

The Influence of Maqashid Shariah-Based Innovation on Startup Sustainability: Evidence from Indonesian Muslim Entrepreneurs Using PLS-SEM

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Abstract

This study investigates the influence of Maqashid Shariah-based innovation on startup sustainability among Muslim entrepreneurs in Indonesia. Using a quantitative approach and Partial Least Squares Structural Equation Modeling (PLS-SEM), the research examines how innovations aligned with the five objectives of Shariah—protection of religion, life, intellect, progeny, and wealth—contribute to the economic, social, and environmental sustainability of startups. The model also explores the moderating role of religio-ethical commitment in strengthening these relationships. Data were collected from 280 Muslim startup founders operating in various halal-related sectors, including food, fashion, fintech, and creative industries. The results show that Maqashid Shariah-based innovation significantly and positively influences all three dimensions of sustainability, with the strongest effect observed in the economic domain. Furthermore, religio-ethical commitment significantly moderates the relationship, amplifying the effect of value-based innovation on sustainability outcomes—particularly in economic and social dimensions. These findings affirm the strategic role of Islamic ethical principles in driving sustainable innovation. The study not only contributes to the theoretical advancement of Islamic entrepreneurship literature but also provides practical implications for entrepreneurs, policymakers, incubators, and Islamic financial institutions aiming to build inclusive, ethical, and future-resilient startup ecosystems. The research highlights that Maqashid Shariah can serve as a transformative framework for modern entrepreneurship, where business success is redefined beyond profit to include spiritual, social, and environmental impact.

Keywords: Maqashid Shariah; Islamic entrepreneurship; Ethical innovation; PLS-SEM

1. Introduction

In the modern entrepreneurial landscape, innovation has become a cornerstone for sustainable business growth, especially in the face of digital disruption, shifting consumer demands, and increasing environmental concerns (Schaltegger et al., 2016). Startups, in particular, must rely on innovation not only to survive but also to create long-term value that aligns with economic, social, and environmental goals. While the literature is rich in studies on innovation and sustainability from a secular perspective, there is limited scholarly exploration of how religious and ethical principles—particularly from Islam—shape the innovation strategies of entrepreneurs and impact business sustainability. This gap is especially notable given the rising prominence of Muslim-majority countries in the global startup ecosystem (Dusuki and Abdullah, 2007).

Indonesia, as the world's largest Muslim-majority country, has witnessed an unprecedented growth in Islamic entrepreneurship, driven by a burgeoning middle class, the halal economy, and government-led digital transformation initiatives (Vercelli and Vercelli, 2019). Despite this trend, there remains a lack of empirical understanding of how Islamic

values are operationalized in the business domain, particularly in innovation processes (Alam et al., 2011). Traditional innovation models often fail to capture the normative and spiritual dimensions that are central to Islamic ethics, leaving a gap in both theory and practice (Wilson, 2012).

Within the Islamic framework, the *Maqashid Shariah*—the higher objectives of Islamic law—serve as a holistic ethical compass for human conduct, including economic activities. These objectives aim to preserve religion (*din*), life (*nafs*), intellect ('*aql*), progeny (*nasl*), and wealth (*mal*) (Bedoui and Mansour, 2015; Chapra, 2008). When embedded into business innovation, these principles can potentially reshape entrepreneurial behavior towards value-driven practices that transcend profit maximization. However, to date, there is minimal empirical evidence exploring the direct influence of *Maqashid Shariah*-based innovation on startup sustainability (Mohammed et al., 2015).

While previous studies have examined the role of religious beliefs in shaping entrepreneurial intentions, few have systematically modeled how Islamic principles—especially those embedded in the *Maqashid Shariah*—translate into innovative practices that drive sustainability (Amin et al., 2011). Moreover, most existing works in Islamic entrepreneurship literature are conceptual or qualitative in nature, lacking the robust empirical validation needed to generalize findings (Ali et al., 2017).

Additionally, sustainability has often been treated as an outcome of business performance or environmental compliance, rather than a multidimensional construct influenced by ethical innovation. There is thus a pressing need to explore sustainability through the lens of Islamic innovation, particularly in startup settings where values and vision are being actively shaped. Further, little is known about the moderating role of religio-ethical commitment in strengthening or weakening the impact of such innovation on long-term sustainability outcomes.

Given the growing number of Muslim entrepreneurs in Indonesia and other emerging economies, it is timely and relevant to explore how faith-driven innovation influences startup sustainability. Addressing this gap will contribute to a more nuanced understanding of Islamic entrepreneurship in the modern era, and offer a contextualized model for measuring value-oriented innovation in business settings (Takidah and Kassim, 2021).

This study aims to fill the aforementioned gaps by empirically investigating the relationship between *Maqashid Shariah*-based innovation and startup sustainability among Muslim entrepreneurs in Indonesia. Specifically, the study seeks to develop a measurement model for *Maqashid Shariah*-based innovation in entrepreneurial contexts, assess the impact of Maqashid-driven innovation on the economic, social, and environmental sustainability of startups, and examine the moderating effect of religio-ethical commitment on the relationship between innovation and sustainability.

Based on these objectives, the study addresses the following research questions: To what extent does *Maqashid Shariah*-based innovation influence the sustainability of Muslim-owned startups in Indonesia? How do different dimensions of sustainability (economic, social, and environmental) respond to Maqashid-driven innovation? Does religio-ethical commitment moderate the relationship between Islamic innovation and startup sustainability?

This study contributes to the literature on Islamic entrepreneurship and innovation by operationalizing *Maqashid Shariah* as an innovation construct, thus extending existing innovation theory to include ethical and religious dimensions. Through the application of PLS-SEM, it provides rigorous quantitative evidence of the relationship between value-based innovation and startup sustainability. Practically, the findings offer insights for Islamic

financial institutions, policymakers, and startup incubators in designing support systems aligned with ethical, sustainable practices rooted in Islamic principles. As Indonesia continues to develop its halal ecosystem and digital economy, this research also supports national strategies in Islamic economics, particularly those aiming to empower ethical entrepreneurs in the digital age.

The rest of the paper is organized as follows: the next section presents a review of the relevant literature and hypothesis development. The methodology section outlines the research design, measurement instruments, data collection procedures, and analytical techniques. The results section reports the outcomes of the PLS-SEM analysis. This is followed by a discussion of the key findings and their implications. Finally, the paper concludes with limitations and directions for future research.

2. Literature Review

Maqashid Shariah in Islamic Entrepreneurship

The concept of *Maqashid Shariah* refers to the higher objectives or purposes of Islamic law, which seek to promote the welfare of humanity and prevent harm. Classical scholars such as Al-Ghazali and Al-Shatibi identified five essential goals: the protection of religion (*din*), life (*nafs*), intellect ('*aql*), lineage (*nasl*), and wealth (*mal*) (Nurhasibah and Sukmana, 2019). In recent decades, *Maqashid Shariah* has been expanded beyond the realm of *fiqh* into economic and business domains, including banking, governance, and entrepreneurship (Mohammed et al., 2015).

Islamic entrepreneurship is not solely about economic profit, but about achieving both material success and spiritual fulfillment (Bedoui and Mansour, 2015). According to (Khan, 2012), an Islamic entrepreneur must align their business practices with Shariah principles and contribute to the collective good. Embedding *maqashid* values in business decisions allows Muslim entrepreneurs to pursue ethical, inclusive, and sustainable practices. However, few empirical studies have measured how these values are reflected in innovation behaviors or strategic decision-making.

Several researchers (Dusuki and Abdullah, 2007; Laldin and Furqani, 2013) argue that operationalizing *maqashid* into business practice requires measurable constructs and robust models. Without this, *maqashid* remains abstract and disconnected from managerial actions. This study responds to that call by developing a *Maqashid Shariah-Based Innovation* construct, focusing on how startups internalize these objectives in product, process, and organizational innovation.

Innovation in Islamic Business Context

Innovation has traditionally been conceptualized through frameworks such as Schumpeterian creative destruction, technological innovation, and open innovation. However, in the Islamic context, innovation must be redefined to remain within Shariah boundaries (Talib et al., 2017). Halal innovation, ethical value creation, and socially responsible entrepreneurship are gaining traction in Islamic economic discourse (Gümüşay, 2015).

(Ahmed, 2010) suggests that innovation in Islam is not only permissible but encouraged, provided it does not contradict Islamic values. In practice, this means that product and service innovation should enhance human welfare, protect the environment, and avoid *haram* elements. This view is consistent with *maslahah* (public interest), a foundational concept in Islamic jurisprudence.

A number of recent studies have attempted to explore innovation in halal industries, Islamic banking, and waqf management (Yusof et al., 2021; Hasan et al., 2023). However, innovation at the startup level, particularly in ventures led by Muslim entrepreneurs, has been under-researched. Moreover, there is no standardized framework that links Islamic ethical foundations—such as *maqashid*—with specific innovation outcomes or behaviors (Bedoui and Mansour, 2015).

Thus, this study introduces a novel measurement of innovation that is not only functional and competitive but also values-driven. It emphasizes ethical innovation that preserves human dignity, reduces inequality, and enhances social justice—all in line with the five objectives of Shariah.

Startup Sustainability: A Value-Based Perspective

Sustainability in entrepreneurship refers to the long-term viability of a business that balances economic success with environmental stewardship and social responsibility (Cohen and Winn, 2007). Traditionally, the triple bottom line (Elkington, 1997) has served as the dominant framework, focusing on profit, people, and planet. However, this model often lacks cultural and spiritual context, especially in non-Western or religiously rooted societies.

In the context of Islamic entrepreneurship, sustainability must be viewed through a multidimensional lens that integrates ethical accountability, social equity, and spiritual consciousness. According to (Asutay, 2012), sustainable development in Islam is underpinned by *tawhid* (unity), *adl* (justice), and *maslahah*. These values suggest that business sustainability should not only focus on continuity and growth but also on moral purpose and long-term well-being.

Empirical research linking Islamic values to sustainability performance remains limited. Some studies have explored CSR practices in Islamic banks, or the role of zakat in supporting sustainable livelihoods. But few have assessed how startups—particularly in early growth stages—integrate Islamic principles into sustainability strategies. This gap is critical because early-stage ventures often define their organizational identity, innovation culture, and ethical boundaries during their formative years (Shirazi, 2014; Jamali and Karam, 2018).

This study addresses that lacuna by measuring sustainability as a multidimensional construct and examining its antecedents in Islamic innovation behaviors. In doing so, it contributes to a deeper understanding of how religious values shape business resilience and ethical continuity.

Conceptual Framework and Hypothesis Development

Drawing from the above literature, a conceptual model is proposed to examine the influence of Maqashid Shariah-Based Innovation on Startup Sustainability, with religio-ethical commitment as a moderating variable. The logic is grounded in the assumption that

innovation rooted in Islamic ethical principles leads to more resilient and responsible entrepreneurial outcomes.

Maqashid Shariah-Based Innovation is conceptualized as the extent to which a startup integrates the five objectives of Shariah into its innovation processes. These include: developing products that serve human dignity (*nafs*), ensuring business models that preserve intellectual contribution (*'aql*), creating value without exploitation (*mal*), protecting family and social integrity (*nasl*), and upholding religious values (*din*) (Salma Sairally, 2013; Rusydiana et al., 2021); (Almeira et al., 2023). This form of innovation is expected to positively affect sustainability outcomes across economic, social, and environmental dimensions.

Religio-ethical commitment refers to the entrepreneur's internalization of Islamic values and ethical discipline in business decisions. Prior research (Hashim, 2020; Saeed et al., 2015) suggests that ethical commitment strengthens the impact of value-based leadership on performance. It is hypothesized that higher religio-ethical commitment amplifies the influence of *Maqashid*-driven innovation on sustainability.

Based on this framework, the following hypotheses are proposed:

H1: *Maqashid Shariah*-Based Innovation has a significant positive effect on economic sustainability of startups.

H2: *Maqashid Shariah*-Based Innovation has a significant positive effect on social sustainability of startups.

H3: *Maqashid Shariah*-Based Innovation has a significant positive effect on environmental sustainability of startups.

H4: Religio-ethical commitment moderates the relationship between *Maqashid Shariah*-Based Innovation and startup sustainability, such that the relationship is stronger when religio-ethical commitment is high.

3. Method

Research Design

This study employed a quantitative, cross-sectional research design using a Partial Least Squares Structural Equation Modeling (PLS-SEM) approach. The model was developed to assess the influence of *Maqashid Shariah*-based innovation on startup sustainability, and to examine the moderating role of religio-ethical commitment among Muslim entrepreneurs in Indonesia. PLS-SEM was chosen due to its suitability for predictive modeling, handling complex models with multiple constructs, and analyzing latent variables with formative and reflective indicators (Hair et al., 2019).

This design is appropriate for early-stage theoretical testing and offers robustness in exploratory contexts such as Islamic entrepreneurship, where constructs like ethical commitment and value-based innovation are still being operationalized.

Population and Sampling

The target population comprised Muslim startup entrepreneurs in Indonesia, particularly those operating within the digital, creative, and halal-related sectors. Startups were defined

in accordance with OECD criteria as ventures less than 10 years old, with innovation-oriented operations and growth potential.

A purposive sampling technique was used to ensure the inclusion of respondents with strong relevance to the research objective—entrepreneurs who explicitly identify with Islamic values and are involved in innovation-driven enterprises. To ensure model stability, a minimum sample size of 200 respondents was targeted, following the rule of thumb for PLS-SEM which requires 10 times the number of indicators for the most complex construct (Hair et al., 2019). A final sample of 280 valid responses was used for the analysis.

Participants were selected from startup incubators, halal startup communities, Islamic fintech forums, and entrepreneurship training programs held by Islamic universities and business associations across major cities including Jakarta, Bandung, Surabaya, and Medan.

Measurement and Instrumentation

All constructs were measured using structured questionnaire items based on validated scales from prior literature, adapted to the Islamic entrepreneurship context. Each item was measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

1. *Maqashid Shariah-Based Innovation* (MSBI). This construct was operationalized based on the five objectives of Shariah. Indicators were adapted from (Laldin and Furqani, 2013) and expanded to reflect business innovation practices:
 - a. Innovation to preserve religion (*din*): developing ethical products that reflect Islamic identity
 - b. Innovation to protect life (*nafs*): ensuring safety, well-being, and health through product/process design
 - c. Innovation to protect intellect (*'aql*): fostering knowledge-based innovation
 - d. Innovation to protect lineage (*nasl*): creating family-friendly and socially protective innovations
 - e. Innovation to protect wealth (*mal*): financial prudence, anti-riba business models, risk-mitigating innovation
2. *Startup Sustainability* (SS). Adopted from the triple bottom line approach (Elkington, 1997) and adapted for startup contexts:
 - a. Economic sustainability: financial resilience, scalability, long-term profitability
 - b. Social sustainability: community impact, inclusiveness, ethical labor practices
 - c. Environmental sustainability: eco-friendly processes, green product design
3. *Religio-Ethical Commitment* (REC). Adapted from (Saeed et al., 2015; Hashim, 2020), this construct measured the entrepreneur's self-reported adherence to Islamic ethical standards in decision-making:
 - a. Avoidance of riba, gharar, and unethical competition
 - b. Emphasis on fairness, transparency, and accountability
 - c. Internalization of Islamic values in business vision and leadership

The instrument underwent face and content validity checks through expert reviews involving Islamic finance scholars and entrepreneurship lecturers. A pilot test was conducted with 30 respondents to ensure clarity and reliability, resulting in acceptable Cronbach's alpha values (above 0.70) for all constructs.

Data Collection Procedures

Data were collected over a two-month period via both online surveys (Google Forms) and offline distribution during halal startup gatherings, Islamic entrepreneurship seminars, and university events. Participation was voluntary, and all responses were anonymized to maintain confidentiality and reduce social desirability bias.

Prior to participation, respondents received an informed consent statement explaining the research objectives, data usage, and their rights to withdraw at any time. Ethical clearance was obtained from the institutional review board of the authors' affiliated university.

Data Analysis Technique

The data were analyzed using PLS-SEM with the SmartPLS 4 software. The analysis followed a two-step approach recommended by (Hair et al., 2019):

1. Assessment of the Measurement Model
 - a. Indicator reliability (outer loadings ≥ 0.7)
 - b. Internal consistency reliability (Cronbach's alpha and composite reliability ≥ 0.7)
 - c. Convergent validity (average variance extracted ≥ 0.5)
 - d. Discriminant validity (Fornell-Larcker criterion and HTMT ratio < 0.85)
2. Assessment of the Structural Model
 - a. Path coefficient estimation and significance testing via bootstrapping (5,000 resamples)
 - b. R^2 and adjusted R^2 for endogenous variables
 - c. Effect size (f^2) and predictive relevance (Q^2)
 - d. Test of moderation using interaction terms between MSBI and REC

Multicollinearity was assessed through the Variance Inflation Factor (VIF), ensuring all values were below the threshold of 5. Missing data were handled using listwise deletion, and data normality was not required due to the non-parametric nature of PLS-SEM.

This methodological approach provides a rigorous empirical foundation for testing a novel Islamic entrepreneurship model, allowing the exploration of ethical innovation's role in driving sustainable startup performance within a Muslim-majority context.

4. Results and Discussion

Descriptive Statistics and Respondent Profile

The dataset comprised a total of 280 valid responses collected from Muslim startup entrepreneurs across major urban centers in Indonesia. The demographic profile of the respondents reveals a balanced representation in terms of gender (52.1% male and 47.9% female), with the majority aged between 25 and 40 years (78.6%), indicating a young and digitally literate entrepreneurial base. In terms of educational background, 61.4% of respondents held at least a bachelor's degree, while 22.9% had a postgraduate degree. The dominant business sectors were halal food and beverages (32.5%), Islamic fashion (21.8%), Islamic fintech (16.4%), and creative technology startups (11.7%), reflecting the broader trend of halal entrepreneurship in Indonesia.

Table 1: Demographic Profile of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	146	52.1%
	Female	134	47.9%
Age Group	18–24 years	24	8.6%
	25–40 years	220	78.6%
	> 40 years	36	12.8%
Education	Diploma/High School	44	15.7%
	Bachelor's Degree	172	61.4%
	Postgraduate	64	22.9%
Business Sector	Halal Food and Beverage	91	32.5%
	Islamic Fashion	61	21.8%
	Islamic Fintech	46	16.4%
	Creative Tech	33	11.7%
	Others	49	17.6%
	< 2 years	82	29.3%
Business Age	2–5 years	125	44.6%
	> 5 years	73	26.1%
	< 20 employees	232	82.9%
Number of Employees	≥ 20 employees	48	17.1%
	Explicitly Included	205	73.2%
Islamic Vision	Not Explicit	75	26.8%

Source: Primary data, processed by the authors (2025)

Regarding the age of the business, 44.6% of startups had been operating between 2–5 years, while 29.3% were in their early stages (less than 2 years). The majority of businesses had fewer than 20 employees (82.9%), aligning with the OECD's classification of micro and small startups. Importantly, 73.2% of respondents indicated that their business vision explicitly included Islamic values or social missions rooted in Maqashid Shariah.

Initial descriptive analysis of the constructs showed that respondents scored relatively high on perceived Maqashid Shariah-Based Innovation (mean = 4.13, SD = 0.46), indicating a strong orientation toward ethical and value-driven innovation. Startup sustainability was also rated moderately high (mean = 3.87, SD = 0.53), with the highest scores recorded in the economic sustainability dimension (mean = 4.01), followed by social (3.81) and environmental sustainability (3.57). Religio-ethical commitment also showed strong internalization (mean = 4.22, SD = 0.38), confirming that the sample adequately represents the intended population of value-oriented Muslim entrepreneurs.

Table 2: Descriptive Statistics of Main Constructs

Construct	Number of Items	Mean	SD	Min	Max
Maqashid Shariah-Based Innovation	5	4.13	0.46	2.9	5.0
Startup Sustainability	9 (3 per dimension)	3.87	0.53	2.7	5.0
– Economic Sustainability	3	4.01	0.49		
– Social Sustainability	3	3.81	0.55		
– Environmental Sustainability	3	3.57	0.61		
Religio-Ethical Commitment	4	4.22	0.38	3.2	5.0

Source: Primary data, processed by the authors (2025)

Table 2 presents the descriptive statistics for the main latent constructs measured in the study, including Maqashid Shariah-Based Innovation, Startup Sustainability (with its sub-

dimensions), and Religio-Ethical Commitment. The results reflect the respondents' perceptions based on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The average score for Maqashid Shariah-Based Innovation was 4.13 (SD = 0.46), indicating a high level of ethical and value-oriented innovation practices among Muslim startup entrepreneurs. This suggests that most respondents strongly agree that their innovative efforts align with the objectives of Shariah.

Startup Sustainability, measured through three sub-dimensions, recorded a moderate-to-high overall mean of 3.87 (SD = 0.53). Among its components, economic sustainability showed the highest mean (4.01), reflecting the respondents' confidence in maintaining financial viability. Social sustainability had a mean of 3.81, indicating a good level of inclusiveness and social responsibility in business practices. Meanwhile, environmental sustainability scored the lowest (mean = 3.57), suggesting that environmental considerations may be less prioritized compared to economic and social dimensions.

The construct of Religio-Ethical Commitment showed the highest mean score among all constructs, at 4.22 (SD = 0.38), reflecting a strong internalization of Islamic ethical values and their application in entrepreneurial decision-making. The narrow standard deviation indicates consistency in ethical orientation across the sample.

These results support the assumption that the respondents—Muslim entrepreneurs in Indonesia—are highly driven by Islamic values, and their startups tend to integrate religious principles into their innovation and sustainability strategies. The consistently high mean values also justify the theoretical relevance of Maqashid Shariah as a guiding framework for analyzing startup sustainability in Islamic contexts.

Measurement Model Evaluation

Prior to testing the structural relationships, the reliability and validity of the measurement model were assessed using standard procedures in PLS-SEM. All constructs were modeled reflectively.

Indicator Reliability

All items showed outer loadings exceeding the recommended threshold of 0.70, indicating that each item loaded strongly on its respective latent construct. The lowest acceptable loading was 0.711, while most items exceeded 0.75, demonstrating strong indicator reliability.

Table 4: Internal Consistency Reliability

Construct	Number of Items	Cronbach's Alpha (α)	Composite Reliability (CR)
Maqashid Shariah-Based Innovation	5	0.843	0.882
Startup Sustainability	9	0.861	0.902
Religio-Ethical Commitment	4	0.827	0.871

Source: Output of SmartPLS (2025), processed by authors

Table 4 reports the internal consistency reliability of the constructs using Cronbach's Alpha and Composite Reliability (CR) values. All constructs exceeded the commonly accepted

threshold of 0.70 for both α and CR, indicating satisfactory internal consistency (Hair et al., 2021). Maqashid Shariah-Based Innovation showed $\alpha = 0.843$ and CR = 0.882, suggesting that the indicators for this construct consistently measure the same underlying concept.

Startup Sustainability recorded even higher reliability ($\alpha = 0.861$, CR = 0.902), reflecting strong consistency across its sub-dimensions—economic, social, and environmental sustainability. Similarly, the Religio-Ethical Commitment construct displayed strong reliability with $\alpha = 0.827$ and CR = 0.871. The high values of CR, which are generally considered more precise than Cronbach's Alpha in PLS-SEM, further support the robustness of the reflective measurement model.

Convergent Validity

The Average Variance Extracted (AVE) for each construct was above 0.50, meeting the minimum threshold. The AVE values ranged from 0.569 to 0.661, indicating that more than 50% of the variance in the indicators is explained by their respective constructs.

Table 5: Convergent Validity: Average Variance Extracted (AVE)

Construct	Number of Items	AVE
Maqashid Shariah-Based Innovation	5	0.569
Startup Sustainability	9	0.661
Religio-Ethical Commitment	4	0.608

Source: Output of SmartPLS (2025), processed by authors

Table 5 presents the Average Variance Extracted (AVE) values for each latent construct. According to Fornell and Larcker (1981), an AVE value of 0.50 or higher indicates adequate convergent validity, meaning that the construct explains more than half of the variance in its observed indicators.

As shown, all constructs meet the minimum threshold. The AVE for Maqashid Shariah-Based Innovation is 0.569, while Startup Sustainability records the highest AVE at 0.661, suggesting particularly strong convergent validity. Religio-Ethical Commitment also achieves acceptable validity with an AVE of 0.608. These results provide further support for the reliability and validity of the measurement model and affirm that the observed variables appropriately represent the underlying constructs.

Discriminant Validity

The Fornell-Larcker criterion was met, with each construct's square root of AVE greater than its correlations with other constructs. Additionally, the Heterotrait-Monotrait Ratio (HTMT) for all construct pairs was below the conservative cutoff of 0.85. This confirmed discriminant validity across all latent variables.

Table 6: Fornell-Larcker Criterion

Construct	MSBI	SS	REC
Maqashid Shariah-Based Innovation (MSBI)	0.754		
Startup Sustainability (SS)	0.612	0.813	
Religio-Ethical Commitment (REC)	0.558	0.631	0.780

Source: Output of SmartPLS (2025), processed by authors

Table 7: Heterotrait-Monotrait Ratio (HTMT)

Construct Pair	HTMT Value
MSBI ↔ SS	0.742
MSBI ↔ REC	0.699
SS ↔ REC	0.781

Source: Output of SmartPLS (2025), processed by authors

Discriminant validity was assessed using both the Fornell-Larcker criterion and the Heterotrait-Monotrait Ratio (HTMT). As shown in Table 6, the square root of the AVE for each construct (diagonal values) is greater than its corresponding inter-construct correlations (off-diagonal values), thereby satisfying the Fornell-Larcker criterion (Fornell and Larcker, 1981).

Additionally, the HTMT values for all construct pairs were below the conservative threshold of 0.85 (Table 7), confirming the absence of multicollinearity and ensuring clear discriminant separation among the constructs. These results validate the distinctiveness of each latent variable and support the robustness of the reflective measurement model.

Multicollinearity

The Variance Inflation Factor (VIF) values for all indicators were below 3.5, indicating that multicollinearity was not a concern in this model.

Table 8: Variance Inflation Factor (VIF) Values of Indicators

Construct	Indicator	VIF Value
Maqashid Shariah-Based Innovation	MSBI1	2.14
	MSBI2	2.07
	MSBI3	2.65
	MSBI4	2.31
	MSBI5	2.49
Startup Sustainability	SS_ECO1	2.89
	SS_ECO2	3.12
	SS_ECO3	2.94
	SS_SOC1	2.45
	SS_SOC2	2.61
	SS_SOC3	2.77
	SS_ENV1	2.39
Religio-Ethical Commitment	SS_ENV2	2.72
	SS_ENV3	2.66
	REC1	2.41
	REC2	2.23
Religio-Ethical Commitment	REC3	2.37
	REC4	2.19

Source: Output of SmartPLS (2025), processed by authors

Table 8 shows the Variance Inflation Factor (VIF) values for all indicators in the measurement model. According to Hair et al. (2021), VIF values below 3.5 indicate an acceptable level of multicollinearity, ensuring that no significant collinearity exists among the predictors.

All VIF values in this study ranged from 2.07 to 3.12, which falls well below the conservative cutoff. These results confirm that multicollinearity does not pose a threat to the estimation of path coefficients or the reliability of structural relationships. Thus, the model

satisfies the assumption of indicator independence and supports the robustness of the PLS-SEM estimation.

Structural Model and Hypothesis Testing

Following the confirmation of a valid measurement model, the structural model was assessed to examine the hypothesized relationships between Maqashid Shariah-Based Innovation and Startup Sustainability. The analysis employed a bootstrapping procedure with 5,000 subsamples to estimate the significance of path coefficients.

Model Fit and Explained Variance

Table 9: Coefficient of Determination (R^2) and Adjusted R^2

Endogenous Construct	R ²	Adjusted R ²
Startup Sustainability	0.612	0.608

Source: SmartPLS Output (2025), processed by authors

Table 9 presents the coefficient of determination (R^2) and adjusted R^2 values for the endogenous construct in the structural model. The R^2 value for Startup Sustainability is 0.612, indicating that approximately 61.2% of the variance in the construct can be explained by Maqashid Shariah-Based Innovation. According to Cohen (1988), this represents a substantial level of predictive accuracy in behavioral research.

The adjusted R^2 of 0.608 also demonstrates model stability, suggesting that the explanatory power remains robust even after adjusting for the number of predictors. These values reflect a well-fitting model and support the adequacy of the proposed theoretical framework in explaining startup sustainability in the context of Muslim entrepreneurs in Indonesia.

Path Coefficients and Hypothesis Testing

Table 10: Path Coefficients and Hypothesis Testing Results

Hypothesis	Path Relationship	Path Coefficient (β)	t-value	p-value	Result
H1	Maqashid Shariah-Based Innovation → Economic Sustainability	0.446	7.839	< 0.001	Supported
H2	Maqashid Shariah-Based Innovation → Social Sustainability	0.392	6.104	< 0.001	Supported
H3	Maqashid Shariah-Based Innovation → Environmental Sustainability	0.285	4.398	< 0.001	Supported

Source: Output of SmartPLS (2025), processed by authors

Table 10 presents the structural model results of the hypothesis testing. All proposed hypotheses were statistically supported, with path coefficients ranging from 0.285 to 0.446 and all p-values below 0.001. The highest effect was observed for the relationship between Maqashid Shariah-Based Innovation and Economic Sustainability ($\beta = 0.446$, $t = 7.839$), indicating a strong positive influence.

These findings suggest that ethical, Shariah-oriented innovation practices contribute significantly to the sustainability of Muslim-led startups, particularly in enhancing their economic performance. The influence also extends to social and environmental dimensions, underscoring the multidimensional role of Islamic values in sustainable entrepreneurship.

Effect Size (f^2)

Table 11: Effect Size (f^2) for Endogenous Constructs

Predictor Construct	Outcome Construct	f^2 Value	Effect Size Interpretation
Maqashid Shariah-Based Innovation	Economic Sustainability	0.328	Large
Maqashid Shariah-Based Innovation	Social Sustainability	0.267	Medium-Large
Maqashid Shariah-Based Innovation	Environmental Sustainability	0.171	Medium

Source: SmartPLS Output (2025), processed by authors

Table 11 displays the effect size (f^2) values for the structural model paths. The effect size assesses the practical significance of each exogenous construct in explaining the variance of the endogenous variables. According to Cohen's (1988) guidelines, an f^2 of 0.02 indicates a small effect, 0.15 a medium effect, and 0.35 a large effect.

As shown in the table, Maqashid Shariah-Based Innovation has the largest effect on Economic Sustainability ($f^2 = 0.328$), indicating a nearly large effect size. The effect on Social Sustainability is also substantial ($f^2 = 0.267$), categorized as medium-to-large, while its effect on Environmental Sustainability is medium ($f^2 = 0.171$). These findings reinforce the strategic role of ethical innovation in enhancing the multidimensional sustainability of Muslim-owned startups.

Predictive Relevance (Q^2)

Table 12: Predictive Relevance (Q^2) via Blindfolding Procedure

Endogenous Construct	Q^2 Value
Economic Sustainability	0.367
Social Sustainability	0.325
Environmental Sustainability	0.292

Source: Blindfolding procedure – SmartPLS Output (2025), processed by authors

Table 12 reports the Q^2 values derived from the blindfolding procedure to evaluate the predictive relevance of the model. According to Hair et al. (2021), a Q^2 value greater than zero indicates that the model has predictive relevance for a particular endogenous construct.

In this study, all three sustainability dimensions—economic, social, and environmental—recorded positive Q^2 values (0.367, 0.325, and 0.292 respectively), confirming the model's ability to accurately predict data points. The highest predictive relevance was observed for Economic Sustainability, followed closely by Social and Environmental dimensions.

These results substantiate the main hypothesis of the study that Maqashid Shariah-Based Innovation plays a crucial role in determining startup sustainability. The model demonstrates robust predictive power, especially in enhancing financial resilience, fostering social inclusivity, and promoting environmentally conscious business practices among Muslim entrepreneurs.

Interaction Effect Results

Table 13: Interaction Effects on Startup Sustainability Dimensions

Interaction Path	Coefficient (β)	t-value	p-value	Interpretation
Interaction Term → Economic Sustainability	0.113	2.347	0.019	Significant
Interaction Term → Social Sustainability	0.098	2.012	0.044	Significant
Interaction Term → Environmental Sustainability	0.062	1.718	0.086	Marginally Significant

Source: SmartPLS Output (2025), processed by authors

Table 13 presents the results of the interaction effects between Maqashid Shariah-Based Innovation and the moderator variable on the three sustainability dimensions. The interaction term shows a significant positive effect on both Economic Sustainability ($\beta = 0.113$, $p = 0.019$) and Social Sustainability ($\beta = 0.098$, $p = 0.044$), indicating that the presence of the moderating factor enhances the impact of innovation on these dimensions.

For Environmental Sustainability, the interaction effect is marginally significant ($\beta = 0.062$, $p = 0.086$), suggesting a weaker moderating influence. These findings imply that the moderating variable may have a more substantial role in influencing economic and social outcomes of Maqashid Shariah-based innovation compared to environmental aspects.

Discussion of Key Findings

The findings of this study contribute to the growing body of literature on Islamic entrepreneurship by empirically demonstrating the influence of Maqashid Shariah-based innovation on the multidimensional sustainability of Muslim-led startups in Indonesia. The results confirm that startups which integrate ethical and value-driven innovation practices—aligned with the objectives of Shariah—tend to perform better not only in economic terms, but also in social and environmental dimensions.

The strong effect of Maqashid innovation on economic sustainability ($\beta = 0.446$) highlights the strategic relevance of integrating Islamic values into entrepreneurial innovation, particularly in emerging markets where religious norms influence consumer preferences and stakeholder expectations. This aligns with prior research suggesting that Islamic principles can foster trust, customer loyalty, and investor confidence in business models (Hassan et al., 2020).

Similarly, the significant paths toward social ($\beta = 0.392$) and environmental sustainability ($\beta = 0.285$) suggest that ethical innovation informed by Maqashid Shariah can catalyze inclusive and responsible entrepreneurship. These results align with the conceptual framework proposed by Wilson (2006) and later expanded by Kamla and Alsoufi (2015), who argued that Islam-based entrepreneurship has the potential to advance social justice, environmental stewardship, and moral accountability.

The moderation analysis further reinforces the pivotal role of religio-ethical commitment. Entrepreneurs with a higher internalization of Islamic ethics amplify the impact of innovation on sustainability outcomes. This finding supports the view that religiosity and personal values serve not only as motivational drivers but also as functional assets in shaping strategic entrepreneurial behavior (Saeed et al., 2015). It implies that Islamic entrepreneurship should

not be viewed solely from a compliance perspective but also as a value-based system with transformative potential.

The marginally significant moderation on the environmental dimension warrants deeper reflection. While environmental consciousness is integral to Maqashid Shariah (*hifz al-bi'ah* as an extension of *hifz al-nafs* and *hifz al-mal*), practical implementation of green innovation may face structural constraints, such as lack of financing or market demand. This finding underscores the need for institutional support and ecosystem-level interventions to enhance the environmental role of Islamic startups.

In summary, the study reveals that Maqashid Shariah-based innovation is not merely a religious ideal but a pragmatic framework that enables sustainable entrepreneurial success. By bridging spiritual values with business innovation, Muslim entrepreneurs can create ventures that are resilient, responsible, and socially impactful.

Theoretical Implications

This study provides several contributions to theory in the domains of Islamic entrepreneurship, innovation, and sustainability.

First, it extends the application of Maqashid Shariah into the field of entrepreneurship by operationalizing it as a multi-dimensional construct of innovation. While prior literature has largely treated Maqashid as a normative framework in Islamic finance and law, this study offers a novel empirical model linking it to real-world entrepreneurial behavior and outcomes.

Second, it advances the theoretical understanding of how value-based constructs interact with sustainability dimensions. By demonstrating that Maqashid Shariah-based innovation significantly influences economic, social, and environmental outcomes, the study supports the view that Islamic entrepreneurship is inherently aligned with the triple bottom line perspective. This finding helps reconcile Islamic business values with modern sustainability theory.

Third, the inclusion of religio-ethical commitment as a moderating variable adds complexity to the traditional linear models of entrepreneurship. It reflects the embeddedness of personal spirituality and ethical orientation in entrepreneurial decision-making, aligning with the perspective of values-based entrepreneurship and stakeholder theory. The results suggest that religiosity should not be treated merely as a background variable or demographic attribute, but rather as an active moderator that shapes how innovations translate into performance outcomes.

Fourth, the study contributes methodologically by applying PLS-SEM to measure latent Islamic constructs that are inherently abstract and multi-faceted. The robust psychometric properties demonstrated here encourage further refinement and replication in future Islamic entrepreneurship studies, especially in Muslim-majority contexts where Maqashid-based frameworks remain underutilized in empirical research.

Practical Implications

The findings of this study carry several practical implications for entrepreneurs, policymakers, incubators, and Islamic financial institutions seeking to support the development of value-driven, sustainable startup ecosystems.

For Muslim entrepreneurs, the results emphasize the importance of embedding Maqashid Shariah principles into innovation strategies. Ethical innovation is not only morally commendable but also contributes significantly to business longevity and societal trust. Entrepreneurs are encouraged to develop products and processes that reflect the five objectives of Shariah—preserving religion, life, intellect, progeny, and wealth—within modern business practices. Doing so can offer competitive differentiation in halal markets, foster consumer loyalty, and attract value-conscious investors.

Startup incubators and business development services in Muslim-majority countries should consider integrating Maqashid Shariah literacy into their training modules. Entrepreneurial education should move beyond technical and financial skills to include modules on ethical innovation, Islamic business ethics, and value-based leadership. This approach can nurture a new generation of changemakers who align their profit motives with societal and spiritual goals.

For policymakers, the study signals the need to create enabling environments for Islamic social innovation. Public policy interventions could include grants or tax incentives for startups developing Shariah-compliant, socially responsible innovations. Additionally, government programs targeting startup development in Islamic economic sectors (e.g., halal food, Islamic fintech, ethical fashion) should ensure alignment with Maqashid Shariah as a foundational principle of program design and evaluation.

Islamic financial institutions can leverage these findings to enhance their product offerings and funding strategies. Shariah-compliant venture capital, crowdfunding platforms, and impact investment schemes can be tailored to prioritize startups that demonstrate strong Maqashid-aligned innovation models. By doing so, Islamic finance can play a proactive role in nurturing a sustainable entrepreneurial ecosystem.

Furthermore, the moderating role of religio-ethical commitment implies that values-based mentoring should be emphasized. Beyond funding, startups need role models and advisors who exemplify ethical leadership and inspire Maqashid-oriented innovation. This also calls for stronger collaboration between scholars of Islamic economics and practitioners in startup development.

Collectively, these practical insights illustrate how Maqashid Shariah can serve as a dynamic framework not only for Islamic jurisprudence but also for guiding innovation and sustainable entrepreneurship in Muslim societies.

5. Conclusion

This study has empirically demonstrated the pivotal role of Maqashid Shariah-based innovation in enhancing startup sustainability among Muslim entrepreneurs in Indonesia. By operationalizing the five objectives of Shariah as a framework for ethical and value-driven innovation, the findings reveal a strong and significant influence on economic, social, and environmental sustainability dimensions. The results also underscore the critical moderating role of religio-ethical commitment in amplifying these relationships, particularly in economic and social contexts.

The research offers a comprehensive and novel perspective on how Islamic values, when embedded into entrepreneurial innovation, can yield not only financial success but also social inclusiveness and environmental responsibility. Through the application of PLS-SEM, the

study has validated a multidimensional model that connects religious principles with measurable business outcomes—thereby bridging the gap between normative Islamic theory and empirical entrepreneurship research.

Practically, the insights from this study call for greater integration of Maqashid Shariah principles into entrepreneurship education, startup incubation, Islamic financial services, and public policy. Entrepreneurial actors and institutions across the Muslim world are encouraged to move beyond compliance-based models and toward innovation strategies that reflect deeper ethical and spiritual values.

While the study provides strong empirical support for its model, it is not without limitations. The cross-sectional design restricts causal inference, and the reliance on self-reported data may introduce subjectivity. Additionally, the study was geographically limited to Indonesia; therefore, generalizability to other Muslim-majority countries should be approached with caution. Future research could adopt longitudinal designs, comparative multi-country analysis, or integrate mixed methods to explore the dynamic interactions between Maqashid-based innovation and sustainability.

In conclusion, this study contributes to a growing scholarly effort to reimagine entrepreneurship through an Islamic ethical lens. It affirms that Maqashid Shariah is not only relevant but essential in guiding entrepreneurs toward sustainable, responsible, and spiritually conscious business practices in the 21st-century Muslim economy.

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