Building Sharia Bank Customer Loyalty in Padang City through Minangkabau Culture Using Hyper-Personalization and Artificial Intelligence

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Abstract. Padang is a city in West Sumatra, Indonesia, with a predominantly Muslim population, known for its "adat basandi sarak, sarak basandi kitabullah" (customary customs based on the teachings of Allah), which shapes a community lifestyle based on customs and sharia. Therefore, the development of Islamic banks in Padang is quite high. Innovation and technology are part of the factors that influence customer loyalty. Hyper-Personalization and Artificial Intelligence are part of the technology that will influence customer loyalty in Islamic banks and the culture in Minangkabau. This research is fully funded by the foundation through the Simlitupi Bath 5 Grant program for 2024-2025 from the University of Putra Indonesia YPTK Padang. The purpose of this research is to see how customer loyalty in Islamic banks in Padang can be built with Hyper Personalization (HP) and Artificial Intelligence (AI) through Minangkabau culture. Minangkabau culture, which is placed as an intervening variable, is state of the art in this research. The respondents to be used as a sample are residents of Padang City who are already Islamic bank customers in 2025, spread across 11 sub-districts. A sample size of 200 will be used using the Joreskog and Sorbom tabulation method. Testing was conducted using primary and secondary data, using Smart PLS 4.0 analysis tools, including automodels, inner models, descriptive statistics, and other tools. The results indicate that HP and AI play a direct and indirect role in building customer loyalty in Islamic banks in Padang City. The mandatory output of this research is publication in an international journal (Scopus). An additional output is participation in an international seminar with proceedings.

Keywords: Customer Loyalty; HP; AI; Minangkabau Culture

INTRODUCTION

The shift in behavior of Indonesians and even the global community towards using Islamic banking services is increasing. This is thought to be because the majority of the world's population, including Indonesia and the city of Padang in West Sumatra, is Muslim. Muslims are guided by sharia law to conduct their daily activities in accordance with Islamic law, including banking. The people of Padang desire spiritual comfort from the banking services they receive. Islamic banking services are also currently in demand, along with the advancement of digital technology or electronic service quality in the banking sector. Hyper Personalization (HP) and Artificial Intelligence (AI) are part of digital banking technology that will influence the loyalty of Islamic bank customers today.

The number of Islamic bank customers in West Sumatra is not currently disclosed, but data from the Financial Services Authority (OJK) and Bank Indonesia indicates that the province's Islamic banking sector continues to grow. By 2024, Islamic bank assets in West Sumatra had increased by 20.58% year-on-year (YoY) to IDR 10.65 trillion. This growth reflects the high public interest in Islamic financial services, with third-party funds (DPK) increasing by 20.09% YoY and financing disbursement increasing by 25.46%. The number of customers using electronic-based digital services has also increased over time.

Research by Susriyanti and Nandan Lima Krisna (2023) found that customer loyalty is influenced by electronic service quality, specifically digital services. Loyalty is defined as a positive long-term commitment by customers to a company's brand or service. Customer loyalty is achieved through a combination of satisfaction and appropriate complaint handling, providing a sense of comfort when using the service. Customer loyalty is demonstrated by repeated use of a service and recommendations to others. These recommendations will increase the number of new customers, enabling changes in the number of customers to translate into changes in customer loyalty.

Factors that influence current sharia bank customer loyalty include service quality, customer satisfaction, trust, sharia values and principles, product and technology innovation, bank reputation and image, prices and profits, and satisfaction with complaint handling. Meanwhile, several experts have conducted research on the factors that influence customer loyalty in sharia banks, namely service quality (Parasuraman et al: 1988), compliance with sharia principles (Dusuki and Abdullah: 2007), customer satisfaction (Kotler Keller: 2009), etc.

Minangkabau culture, a traditional tradition of the people of West Sumatra and Padang, is a key factor influencing customer loyalty in Islamic banks. Spiritual intelligence, as part of cultural and ethical values, influences customers' purchase of Islamic banking products in Padang (Yeni et al., 2023). Minangkabau culture can also influence customer loyalty to Islamic banks through several unique factors derived from their cultural values and customary systems. In other words, Minangkabau cultural values, which are religious, uphold trust, and possess strong community ties, can strengthen customer loyalty to Islamic banks, which are considered in line with their life principles.

The results of Maulida & Jaya's research (2024) found that personalization and AI on e-commerce platforms can be crucial factors in building and maintaining customer loyalty in the Industry 6.0 era. Parameswari, K. U., Umadevi, P., & Thangaraj's research (2023) found that most customers (52%) expect that banking companies need to provide personalized offers to utilize technology in banking companies, greater awareness needs to be built among customers and guarantees for safe transactions need to be ensured with a better protection system and it was also found that more than 23 percent of countries adopt artificial intelligence technology in the field of modern banking.

Riyan Maulana & Aulia (2024) found in their research that AI services in the banking sector offer ease of access and high efficiency, which was valued by 85% of participants. However, there were significant concerns regarding data privacy and security, with 65% of respondents voicing these concerns. These findings indicate the need for better policies and technology to protect user data. Furthermore, 40% of participants felt that AI services were not yet able to completely replace personal interactions, indicating that the human touch remains important in banking services. Seventy-eight percent of respondents stated that the combination of AI and human support provided more satisfactory results. Therefore, banks need to consider a balanced integration of technology and personal services to improve the overall user experience.

Norrahman & Badrudin (2023) revealed in their research that there are both challenges and opportunities for Islamic banks in Indonesia in utilizing AI technology. Influencing factors include customer concerns regarding data security and privacy, as well as ease of use of AI services at Islamic banks in Indonesia. Therefore, Islamic banks in Indonesia must prioritize customer trust to ensure continued growth in AI-based services. Research Gaps Based on Literature, among others, are:

1. Limitations of studies specifically regarding hyper-personalization in Islamic banks. Most studies examine personalization in general without distinguishing the level and mechanisms of hyper-personalization (real-time predictive vs. static). The specific impact of hyper-personalization on customer loyalty in Islamic banks has not been adequately documented.
2. The moderating role of religiosity and Sharia compliance is relatively under-tested. Although religiosity and perceived Sharia compliance are known to influence loyalty, few empirical studies have examined whether religiosity (Minangkabau culture) mediates the effect of hyper-personalization on loyalty.
3. Lack of focus on privacy/data ethics as a mediator or moderator. Hyper-personalization requires intensive data collection and processing—presenting the risk of perceived privacy violations that can undermine trust and loyalty. However, the empirical relationship between personalization practices, privacy concerns, trust, and loyalty has not been thoroughly tested among Islamic bank customers.
4. There is a lack of in-depth qualitative studies on customer perceptions. Surveys provide quantitative insights but do not address the reasons why customers accept or reject AI-driven personalization practices particularly those related to Sharia values.
5. Institutional and regulatory aspects are relatively rarely discussed. Who is responsible for AI governance, Sharia compliance, and customer data protection in Islamic banks? How does organizational readiness influence personalized outcomes and loyalty?
6. Heterogeneity of effects across customer segments. The effects of hyper-personalization likely differ across segments (e.g., age, digital literacy, religiosity), but comparative studies of segments are still limited.

Meanwhile, based on the results of previous research, research gaps were found in Table 1 below:

Table 1: Research Gap Based on Previous Research Results

No.	Influence of Variables	Research result	Researchers
1.	Hyper Personalization and Islamic Bank Customer Loyalty	1. Has a significant positive impact	Maylinda, W. D., & Andarini, S. (2024); Maulida, N., & Jaya, U. A. (2024); Tjioe, G., Wijaya, B. M., Evarianto, J. F., Darmawan, V. A., & Erwin, E. (2025); Dassucik, D., Rasyidi, A. H., Mujanah, S., Halik, A., & Azizah, N. (2025); Hilabi, A. H., & Zawawi, Z. (2025).
		2.Tidak Berpengaruh	Al Nasser et al. (2023) jika tidak diperkuat oleh nilai spiritualitas dan kepercayaan; Hassan & Basalamah (2021) personalisasi layanan berbasis AI justru menimbulkan resistensi jika nasabah merasa privasinya terganggu, sehingga loyalitas menurun.
2.	Artificial Intellegence and Islamic Bank Customer Loyalty	1. Has a significant positive impact	Chen et al. (2022); Kristhiofan, K. Y. & Fadli, F. (2023); Rodoni, A., & Amalia, E. (2021); Maulida, N., & Jaya, U. A. (2024); Tjioe, G., Wijaya, B. M., Evarianto, J. F., Darmawan, V. A., & Erwin, E. (2025); Hilabi, A. H., & Zawawi, Z. (2025); Rafiah, K. K., Rejito, C., & Hasan, Z. I. (2025).
		2. No effect	Hossain et al. (2022) tapi berpengaruh melalui kepuasan dan kepercayaan; Al Nasser et al. (2023) jika tidak diperkuat oleh nilai spiritualitas dan kepercayaan; Rahmah & Yusuf (2024) nasabah lebih

				mengutamakan nilai syariah dan hubungan emosional dengan bank.
3.	Hyper Personalization and Minangkabau Culture	1. Has significant positive impact	a	Alalwan et al. (2021) **dan** Kumar et al. (2023), personalisasi yang sensitif terhadap konteks budaya meningkatkan *cultural resonance* dan memperkuat hubungan emosional antara pelanggan dan organisasi.
		2. No effect		Nofri & Yuliani (2021) Penelitian etnografi digital di Luhak Nan Tigo menemukan bahwa hyper-personalization media sosial dan AI marketing tidak mengubah cara masyarakat memutuskan sesuatu, karena keputusan tetap dipengaruhi oleh nilai *bulek aia dek pambuluah, bulek kato dek mufakat.*
4.	Artificial Intelligence and Minangkabau Culture	1. Has significant positive impact	a	Chen et al. (2022) **dan** Ahmad & Hassan **(**2023) AI yang didesain secara etis dan kontekstual dapat memperkuat nilai budaya serta kepercayaan masyarakat dalam sektor keuangan berbasis nilai.
		2. No effect		Rahman & Syafri (2023) penerapan AI dalam sektor keuangan dan layanan publik tidak berpengaruh terhadap nilai-nilai budaya lokal, karena masyarakat tetap menjadikan *adat dan agama* sebagai panduan utama perilaku; Nasution et al. (2024) teknologi AI tidak signifikan dalam mempengaruhi perubahan budaya Minangkabau, karena sistem nilai berbasis agama dan adat sangat kuat dan adaptif; Putri & Hidayat (2022) penggunaan AI tidak mengubah pola komunikasi atau nilai kolektif Minangkabau, karena masyarakat masih mengutamakan musyawarah dan hubungan kekeluargaan dalam bisnis.
5.	Minangkabau Culture and Islamic Bank Customer Loyalty	1. Has significant positive impact	a	Aulia & Yusri (2023) *alignment* antara nilai budaya lokal dan nilai syariah memperkuat ikatan psikologis nasabah terhadap bank syariah; Rahmah & Yusuf (2024) Budaya Minangkabau memperkuat hubungan antara *AI-based service* dan loyalitas melalui kepercayaan dan kesesuaian nilai; Hassan & Basalamah (2021) Loyalitas nasabah bank syariah lebih banyak dipengaruhi oleh faktor religius dan sosial dibandingkan teknologi; Yuliani & Nofri (2022) Loyalitas nasabah di Sumatera Barat tumbuh dari rasa kebersamaan dan nilai kultural yang diinternalisasi sejak kecil.

Based on the phenomena described, as the people of Padang, West Sumatra, which is famous for its "adat basandi sara', sara' basandi kitabullah," we are interested in further researching the role of Hyper-personalization and Artificial Intelligence (AI) in increasing customer loyalty through Minangkabau Crocodile as a mediator. Minangkabau culture as a mediator is state of the art. The results of a quantitative approach to see the role or influence of Hyper Personalization and Artificial Intelligence on Sharia Bank Customer Loyalty in Padang City through Minangkabau Culture will be a novelty in this research. Many previous studies only used a qualitative approach to see the role of Minangkabau Culture on customer behavior in Sharia Banks.

METHOD

This study uses a quantitative descriptive approach with primary data obtained from respondents who are Sharia Bank customers in Padang city in 2025. The sample in the study was taken through a purposive sampling method, involving 208 customers selected randomly in the Padang city area. The selection of the purposive sampling method with the category of Sharia Bank customers.

Data analysis was performed using Smart PLS software. Hyper Personalization (X1) with an operational definition as "a technology-based marketing strategy that uses artificial intelligence, customer behavioral data, and real-time analytics to deliver highly personalized and relevant service experiences", using indicators from Jain et al.'s research (2021), namely product recommendations, personalized content, and real-time communication. Artificial Intelligence (X2) is "Imitation of human intelligence (Artificial Intelligence), for example, obtaining & processing information, reasoning, solving problems" using indicators from Chen et al. 's research (2022), namely service automation, need prediction, and data personalization. Minangkabau Culture (Z) in the sense of "a value system that develops in West Sumatran society that upholds the customary principles of basandi sarak, sarak basandi Kitabullah" as mediation using indicators from Nasroen (1957); Nursal (2018), namely the values of shame, deliberation, religion, and kinship. Customer Loyalty (Y) as "Emotional attachment and customer behavior towards a product or service institution, which is shown through transaction loyalty, positive attitude, and desire to recommend to others" using indicators from Griffin (2002) and Susriyanti (2023) namely regular repeat purchases, buying between product lines and services, referring to others, and immunity to competitors' pull.

RESULTS AND DISCUSSION
Validity Test

Validity testing was conducted by comparing the outer loading values of each indicator. If the outer loading value exceeds 0.7, the indicator is declared valid and suitable for use in the analysis. Each variable uses 10 statement items as indicators to measure the variables under study. Validity testing was conducted in two stages: in the first stage, 1 statement was used HP10 (0.696), and 2 statements used Z1(0.657) as well as Z4 (0.612) invalid. However, the three items that were removed did not affect the indicators used because they could still be represented in other statements. In the results of the second stage of validity testing, all statements met the established validity criteria, as seen in Table 1 below:

Table 2: Validity Test Results

Faktor Loading Validity Test Results							
HP		**AI**		**Z**		**Y**	
HP1	0.723	AI1	0.789			Y1	0.832
HP2	0.813	AI2	0.817	Z2	0.740	Y2	0.812
HP3	0.813	AI3	0.842	Z3	0.764	Y3	0.845
HP4	0.757	AI4	0.784			Y4	0.813
HP5	0.815	AI5	0.837	Z5	0.753	Y5	0.803

HP6	0.758	AI6	0.846	Z6	0.818	Y6	0.793
HP7	0.847	AI7	0.848	Z7	0.808	Y7	0.786
HP8	0.800	AI8	0.828	Z8	0.804	Y8	0.853
HP9	0.786	AI9	0.814	Z9	0.845	Y9	0.828
		AI10	0.823	Z10	0.784	Y10	0.791

All indicators used in this study showed outer loading values above 0.7, which means that all of them met the validity criteria and were declared suitable for optimal use in the analysis and hypothesis testing stages.

Reliability Test

Reliability testing in this study was conducted based on three main criteria: a Cronbach's Alpha value greater than 0.7, a Composite Reliability value greater than 0.7, and an Average Variance Extracted (AVE) value greater than 0.5. These three indicators were used to ensure that the instrument had good internal consistency and accurately represented the constructs being measured. The test results can be seen in Table 3 below:

Table 3: Reliability Test Results

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Artificial_Intelligence	0.947	0.948	0.955	0.677
Customer_Loyalty	0.914	0.918	0.930	0.624
Hyper_Personalization	0.925	0.927	0.938	0.626
Minangkabau_Culture	0.944	0.944	0.952	0.666

All variables in this study demonstrated Cronbach's Alpha and Composite Reliability values above 0.7, and AVE values exceeding 0.5. This indicates that the instruments used met reliability standards. Therefore, the data obtained are deemed valid and can be used for hypothesis testing.

Inner Model Test
R Square Test (R^2)

The R-square test in this study aims to determine the extent to which the independent variables are able to explain the dependent variable in the model used. The R-square value indicates the extent of the independent variable's contribution to changes in the dependent variable, as follows:

Table 4: R Square Test Results

	R-square	R-square adjusted
Customer_Loyalty	0.624	0.618
Minangkabau_Culture	0.686	0.683

The test results concluded that the influence of Hyper Personalization and Artificial Intelligence on Customer Loyalty was 64.2%, while the remaining 35.8% was influenced by variables other than those in the research model. The ability of the Hyper Personalization and Artificial Intelligence variables to explain the relationship with the Customer Loyalty variable was 64.2%.

Meanwhile, the influence of Hyper Personalization and Artificial Intelligence on Minangkabau Culture is 68.6%, while the remaining 31.4% is influenced by variables other than the research model. The ability of the Hyper Personalization and Artificial Intelligence variables to explain the relationship with the Customer Loyalty variable is 68.6%.

F Square Test

The F-square test in this study was used to measure the magnitude of each variable's effect on the dependent variable in the model. Based on the criteria used, an F-value below 0.02 indicates no effect, a value between 0.02 and 0.15 indicates a small effect, a value between 0.15 and 0.35 indicates a moderate effect, and a value above 0.35 indicates a large effect.

Table 5: F Square Test Results

	Efek Size	Customer_Loyalty	Efek Size	Minangkabau_Culture
Artificial_Intelligence	Kecil 0,02 - 0,15	0.016	Sedang 0,15 - 0,35	0.119
Hyper_Personalization	Tidak Ada < 0,02	0.000	Sedang 0,15 - 0,35	0.305
Minangkabau_Culture	Besar > 0,35	0.383		

Based on the table above, the F square value of the relationship between Hyper Personalization and Customer Loyalty of 0.000 indicates no effect. The F square value of the relationship between Artificial Intelligence and Customer Loyalty of 0.016 is between 0.02-0.15 so it has a small effect. The F square value of the relationship between Minangkabau Culture and Customer Loyalty of 0.383> 0.35 so it has a large effect. The F square value of the relationship between Hyper Personalization and Minangkabau Culture of 0.305 is between 0.15-0.35 so it has a medium effect. The F square value of the relationship between Artificial Intelligence and Minangkabau Culture of 0.119 is between 0.02-0.15 so it has a small effect.

Q Square Test

To measure the predictive relevance of a model, the inner model has predictive relevance if its cross-validation redundancy (Q2) value is greater than zero. Conversely, if its value is less than zero, the model lacks predictive relevance, making it less effective at

predicting. Based on the formulation, the Q2 test results are as follows:

$$
\begin{aligned}
\text{Q-Square} \quad &= 1 - [(1\text{-}R_21) \times (1\text{-}R_22)] \\
&= 1 - [(1\text{-}0,686) \times (1\text{-}0,624)] \\
&= 1 - [0,314 \times 0,376] \\
&= 1 - 0,118064 \\
&= 0,881936
\end{aligned}
$$

From the results of the Q square value formulation of 0.881936 > 0, the overall model prediction is relevant.

Hypothesis Testing

The results of the direct hypothesis test that was conducted in this study are:

Table 6: Direct Hypothesis Test Results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ($\mid$O/STDEV$\mid$)	P values
Artificial_Intelligence -> Customer_Loyalty	0.367	0.369	0.126	2.907	0.004
Artificial_Intelligence -> Minangkabau_Culture	0.334	0.334	0.089	3.759	0.000
Hyper_Personalization -> Customer_Loyalty	0.360	0.359	0.108	3.334	0.001
Hyper_Personalization -> Minangkabau_Culture	0.534	0.533	0.082	6.497	0.000
Minangkabau_Culture -> Customer_Loyalty	0.678	0.673	0.095	7.100	0.000

The results of the hypothesis testing concluded that Hyper Personalization and Artificial Intelligence have a positive effect and have a significance value <0.05 and all variables also have a T Statistic value > from the T Table (1.97), on Customer Loyalty and Minangkabau Culture directly. This indicates that the hypothesis is accepted. Based on the direct influence, 2 structural equations are obtained as follows:

1. Direct Influence on Islamic Bank Customer Loyalty: Y = 0,360X1 + 0,367X2 + 0,678Z
2. Direct influence on Minangkabau culture: M = 0,534X1 + 0,334X2

Meanwhile, the results of the indirect hypothesis testing are as follows:

Table 7: Indirect Hypothesis Test Results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ($\mid$O/STDEV$\mid$)	P values
Artificial_Intelligence -> Minangkabau_Culture -> Customer_Loyalty	0.226	0.224	0.064	3.509	0.000
Hyper_Personalization -> Minangkabau_Culture -> Customer_Loyalty	0.362	0.360	0.081	4.460	0.000

The results of the hypothesis testing concluded that Hyper Personalization and Artificial Intelligence have a positive effect and have a significance value <0.05 and all

variables also have a T Statistic value > from the T Table (1.97), on Customer Loyalty indirectly through Minangkabau Culture. This indicates that the hypothesis is accepted. Based on the indirect effect, the following structural equation is obtained: Y = 0,226X1M + 0,362X2M

Mediation Properties Test

Testing the nature of mediation according to Hair (2014) uses the rule if:
1. If the VAF value is > 80%, the mediating variable is declared as a full mediator (full mediation).
2. The VAF value is between 20% and 80%, then the mediating variable is stated as a partial mediator (partial mediation).
3. VAF value ≤ 20% means the mediating variable cannot mediate the exogenous influence on the endogenous.

The test results can be seen in Table 8 below:

Table 8: Mediation Properties Test Results

NO	INFLUENCE	Direct	Indirect	Total	VAF	Status
1	HP to Y Via Z	0.360	0.362	0,722	0,498615	Parsial
2	AI to Y Via Z	0.226	0.367	0,593	0,381113	Parsial

Based on Table 8, it can be seen that Minangkabau culture is able to partially mediate Hyper Personalization and Artificial Intelligence on Sharia Bank Customer Loyalty in Padang City. The mediation nature has a VAF value of 49.86% for Hyper Personalization and 38.11% for Artificial Intelligence, ranging between 20% and 80% of the VAF value.

CONCLUSION

The conclusions related to the research results are:
1. Hyper-personalization (HP) has a positive and significant influence on Minangkabau culture. This is in line with the results of Alalwan's research et al. (2021) dan Kumar et al. (2023).
2. Artificial Intelligence (AI) has a positive and significant influence on Minangkabau culture. This is in line with research by Chen et al. (2022) and Ahmad & Hassan (2023).
3. Hyper-personalization (HP) has a positive and significant effect on Sharia Bank Customer Loyalty in Padang City. This is in line with research by Maylinda et al. (2024); Maulida, et all (2024); Tjioe, G., etc (2025); Dassucik, etc (2025); Hilabi, etc (2025).
4. *Artificial Intelligence (AI) has a positive and significant impact on Sharia Bank Customer Loyalty in Padang City. In line Chen et al. (2022); Kristhiofan, et al. (2023); Rodoni, et al. (2021); Maulida, et al. (2024); Tjioe, et al. . (2025); Hilabi, et al. . (2025); Rafiah, et al. (2025).*
5. Minangkabau culture has a positive and significant influence on customer loyalty at Islamic banks in Padang City. This is in line with research by Aulia & Yusri (2023), Rahmah & Yusuf (2024).

6. *Minangkabau culture is able to mediate Hyper-personalization (HP) towards Sharia Bank Customer Loyalty in Padang City.*
7. Minangkabau culture is able to mediate Artificial Intelligence (AI) towards Sharia Bank Customer Loyalty in Padang City.

MANAGERIAL IMPLICATIONS

1. This study demonstrates that hyperpersonalization and artificial intelligence influence customer loyalty in Islamic banks, and their role becomes even stronger with the presence of a mediating variable (Minangkabau culture). This indicates the strong role of mediating variables such as trust, customer satisfaction, spiritual intelligence, and local culture.

2. These findings demonstrate that the stronger the internalization of Minangkabau cultural values in customers, the higher their level of loyalty to Islamic financial institutions. These values align with the operational principles of Islamic banks, such as fairness, trust, and the prohibition of usury. Therefore, when customers perceive that a bank's values align with their customs and religion, they feel comfortable and morally represented, fostering trust and emotional attachment, and demonstrating long-term loyalty to Islamic banks.

3. The research results show that the use of mobile phones and AI in Islamic banking services such as chatbots, customer behavior analysis, product recommendations, and automated security systems supports the preservation of Minangkabau cultural values, especially the values of efficiency, responsibility, and justice.

4. The research results provide an important contribution to the development of theories and models of sharia consumer behavior:
   a. Shows that local culture plays a role as a mediating and protective variable in the relationship between digital technology innovation (Hyper_Personalization and AI) and loyalty.
   b. Expanding the Technology Acceptance Model (TAM) and Cultural Value Theory in the context of religious societies.
   c. Provides a conceptual basis for the development of an integrative model between AI capability, cultural adaptation, and customer loyalty in the Islamic banking system.

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