's strategy in utilizing technology. Please note that there are many things that are factors for banking customer satisfaction. This is in line with the (Kim & Yeo, 2024) theory of the Technology Acceptance Model (TAM) – Davis (1989), which emphasizes that technology adoption is influenced by *perceived*

usefulness and *perceived ease of use*. If these two aspects are low in the eyes of customers, then the use of technology will not be significant in increasing *market share*. (Bhardwaj et al., 2021)

The Effect of Enforcement of Qanun LKS on Market Share Analysis of the moderation path shows that *the Enforcement of Qanun LKS No. 11 of 2018* has a negative and significant effect on the *market share* of Islamic banking, with a path coefficient of -0.15 and a p value = 0.04. Theoretically, financial regulation should provide support for strengthening Islamic financial institutions. According to the Theory of Institutional Isomorphism – DiMaggio & Powell (1983), regulation is a form of *coercive isomorphism* that forces organizations to conform to rules. However, in practice, the enforcement of qanun actually has a negative effect because the transition process from the conventional system to sharia does not run smoothly.

In addition, according to Regulation Theory (Baldwin et al., 2012), the effectiveness of regulations is highly determined by the readiness of infrastructure, the level of compliance, and acceptance from the public, besides that what must be considered is the satisfaction of employees so that they can provide optimal service to customers. Stress. Work on employees will have an impact because it can affect work productivity. Banks are obliged to pay attention to the health of banks to find out the extent of the bank's ability to develop. If regulations are implemented without careful readiness, it can cause resistance, decrease public trust, and even be counterproductive to the original goal. This explains why the enforcement of Qanun LKS actually has a negative impact on market share, because there are still technical obstacles, limitations in Islamic banking services, and community needs that have not been fully accommodated. (Akram et al., 2015) (Robina-Ramírez et al., 2021) (Mosharrafa et al., 2025)

The R² value (Coefficient of Determination) The R² value of 0.04 shows that the *variables Technological Disruption (X)* and *Enforcement of Qanun LKS (M)* are only able to explain 4% of the variation in *Market Share (Y) changes*. This means that 96% of the variation *in Market Share* is influenced by other factors outside of this research model. Other factors that affect Islamic financial literacy, consumer trust (trust theory – Mayer et al., 1995), service quality (SERVQUAL – Parasuraman et al., 1988), and macroeconomic conditions are likely to dominate influencing the market share of Islamic banking in Aceh than just technological and regulatory disruption factors. (Pepple et al., 2024)

The R² value obtained for the market share variable of Islamic banking is 0.04. This suggests that only 4% of the variation in market share can be explained by the technological variables used in this model. Based on the interpretation of Hair et al. (2019), this value is included in the weak category. However, a low R² value does not necessarily indicate that the study is a failure or invalid. On the contrary, this indicates that there are many other factors outside of technological variables that play a role in influencing the market share of Islamic banking, such as service quality, Islamic financial literacy, government policies, and the level of public trust. This finding actually enriches the insight that although technology is important, the ability of Islamic banking fintech is still lagging behind conventional banks, causing its influence on increasing

market share is still limited. Therefore, this research continues to contribute to highlighting the importance of strengthening digital innovation in the Islamic banking industry to be more competitive in the era of digital transformation.

The important point is that the findings of the study show a paradox in the implementation of the Qanun of Sharia Financial Institutions (LKS) No. 11 of 2018 in Aceh. Theoretically, the enforcement of this qanun should strengthen the dominance of Islamic banking because all financial institutions are required to operate according to sharia principles. However, the results of the analysis actually show that the stricter the enforcement of regulations, the more the market share of Islamic banking is under pressure. (Ismamudi et al., 2023)

This paradox arises because the reality on the ground is not entirely in line with the ideals of regulation. People who feel limited by the choice of Islamic banking services, especially in terms of the ease of digital transactions, speed of service, and product flexibility, tend to turn to non-bank fintech or other digital financial platforms. These institutions are not directly bound by the provisions of the qanun so that they are more free to offer technology-based innovations, which ultimately become an alternative for customers, especially the digitally literate young generation.

This condition confirms that regulatory enforcement alone is not enough to expand the market share of Islamic banking. Normative regulations must be accompanied by real efforts to improve (Alam & Miah, 2024) digital innovation, financial literacy, and the quality of Islamic banking services. Without an adaptation strategy to the dynamics of digitalization, Islamic banks are at risk of being abandoned by customers even though they legally have a dominant position in Aceh. On the other hand, the satisfaction of banking employees also needs to be considered (Izuchukwu et al., 2014) because employees who are satisfied with their work will have a good influence.

Thus, it can be concluded that Qanun LKS that is enforced without the support of digital transformation actually has the potential to narrow the Islamic banking market. Therefore, collaboration between regulations, digital innovation, and improving service quality is key, this is so that Islamic banking in Aceh is able to face the challenges of technological disruption while maintaining the sustainability of its market share. This is because the banks in Aceh are the result of the merger of several banks, so it requires more serious attention to sharia culture. (Maciej Serda et al., 2013) (Jindal & Mittal, 2022). CSR funds can also be used to increase public literacy about banking. (Ahmad et al., 2022)

.E. CONCLUSION

Effect of (X) – Technological Disruption on (Y) – Market Share The path coefficient is -0.11 with a value of $p = 0.10$, showing that the influence of technological disruption on the market share of Islamic banking is negative but not significant. This means that although increased technological disruption tends to decrease market share, this relationship has not been statistically proven to be strong.

Effect (X) – Technological Disruption on (Y) – Market Share with moderation (M) – Enforcement of Qanun LKS No. 11/2018 The path coefficient is -0.15 with a value of

$p = 0.04$, indicating that the enforcement of Qanun LKS has a negative and significant effect on market share. This indicates that the stricter the implementation of Qanun LKS, the more likely it is to reduce the market share of Islamic banking.

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