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Beyond Utility: A Pilot Extension of TAM with Sharia Compliance Trust and Religiosity among Pontianak Micro and Small Enterprises

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Abstract: Islamic fintech may broaden access to payments and financing for micro and small enterprises, but acceptance may depend on functional beliefs, confidence in sharia compliance, and religiosity. This pilot study examined an extended Technology Acceptance Model among 30 business owners in Pontianak, Indonesia. A cross-sectional survey measured perceived usefulness, perceived ease of use, attitude toward use, behavioral intention, sharia compliance trust, and religiosity. Preliminary internal-consistency and measurement diagnostics were followed by separate exploratory bivariate regressions; the sample was not designed to test the full structural model. None of the reported associations reached $p < 0.05$, so the findings do not establish determinants, causal effects, or mediation. The study proposes a conceptual distinction between sharia compliance trust and generic service trust and identifies improvements in item design, respondent profiling, exposure measurement, and sampling needed before a powered confirmatory study.

Keywords: Islamic fintech, micro and small enterprises, technology acceptance model, sharia compliance trust, religiosity.

INTRODUCTION

Islamic financial technology has moved from a niche innovation to an increasingly important channel for payments, financing, crowdfunding, and social finance. Its relevance is especially pronounced in Indonesia, where digital financial services can reduce distance and transaction-cost barriers while offering products that are expected to comply with sharia principles. Yet the expansion of services does not automatically produce adoption. Reviews of Islamic finance and fintech literature continue to identify user acceptance, trust, literacy, regulation, and the credibility of sharia compliance as central research and policy questions (Alshater et al., 2022).

For micro, small, and medium enterprises (MSMEs), the adoption decision is consequential because digital finance can widen access to transactions and funding, but it also requires confidence that a platform is useful, understandable, secure, and normatively

acceptable. Indonesian evidence shows that Islamic fintech adoption can support MSME sustainability and financial inclusion, while the strength of individual determinants differs across samples and products (Alfarizi & Ngatindriatun, 2022; Askandar et al., 2026; Majid, 2024). This heterogeneity makes local, context-sensitive evidence necessary rather than assuming that findings from large metropolitan or consumer samples transfer directly to MSMEs in Pontianak.

The Technology Acceptance Model (TAM) provides a parsimonious starting point. TAM proposes that perceived usefulness and perceived ease of use shape attitudes, intentions, and ultimately technology use (Davis, 1989). Subsequent extensions demonstrate that external beliefs and social conditions can refine the model when a technology involves risk, identity, or institutional dependence (Venkatesh & Davis, 2000). For Islamic fintech, functional beliefs alone may be insufficient because users must also evaluate whether the service, contracts, and governance are genuinely aligned with sharia requirements.

Prior Islamic fintech research supports this extension while also showing mixed results. Large Indonesian studies find that acceptance-model constructs are important for behavioral intention (Darmansyah et al., 2021), and studies of halal MSMEs associate religiosity, Islamic financial literacy, and perceived risk with adoption (Alfarizi & Ngatindriatun, 2022). Research on Indonesian Islamic philanthropy demonstrates that trust and religiosity can be integrated into TAM (Usman et al., 2022), while broader Islamic fintech evidence identifies trust as a link between perceived benefits, risks, and adoption intention (Ali et al., 2021). In MSME samples, however, the direct effect of ease of use may be weak, while usefulness, product knowledge, subjective norms, and religiosity can carry more explanatory weight (Majid, 2024).

Pontianak provides a useful nonmetropolitan setting for examining these relationships. Earlier local research applied the technology acceptance model to fintech intention among Pontianak MSMEs (Anshori & Anwari, 2022), and a later study integrating the technology acceptance model, the Theory of Planned Behavior, and religiosity found that usefulness, subjective norms, perceived behavioral control, and attitude were significant, whereas ease of use was not (Anwari & Primayudia, 2026). The gap addressed here is whether the core technology beliefs remain informative when sharia compliance trust and religiosity are modeled as distinct antecedents among nonmetropolitan micro and small enterprises. The intended theoretical extension is to model confidence in sharia-compliant contracts, operations, and oversight as conceptually distinct from generic technology trust; the present pilot does not establish that distinction empirically.

This study asks three questions: (1) Does the pilot instrument provide adequate preliminary evidence of internal consistency and convergent and discriminant validity? (2) What exploratory bivariate associations appear from perceived usefulness, perceived ease of use, sharia compliance trust, and religiosity to attitude toward use and behavioral intention? and (3) What measurement and sampling refinements are required before a confirmatory main study? The first question evaluates the measurement model; the second corresponds to the direct antecedent-to-attitude and antecedent-to-intention paths in Figure 1; and the third uses those diagnostics to specify the confirmatory study. The contribution is a transparent pilot assessment, not a validated causal model.

Literature Review and Proposition Development

Technology Acceptance Beliefs

Perceived usefulness is the degree to which a person expects a system to improve task or business performance, while perceived ease of use concerns the effort required to learn and operate it (Davis, 1989). In the original TAM, these beliefs influence attitude and behavioral intention. TAM2 further explains how social influence and cognitive instrumental processes shape usefulness judgments (Venkatesh & Davis, 2000). Applied to Islamic fintech, usefulness

may involve faster transactions, better financing access, easier record keeping, or improved business control; ease of use may involve learnability, interface clarity, and procedural simplicity.

Perceived usefulness should improve attitude and intention when the service produces recognizable business benefits. Perceived ease of use should reduce the effort required to learn and operate the service, supporting both favorable evaluations and intention. Evidence is not uniform: a large Indonesian MSME study identified ease of use as the strongest adoption factor (Askandar et al., 2026), whereas another MSME study reported a significant usefulness effect but a non-significant direct ease-of-use effect on intention (Majid, 2024). These differences make the expected directions suitable for pilot propositions rather than confirmatory hypotheses.

Proposition 1. Perceived usefulness is positively associated with attitude toward using Islamic fintech. Proposition 2. Perceived usefulness is positively associated with behavioral intention to use Islamic fintech. Proposition 3. Perceived ease of use is positively associated with attitude toward using Islamic fintech. Proposition 4. Perceived ease of use is positively associated with behavioral intention to use Islamic fintech.

Sharia Compliance Trust

Trust is important when users cannot directly verify a provider's algorithms, contracts, fund flows, or governance. Islamic fintech adds a normative layer because users must assess technical reliability and the authenticity of sharia compliance. Perceived benefits can strengthen trust, trust can support intention, and risk can undermine it (Ali et al., 2021). Indonesian research also shows that trust can operate alongside religiosity and institutional image (Usman et al., 2022). Sharia compliance trust is therefore defined here as confidence in the provider's sharia-compliant contracts, operations, and oversight. It is proposed as conceptually distinct from generic security or technology trust and requires item-level validation in the main study.

Proposition 5. Sharia compliance trust is positively associated with attitude toward using Islamic fintech. Proposition 6. Sharia compliance trust is positively associated with behavioral intention to use Islamic fintech.

Religiosity

Religiosity can connect product evaluation to religious commitment and everyday practice. It may increase the appeal of services perceived as sharia-compliant, but it does not guarantee adoption when product knowledge, usability, transparency, or trust is weak. Studies of Indonesian halal MSMEs and Islamic fintech users generally support a positive role for religiosity (Alfarizi & Ngatindriatun, 2022; Majid, 2024), while research on Islamic mobile and philanthropic services places religiosity alongside perceived trust and technology-acceptance beliefs (Muflih, 2023; Usman et al., 2022). Positive associations are therefore expected, subject to credible sharia assurance.

Proposition 7. Religiosity is positively associated with attitude toward using Islamic fintech. Proposition 8. Religiosity is positively associated with behavioral intention to use Islamic fintech.

Evidence for the Extended Model

Recent reviews position Islamic fintech as a convergence of financial intermediation, digital platforms, data-driven services, and sharia-sensitive innovation (Aysan & Unal, 2023). Bibliometric evidence maps the field across payments, lending, investment, social finance, and financial inclusion (Qudah et al., 2023), while Indonesian ecosystem research emphasizes the joint roles of regulation, providers, users, and supporting institutions (Hudaefi et al., 2023).

Cross-country evidence shows that Islamic fintech can widen digital financial inclusion and contribute to sustainable development, but its benefits depend on infrastructure, institutional credibility, and user capability (Mohamed & Otake, 2025). A recent emerging-market research agenda similarly warns that inclusion gains are shaped by digital divides and local institutional conditions (Del Sarto & Ozili, 2025).

Technology-adoption theory also provides constructs beyond the two core TAM beliefs. UTAUT consolidates performance expectancy, effort expectancy, social influence, and facilitating conditions (Venkatesh et al., 2003), while UTAUT2 adds price value, hedonic motivation, and habit for consumer settings (Venkatesh et al., 2012). The Theory of Planned Behavior retains the roles of attitude, subjective norms, and perceived behavioral control in forming intention (Ajzen, 1991). These perspectives support a contextual model in which usefulness and ease of use remain central but are interpreted alongside social, institutional, and value-based considerations.

Trust and risk are particularly relevant because digital financial transactions involve uncertainty about both the technical system and the provider. A recent systematic review identifies trust, security, perceived usefulness, and attitude as recurring fintech-adoption predictors (Jafri et al., 2024). An integrated model further shows that technology expectations and trust can operate jointly (Amnas et al., 2023), while evidence from financial services demonstrates that trust can condition the translation of behavioral intention into actual use (Hassan et al., 2024). In Islamic fintech lending, behavioral intention also depends on how users evaluate risk, service credibility, and the institutional environment (Alsmadi et al., 2024). These findings justify separating ordinary service trust from confidence that contracts, fund flows, and governance comply with sharia.

Recent Islamic fintech studies show that performance expectancy, facilitating conditions, social influence, knowledge, trust, religiosity, and effort expectancy can have different strengths across products and user groups (Alrasyid et al., 2023; Khan et al., 2022; Rahim et al., 2023). Indonesian evidence specifically links trust and religiosity with sharia peer-to-peer lending decisions (Hanif & Santosa, 2023), while research among micro, small, and medium enterprises shows that perceived usefulness, trust, and attitude form important adoption pathways (Jatnika et al., 2024). A multi-region Indonesian study also identifies technology readiness, usefulness, ease of use, and religiosity as relevant to Islamic fintech intention (Ibrahim et al., 2024).

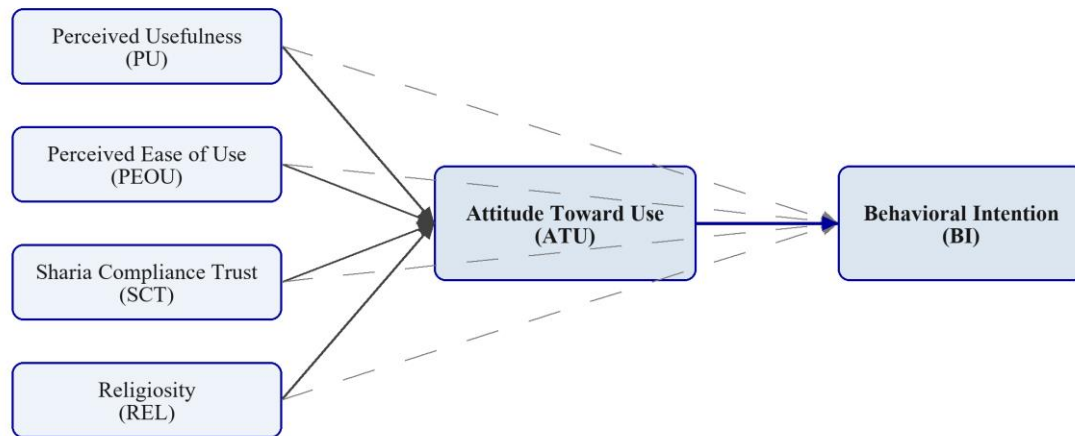
Evidence from small-business and financial-inclusion research strengthens the case for local calibration. Indonesian studies identify usefulness, perceived value, compatibility, and business context as recurring fintech drivers but also document substantial variation among enterprises (Nugraha et al., 2022; Rahadian & Thamrin, 2023). Comparative Islamic and conventional banking research shows that education and experience can moderate unified acceptance-model relationships (Idrees & Ullah, 2024). Research on digital finance and enterprise performance further links technology acceptance with financial inclusion and business outcomes (Thathsarani & Jianguo, 2022). Collectively, this literature cautions against assuming universal path coefficients and supports the present study's pilot-first approach.

Conceptual Model

The contextual model positions perceived usefulness, perceived ease of use, sharia compliance trust, and religiosity as antecedents of attitude toward use and behavioral intention. Attitude is specified as a potential mediator because each antecedent may influence intention indirectly through a favorable evaluation of use. Direct paths to intention are retained because practical and normative beliefs may also shape intention without that intermediate evaluation. Figure 1 distinguishes these paths. The present pilot examines only the eight direct antecedent-

to-attitude and antecedent-to-intention propositions; the attitude-to-intention and indirect paths are reserved for the confirmatory study.

Confirmatory-study Proposition 9. Attitude toward use is positively associated with behavioral intention to use Islamic fintech. Confirmatory-study Proposition 10. Attitude toward use mediates the associations of the four antecedents with behavioral intention.



Solid paths: attitude formation and attitude-to-intention link; dashed paths: direct effects on intention

Source: Developed by the authors (2025).

Figure 1. Contextual pilot model of Islamic fintech acceptance. Solid arrows represent antecedent-to-attitude and attitude-to-intention paths; dashed arrows represent direct antecedent-to-intention paths. Attitude is proposed as a mediator in the confirmatory model; the attitude-to-intention path and indirect effects were not estimated in this pilot.

METHODS

Research Design and Setting

The study used a quantitative, cross-sectional survey design as a pilot for a broader investigation of Islamic fintech acceptance among micro- and small-enterprise owners in Pontianak City, West Kalimantan, Indonesia. The pilot objective was to assess field feasibility, instrument performance, and the direction and approximate magnitude of relationships before a larger confirmatory survey.

Ethical Considerations

This study was conducted under the ethical oversight of the Lembaga Penelitian dan Pengabdian kepada Masyarakat (LPPM), Universitas Muhammadiyah Pontianak, as part of the 2025 Penelitian Dosen Pemula (PDP) program. All respondents provided informed consent before participating in the survey. The questionnaire did not collect personally identifiable information, and responses were recorded anonymously. Participation was voluntary, and respondents could withdraw at any time without consequence.

Population, Sample, and Data Collection

The target population comprised active micro and small business owners in Pontianak. Purposive sampling recruited respondents who had operated a business for at least one year and had basic knowledge of or experience with digital financial services (fintech), though not necessarily with Islamic fintech products specifically. Thirty usable interviewer-administered structured questionnaires were collected, allowing the research team to clarify procedural questions and check item completeness. The respondents came from multiple business sectors. Data were collected in March–April 2025 through face-to-face structured interviews. Thirty-five business owners were approached; 32 met the eligibility criteria, and 30 returned usable questionnaires (response rate 93.8%). Table 1 summarizes the respondent profile.

Table 1. Respondent profile (n = 30)

Characteristic	Category	n	%
Gender	Male	18	60.0
	Female	12	40.0
Age (years)	20–30	6	20.0
	31–40	12	40.0
	41–50	9	30.0
	> 50	3	10.0
Education	Primary/Junior high school	4	13.3
	Senior high school/Vocational	14	46.7
	Diploma/Bachelor's degree	10	33.3
	Master's/Doctoral degree	2	6.7
Business sector	Trading	11	36.7
	Food and beverage	8	26.7
	Services	6	20.0
	Crafts/Manufacturing	5	16.7
Business scale	Micro	19	63.3
	Small	11	36.7
Business duration (years)	1–3	8	26.7
	4–6	10	33.3
	7–10	7	23.3
	> 10	5	16.7
Fintech experience	Have used fintech	22	73.3
	Aware but never used	8	26.7
Islamic fintech familiarity	Familiar with Islamic fintech	14	46.7
	Not yet familiar	16	53.3

Source: Primary survey data (2025).

Most respondents were male (60%), aged 31–40 (40%), and had completed senior high school or vocational education (46.7%). Trading was the largest sector (36.7%), followed by food and beverage (26.7%). Micro enterprises accounted for 63.3% of the sample. While 73.3% had used fintech services in general, only 46.7% reported familiarity with Islamic fintech products, suggesting that a meaningful proportion evaluated Islamic fintech from limited direct exposure.

The distinction between general fintech experience (73.3%) and Islamic fintech familiarity (46.7%) indicates that a substantial portion of the sample evaluated Islamic fintech from limited direct exposure. This pattern is relevant because the pilot instrument asked respondents about Islamic fintech specifically; responses from participants unfamiliar with Islamic fintech products should be interpreted as reflecting expectations rather than experience-based evaluations.

The target of 30 usable cases was set for instrument pretesting and field-procedure evaluation, not for estimating the complete structural model or making population inferences. A 30-participant sample is consistent with guidance for an initial instrument-development pilot (Johanson & Brooks, 2010). It remains underpowered for the proposed six-construct model, so the main study must determine its sample prospectively from model complexity, expected effect sizes, and statistical power.

Instrument and Constructs

The questionnaire included perceived usefulness, perceived ease of use, attitude toward use, and behavioral intention domains informed by the technology acceptance model (Davis, 1989). The generic trust and religiosity domains were informed by prior Islamic fintech research (Muflih, 2023; Usman et al., 2022), while the pilot labeled confidence in sharia-compliant contracts, operations, and oversight as sharia compliance trust. All 15 retained indicators used the same ordered agreement-response format and were reviewed after expert input and preliminary testing. Table 2 summarizes the constructs, item counts, and operational domains. The complete item wording, response anchors, and source basis are reported in Appendix A. The sharia compliance trust items were developed by the authors based on the trust and religiosity domains in Muflih (2023) and Usman et al. (2022), adapted to capture confidence in sharia-compliant contracts, operations, and oversight. Content validity was assessed through expert review and preliminary field testing prior to the main data collection.

Table 2. Construct operationalization and adaptation sources

Construct	Operational focus and adaptation basis	Items
Perceived Usefulness (PU)	Expected improvement in business tasks and fintech-related performance; adapted from Davis (1989); see Appendix A	4
Perceived Ease of Use (PEOU)	Learnability, clarity, and effort required to use Islamic fintech; adapted from Davis (1989); see Appendix A	3
Attitude Toward Use (ATU)	Favorable evaluation of using Islamic fintech; adapted from Davis (1989); see Appendix A	2
Behavioral Intention (BI)	Intention to use or continue using Islamic fintech; adapted from Davis (1989); see Appendix A	2
Sharia Compliance Trust (SCT)	Confidence that services, contracts, operations, and oversight comply with sharia; developed from Muflih (2023) and Usman et al. (2022); see Appendix A	2
Religiosity (REL)	Religious commitment relevant to financial and technology choices; adapted from Muflih (2023) and Usman et al. (2022); see Appendix A	2

Source: Developed by the authors from the pilot questionnaire (2025).

Analytical Strategy

Internal consistency was examined with Cronbach's alpha. Convergent validity was assessed using indicator loadings and average variance extracted (AVE), while the available

discriminant-validity evidence used the Fornell-Larcker comparison. Because Fornell-Larcker can fail to detect some validity problems, a future confirmatory study should also report the heterotrait-monotrait ratio (HTMT) (Henseler et al., 2015).

Exploratory bivariate associations were estimated separately from each exogenous antecedent to attitude and behavioral intention. These regressions address Propositions 1-8 only. The attitude-to-intention path and proposed indirect effects in confirmatory-study Propositions 9-10 were not estimated. The pilot does not claim minimum-sample adequacy for a full structural model. PLS-SEM guidance emphasizes power, model complexity, and expected effect size rather than a simple ten-times rule (Hair et al., 2019; Kock & Hadaya, 2018; Streukens & Leroi-Werelds, 2016). With 30 cases, p-values and coefficient signs can be unstable and moderate effects may be missed; the estimates are used only to identify measurement problems and inform confirmatory-study planning.

RESULTS AND DISCUSSION

Measurement Quality

Cronbach's alpha ranged from 0.685 to 0.882 (Table 3). Perceived usefulness showed strong internal consistency, while perceived ease of use, behavioral intention, and sharia compliance trust were acceptable for a pilot. Attitude toward use (0.685) and religiosity (0.698) were marginal and require improved wording or additional theoretically coherent indicators. All average variance extracted values exceeded 0.50, and composite reliability values ranged from 0.863 to 0.921 (Table 3), exceeding 0.70 for all constructs. For attitude toward use and religiosity, each construct has one strong and one moderate loading, producing composite reliability values that exceed their Cronbach's alpha; this gap may reflect unequal loadings and different reliability assumptions and does not rule out measurement error. Most item loadings exceeded 0.70; PEOU1 loaded at 0.598 and should be revised or replaced before confirmatory testing. SCT2 showed a very high loading (0.975), which may partly reflect the two-item scale's limited content coverage. These results provide only preliminary measurement diagnostics, not confirmatory validation.

Table 3. Reliability and convergent-validity results

Construct	Item	Loading (λ)	α	AVE	CR
Perceived Usefulness (PU)	PU1	0.807	0.882	0.745	0.921
	PU2	0.895			
	PU3	0.892			
	PU4	0.855			
Perceived Ease of Use (PEOU)	PEOU1	0.598	0.751	0.688	0.865
	PEOU2	0.940			
	PEOU3	0.907			
Attitude Toward Use (ATU)	ATU1	0.931	0.685	0.761	0.863
	ATU2	0.809			
Behavioral Intention (BI)	BI1	0.871	0.759	0.809	0.894
	BI2	0.927			

Construct	Item	Loading (λ)	α	AVE	CR
Sharia Compliance Trust (SCT)	SCT1	0.844	0.790	0.831	0.908
	SCT2	0.975			
Religiosity (REL)	REL1	0.932	0.698	0.768	0.868
	REL2	0.817			

Source: Authors' analysis of pilot survey data (2025).

Note: α = Cronbach's alpha; AVE = average variance extracted; CR = composite reliability. All AVE values exceed 0.50. PEOU1 loaded below 0.70 and should be revised before confirmatory testing. SCT2 showed a high loading (0.975), which may partly reflect the two-item scale's limited content coverage. For ATU and REL, the gap between CR and α may reflect unequal loadings and different reliability assumptions and does not rule out measurement error; these constructs require additional indicators in the confirmatory study.

The square roots of AVE on the diagonal of the Fornell-Larcker matrix exceeded the absolute inter-construct correlations (Table 4), so the reported matrix mechanically meets the Fornell-Larcker comparison. Discriminant validity cannot be concluded until the AVE values, scoring, and correlations are verified. The pilot did not report HTMT values, cross-loadings, or bootstrapped confidence intervals, which should be included in the confirmatory study. Several core-model correlations are also unexpectedly weak or negative, including PU-PEOU, ATU-BI, and PEOU-ATU. These patterns should not be given a substantive theoretical interpretation until the researchers verify data coding, reverse-keyed items, missing-value handling, scale direction, and whether the reported scores mix latent-variable estimates with arithmetic composites. If the verified patterns remain, restricted range and heterogeneous product awareness or use may be investigated as possible explanations rather than assumed causes (Hair et al., 2019; Henseler et al., 2015).

Table 4. Fornell-Larcker matrix

Construct	PU	PEOU	ATU	BI	SCT	REL
PU	0.863					
PEOU	-0.001	0.829				
ATU	0.273	-0.223	0.872			
BI	0.075	0.143	0.021	0.899		
SCT	-0.323	0.064	0.081	0.133	0.912	
REL	-0.011	0.128	-0.022	0.022	-0.044	0.876

Source: Authors' analysis of pilot survey data (2025).

Note: Diagonal values are the square roots of AVE (reported in Table 3); lower-triangle values are inter-construct correlations.

Exploratory Relationships

Table 5 reports the exploratory bivariate regression results. Standardized coefficients equal the inter-construct correlations from Table 4, with $R^2 = r^2$ and exact p-values calculated using $t = r\sqrt{(n-2)/\sqrt{(1-r^2)}}$, $df = 28$. Perceived usefulness had the largest reported positive coefficient for attitude toward use ($\beta = 0.273$, $p = 0.144$, $R^2 = 0.075$). The direction is consistent

with prior technology-acceptance evidence (Askandar et al., 2026; Darmansyah et al., 2021; Davis, 1989), but it is not statistically significant and does not confirm Proposition 1.

Perceived ease of use showed a small positive coefficient for behavioral intention ($\beta = 0.143$, $p = 0.451$, $R^2 = 0.020$), consistent in direction with prior evidence but far from statistical significance. Sharia compliance trust produced a similar-sized positive coefficient for behavioral intention ($\beta = 0.133$, $p = 0.484$, $R^2 = 0.018$). Neither association should be interpreted as evidence of a confirmed determinant with 30 cases. The negative ease-of-use coefficient for attitude ($\beta = -0.223$, $p = 0.236$) should likewise not be interpreted as evidence that usability reduces favorable attitudes. With the weak PEOU1 loading, unmeasured variation in product-specific exposure, and separate bivariate models, the sign could reflect sampling or measurement instability or omitted-variable distortion. The main study should revalidate the ease-of-use measure and estimate the full model with bootstrapped confidence intervals. Comparable Indonesian evidence also reports different ease-of-use relationships across settings (Anwari & Primayudia, 2026; Askandar et al., 2026; Majid, 2024).

Table 5. Exploratory simple-regression results

Relationship	β	p-value	R^2	Pilot interpretation
P1 PU $\rightarrow$ ATU	0.273	0.144	0.075	Largest ATU signal; not significant
P3 PEOU $\rightarrow$ ATU	-0.223	0.236	0.050	Negative; not significant
P5 SCT $\rightarrow$ ATU	0.081	0.670	0.007	Small positive; not significant
P7 REL $\rightarrow$ ATU	-0.022	0.908	0.000	Near zero; not significant
P2 PU $\rightarrow$ BI	0.075	0.694	0.006	Small positive; not significant
P4 PEOU $\rightarrow$ BI	0.143	0.451	0.020	Positive; not significant
P6 SCT $\rightarrow$ BI	0.133	0.484	0.018	Positive; not significant
P8 REL $\rightarrow$ BI	0.022	0.908	0.000	Near zero; not significant

Source: Authors' analysis of pilot survey data (2025).

Note: β = standardized bivariate regression coefficient, equal to the Pearson correlation from Table 4. Each row is a separate bivariate regression. No p-value is below 0.05. Coefficients, R^2 values, and p-values have been recalculated from the inter-construct correlations in Table 4 using $t = r\sqrt{(n-2)/\sqrt{1-r^2}}$ with $df = 28$ to ensure internal consistency across tables.

Interpretation of Trust and Religiosity

Sharia compliance trust and religiosity showed small, non-significant coefficients. These estimates do not show that value-based constructs are irrelevant. Larger studies have linked trust and religiosity to Islamic fintech adoption (Alfarizi & Ngatindriatun, 2022; Ali et al., 2021; Majid, 2024; Usman et al., 2022). Three possible explanations merit testing: respondents may have evaluated fintech generally rather than a specific sharia product; two-item measures may not represent the multidimensional nature of religious commitment or sharia assurance; and the small sample produces imprecise estimates. Because product-specific exposure was not documented in sufficient detail, its role cannot be determined from this pilot.

The trust measure also requires conceptual refinement. With only two indicators, this pilot cannot establish that the scale adequately covers confidence in the provider, product contracts, operations, and sharia oversight. A respondent may trust the technology while

remaining uncertain about the underlying contract, or may value sharia compliance without being able to verify it. The main study should anchor every item to a concrete Islamic fintech service, document whether each item is adapted or author-developed, establish content validity, and cover transparency, supervisory credibility, contract clarity, and dispute handling.

Practical Implications

If the coefficient ranking is reproduced after raw-data verification, utility and usability would be priorities to test, not confirmed adoption determinants. Future onboarding studies should examine concrete micro- and small-enterprise tasks such as payment collection, cash-flow monitoring, financing applications, and transparent fee or profit-sharing calculations. Ease of use should be evaluated with users who have varied digital and product experience because one ease-of-use indicator underperformed in the pilot.

For regulators, local government, Islamic financial institutions, and business associations, usability should be paired with credible sharia communication. Labels alone are unlikely to create trust. Providers should explain the contract, fund flow, sharia supervisory process, data protection, and complaint mechanism in language that micro- and small-enterprise owners can apply to business decisions. Collaborative literacy programs involving practitioners, academics, and recognized sharia authorities may strengthen both product knowledge and informed trust, consistent with recommendations from Indonesian MSME research (Alfarizi & Ngatindriatun, 2022; Majid, 2024).

The study's contribution is methodological rather than confirmatory. It proposes sharia compliance trust as conceptually distinct from generic technology trust in a nonmetropolitan micro- and small-enterprise context and identifies the measurement and sampling features that must be improved before the distinction and extended model can be tested.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This 30-respondent pilot reports preliminary measurement diagnostics requiring verification for an intended extension of the technology acceptance model among micro and small enterprises in Pontianak. The extension conceptualizes sharia compliance trust as distinct from generic technology trust but does not establish that distinction empirically. The non-significant bivariate coefficients do not validate the structural model or identify adoption determinants. Instead, the pilot identifies priorities for the main study: revise PEOU1; strengthen the short attitude, trust, and religiosity measures; expand the respondent profile to include income, digital literacy, and product-specific exposure measures; determine sample size through prospective power analysis; and test the full model with bootstrapped direct and indirect effects.

Limitations

The sample is small and non-probabilistic. The respondent profile (Table 1) documents basic demographics and fintech exposure but does not include income, digital literacy measures, or the specific Islamic fintech products respondents evaluated. The complete questionnaire and item wording are reported in the Appendix, but the pilot instrument contains several constructs with only two indicators. The available diagnostics exclude the heterotrait-monotrait ratio, bootstrapped confidence intervals, and a complete indirect-effects model. Interviewer administration may also increase social-desirability responding, especially for religiosity and sharia-compliance questions. Finally, the cross-sectional design cannot establish causality.

Recommendations

Before the main study, the researchers should expand and revalidate the attitude, trust, and religiosity scales. For each two-item pilot measure, the revised instrument assessment should also report the inter-item relationship and an appropriate two-item reliability estimate. The study should define the Islamic fintech product category, verify coding, reverse-keyed items, missing-value handling, and score construction against the raw data, recruit a broader sample across Pontianak districts, determine sample size through prospective power analysis, test common-method bias, and estimate the full model with bootstrapped direct and indirect effects. Predictive assessment and out-of-sample performance should complement explanatory statistics (Hair et al., 2019; Kock & Hadaya, 2018; Streukens & Leroi-Werelds, 2016).

Author Contributions

Aiyub Anshori led the research conceptualization, field coordination, data interpretation, and preparation of the initial manuscript. Rahmat contributed to instrument development, data review, interpretation of the findings, and critical revision of the manuscript. Both authors reviewed and approved the final version.

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REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Alfarizi, M., & Ngatindriatun. (2022). Indonesian halal MSME open innovation with Islamic fintech adoption. *Jurnal Akuntansi dan Keuangan Indonesia*, 19(2), 221–243. <https://doi.org/10.21002/jaki.2022.11>
- Ali, M., Raza, S. A., Khamis, B., Puah, C. H., & Amin, H. (2021). How perceived risk, benefit and trust determine user fintech adoption: A new dimension for Islamic finance. *Foresight*, 23(4), 403–420. <https://doi.org/10.1108/FS-09-2020-0095>
- Alrasyid, H., Rabbani, M. R., & Afifudin. (2023). Embracing the digital economy: Exploring the role of trust, perceived ease of use, and religiosity on intention to use Islamic peer-to-peer lending. *JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen*, 20(2), 283–305. <https://doi.org/10.31106/jema.v20i2.9097>
- Alshater, M. M., Saba, I., Supriani, I., & Rabbani, M. R. (2022). Fintech in Islamic finance literature: A review. *Heliyon*, 8(9), e10385. <https://doi.org/10.1016/j.heliyon.2022.e10385>
- Alsmadi, A. A., Aalrawashdeh, N., Al-Gasaymeh, A., Al_hazimeh, A. M., & Alhawamdeh, L. (2024). Adoption of Islamic fintech in lending services through prediction of behavioural intention. *Kybernetes*, 53(6), 1921–1938. <https://doi.org/10.1108/K-10-2022-1362>
- Amnas, M. B., Selvam, M., Raja, M., Santhoshkumar, S., & Parayitam, S. (2023). Understanding the determinants of fintech adoption: Integrating UTAUT2 with trust theoretic model. *Journal of Risk and Financial Management*, 16(12), 505. <https://doi.org/10.3390/jrfm16120505>
- Anshori, A., & Anwari, M. K. (2022). Model penerimaan teknologi (TAM) terhadap intensi menggunakan teknologi keuangan (FINTECH) UMKM Kota Pontianak. *Jurnal Produktivitas*, 9(2), 236–241. <https://doi.org/10.29406/jpr.v9i2.5380>

- Anwari, M. K., & Primayudia, D. (2026). Pengaruh religiusitas terhadap intensi UMKM menggunakan fintech syariah di Kota Pontianak: Integrasi TAM–TPB. *Jesya (Jurnal Ekonomi dan Ekonomi Syariah)*, 9(1), 57–68. <https://doi.org/10.36778/jesya.v9i1.2499>
- Askandar, N. S., Alrasyid, H., & Asri, N. W. (2026). Islamic fintech adoption and MSME financial inclusion in Indonesia. *Jurnal Ilmiah Akuntansi dan Bisnis*, 21(1), 40–56. <https://doi.org/10.24843/JIAB.2026.v21i01.p03>
- Aysan, A. F., & Unal, I. M. (2023). Challenges in Islamic fintech and digitalization: An extensive literature review. *World Scientific Annual Review of Islamic Finance*, 1, 41–52. <https://doi.org/10.1142/S2811023423500028>
- Darmansyah, Fianto, B. A., Hendratmi, A., & Aziz, P. F. (2021). Factors determining behavioral intentions to use Islamic financial technology: Three competing models. *Journal of Islamic Marketing*, 12(4), 794–812. <https://doi.org/10.1108/JIMA-12-2019-0252>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Del Sarto, N., & Ozili, P. K. (2025). FinTech and financial inclusion in emerging markets: A bibliometric analysis and future research agenda. *International Journal of Emerging Markets*, 20(13), 270–290. <https://doi.org/10.1108/IJOEM-08-2024-1428>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hanif, M. A., & Santosa, P. B. (2023). TAM construct, trust, and religiosity for decision of Muslim lenders to use funding services on sharia peer-to-peer lending platforms (Website and Apps). *Jurnal Ekonomi Syariah Teori dan Terapan*, 10(2), 151–168. <https://doi.org/10.20473/vol10iss20232pp151-168>
- Hassan, M. S., Islam, M. A., Abdullah, A. B. M., & Nasir, H. (2024). End-user perspectives on fintech services adoption in the Bangladesh insurance industry: The moderating role of trust. *Journal of Financial Services Marketing*, 29(4), 1377–1395. <https://doi.org/10.1057/s41264-024-00268-6>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hudaefi, F. A., Hassan, M. K., & Abduh, M. (2023). Exploring the development of Islamic fintech ecosystem in Indonesia: A text analytics. *Qualitative Research in Financial Markets*, 15(3), 514–533. <https://doi.org/10.1108/QRFM-04-2022-0058>
- Ibrahim, M. H., Fitri, F., & Ahmad, R. S. (2024). The role of technology readiness in Islamic financial technology acceptance among MSMEs: An empirical integration analysis TPB and TAM framework. *Al-Muzara'ah*, 12(1), 177–194. <https://doi.org/10.29244/jam.12.1.177-194>
- Idrees, M. A., & Ullah, S. (2024). Comparative analysis of fintech adoption among Islamic and conventional banking users with the moderating effect of education level: A UTAUT2 perspective. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(3), 100343. <https://doi.org/10.1016/j.joitmc.2024.100343>
- Jafri, J. A., Mohd Amin, S. I., Abdul Rahman, A., & Mohd Nor, S. (2024). A systematic literature review of the role of trust and security on fintech adoption in banking. *Heliyon*, 10(1), e22980. <https://doi.org/10.1016/j.heliyon.2023.e22980>
- Jatnika, M. D., Friantoro, D., Muhammad, M., Iskandar, I., & Alikhan, L. U. R. L. (2024). Intention to use Islamic fintech among MSMEs: Knowledge of sharia prohibition approach. *Jurnal Manajemen Universitas Bung Hatta*, 19(1), 104–119. <https://doi.org/10.37301/jmubh.v19i1.24443>

- Johanson, G. A., & Brooks, G. P. (2010). Initial scale development: Sample size for pilot studies. *Educational and Psychological Measurement*, 70(3), 394–400. <https://doi.org/10.1177/0013164409355692>
- Khan, M. S., Rabbani, M. R., Hawaldar, I. T., & Bashar, A. (2022). Determinants of behavioral intentions to use Islamic financial technology: An empirical assessment. *Risks*, 10(6), 114. <https://doi.org/10.3390/risks10060114>
- Kock, N., & Hadaya, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. *Information Systems Journal*, 28(1), 227–261. <https://doi.org/10.1111/isj.12131>
- Majid, R. (2024). Islamic fintech and MSMEs: The role of religiosity and product knowledge. *Al-Muzara'ah*, 12(2), 321–335. <https://doi.org/10.29244/jam.12.2.321-335>
- Mohamed, H. A., & Otake, T. (2025). The role of Islamic fintech in digital financial inclusion and sustainable development post COVID-19: Cross-country analysis. *International Journal of Islamic and Middle Eastern Finance and Management*, 18(3), 649–671. <https://doi.org/10.1108/IMEFM-02-2024-0100>
- Muflih, M. (2023). Muzakki's adoption of mobile service: Integrating the roles of technology acceptance model (TAM), perceived trust and religiosity. *Journal of Islamic Accounting and Business Research*, 14(1), 21–33. <https://doi.org/10.1108/JIABR-09-2021-0273>
- Nugraha, D. P., Setiawan, B., Nathan, R. J., & Fekete-Farkas, M. (2022). Fintech adoption drivers for innovation for SMEs in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(4), 208. <https://doi.org/10.3390/joitmc8040208>
- Qudah, H., Malahim, S., Airout, R., Alomari, M., Hamour, A. A., & Alqudah, M. (2023). Islamic finance in the era of financial technology: A bibliometric review of future trends. *International Journal of Financial Studies*, 11(2), 76. <https://doi.org/10.3390/ijfs11020076>
- Rahadian, A., & Thamrin, H. (2023). Analysis of factors affecting MSME in using fintech lending as alternative financing: Technology acceptance model approach. *Brazilian Business Review*, 20(3), 301–322. <https://doi.org/10.15728/bbr.2023.20.3.4.en>
- Rahim, N. F., Bakri, M. H., Fianto, B. A., Zainal, N., & Al Shami, S. A. H. (2023). Measurement and structural modelling on factors of Islamic fintech adoption among millennials in Malaysia. *Journal of Islamic Marketing*, 14(6), 1463–1487. <https://doi.org/10.1108/JIMA-09-2020-0279>
- Streukens, S., & Leroi-Werelds, S. (2016). Bootstrapping and PLS-SEM: A step-by-step guide to get more out of your bootstrap results. *European Management Journal*, 34(6), 618–632. <https://doi.org/10.1016/j.emj.2016.06.003>
- Thathsarani, U. S., & Jianguo, W. (2022). Do digital finance and the technology acceptance model strengthen financial inclusion and SME performance? *Information*, 13(8), 390. <https://doi.org/10.3390/info13080390>
- Usman, H., Mulia, D., Chairy, C., & Widowati, N. (2022). Integrating trust, religiosity and image into technology acceptance model: The case of the Islamic philanthropy in Indonesia. *Journal of Islamic Marketing*, 13(2), 381–409. <https://doi.org/10.1108/JIMA-01-2020-0020>
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/10.2307/41410412>