

BEYOND RELIGION: CROSS-FAITH DIFFUSION OF ISLAMIC FINTECH AMONG SMES IN A NON- MUSLIM-MAJORITY ECONOMY, EVIDENCE FROM GHANA

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ABSTRACT

The dominant assumption in Islamic Fintech literature is that adoption intent is driven primarily by religious identity, positioning it as a Muslim-market product. This paper challenges that assumption with an exploratory convergent parallel mixed-methods study of 150 purposively sampled urban SME owners and managers across Accra, Kumasi, and Tamale, Ghana combined with eight semi-structured expert contextual interviews. We find that overall adoption intent does not differ significantly between Christian (mean = 3.60) and Muslim (mean = 3.86) respondents ($t = -1.19$, $p > 0.05$, Cohen's $d = 0.215$, 95% CI $[-0.12, 0.55]$), and that religious identity is a non-significant predictor of adoption intent after controlling for digital literacy, firm size, awareness, and ethical compliance orientation ($\beta = -0.196$, $p > 0.05$, 95% CI $[-0.60, 0.21]$). A Bayesian regression analysis yields $BF_{01} = 3.8$ for the religion predictor, providing positive evidence for the null hypothesis (Rouder et al., 2009). The most direct adoption intent item formally satisfies two one-sided tests (TOST) for equivalence within ± 0.5 points ($t_1 = 2.11$, $t_2 = -2.20$); the composite TOST was not met at current sample size, indicating that broader composite equivalence requires replication with a larger sample. Digital literacy ($\beta = 0.479$, $p < 0.001$,

95% CI [0.271, 0.687]) is the dominant predictor of adoption intent; trust in Islamic Finance mechanisms ($r = 0.83$, $p < 0.001$) is the strongest bivariate correlate. These findings carry significant implications for how Islamic Fintech is regulated, marketed, and scaled in non-Muslim-majority developing economies.

Keywords: *Islamic Fintech; Diffusion of Innovations; Social Exchange Theory; SMEs; Ghana; Cross-Faith Adoption; Financial Inclusion; Developing Economies; Equivalence Testing.*

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1. INTRODUCTION

Islamic finance has undergone a transformation of remarkable scale over the past two decades. From a niche framework anchored in devotional practice, it has evolved into a USD 4.9 trillion global industry encompassing more than 1,900 institutions across 136 countries (ICD–LSEG, 2024). Within this broader expansion, Islamic Fintech, the integration of Shariah-compliant financial principles with digital technology platforms has emerged as one of the sector's most significant growth drivers, with the global Islamic Fintech transaction volume reaching USD 161 billion in 2023/24 (DinarStandard & Qatar Financial Centre, 2024). Yet the intellectual architecture of the Islamic Fintech adoption literature remains built on a foundational assumption that the geography of Islamic finance development has never seriously challenged: that adoption intent is fundamentally a function of religious identity. The bulk of empirical research has been conducted in Gulf Cooperation Council (GCC) countries, Malaysia, and Indonesia economies where Muslim populations constitute decisive demographic

majorities and the resulting theoretical frameworks treat Islamic Fintech as a Muslim-community product. Religious identity, religiosity, Islamic financial literacy, and Shariah compliance perception appear repeatedly as primary predictor constructs (Maniam, 2024; Rabbani, 2022).

This framing creates a significant intellectual contradiction. If Islamic Fintech's appeal were exclusively faith-based, one would expect it to remain confined to Muslim-majority jurisdictions. Yet the empirical record of regulatory development tells a different story: the United Kingdom, the United States, and Luxembourg have each established Islamic Finance regulatory frameworks not to serve Muslim minorities, but to capture demand from ethical and socially responsible investors operating across religious identities (Kok et al., 2022).

Ghana presents an almost ideal natural test case for examining this proposition. With approximately 70% of its population identifying as Christian and an additional 20% as Muslim, it represents a demographic inversion of the typical Islamic Fintech research context. The Bank of Ghana (BoG) advanced a national non-interest banking regulatory framework throughout 2025 publishing a technical committee report and, in December 2025, opening an exposure draft for public consultation explicitly positioning non-interest banking as a mainstream financial innovation accessible to all Ghanaians rather than a Muslim-community accommodation (Bank of Ghana, 2025). Islamic Fintech's entry into Ghana's substantial SME finance market therefore occurs under conditions of pre-existing cross-faith regulatory legitimacy an analytically unique circumstance.

Ghana has received limited attention in the empirical Islamic Fintech literature, particularly in quantitative work on cross-faith adoption intent. While a small but meaningful body of research has examined Islamic banking adoption in sub-Saharan Muslim-minority contexts notably in Nigeria (Adewale, 2017), the specific question of whether a Christian-majority economy can sustain cross-faith Islamic Fintech adoption intent remains empirically untested. This paper addresses that gap with a direct empirical question: does religious affiliation predict Islamic Fintech adoption intent among urban SMEs in a non-Muslim-majority African economy, once digital capability, firm characteristics, awareness, and ethical compliance orientation are controlled? The answer, we find, is no.

This paper makes four contributions. First, to our knowledge, it provides the first quantitative test of the religion-adoption assumption in a Christian-majority sub-Saharan African context, extending the prior sub-Saharan literature (Adewale, 2017) to a setting where non-Muslim adoption intent is the modal research challenge. Second, it extends Diffusion of Innovations theory (Rogers, 2003) by demonstrating that the compatibility attribute of Islamic Fintech is consistent with operating at the level of universal ethical values, not religious identity. Third, it extends Social Exchange Theory (Blau, 1964; Cropanzano & Mitchell, 2005) by identifying digital literacy and institutional trust as the operative exchange resources driving adoption intent. Fourth, it introduces both equivalence testing (TOST) and Bayesian null hypothesis evidence (BF_{01}) to the Islamic Fintech adoption literature, providing a more rigorous framework for evaluating religion-invariance claims.

Three research questions structure this inquiry. First, does religious affiliation significantly predict Islamic Fintech adoption intent among urban Ghanaian SMEs with existing Fintech exposure, after controlling for relevant covariates? Second, what constructs drive adoption intent across faith groups? Third, what are the implications for how Islamic Fintech is positioned, regulated, and scaled in non-Muslim-majority developing economies?

2. REVIEW OF LITERATURE

2.1 Islamic Fintech and the Religion-Adoption Assumption

Islamic Fintech may be defined as the integration of Shariah-compliant financial principles with digital technology platforms, encompassing mobile payment systems, crowdfunding platforms, digital Islamic insurance (takaful), sukuk issuance tools, and AI-assisted Shariah-compliance screening (Maniam, 2024; Rabbani, 2022). The global Islamic Finance industry held approximately USD 4.9 trillion in total assets by 2023, recording double-digit growth of 11% over the preceding year (ICD–LSEG, 2024).

The academic literature's implicit religion-adoption assumption follows predictably from the geographic concentration of research in GCC and Southeast Asian contexts. Studies from these settings treat Islamic Fintech adoption intent as a Muslim-community behaviour examining how religiosity, Islamic literacy, and Shariah-compliance perception determine adoption intent (Maniam, 2024; Rabbani, 2022). Alsmadi (2025) and Kok et al. (2022) represent recent contributions that begin to question this framing by emphasising CSR mechanisms and

regulatory cross-boundary diffusion respectively, but both remain situated in Muslim-majority or GCC regulatory contexts.

Several strands of evidence challenge the religion-adoption assumption directly. Regulatory developments in non-Muslim-majority economies, the United Kingdom, the United States, and Luxembourg have established Islamic Finance frameworks explicitly to capture demand from ethical and socially responsible investors, not Muslim communities per se (Kok et al., 2022). Azmat and Subhan (2022) demonstrate that Islamic financial products' deontological attributes generate ethical credentials that resonate across cultural and religious contexts. Sub-Saharan Africa has seen initial Islamic banking adoption studies in Muslim-minority urban contexts (Adewale, 2017), but these have not extended to the cross-faith adoption question in Christian-majority settings.

Broader technology adoption frameworks, particularly UTAUT2 (Venkatesh et al., 2012), identify hedonic motivation, habit, and price value as additional determinants of consumer technology adoption. This study selects DOI and SET over UTAUT2 for specific theoretical reasons: the core research question concerns whether an innovation's values-compatibility can transcend religious identity boundaries, a mechanism theorised directly in Rogers' (2003) compatibility construct and not addressed in UTAUT2's performance and effort expectancy constructs. SET is selected because the exchange value of Islamic Fintech is specifically constituted by its offer of interest-free financing against a backdrop of high conventional lending rates, an economic calculation grounded in trust, SET's central theoretical variable.

2.2 Diffusion of Innovations Theory: Compatibility as the Cross-Faith Mechanism

Rogers' (2003) Diffusion of Innovations (DOI) theory identifies five attributes that determine the adoption rate of any innovation: relative advantage, compatibility, complexity, trialability, and observability. Compatibility, the degree to which an innovation is consistent with the existing values, experiences, and needs of potential adopters is the attribute most directly relevant to the cross-faith adoption question.

Compatibility operates at the level of values alignment: an innovation is compatible when potential adopters perceive it as consistent with their existing value systems, whether those value systems are religious, cultural, professional, or ethical. Islamic Fintech's prohibitions on interest, its asset-backing requirements, and its profit-sharing mechanisms are structurally aligned with values of fairness, transparency, and economic protection that are not exclusive to Islamic traditions. The Catholic Church's sustained historical opposition to usury, the Protestant tradition's ambivalence toward financial speculation, and the modern secular ethical finance and ESG investment movements all share functional value alignment with Islamic Fintech's design principles (Visser & McIntosh, 1998; Azmat & Subhan, 2022).

DOI's application to financial technology adoption in sub-Saharan Africa provides important precedent. Mobile money particularly M-Pesa in Kenya and Ghana's mobile money ecosystem diffused rapidly across communities regardless of religious identity because the innovation's economic value proposition was universally accessible (Dodoo et al., 2025). The

compatibility attribute in these cases operated through economic need, not demographic identity.

2.3 Social Exchange Theory: The Religion-Invariant Value Calculation

Social Exchange Theory (SET), originally developed by Blau (1964), proposes that behaviour is governed by the logic of exchange: individuals engage in exchange relationships when the perceived benefits of participation outweigh the perceived costs. Exchange relationships are sustained by trust: actors will not commit to exchanges with unknown or unreliable counterparties, regardless of the nominal attractiveness of the exchange proposition (Cropanzano & Mitchell, 2005).

Applied to Islamic Fintech adoption intent among Ghanaian SMEs, SET provides a compelling explanation for why the adoption decision should be religion-invariant. The exchange proposition is straightforward: SME owners face a known and substantial cost conventional bank lending rates averaging approximately 19.7% as of February 2026, among the highest in West Africa (Bank of Ghana, 2026) combined with stringent collateral requirements and information asymmetries that disadvantage small borrowers (Abor & Quartey, 2010; Ozili, 2020). Islamic Fintech offers an alternative exchange structure: interest-free financing through *murabaha*, risk-sharing through *mudarabah* and *musharakah*, and reduced collateral dependency through asset-backed instruments. The rational calculation of exchange value is available to any SME owner regardless of religious identity.

SET identifies trust as the foundational resource in exchange relationships (Blau, 1964; Cropanzano & Mitchell, 2005). This

theoretical prediction is supported with high empirical force in this study ($r = 0.83$ for trust in Islamic Finance mechanisms and adoption intent). Regulatory frameworks are, in SET terms, institutional trust mechanisms: BoG's regulatory oversight converts a novel and unfamiliar product into an endorsed exchange partner.

2.4 SME Financing Challenges in Ghana and the Islamic Fintech Opportunity

The persistent financing gap facing SMEs in developing economies is extensively documented (Beck & Demirguc-Kunt, 2006; Ozili, 2020; World Bank, 2020). Ghana exemplifies these dynamics. Conventional bank lending rates averaged approximately 19.7% as of February 2026 (Bank of Ghana, 2026), creating a cost-of-capital burden that constrains SME investment and growth financing. SMEs are estimated to contribute approximately 60–70% of Ghana's GDP and account for over 80% of employment in the formal private sector (World Bank, 2020; Ghana Enterprise Agency, 2020). Collateral requirements, information asymmetries, and high transaction costs systematically exclude micro and small enterprises from formal bank credit (Abor & Quartey, 2010).

Islamic Fintech offers instruments directly responsive to these constraints: *murabaha* for asset acquisition without interest, *mudarabah* and *musharakah* for equity-style profit-sharing financing, and crowdfunding platforms that aggregate small capital contributions. Empirical evidence from Muslim-majority economies confirms the positive impact of Islamic Fintech on SME financing outcomes (Hassan et al., 2020; Rabbani, 2022).

The critical limitation of this evidence base is that it originates exclusively in Muslim-majority contexts.

2.5 Theoretical Integration and Critical Perspectives

DOI and SET are employed as complementary rather than competing frameworks. DOI explains the mechanism through which an innovation's attributes become relevant to non-target communities: compatibility at the level of shared values enables cross-faith diffusion regardless of religious identity. SET explains the decision logic: the exchange value of interest-free financing is available to any SME owner who perceives the mechanism as trustworthy and the platform as capable of delivering on its promise. Trust, SET's central variable, is the mediating condition that connects DOI's compatibility perception to behavioural commitment. Future research employing PLS-SEM could formally model the compatibility → trust → adoption intent pathway.

This study acknowledges critical perspectives that complicate the narrative of Islamic Fintech's cross-faith expansion. Rudnyckyj (2019) and others in the political economy tradition question whether the global diffusion of Islamic finance represents authentic value transfer or a commercially driven "economisation of Islam" that repackages ethical principles for market purposes. In Christian-majority developing economies, this critique raises legitimate questions about whether "Islamic branding" in financial products constitutes cultural imperialism, authentic universalism, or pragmatic repackaging of universal ethical finance principles. This study is empirical rather than normative: it documents adoption intent patterns rather than making prescriptive claims. The dual-pathway finding that

Muslim and Christian adopters reach equivalent intent through motivationally distinct routes suggests that any expansion strategy must be designed to respect motivational heterogeneity rather than assuming a monolithic market logic.

3. METHODOLOGY

This study employs a convergent parallel mixed-methods research design (Creswell & Creswell, 2018), in which quantitative and qualitative data were collected simultaneously, analysed independently, and merged at the interpretation stage. The study is exploratory in scope: findings are intended to generate theoretically grounded hypotheses about cross-faith Islamic Fintech adoption intent within a digitally engaged urban SME population, rather than to provide population-representative estimates.

The study area spans three major Ghanaian cities: Accra (Greater Accra Region), Kumasi (Ashanti Region), and Tamale (Northern Region). Accra and Kumasi represent the largest commercial and SME concentrations in southern and central Ghana, with predominantly Christian demographics; Tamale is the commercial centre of northern Ghana, with a predominantly Muslim demographic (approximately 50 respondents per city). This geographic spread ensured that religious composition differences in the sample were not confounded with a single regional context and permitted a geographic robustness test in the regression analysis (Section 4.5).

Sampling followed a purposive strategy (Palinkas et al., 2015) targeting urban SME owners and managers meeting two inclusion criteria: at least basic Fintech exposure (active use of at least one digital financial service in the preceding 12 months)

and a minimum of two years of business operation. Data collection employed two parallel instruments: a structured Google Forms questionnaire (n = 53) and a printed questionnaire administered through direct field visits (n = 97), yielding N = 150 valid and complete responses. The full survey instrument is provided in Appendix A.

Researchers and readers should note important characteristics of this purposive sample that define the scope of inference. The sample is restricted to urban SME owners in three cities who were already active Fintech users. Table 8 (Section 4.1) compares the sample profile against national SME benchmarks from the Ghana Statistical Service (2021) and reveals systematic skews on age (88% below 35 vs. approximately 45–50% nationally), education (80% tertiary vs. approximately 25–30% nationally), geographic location (100% urban vs. approximately 40–45% nationally), and digital engagement (100% Fintech users by design vs. approximately 30–40% nationally). Findings are interpreted as applying to urban Ghanaian SME owners with existing digital financial service exposure, not to the broader Ghanaian SME population.

The quantitative instrument comprised a structured Likert-scale questionnaire (1 = Strongly Disagree to 5 = Strongly Agree) spanning nine thematic sections. Construct reliability was assessed using Cronbach's alpha. Discriminant validity evidence is reported in Section 4.2.

Quantitative analysis proceeded in four stages. First, descriptive statistics and independent samples t-tests (Welch correction) assessed group differences. Second, two one-sided t-tests (TOST; Schuirmann, 1987; Lakens, 2017) were

conducted using a pre-analysis equivalence bound of $\delta = \pm 0.50$ points. This bound was determined before data analysis, following Cohen's (1988) criterion for the minimum practically meaningful effect size ($d = 0.50$), applied to the five-point response scale at the observed pooled standard deviation. The study was not formally pre-registered on a public platform (e.g., OSF, AsPredicted); this is acknowledged as a limitation (Lakens, 2017). A post-hoc power analysis is reported in Section 4.4 to assess the inferential precision of the TOST results. Third, OLS multiple regression was used to test religion-as-predictor after controls; interaction terms and a geographic control (city dummy) were tested in extended models. A Bayesian regression using the Jeffreys-Zellner-Siow (JZS) prior (Cauchy distribution, $r = 0.707$; Rouder et al., 2009) was conducted to quantify evidence for the null hypothesis on the religion predictor. Fourth, a Harman's single-factor test was conducted for common method variance.

The regression sample comprises $N = 129$ respondents, reflecting the exclusion of 12 participants who selected "Prefer not to state" for religious affiliation and nine respondents with missing covariate data under list-wise deletion. The full $N = 150$ is retained for all descriptive analyses, t-tests, equivalence tests, and correlation analyses.

The qualitative component comprised eight semi-structured expert contextual interviews with purposively selected experts: two Islamic Finance specialists, two Fintech operators, two SME sector representatives, and two regulatory advisors familiar with BoG's non-interest banking framework. These interviews were not designed to corroborate the quantitative findings through independent triangulation; they provide interpretive

enrichment by elucidating mechanisms and contextual factors that illuminate the statistical patterns. Interviews were conducted in English, audio-recorded with written consent, and transcribed verbatim. Analysis followed Braun and Clarke's (2006) six-phase thematic analysis protocol. Eight expert interviews is appropriate for theoretically saturating expert knowledge on a specialist topic (Guest et al., 2006). The study received institutional ethical approval prior to data collection; all participants provided written informed consent.

4. RESULTS

4.1 Sample Profile

Table 1 presents the demographic profile of the 150 survey respondents. The gender distribution (66% male, 34% female or preferring not to state) reflects patterns documented in Ghana's SME sector. The sample skews younger than the general SME population: 38% of respondents were below 25 years of age, and a further 50% were aged 25–34. Tertiary education was reported by 80% of respondents. Micro-enterprises (fewer than five employees) represented 66% of the sample. The religious composition Christian 40%, Muslim 52%, Prefer not to state 8% reflects the geographic spread across Accra, Kumasi, and Tamale.

Table 1. Demographic Profile of Survey Respondents (N = 150)

Characteristic	Category	n (%)
Gender	Male	99 (66%)
	Female / Prefer not to state	51 (34%)
Age Group	Below 25 years	57 (38%)
	25–34 years	75 (50%)
	35+ years	18 (12%)
Education	Tertiary	120 (80%)
	Secondary or below	30 (20%)
Enterprise Size	Micro (<5 employees)	99 (66%)
	Small (5–29 employees)	39 (26%)
	Medium (30+ employees)	12 (8%)
Religion	Christian	60 (40%)
	Muslim	78 (52%)
	Prefer not to state	12 (8%)
City	Accra	50 (33%)
	Kumasi	50 (33%)
	Tamale	50 (33%)
Annual Turnover	Below GHS 150,000	89 (59%)
	GHS 150,000–1,000,000	44 (29%)
	Above GHS 1,000,000	17 (11%)

Note: The author's own work.

Table 2 compares the study sample against available national SME benchmarks to contextualise the scope of inference. The purposive sampling strategy produces a sample that systematically differs from the national SME owner population on age, education, geographic location, and digital engagement. Findings should be interpreted as applying to urban Ghanaian SME owners with existing digital financial service exposure, not to the full Ghanaian SME population.

Table 2. Sample Profile Compared to National SME Benchmarks (Ghana Statistical Service, 2021)

Characteristic	Study Sample	National Benchmark†	Direction of Skew
Age below 35	88%	~45–50%	↑ Higher (Fintech criterion)
Tertiary education	80%	~25–30%	↑ Higher
Urban location	100%	~40–45%	↑ Higher (3-city sampling)
Active Fintech user	100%	~30–40%	↑ Higher (inclusion criterion)
Male ownership	66%	~60–65%	≈ Comparable
Micro-enterprise (<5 emp.)	66%	~65–70%	≈ Comparable

Note: † National benchmarks approximate, based on Ghana Statistical Service (2021) census and related SME sector estimates. Classification differences limit direct comparability.

4.2 Construct Reliability

Table 3 presents Cronbach’s alpha coefficients for all multi-item composites. All scales achieved acceptable to excellent internal consistency, exceeding the conventional threshold of $\alpha \geq 0.70$ (Nunnally, 1978).

Table 3. Construct Reliability (Cronbach’s Alpha)

Construct	Items	α	n	Interpretation
Adoption Intent	5	0.958	137	Excellent
Trust in IF Mechanisms	3	0.925	131	Excellent
Operational Efficiency	3	0.909	137	Excellent
Market Expansion	3	0.950	143	Excellent
Financial Performance	3	0.916	140	Excellent
Innovation	2	0.909	143	Excellent
Digital Literacy	4	0.862	140	Good
Perceived Usefulness	4	0.940	131	Excellent
Awareness	3	0.718	143	Acceptable

Note: Excellent $\alpha \geq 0.90$; Good 0.80–0.89; Acceptable 0.70–0.79 (Nunnally, 1978).

4.3 Discriminant Validity and Common Method Variance

The three items comprising the Trust in Islamic Finance Mechanisms scale ($\alpha = 0.925$) are: (F1) “Profit-sharing (Mudarabah) financing is more advantageous for my business than conventional interest-based loans”; (F2) “Islamic Finance mechanisms are suitable for the financing needs of SMEs like mine”; and (F3) “Using Islamic Finance would reduce financial pressure on my business compared to conventional bank lending.” These items assess confidence in the profit-sharing mechanism, perceived suitability for SME operations, and expected financial pressure reduction conceptually distinct from the Adoption Intent items, which assess behavioural commitment to use a platform, willingness to invest learning time, and recommendation behaviour. The distinction mirrors the well-established attitude-intention difference in the Theory of Planned Behaviour (Ajzen, 1991): trusting that a mechanism is advantageous (attitude toward object) is conceptually prior to and distinct from intending to use it (behavioural intention).

Notwithstanding this conceptual distinction, the high bivariate correlation between Trust and Adoption Intent ($r = 0.83$) warrants discriminant validity assessment. Following Henseler et al. (2015), the estimated HTMT ratio is approximately 1.02, exceeding the 0.85 threshold. Composite-level HTMT estimates are known to overstate true item-level HTMT (Henseler et al., 2015), and item-level PLS-SEM not possible with the summary data available would provide a lower and more accurate estimate. Critically, Trust in IF Mechanisms is not included as a predictor in the OLS regression model (Table 5): the primary inference that religion is a non-significant predictor derives from digital literacy, firm size, awareness, and ethical

compliance constructs that are not implicated in the Trust-Intent discriminant validity concern. A Harman's single-factor test yielded a first unrotated factor explaining 38.6% of total variance (below the 50% CMV threshold; Harman, 1960). These limitations are acknowledged: the high Trust-Intent correlation is an interpretive limitation of the correlation analysis (Section 4.6), not of the regression inference (Section 4.5). Future research should conduct item-level confirmatory factor analysis.

4.4 Awareness Levels: Significant Differences by Religious Group

Table 4 presents awareness-related findings disaggregated by religious group. Overall awareness of Islamic Fintech products was low (mean = 2.48, SD = 1.33), with only 43 respondents (29%) reporting familiarity with specific products such as murabaha, mudarabah, or musharakah. Muslim respondents demonstrated substantially higher product awareness (mean = 2.61) than Christian respondents (mean = 2.11; $t = -2.20$, $p < 0.05$). A similarly significant group difference emerged on basic Islamic Finance principles familiarity (Muslim mean = 3.39; Christian mean = 2.47; $t = -3.71$, $p < 0.001$). Importantly, 62% of Christian respondents scored 2 or below on Islamic Fintech product familiarity, confirming that low product-specific knowledge is the modal condition among Christian SME owners.

Table 4. Awareness by Religious Group (N = 150)

Construct	Overall Mean (SD)	Muslim Mean	Christian Mean	t-statistic	Sig.
IF product familiarity	2.48 (1.33)	2.61	2.11	-2.20	p < 0.05 *
BoG non-interest banking awareness	2.91 (1.23)	2.86	2.82	-0.17	ns
Basic IF principles familiarity	3.07 (1.51)	3.39	2.47	-3.71	p < 0.001 ***
Awareness composite ($\alpha = 0.718$)	2.82 (1.09)	2.95	2.47	-2.72	p < 0.01 **
Digital readiness	3.51 (1.06)	3.66	3.20	-2.44	p < 0.05 *
% Christian scoring ≤ 2 on IF product familiarity			62%		

Note: Welch's t-test. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, ns = not significant.

4.5 The Core Finding: Adoption Intent Is Not Significantly Predicted by Religious Identity

Table 4 presents the central empirical findings on adoption intent. The composite adoption intent score (5-item, $\alpha = 0.958$) does not differ significantly between Christian (mean = 3.60, SD = 1.24) and Muslim (mean = 3.86, SD = 1.16) respondents ($t = -1.19$, $df = 109.4$, $p > 0.05$, Cohen's $d = 0.215$, 95% CI [-0.12, 0.55]).

To establish the practical equivalence of these scores, two one-sided t-tests (TOST) were conducted. The equivalence bound of $\delta = \pm 0.50$ points was set a priori following Cohen's (1988) minimum practically meaningful effect size ($d = 0.50$), applied to the five-point scale. Because the study was not formally pre-registered, this bound justification follows the post-hoc equivalence bound procedure prescribed by Lakens (2017). Two results must be reported transparently. First, at the item level, the most direct adoption intent measure "I intend to use an Islamic Fintech product if it becomes available in Ghana" (Muslim mean = 3.74; Christian mean = 3.73; difference = 0.01) formally satisfies the TOST criterion within ± 0.50 points ($t_1 = 2.11$, $t_2 = -2.20$, both exceeding $t_{crit} = 1.658$ at $\alpha = 0.05$).

Second, the composite adoption intent TOST was not met (composite difference = 0.26): the sample is underpowered to establish composite-level equivalence at the current N. These two results must be interpreted together: the paper’s primary equivalence claim is supported only at the item level for the most direct adoption intent measure, not at the composite level. The composite null hypothesis is not rejected ($p > 0.05$), but equivalence is not formally established either the correct interpretation is that current evidence is insufficient to draw a definitive conclusion on composite-level equivalence.

Table 5 presents a TOST sensitivity analysis. For the current sample ($n_1 = 60$, $n_2 = 78$, pooled SD ≈ 1.20 for composite), the TOST is only met when the true mean difference is below approximately 0.16 points. The observed composite difference (0.26) exceeds this threshold, explaining the composite failure. A minimum sample of approximately 140 per group ($N \approx 280$ total) would be needed to establish composite equivalence at 80% power if the true difference is 0.26 points. Future replication with a larger sample is therefore required before composite-level equivalence can be claimed.

Table 5. TOST Sensitivity Analysis: Sample Adequacy for Equivalence Claims

Adoption Intent Measure	Observed Diff.	Threshold for TOST ($\delta = \pm 0.50$)	TOST Met?	N Required for 80% Power
Composite (5-item, $\alpha = 0.958$)	0.26	< 0.16	NO	~280
Item: Intend to use if available	0.01	< 0.14	YES ($t_1=2.11$, $t_2=-2.20$)	(140/group) Met with N=138
Item: Would recommend to others	0.18	< 0.14	NO (marginal)	~200 (100/group)
Item: Willing to invest time to learn	0.26	< 0.15	NO	~280 (140/group)

Item: Trust in BoG-regulated platform	0.24	< 0.16	NO	~240 (120/group)
Item: Prefer Islamic over conventional†	0.63	—	NO (significant diff.)	Equivalence not plausible

Note: Threshold = $\delta - t_{crit} \times SE$, where $SE = \text{pooled } SD \times \sqrt{(1/n1 + 1/n2)}$. $\delta = 0.50$ pre-specified (Cohen, 1988; Lakens, 2017). $t_{crit} = 1.658$ ($\alpha = 0.05$, one-tailed). N required estimated at 80% power assuming true difference equals observed difference. † Significant group difference ($p < 0.01$); equivalence testing not appropriate.

Table 6. Adoption Intent by Religious Group and TOST Equivalence Results ($N = 150$)

Adoption Intent Item	Overall Mean (SD)	Muslim Mean	Christian Mean	t-stat	Cohen's d [95% CI]	TOST (± 0.5)
Composite (5-item, $\alpha = 0.958$)	3.80 (1.19)	3.86	3.60	-1.19 (ns)	0.215 [-0.12, 0.55]	NOT MET ‡
Intend to use if platform available *	3.79 (1.28)	3.74	3.73	-0.04 (ns)	0.007 [-0.35, 0.36]	MET
Would recommend to other SME owners	3.77 (1.27)	3.82	3.64	-0.79 (ns)	0.139 [-0.22, 0.49]	Not met
Willing to invest time to learn	3.90 (1.20)	3.97	3.71	-1.21 (ns)	0.217 [-0.12, 0.55]	Not met
Trust in BoG-regulated platform	3.80 (1.34)	3.86	3.62	-0.99 (ns)	0.180 [-0.16, 0.52]	Not met
Prefer Islamic over conventional †	3.80 (1.24)	4.00	3.37	-2.71 (**)	0.515 [0.17, 0.86]	Not met
Above-midpoint adoption intent (>3.5)	89 (59%)	—	—	—	—	—

Note: TOST conducted with $\delta = \pm 0.50$ pre-specified equivalence bound (Cohen, 1988; Lakens, 2017). * TOST formally met ($t_1 = 2.11$, $t_2 = -2.20$, $t_{crit} = 1.658$). ‡ Composite TOST NOT met: current sample underpowered for composite equivalence; see Table 9. † Significant group difference ($p < 0.01$). 95% CIs for Cohen's d computed using the large-sample approximation. ** $p < 0.01$, ns = not significant.

4.6 Regression Analysis: Religion as a Non-Significant Predictor

Table 7 presents OLS regression results. The base model (Model 1) explains 29.7% of variance in adoption intent ($R^2 = 0.297$, Adjusted $R^2 = 0.262$, $N = 129$), consistent with similarly specified attitude-and-awareness models in technology adoption research (Venkatesh et al., 2012; Rabbani, 2022). Variance inflation factors (VIFs) ranged from 1.23 to 1.71, all well below the threshold of 5.0 (Hair et al., 2010), confirming no problematic multicollinearity.

Religious identity (Muslim dummy) is a non-significant predictor in all three models. In Model 1: $\beta = -0.196$, $t = -0.950$, $p > 0.05$, 95% CI $[-0.600, 0.208]$. To formally quantify evidence for the null hypothesis, a Bayesian regression using the JZS prior (Cauchy, $r = 0.707$; Rouder et al., 2009) was conducted. The Bayes Factor $BF_{01} = 3.8$, indicating positive evidence for the null hypothesis that religious identity does not predict adoption intent in this population (Kass & Raftery, 1995; BF_{01} between 3 and 20 = positive evidence). This converts the frequentist null result from “insufficient evidence to reject H_0 ” into a positive evidential statement: the data are approximately 3.8 times more consistent with the null than with the alternative hypothesis.

Digital literacy is the dominant and highly significant predictor of adoption intent ($\beta = 0.479$, $t = 4.505$, $p < 0.001$, 95% CI $[0.271, 0.687]$). Firm size is a significant negative predictor ($\beta = -0.348$, $t = -3.009$, $p < 0.01$, 95% CI $[-0.575, -0.121]$). Model 2 tests interaction effects (Digital Literacy $\times$ Religion; Ethical Compliance $\times$ Religion); both are non-significant, confirming that predictors operate

equivalently across groups. Model 3 adds a Tamale city dummy (1 = Tamale, 0 = Accra/Kumasi) to control for geographic and demographic differences between the predominantly Muslim northern city and the predominantly Christian southern cities. The Tamale dummy is non-significant ($\beta = 0.191$, $t = 0.872$, ns), and religion remains non-significant after this geographic control ($\beta = -0.168$, $t = -0.760$, ns). The consistency of religion's non-significance across all three models provides robust convergent evidence against a religion effect on adoption intent.

Table 7. OLS Regression: Predictors of Islamic Fintech Adoption Intent (N = 129)

Predictor	M1: β (SE) [95% CI]	M1: t	M1: Sig.	M1: VIF	M2: β	M2: t	M3: β	M3: t
Intercept	2.224 (0.376) [1.486, 2.962]	5.917	***	—	2.217	5.819	2.199	5.766
Religion (Muslim=1)	-0.196 (0.206) [-0.600, 0.208]	-0.950	ns	1.24	-0.182	-0.871	-0.168	-0.760
Digital literacy	0.479 (0.106) [0.271, 0.687]	4.505	***	1.57	0.471	4.361	0.475	4.410
Education (Tertiary=1)	-0.351 (0.268) [-0.877, 0.175]	-1.310	ns	1.63	-0.348	-1.289	-0.345	-1.278
Firm size (employees)	-0.348 (0.116) [-0.575, -0.121]	-3.009	**	1.23	-0.345	-2.949	-0.344	-2.938
Awareness composite	0.136 (0.115) [-0.090, 0.362]	1.184	ns	1.71	0.133	1.147	0.130	1.121
Ethical compliance	0.123 (0.078) [-0.030, 0.276]	1.587	ns	1.42	0.119	1.506	0.120	1.518
DL × Religion	—	—	—	—	0.072	0.385	—	—
EC × Religion	—	—	—	—	0.048	0.325	—	—

Tamale dummy (M3)	—	—	—	—	—	—	0.191	0.872
R ² / Adj. R ²	0.297 / 0.262				0.303 / 0.258		0.301 / 0.259	

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, ns = not significant. DV: Adoption Intent (5-item, $\alpha = 0.958$). $N = 129$ (12 religion=NA excluded; 9 listwise deletion). VIFs range 1.23–1.71 (all < 5.0; Hair et al., 2010). 95% CIs for Model 1 only. Bayesian regression (JZS prior, Cauchy $r = 0.707$): $BF_{01} = 3.8$ for religion predictor, indicating positive evidence for null (Rouder et al., 2009; Kass & Raftery, 1995). M2 = base + interaction terms; M3 = base + Tamale city dummy. Religion non-significant across all three models.

4.7 Correlation Analysis: Trust and Digital Literacy as Primary Correlates

Table 8 presents Pearson correlation coefficients between key theoretical constructs and adoption intent. Trust in Islamic Finance mechanisms operationalised through three items assessing perceived profit-sharing advantage, mechanism suitability, and financial pressure reduction ($\alpha = 0.925$) is the strongest bivariate correlate of adoption intent ($r = 0.83$, $p < 0.001$, $n = 143$). Discriminant validity limitations of this correlation are discussed in Section 4.2. Note that Trust is a bivariate correlate only; it is not included in the regression model (Table 5) owing to discriminant validity concerns. Digital literacy is the strongest independent predictor in the multivariate model ($\beta = 0.479$), and also demonstrates a strong bivariate correlation with adoption intent ($r = 0.46$, $p < 0.001$). Religious identity is not significantly correlated with adoption intent ($r = -0.034$, $p > 0.05$).

Table 8. Pearson Correlation Coefficients: Key Constructs and Adoption Intent (N = 150)

Construct	r	n	Significance	Note
Trust in IF mechanisms → Adoption intent	0.83	143	p < 0.001 ***	Bivariate correlate only; see §4.2 on discriminant validity
Digital literacy → Adoption intent	0.46	143	p < 0.001 ***	Also, dominant regression predictor ($\beta=0.479$)
Regulatory salience → Adoption intent	0.47	143	p < 0.001 ***	
Awareness composite → Perceived usefulness	0.19	140	p < 0.05 *	—
Ethical compliance → Adoption intent	0.31	143	p < 0.001 ***	—
Religious identity (Muslim=1) → Adoption intent	-0.034	138	ns (p > 0.05)	BF ₀₁ =3.8 (positive evidence for null)

Note: *** p<0.001, * p<0.05, ns = not significant.

4.8 Perceived Benefits: Broadly Equivalent, with Nuanced Differences

Table 9 presents perceived benefit measures across five dimensions. Operational efficiency (mean = 3.58) and market expansion (mean = 3.55) perceptions do not differ significantly between Christian and Muslim respondents, consistent with the DOI compatibility argument. Three benefit dimensions reveal statistically significant group differences: innovation and competitive advantage (Christian mean = 3.07; Muslim

mean = 3.67; $t = -2.74$, $p < 0.01$), financial performance improvement (Christian mean = 3.40; Muslim mean = 3.81; $t = -2.13$, $p < 0.05$), and reduced reliance on high-interest debt (Christian mean = 3.40; Muslim mean = 3.84; $t = -1.96$, $p < 0.05$). The most striking finding concerns religious or ethical compliance influence on financial service choice (Christian mean = 2.82; Muslim mean = 4.04; $t = -4.86$, $p < 0.001$, $d = 0.804$, 95% CI [0.45, 1.16]), confirming that while adoption intent is broadly equivalent, the motivational pathway differs substantially.

Table 9. Perceived Benefits by Religious Group (N = 150)

Benefit Dimension	Overall Mean (SD)	Muslim Mean	Christian Mean	t-stat	Sig.	Cohen's d [95% CI]
Operational efficiency ($\alpha=0.909$)	3.58 (1.16)	3.66	3.35	-1.54	ns	0.267 [-0.09, 0.62]
Market expansion ($\alpha=0.950$)	3.55 (1.16)	3.64	3.34	-1.47	ns	0.254 [-0.11, 0.61]
Innovation & competitive advantage	3.47 (1.23)	3.67	3.07	-2.74	**	0.474 [0.12, 0.82]
Financial performance ($\alpha=0.916$)	3.70 (1.10)	3.81	3.40	-2.13	*	0.368 [0.01, 0.72]
Reduced reliance on high-interest debt	3.70 (1.28)	3.84	3.40	-1.96	*	0.339 [-0.01, 0.69]
Religious/ethical compliance influence	3.55 (1.41)	4.04	2.82	-4.86	***	0.804 [0.45, 1.16]

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, ns = not significant (Welch's t-test).

4.9 Expert Contextual Interviews: Interpretive Enrichment

The eight expert contextual interviews provide interpretive enrichment of the quantitative patterns, illuminating

mechanisms, stakeholder perspectives, and contextual factors that the survey data cannot directly capture. Four representative quotations illustrate the structural mechanisms identified in the quantitative analysis.

SME Association Executive: “Our members don’t care whether a product is called Islamic or Christian or anything else. They care about whether it is affordable, accessible, and fair. If an Islamic Fintech product offers lower costs, transparent terms, and ethical treatment, it will attract customers from all backgrounds. The name is secondary to the value proposition.”

Islamic Finance Expert: “In my experience across multiple countries, non-Muslims often embrace Islamic finance once they understand it. They appreciate the asset-backing, the transparency, the ethical screening, and the fact that the bank shares risk rather than just charging interest regardless of business performance. These are universal values, not religious ones.”

Fintech Operator: “When we explain the concept of ‘no interest, profit-sharing’, SME owners get very interested, regardless of their religion. The problem is they don’t encounter these products in their daily business life. So it’s not resistance; it’s simply lack of exposure.”

Regulatory Advisor: “The non-interest banking framework is explicitly designed as a mainstream financial innovation, not a Muslim accommodation. That regulatory framing matters enormously. It tells every business owner regardless of religion that this product is legitimate, supervised, and available to them.”

These quotations illuminate four analytically distinct mechanisms: the economic rationality pathway for Christian adopters (SME Executive); the universal accessibility of Islamic Finance values (Islamic Finance Expert); the observability-awareness barrier as operative constraint rather than ideological resistance (Fintech Operator); and the institutional trust mechanism through which BoG's regulatory framework provides credibility transcending religious identity (Regulatory Advisor). The experts' accounts do not independently verify the survey findings but provide rich contextual support for the theoretical mechanisms proposed.

5. DISCUSSION

5.1 DOI Compatibility and the Cross-Faith Adoption Intent Pattern

The central finding of this study that adoption intent does not differ significantly between Christian (mean = 3.60) and Muslim (mean = 3.86) respondents ($d = 0.215$, 95% CI $[-0.12, 0.55]$), religious identity is a non-significant predictor after multivariate controls, and $BF_{01} = 3.8$ provides positive evidence for the null is consistent with predictions from Diffusion of Innovations theory's compatibility construct. Rogers (2003) defines compatibility as the degree to which an innovation is consistent with existing values, experiences, and needs of potential adopters. The key theoretical insight is that compatibility can operate at the level of value systems, not only at the level of religious affiliation.

Islamic Fintech's core attributes interest prohibition, profit-sharing, asset-backing, and transparent contractual terms are structurally aligned with values of fairness, risk-sharing, and

economic protection that transcend religious identity boundaries. Azmat and Subhan (2022) demonstrate that Islamic financial products' deontological structure can generate ethical appeal across cultural and religious boundaries. The awareness-intent asymmetry low product knowledge among Christians coexisting with broadly equivalent adoption intent relative to Muslims is consistent with what DOI predicts when observability and trialability are constrained but compatibility is high. This interpretation is offered with appropriate exploratory caution: the findings are specifically applicable to urban Ghanaian SME owners with existing Fintech exposure, and cross-sectional design does not permit causal inference.

5.2 Social Exchange Theory: Digital Literacy and Trust as the Operative Exchange Resources

While DOI compatibility explains the values mechanism, Social Exchange Theory (Blau, 1964; Cropanzano & Mitchell, 2005) explains the economic rationality that makes the cross-faith adoption calculation coherent. The regression results identify digital literacy ($\beta = 0.479$, $p < 0.001$) not religious identity ($\beta = -0.196$, ns; $BF_{01} = 3.8$) as the dominant predictor of adoption intent. In SET terms, digital literacy is the exchange resource that determines an SME owner's capacity to commit to a new financial technology platform. Those who can evaluate, navigate, and utilise digital financial tools are equipped to make the exchange commitment that adoption requires.

Trust in Islamic Finance mechanisms is the strongest bivariate correlate of adoption intent ($r = 0.83$, $p < 0.001$), operationalised through the three items described in

Section 4.2. Trust is a bivariate correlate, not an independent regression predictor (excluded owing to discriminant validity concerns). The theoretical implication remains consistent with SET's core proposition: trust in the exchange partner's reliability is foundational, and this trust does not require religious familiarity it requires confidence that the Islamic Fintech mechanism will deliver on its economic promise. BoG's institutional oversight provides a credibility signal that transcends religious identity.

The firm size finding ($\beta = -0.348$, $p < 0.01$, 95% CI $[-0.575, -0.121]$) is consistent with SET's exchange value logic. Micro-enterprise owners those most acutely constrained by Ghana's elevated conventional lending rates (Bank of Ghana, 2026; Abor & Quartey, 2010) express the highest adoption intent because the exchange value of interest-free Islamic Fintech is proportionally largest for those facing the most severe conventional financing constraints.

5.3 The Dual-Pathway Finding: Equivalent Intent, Different Motivations

One of the paper's most theoretically rich findings is the combination of broadly equivalent adoption intent with divergent motivational structures. Muslim respondents demonstrate higher ethical compliance orientation (mean = 4.04), higher Islamic Finance awareness (mean = 2.95), and stronger preference for Islamic labelling (mean = 4.00). Christian respondents demonstrate broadly equivalent overall adoption intent (mean = 3.60) despite lower awareness and substantially lower ethical compliance orientation (mean = 2.82, $d = 0.804$).

This dual-pathway pattern implies that Islamic Fintech can reach broadly equivalent adoption intent through two distinct mechanisms: a values-alignment pathway for Muslim adopters and an economic-rationality pathway for Christian adopters. Both pathways lead to broadly equivalent intent outcomes, but they require different marketing strategies to activate. The non-significant interaction effects (Table 5, Model 2) confirm that digital literacy and ethical compliance operate through the same structural mechanism for both groups, even as the surface motivational framing differs.

5.4 Implications for Positioning and Marketing

Marketing that leads with “fair finance,” “interest-free business growth,” and “profit-sharing that aligns investor and borrower incentives” will activate the economic-rationality pathway for both Christian and Muslim potential adopters. The Bank of Ghana’s own terminology “non-interest banking” rather than “Islamic banking” already embodies this positioning logic. The 62% of Christian respondents who scored 2 or below on product familiarity represent not a resistant audience but an uninformed one; the Fintech Operator’s observation that “when we explain the concept, SME owners get very interested regardless of their religion” is consistent with DOI’s observability-awareness barrier.

5.5 Regulatory Implications

The strong positive association between regulatory salience and adoption intent ($r = 0.47$, $p < 0.001$) makes the policy prescription concrete. Those most ready to adopt are already attuned to the regulatory environment, treating BoG oversight as the critical institutional assurance required before they

commit. The study recommends that BoG's ongoing non-interest banking framework development be designed and communicated explicitly as a mainstream financial innovation initiative. The exposure draft published in December 2025 is still under consultation; timely finalisation will be an important enabling condition for converting the latent cross-faith demand documented in this study into active market participation.

5.6 Theoretical Contributions

This paper makes four distinct theoretical contributions. First, it extends DOI (Rogers, 2003) by demonstrating that the compatibility construct is consistent with operating at the level of universal ethical values, not only religious identity. Second, it extends SET (Blau, 1964) by identifying digital literacy as the primary exchange resource associated with adoption capacity in developing-economy Fintech markets. Third, it contributes a dual-pathway theoretical framework: broadly equivalent intent reached through motivationally distinct routes. Fourth, it introduces both TOST equivalence testing and Bayesian null hypothesis evidence (BF_{01}) to the Islamic Fintech adoption literature, providing a more rigorous framework for evaluating religion-invariance claims than non-significant frequentist t-tests alone (Lakens, 2017; Rouder et al., 2009).

6. CONCLUSION

This paper set out to test a fundamental assumption in the Islamic Fintech literature: that religious identity is the primary driver of adoption intent. Drawing on a convergent parallel mixed-methods study of 150 urban SME owners across three Ghanaian cities, supplemented by eight expert contextual interviews and employing independent samples t-tests, TOST

equivalence testing, OLS multiple regression, Bayesian regression, and interaction testing, it finds consistent evidence against a religion effect.

Religious identity is a non-significant predictor of Islamic Fintech adoption intent ($\beta = -0.196$, $p > 0.05$, 95% CI $[-0.60, 0.21]$; $BF_{01} = 3.8$, positive evidence for null). This result holds across three regression models, including one with geographic controls (Tamale city dummy). At the item level, the most direct adoption intent measure formally satisfies TOST equivalence within ± 0.50 points. The composite TOST was not met: with $n_1 = 60$ and $n_2 = 78$, the study is underpowered to establish composite-level equivalence when the true difference is approximately 0.26 points. Replication with $N \geq 280$ is needed before composite equivalence can be claimed. Digital literacy ($\beta = 0.479$, $p < 0.001$) is the dominant predictor of adoption intent; trust in Islamic Finance mechanisms ($r = 0.83$) is the strongest bivariate correlate.

The theoretical contributions are cumulative. DOI theory is consistent with the cross-faith pattern through the compatibility construct: Islamic Fintech's ethical attributes are compatible with universally held values that transcend religious identity. SET explains the economic rationality: the exchange value of interest-free financing is accessible to any SME owner regardless of religious orientation. The dual-pathway framework captures motivational heterogeneity: broadly equivalent intent reached through divergent mechanisms.

The practical message is direct. Islamic Fintech should be positioned as ethical alternative finance accessible to all, differentiated by economic fairness and ethical structure, not

by religious origin. BoG's non-interest banking framework, currently at exposure draft stage, provides the regulatory credibility that SME owners across both faith groups are waiting for.

This study acknowledges seven limitations. First, the purposive sample is restricted to urban SME owners in three Ghanaian cities who were active Fintech users. The sample skews substantially younger (88% below 35), more educated (80% tertiary), and more digitally engaged than the broader Ghanaian SME population (Ghana Statistical Service, 2021). Findings are exploratory, not population-representative. Second, the Fintech-user inclusion criterion creates selection bias: non-Fintech users, whose adoption intent may be substantially lower, are excluded. Third, the composite TOST was not met at the current sample size: a minimum of approximately 140 respondents per group ($N \geq 280$) would be needed to establish composite equivalence. The study is therefore exploratory on composite equivalence and confirmatory only for the single-item TOST result. Fourth, the study measures adoption intent, not actual adoption behaviour. Fifth, the Trust-Adoption Intent discriminant validity concern (estimated HTMT ≈ 1.02) limits bivariate correlation interpretation; item-level CFA is recommended. Sixth, the Bayesian evidence ($BF_{01} = 3.8$) is positive but not strong (Kass & Raftery, 1995 threshold for strong evidence: $BF_{01} > 20$); the null hypothesis evidence should be interpreted cautiously. Seventh, the cross-sectional design does not permit causal inference; digital literacy and awareness may be endogenous to adoption intent.

Future research should address these limitations through: (a) replication with $N \geq 280$, random sampling, and inclusion of

non-Fintech users; (b) longitudinal designs tracking actual adoption behaviour after BoG's framework is finalised; (c) multi-country replication across non-Muslim-majority African economies; (d) item-level PLS-SEM for full discriminant validity assessment; and (e) denomination-level religious analysis.

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Data Availability Statement: The data that support the findings of this study are available from the author upon reasonable request. Data were collected under informed consent that permits sharing in anonymised aggregate form for research and replication purposes.

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APPENDIX: Survey Instrument

The survey instrument comprised nine sections administered on a five-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree) unless otherwise noted. The full instrument is available from the corresponding author upon request.

Section A: Respondent Demographics

- A1. Gender (Male / Female / Prefer not to state)
- A2. Age group (Below 25 / 25–34 / 35–44 / 45+ years)
- A3. Highest educational qualification (No formal / Primary / Secondary / Tertiary)
- A4. Religious affiliation (Christian / Muslim / Other / Prefer not to state)
- A5. Number of full-time employees (Micro: 1–4 / Small: 5–29 / Medium: 30–99)
- A6. City of business operation (Accra / Kumasi / Tamale)
- A7. Estimated annual business turnover (GHS ranges provided)

Section B: SME Financing Challenges

- B1. Conventional bank interest rates make business financing unaffordable for my business.
- B2. Collateral requirements prevent me from accessing formal bank loans.
- B3. My business relies primarily on personal savings or family support for capital.

Section C: Islamic Finance Awareness

- C1. I am familiar with Islamic Finance products such as Murabaha or Mudarabah.
- C2. I understand the basic principle that Islamic Finance prohibits interest (riba).
- C3. I am aware of the Bank of Ghana's non-interest banking framework.

Section D: Digital Literacy

- D1. I regularly use mobile money or digital banking for my business transactions.
- D2. I am comfortable learning to use new digital financial technology platforms.
- D3. I have reliable internet access for conducting business online.
- D4. I have used at least one digital financial service in the past 12 months.

Section E: Adoption Intent (Composite Scale, $\alpha = 0.958$)

- E1. I intend to use an Islamic Fintech product if it becomes available in Ghana.
- E2. I would recommend Islamic Fintech services to other SME owners in my network.
- E3. I am willing to invest time and effort to learn how to use Islamic Fintech products.
- E4. I would trust an Islamic Fintech platform that is regulated by the Bank of Ghana.
- E5. I would prefer an Islamic Fintech product over a conventional digital finance product if both were equally accessible.

Section F: Trust in Islamic Finance Mechanisms ($\alpha = 0.925$)

- F1. Profit-sharing (Mudarabah) financing is more advantageous for my business than conventional interest-based loans.
- F2. Islamic Finance mechanisms are suitable for the financing needs of SMEs like mine.
- F3. Using Islamic Finance would reduce financial pressure on my business compared to conventional bank lending.

Section G: Perceived Benefits

- G1. Islamic Fintech would improve the operational efficiency of my business.
- G2. Islamic Fintech would help my business expand into new markets.

G3. Adopting Islamic Fintech would reduce my reliance on high-interest conventional debt.

G4. Religious or ethical considerations influence my choice of financial services.

Section H: Adoption Barriers

H1. Lack of awareness about Islamic Fintech products is the main barrier to my adoption.

H2. Regulatory uncertainty about Islamic Finance in Ghana prevents me from adopting.

H3. I am concerned that Islamic Fintech products may not be compatible with my existing business systems.

Section I: Expert Interview Guide (Qualitative Component)

I1. In your view, what are the primary factors that determine whether an SME owner adopts Islamic Fintech, beyond religious affiliation?

I2. How do you assess the readiness of the Ghanaian regulatory environment for Islamic Fintech?

I3. What communication strategies would be most effective in promoting Islamic Fintech to non-Muslim SME owners?