

Islamic Perspectives on Entrepreneurship in the Industry 4.0 and Artificial Intelligence Era

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Abstract

This study re-establishes the theoretical foundations of Islamic entrepreneurship through Quranic and Hadith guidance, while examining barriers faced by Muslim society in the era of the Fourth Industrial Revolution (4IR), driven by Artificial Intelligence (AI). Content analysis of Quranic verses and six major Hadith compilations identified five themes from each source, together forming a comprehensive ethical framework for Islamic entrepreneurship. Data from 100 Muslim participants—including scholars, da'wah followers, pir-murids, religious officers, and general Muslims—were analyzed using statistical frequency and thematic analysis. Findings revealed five principal barriers: religious misconceptions (76.8% perceived entrepreneurship as risky), lack of institutional and financial support (70% cited difficulty accessing Sharia-compliant investment), skills deficit (63% lacked business and digital skills), socio-cultural barriers (69% viewed employment as safer), and technological unpreparedness (63% lacked digital skills, 49% resisted integrating Islamic economics with entrepreneurship).

The study proposes a three-tier framework: (1) Quranic-Hadith foundations, (2) skills development and education reform, and (3) institutional and policy support. Recommendations are offered for religious institutions, Islamic banks, educators, policymakers, and the technology sector. Limitations include the Bangladesh-only sample and convenience sampling. Future research should explore comparative studies, AI-integrated models, and female Islamic entrepreneurship. Islamic entrepreneurship is framed as worship, social responsibility, and spiritual pursuit, capable of ensuring prosperity and success in the hereafter when aligned with 4IR technologies.

Keywords: Islamic entrepreneurship, Muslim society, Fourth industrial revolution, Religious misconceptions, Education reform.

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1. Introduction

Human life is shaped mainly by spiritual, physical, and sexual needs, and there are various ways of satisfying them. One driving force that plays a key role in meeting these needs, however, is finance, which sustains the mosques, temples, pagodas, synagogues, theaters, parks, libraries, and foundations where people go to satisfy their spiritual needs — maintaining a spiritual environment in these institutions is itself inseparable from financial management. Meeting the remaining two needs is likewise tied to monetary affairs. These monetary affairs, which originate in business entrepreneurship, are thus the root cause of fulfilling all human needs (Rusmini, 2022; Timuroglu et al., 2017).

Business entrepreneurship refers to a self-motivated process in which an individual or group, through innovation, risk-taking, and opportunity creation, builds a system of production, distribution, or service that creates economic value and fulfills the needs of society. In Islamic terms, it falls within the general scope of ‘tijarat’ (trade) and ‘qasb’ (earning), where the entrepreneur seeks not only profit but also the pleasure of Allah, social responsibility, and moral integrity (Hoque et al., 2014; Linge & Ahmad, 2021). In light of this definition, it is worth noting that despite Muslims being held up as the perfect example (uswah) for mankind, a considerable gap remains between actual practice and the pathway of business entrepreneurship prescribed by the Holy Quran and Hadith. From an Islamic perspective, however, business entrepreneurship is not a mere worldly occupation but a moral act imbedded in worship, provided it is conducted with righteous intent, Sharia-compliant methods, and social justice. History bears this out: the Prophets and messengers of Islam were, in most cases, themselves business entrepreneurs in their respective eras. Hazrat Adam (AS), for example, was an agricultural entrepreneur who laid the foundations of human civilization through cultivating land and producing crops; Hazrat Nuh (AS) was a marine engineer and the father of shipbuilding, uniting engineering and labor in a way unique for his time; Hazrat Hud (AS) led a commercial caravan; Hazrat Ibrahim (AS) was an animal husbandry and commercial entrepreneur; Hazrat Shuaib (AS), honest in weights, measures, and transactions, remains a symbol of business integrity; Hazrat Yusuf (AS), an economic planner and grain store manager, who embodied the management of Egypt's wealth; Hazrat Dawud (AS) was an armor maker and blacksmith; Hazrat Sulayman (AS) was a pioneer in international trade and seafaring; and

Hazrat Muhammad (SAW) was himself a business, recognized as the finest entrepreneur in Arabia through his management of Khadija's (RA) business (Ripin & Yusof, 2018; Latifah et al., 2023; Faizal et al., 2013).

Following these prophets and messengers, the early adherents of Islam set an unmatched example as business entrepreneurs. Hazrat Abu Bakr (RA) was a cloth merchant and the first caliph of the Islamic state; Hazrat Umar (RA), a businessman and skilled financial administrator, established the Baitul Mal and laid the foundation for the Islamic financial system; Hazrat Uthman (RA), owner of a vast merchant empire, transformed the trade of Medina and financially strengthened the Islamic state through his commercial knowledge and wealth; Hazrat Abdur Rahman Ibn Awf (RA), a wealthy businessman and pioneer of Islamic economics, established markets in Medina and modeled interest-free transactions; Hazrat Zubair Ibn Awam (RA) traded in weapons and equipment; Hazrat Talha Ibn Ubaidullah (RA) traded in cloth and dates; Hazrat Saad Ibn Abi Waqqas (RA) traded in weapons and military equipment; and, above all, Hazrat Khadija (RA) was Arabia's greatest female entrepreneur, managing international caravan trade and becoming the first to recognize the Prophet's (PBUH) mission (Nurfatwa et al., 2025; Cevherli, 2022).

Not only the early followers of Islam but also the scholars and jurists of later generations were renowned as business entrepreneurs. Imam Abu Hanifa (RA) was a successful entrepreneur in the textile trade who wrote on the complex issues of business transactions in Islamic jurisprudence; Imam Malik (RA) was involved in the book trade and was known throughout the markets of Medina for his business integrity; Imam Shafi'i (RA) traded in textiles and books; Imam Ahmad ibn Hanbal (RA) was involved in the manuscript and book trade, as were Imam Bukhari (RA) and Imam Tirmidhi (RA); and Imam Ghazali (RA) offered a comprehensive discussion of business ethics in his 'Ihya Ulumuddin', which played a leading role in establishing the moral foundation of Islamic entrepreneurship (Islahi, 2021; Suherli et al., 2023).

These historical examples make clear that the tradition of Islamic entrepreneurship flowed successively from the Prophets, through the Companions and Tabi'in, to later scholars. Yet present-day Muslim society is steadily deviating from this rich tradition, even as the Quran and Hadith continue to offer clear instruction for business entrepreneurship. This gap raises the study's central question — why and how did it rise, and how can Islamic

entrepreneurship be revived in this era of the Fourth Industrial revolution (AI, blockchain, big data)? Finding answers to these questions is the main purpose of this research.

1.1. Background of the research

Islamic economic philosophy, guided by the Holy Quran and Hadith, establishes the business entrepreneur on the principles of honesty, justice, freedom from interest, and risk sharing. Surah Al-Baqarah (2:275-280) of the Quran prohibits interest, and Surah Al-Mutaffifin (83:1-6) censures business fraud; in the Hadith, the Prophet (peace be upon him) affirmed that the truthful businessman to be the companion of the Prophets, the Siddiqs, and the martyrs (Sunan Tirmidhi, 1209). Historically, the Prophets, Companions, and later scholars were the genuine pioneers of this principle. However, present-day Muslim society has gradually deviated from this tradition — turning, in the name of conventional worship, away from the halal financial transactions prescribed by the Quran and Hadith; engaging in sectarianism rather than skilled and intellectual economic activity; and in the name of religious education, learning only the theoretical aspects of religion in madrasas (Muhammad et al., 2017; Abubakar et al., 2025). In addition, because clerics often emphasizes hereafter-focused education over worldly education and professional skills, a skill-averse attitude has developed in Muslim society one that conflicts with the Quranic instruction to “travel in the land and seek the bounty of Allah” (Surah Al-Jumu’ah, 62:10).

At present, the world is standing at the threshold of the Fourth Industrial Revolution (4IR), where artificial intelligence (AI), blockchain, big data, and automation have created unparalleled opportunities and ethical challenges for the economy. In this context, revitalizing Islamic entrepreneurship through a combination of Quranic and Hadith guidance, mosque-based human resource development reforms, and modern technology is a timely research topic that can pave the way for employment, economic prosperity, and sustainable development in Muslim society.

1.2. Significance of the research

The significance of this study is a multifaceted and far-reaching. From a theoretical perspective, it develops a comprehensive framework combining the business guidance of the Quran and Hadith, the historical entrepreneurial models of the Prophets and Companions, and the technologies of the Fourth Industrial Revolution — artificial intelligence, blockchain, and big data — opening new horizons for Islamic entrepreneurship research. From a

religious and moral perspective, it demonstrates that Islamic entrepreneurship is a part of worship and that reforming of the mosque-madrassa-based education system is essential to reducing the customary skill-averse attitude in Muslim society. From an economic perspective, it contributes to job creation, poverty reduction, and sustainable development through an interest-free digital entrepreneurship model. Above all, the research prepares Muslim society to compete globally in the era of the Fourth Industrial Revolution and offers practical guidance for policymakers formulating Islamic entrepreneurship development policies (Rouf et Al., 2024; Saridudin et al., 2024).

1.3. Purposes of the research

The objectives of this research — which aims to analyze the obstacles to reviving Islamic entrepreneurial culture in present-day Muslim society within the technological context of the Fourth Industrial Revolution — are as follows:

1.3.1. To identify and classify the guidelines related to business entrepreneurship from the verses of the Holy Quran and the narrations of the six major hadith books (Bukhari, Muslim, Abu Dawud, Tirmidhi, Nasa'i, Ibn Majah).

1.3.2. To investigate the challenges—financial, institutional, cultural, religious and technological—that hinder Muslims from becoming business entrepreneurs in the current socio-economic context of the Fourth Industrial Revolution based on artificial intelligence.

2. Literature Review

The integration of artificial intelligence (AI) technologies with Islamic perspectives on entrepreneurship and the Fourth Industrial Revolution (Industry 4.0) is an emerging and increasingly important area of research. A significant number of studies on the ethical foundations of Islamic entrepreneurship have been published in recent decades, emphasizing principles such as taqwa (fear of God), halal-haram compliance, honesty, fairness, and social responsibility (Oukil, 2011; Ramadani et al., 2015; Mustapa & Arishin, 2023). Oukil (2011) presents an Islamic perspective on technology-based entrepreneurship but does not link it to Fourth Industrial Revolution technologies. Ramadani et al. (2015) extensively discussed the concepts, principles, and perspectives of Islamic entrepreneurship, contributing significantly to its theoretical foundation (Ramadani et al., 2016). Mustapa &

Arishin (2023) analyzed Islamic entrepreneurship ethics in the context of *ijtihad* and innovation, While Ukil et al. (2024) identified determinants of Islamic entrepreneurial intention across two country samples, highlighting its behavioral dimensions. Islam et al. (2021) examined the role of spiritual leadership in Bangladesh's SME sector during crises, helping to establish the link between Islamic leadership and entrepreneurship.

While these studies make important contributions to the theoretical and behavioral foundations of Islamic entrepreneurship, share have a significant weakness: none engages with the technological advances of the Fourth Industrial Revolution —such as the Internet of Things (IoT), blockchain, and automation — or the practical applications of artificial intelligence (machine learning, big data analytics). In other words, they remain bound to the framework of classical Islamic economics and largely ignore contemporary technological realities.

Other researchers have examined the role of Islamic ethics in the digital economy without linking it to entrepreneurship. Ishaq and Mohammad (2023) discuss the potential of AI in Islamic economics and highlight ethical considerations but do not explore the broader technological framework of the Fourth Industrial Revolution or its practical application to entrepreneurship. Yohana et al. (2025) mapped Islamic entrepreneurship through a combination of religious values and business ethics, helping to clarify its ethical framework, but likewise made no connection to the Fourth Industrial Revolution or AI.

Based on this critical analysis the following research gaps can be identified: First, no research has integrated the Islamic entrepreneurship perspective with the AI technologies of the Fourth Industrial Revolution. Various studies have discussed the ethics of Islamic entrepreneurship separately (Oukil, 2011; Ramadani et al., 2015; Mustapa & Arishin, 2023; Ukil et al., 2024; Yohanna et al., 2025), and AI or the Fourth Industrial Revolution separately (Ishak & Mohamed, 2023), but none has integrated the two fields.

Second, no integrated study to date has identified and categorized instructions on business entrepreneurship from Qur'anic verses and the six major Hadith books while linking them to the AI-based context of the Fourth Industrial Revolution. Previous studies (Ramadani et al., 2016; Islam et al., 2021) have confined Quranic-Hadith guidance to traditional economics, or analyzed AI technology separately from Islamic ethics (Ishak & Mohamed, 2023).

Third, the financial, institutional, cultural, religious, and technological challenges to entrepreneurship development in contemporary Muslim societies — especially in the AI-based context of the Fourth Industrial Revolution — have not been investigated through an integrated framework. Ukil et al. (2024) identified determinants of Islamic entrepreneurial intention but did not analyze them in an AI-based context.

Fourth, the skills orientation of mosque-madrasah-based education, and its limited role in fostering entrepreneurship, has been almost entirely neglected in previous studies — an important gap given its significance for reviving Islamic entrepreneurship.

This study, titled "Islamic Perspectives on Entrepreneurship in the Industry 4.0 and Artificial Intelligence Era," therefore proposes an integrated framework by identifying and classifying the guidance of the Qur'an and Hadith and investigating the challenges that hinder Muslim entrepreneurship in the AI-based context of the Fourth Industrial Revolution, which is a combination missing from prior research. This is a timely undertaking: as the world moves rapidly toward the Fourth Industrial Revolution, reviving Islamic entrepreneurship is essential if Muslim societies are to remain competitive globally.

3. Research Methodology

In line with the research objectives and questions, this study adopted a mixed-methods approach combining qualitative and quantitative data, which makes the research richer and more robust by drawing on both numerical data and in-depth descriptive analysis to answer the research questions (Creswell & Creswell, 2009). A purely qualitative approach was used to meet the first objective (identifying and classifying the Quranic-Hadith instructions), while both qualitative and quantitative data were collected and analyzed to meet the second objective (investigating current challenges).

3.1. Data Collection and Analysis Method

3.1.1. Data Collection and Analysis for the First Objective

Documentary analysis was used to fulfill the first objective — "to identify and classify the guidelines related to business entrepreneurship from the verses of the Holy Quran and the narrations of the six major Hadith books."

3.1.1.1. Source of data:

- Verses of the Holy Quran (especially Surah Al-Baqarah,

Al-Mutaffifin, An-Nisa, Al-Jumu'ah, Al-Ma'idah etc.)

- Six major hadith books: Sahih Bukhari, Sahih Muslim, Sunan Abu Dawud, Sunan Tirmidhi, Sunan An-Nasa'i and Sunan Ibn Majah

3.1.1.2.Data collection method:

The verses and hadiths related to business entrepreneurship were identified and collected from chapters of the above books such as 'Kitabul Buyu' (Sale and Purchase), 'Kitabul Musaqt' (Agriculture), 'Kitabul Ijarah' (Lease), and 'Kitabus Sulh' (Contracts) etc.

3.1.1.3.Data analysis method:

The collected data were analyzed using the content analysis method. First, the verses and hadiths were read and their main meanings and instructions identified. They were then divided into several categories according to their content and nature: (a) business honesty and justice, (b) prohibition of interest and fraud, (c) risk sharing and business partnerships, (d) workplace behavior and seeking Allah's favor, and (e) consumer rights and social responsibility. This classification fulfilled the first objective of the research and provided a theoretical basis analyzing the second.

3.1.2. Data collection and analysis for the second objective

An interview-based survey method was used to fulfill the second objective — "to investigate the financial, institutional, cultural, religious, and technological challenges that hinder Muslims from becoming business entrepreneurs in the current AI-based socio-economic context of the Fourth Industrial Revolution."

3.1.2.1.Study population and sample:

The study population comprises Muslims of different classes and professions in Bangladesh. From , this population 100 Muslims (<https://docs.google.com/forms/d/e/1FAIpQLSenzdmm1TIpWbISkx-OitdRCQvAtnXBk-HKNQmzD35YCluiV7Q/viewform?usp=header>) were selected as a sample using the convenience sampling method. The sample included—

S.N	Participants' identity	Number of the participants from each class
01	Mosque-Madrasa scholars	20
02	Dawah and Tabligh brothers	20
03	Priests and their followers	20
04	Religious Education Cadre Officers	20
05	General Muslim population	20
In total		100

This diverse sample made the research richer and more comprehensive, allowing it to reflect a variety of religious, cultural, financial, and technological perspectives.

3.1.2.2. Data Collection Tools and Methods:

A semi-structured questionnaire combining open and closed questions was prepared for data collection, based on five main dimensions (financial, institutional, cultural, religious, and technological). The researcher conducted a face-to-face interviews with each respondent, allowing for spontaneous opinions and in-depth experiences to emerge; each interview lasted 20-30 minutes, with the respondent's comfort given the utmost priority.

3.1.2.3. Data Analysis Methodology:

The collected data was analyzed using Mixed Analysis—

- Quantitative analysis: Responses to the closed questions were coded and analyzed using statistical frequency analysis, which helped determine the prevalence and priority of the challenges.
- Qualitative analysis: Responses to the open questions were analyzed using thematic analysis. Recurring issues, patterns, and important themes were identified from respondents' statements and categorized under the five key dimensions.

3.1.3. Data Reliability and Ethics

3.1.3.1. Reliability and Validity:

To ensure the study's reliability, the questionnaire was initially pilot-tested on 10 participants and amended as necessary. To increase the credibility of the qualitative data, a triangulation method was followed — that is, data on the same topic were collected from different sources (scholars, preachers, pirs, and members of the general public) and checked for consistency.

3.1.3.2. Ethical Considerations:

Ethical standards were maintained at every stage of the study. Each respondent was informed of the study's purpose, and informed consent was obtained; respondent's names and identities were kept confidential, and they were assured that the information they provided would be used for academic purposes only. The respondent's freedom and confidentiality were treated as paramount.

3.1.3.3. Methodological Limitations

The research methodology has some limitations. First, the sample is

limited to Bangladesh and does not represent the global Muslim community. Second, although the sample shows variation, the use of convenience sampling means it is not fully random. Third, some respondents may have felt hesitant to share their opinions freely for religious or cultural reasons, which may have affected the spontaneity of the data. The researcher is aware of these limitations and has taken them into account in the data analysis.

4. Data Analysis and Findings

This chapter presents the analysis and results of the data collected for on the study’s two objectives using mixed methods. Documentary and content analysis were used to fulfill the first objective (identifying and classifying Quranic-Hadith instructions), while survey data from 100 participants are presented through statistical frequency analysis and thematic analysis to fulfill the second objective (investigating current challenges). Each stage of the analysis follows the procedures outlined in the methodology.

4.1. Results of the first objective: Guidance on business entrepreneurship in the Quran and Hadith

4.1.1. Guidance in the Holy Quran

The numerous verses related to business entrepreneurship in various Surahs of the Holy Quran have been classified into five main themes through content analysis

Table 1: Themes related to business entrepreneurship in the Quran

S.N	Theme	Representative Verses	Key Instructions
01	Basic principles of transactions	Surah An-Nisa (4:29); Surah Al-Baqarah (2:275)	Mutual consent, legality of trade, prohibition of interest
02	Prohibition of interest (riba)	Surah Al-Baqarah (2:278-280)	Strict prohibition of interest, compassion for the borrower
03	Honesty and Justice	Surah Al-Mutaffifin (83:1-6); Surah Hud (11:85)	Honesty in weights and measures, prohibition of cheating
04	Effort and Initiative	Surah Al-Jumu'ah (62:10); Surah Al-Muzzammil (73:20)	Economic activities after worship, seeking the grace of Allah
05	Social Responsibility	Surah Al-Hashr (59:7); Surah At-Tawbah (9:60)	Equitable distribution of wealth, Zakat and social welfare

Analytical explanation: The Quranic instructions provide a comprehensive ethical framework for Islamic entrepreneurship — one that, on the one hand, allows business freedom and profit-making, while, on the other, renders that profit lawful and blessed through honesty, justice, and social responsibility. In

particular, the instruction in Surah Al-Jumu'ah (62:10) shows that entrepreneurship complements rather than opposes worship, offering an antidote to the religious distortions prevalent in contemporary Muslim society.

4.1.2. Hadith Guidance

From the content analysis of the six major hadith texts, guidance on business entrepreneurship has been categorized into five themes:

Table 2: Hadith Themes on Business Entrepreneurship

S.N	Theme	Representative Hadith	Key Instructions
01	The dignity of a businessman Sunan	Tirmidhi (1209); Sahih Bukhari (2079)	The truthful businessman is the companion of the prophets and martyrs; there is a blessing in honesty
02	Honesty in transactions Sunan	Abu Dawud (3329); Sahih Muslim (1513)	Disclosure of errors, prohibition of fraud, frankness
03	Prohibition of interest Sahih	Muslim (1597); Sunan Ibn Majah (2276)	Curse on the usurer-the usurer-the writer-the witness
04	Risk and uncertainty (Gharar) are prohibited	Sahih Muslim (1513); Sunan Abu Dawud (3383)	Trading in unknown-uncertain products is prohibited
05	Enthusiasm for work effort	Sahih Bukhari (2078); Sunan Bayhaqi	Enthusiasm for being a self-reliant entrepreneur; an honest hardworking entrepreneur is the choice of Allah

Analytical explanation: The Hadith instructions give practical form to the guidance of the Quran. In particular, the declaration that "the truthful businessman is the companion of the Prophets and Martyrs" elevates the entrepreneur's status to the highest level, directly countering the view in contemporary Muslim society that business is merely a 'worldly' pursuit. The word 'barakat' in the Hadith of Bukhari links economic success with spiritual success, establishing the dual purpose — world and the hereafter — of the Islamic entrepreneur.

Conclusion: The instructions of the Quran and Hadith demonstrate that Islamic entrepreneurship is not merely an economic activity but a moral, social, and spiritual responsibility.

4.2. Results of the second objective: Analysis of current challenges (Quantitative Analysis)

To fulfill the second objective, data were collected from 100 participants through semi-structured questionnaires. The sample included Islamic scholars from mosques-madrasas, followers of dawat and tabligh, Islamic priests and their followers, and members of the Muslim public. The data were analyzed using statistical frequency analysis and thematic analysis.

4.2.1. Question 1: Religious and psychological challenges

Question 1: In your opinion, which of the following psychological disorders and misconceptions about practicing Islam among traditional-minded Muslims prevent them from becoming entrepreneurs?

Table 3: Frequency analysis of religious and psychological challenges (n=100)

Challenges	Respondent Rate	Frequency (individuals)
Being an entrepreneur is risky and uncertain	76.8%	73
Sustenance is determined by fate, so there is no need to take initiative	33.7%	32
Worldly success must be abandoned for success in the Hereafter	28.4%	27
Entrepreneurship is a matter of luck, not achievable through effort	17.9%	17
Business is a worldly job, the opposite of worship	14.7%	14

Analysis and explanation: A maximum of 76.8% of participants consider risk and uncertainty the main obstacle — the biggest psychological barrier on the path to Islamic entrepreneurship. Yet while ‘gharar’ (uncertainty) is prohibited in Islam, determined risk-taking and planned initiative (mukhtara) are praised in the biographies of the Prophets. A further 33.7% believe that sustenance is predetermined by fate, an idea that contradicts the instruction to ‘seek the bounty of Allah’ in Surah al-Jumu’ah (62:10), which encourages hard work, while 28.4% perceive a conflict between success in this world and the Hereafter, contradicting the Quranic injunction to ‘do good in this world and do not forget the Hereafter’ (Surah al-Qasas, 28:77). Only 14.7% consider business the opposite of worship — a positive sign that most respondents understand the Islamic perspective correctly.

Question 2: Challenges related to Islamic knowledge and economics

Question: "In your view, what challenges and misconceptions related to Islamic knowledge and economics prevent traditional Muslims from becoming entrepreneurs?"

Table 4: Frequency analysis of challenges related to Islamic knowledge and economics (n=100)

Challenges	Respondent Rate	Frequency (individuals)
Difficulty in accessing Sharia-compliant investment and financing platforms	70%	70
Lack of Sharia-based business knowledge	66%	66
Unwillingness to explore the relationship between Islamic economics and modern entrepreneurship	49%	49
Imagination of difficulty in verifying halal-haram	26%	26
Considering zakat and charity as the main means of economic development	10%	10

Analysis and explanation: A maximum of 70% identified the unavailability of Sharia-compliant investment platforms as the biggest institutional barrier to Islamic entrepreneurship — in many Muslim countries, Islamic banks are more interested in lending to large companies, leaving small and medium entrepreneurs behind. A further 66% admitted to a lack of Sharia-based business knowledge, pointing to weaknesses in madrasa-based education and the absence of entrepreneurship in the religious curriculum, while 49% expressed reluctance to explore the relationship between Islamic economics and modern entrepreneurship — a worrying finding, since integrating Islamic economics with modern technology is critical in the era of the Fourth Industrial Revolution. Only 10% consider Zakat-giving the primary means of economic development, a positive sign that most respondents are interested in the institutional economic model.

4.2.3. Question 3: Skill Shortage

Question: "In your opinion, what skills do you feel are lacking in order to be an entrepreneur?"

Table 5: Frequency analysis of skill shortages (n=100)

Skill gap	Respondent rate	Frequency (individuals)
Lack of business planning, financial knowledge and digital skills (hard skills)	63%	63
Lack of self-confidence, leadership and risk-taking skills (soft skills)	51%	51
No clear idea about the required skills	50%	50
Even if there are opportunities to learn skills, I do not use them	33%	33
Lack of self-development habits and self-motivated learning	28%	28

Analysis and explanation: A maximum of 63% admitted to a lack of hard skills (business planning, financial literacy, digital skills), which are crucial for entrepreneurship in the era of the Fourth Industrial Revolution, while 51%

reported a lack of soft skills (confidence, leadership, risk-taking ability) — skills developed through family and education, consistent with the results of Question 4. Half of respondents (50%) said they did not know what skills were needed, pointing to a failure of the education system in which entrepreneurship education is not part of the curriculum, while only 28% reported a lack of interest in self-development — a positive sign that most respondents are interested in acquiring skills but simply lack opportunity and guidance.

4.2.4. Question 4: Family, Social and Educational Environment Challenges

Question: "In your opinion, what aspects of the family, social and educational environment prevent traditional Muslims from becoming entrepreneurs?"

Table 6: Frequency analysis of family, social and educational challenges (n=100)

Challenges	Respondent rate	Frequency (individuals)
Family-Society-Educational Institutions Consider Job as Safe and Respectable	69%	69
Lack of Entrepreneurial Skills and Mindset Development in the Education System	59%	59
Lack of Enthusiasm in Building Confidence in the Family and Obstacles to Decision Making	51%	51
Negative View of Failed Entrepreneurs in Society	41%	41
Family-Society Reluctance to Take Risks and Considering Failure as Shameful	35%	35

Analysis and explanation: A maximum of 69% identified a job-centric attitude — a cultural barrier deeply rooted in Muslim society and one entirely at odds with the entrepreneurial spirit of the Companions. A further 59% identified a deficiency in the education system, consistent with Question 3, since the lack of entrepreneurship education creates a skill deficit, while 51% cited obstacles to family decision making, which creates psychological barriers, especially for young people, on the path to entrepreneurship. Finally, 41% identified a negative societal view of failed entrepreneurs, which further reinforces reluctance to take risks for fear of social humiliation in the event of failure.

4.2.5. Question 5: Practical Support and Institutional Challenges

Question: "In your opinion, what are the major challenges faced by traditional Muslim entrepreneurs in terms of practical support and institutional challenges?"

Table 7: Frequency analysis of practical support and institutional challenges (n=100)

Challenges	Respondent rate	Frequency (individuals)
Difficulty in raising initial investment or capital	64%	64
Lack of training and mentoring	60%	60
Islamic finance and Sharia-compliant investments are not readily available	52%	52
Lack of investment support from relatives or society	37%	37
Lack of inspiring examples of successful entrepreneurs based on religion	37%	37

Analysis and explanation: A maximum of 64% identified difficulty raising initial capital as an obstacle — a real, structural problem stemming largely from the lack of entrepreneur-friendly lending policies among Islamic banks and from high interest rates. A further 60% acknowledged a lack of training and mentoring, which is critical for skill development and mindset formation but practically nonexistent in Muslim society, while 52% considered Islamic finance not easily available, consistent with Question 2. Only 37% cited a lack of religiously grounded examples of successful entrepreneurs — a opposite sign, since examples from the Prophets and Companions do exist; what is lacking is their proper promotion and presentation.

4.3. Thematic Analysis (Qualitative Analysis)

Responses to the open-ended questions were analyzed using thematic analysis. Recurring issues, patterns, and important themes were identified from respondents' statements and categorized under five main dimensions, with verbatim quotes from participants included under each theme to preserve the academic rigor of the qualitative analysis.

4.3.1. Theme 1: Religious Distorted Concepts and Mental Barriers

Description: Many respondents consider entrepreneurship the opposite of worship, an obstacle to success in the hereafter, or an activity contrary to destiny. These views stem from a narrow reading of religious teaching prevalent in Muslim society and from an anti-entrepreneurial attitude more broadly.

Respondents' statements

"Our Alim Sahib said that doing business reduces the time for prayers and fasting, so it is better not to do business. Hearing this, my desire to become

an entrepreneur has decreased." — (Respondent, Imam, 55 years old)

"Pir Sahib said that if you fall behind in this world, the hereafter will be ruined. That is why we, the followers, are busier with worship and rituals than with jobs or business." — (Respondent, a priest's follower, 40 years old)

"My father says, sustenance is in the hands of Allah, what will happen if you try? So there is no need to take initiative." — (Respondent, madrasa student, 25 years old)

Analytical explanation: These statements show that religious leadership and family attitudes create the greatest psychological obstacles to entrepreneurship. Yet the instruction in Surah Al-Jumu'ah (62:10) to "when the prayer is finished, disperse in the land and seek the bounty of Allah" directly contradicts this view. Such distorted ideas have taken hold partly because the fact that the Prophets themselves were entrepreneurs is not properly conveyed in religious education.

4.3.2. Theme 2: Lack of Institutional and Financial Support

Description: Participants identified the unavailability of Shariah-compliant investment platforms, capital shortages, and a lack of entrepreneur-friendly policies among Islamic banks as the main barriers.

Respondents' statements

"Islamic banks lend to big businessmen, not small entrepreneurs. I went to three banks, but none helped." — (Respondent, an entrepreneur, 32 years old)

"I have heard of Shariah-compliant investment platforms, but I don't know how to go there, how to apply—anything." — (Respondent, BCS education cadre, 38 years old)

"My friend wanted to start a halal business, but he stopped because he couldn't get an interest-free loan." — (Respondent, religious person, 39 years old)

Analytical interpretation: These statements paint a realistic picture of the lack of institutional support. Islamic banks generally prioritize large institutions and corporate clients over small and medium entrepreneurs, and modern Islamic financing models such as Sharia-compliant crowdfunding or venture capital have not yet gained popularity in Muslim societies.

4.3.3. Theme 3: Skills and Education Deficits

Description: Most respondents admitted to a lack of hard skills (business planning, financial knowledge, digital skills) and soft skills (confidence, leadership, risk-taking ability); the near-total absence of entrepreneurship education in madrasas is particularly concerning.

Respondents' statements

“Our madrasas only teach Quran-Hadith and Fiqh. There is no education in business and commerce.” — (Respondent, a dawra student of madrasah, 23 years old)

“I don’t know how to do digital marketing or e-commerce. I have heard about doing business on Facebook, but I don’t understand how to start.” — (Respondent, female, 35 years old)

“I don’t have the confidence and leadership skills. I don’t have the courage to make big decisions because my family never encouraged me.” — (Respondent, young, 20 years old)

Analytical explanation: These statements highlight structural weaknesses in the education system. Entrepreneurship or business education is almost entirely absent from traditional madrasa education in Bangladesh, even as religious institutions in the West increasingly incorporate it into their curricula, and the resulting lack of digital skills is one reason Muslim entrepreneurs are falling behind in the era of the Fourth Industrial Revolution.

4.3.4. Theme 4: Social and Cultural Barriers

Description: In Muslim society, a job-centric attitude, a negative view of entrepreneurship, and the stigmatization of failure stand as major obstacles to developing an entrepreneurial culture.

Respondents’ statements

“My family wants me to work. If I do business, they say, ‘There is no respect in business, there is respect in jobs.’” — (Respondent, business graduate, 25 years old)

“My brother failed in business; everyone in society laughs at him, calls him a ‘failure’. That’s why I am afraid to do business.” — (Respondent, an ordinary man, 32 years old)

“When someone starts a new business in our village, everyone says, ‘He will fail, he will make a loss’—they don’t dare to take the initiative because of such negative attitudes.” — (Respondent, young entrepreneur, 20 years old)

Analytical explanation: These statements point to a problem deeply rooted in social attitudes. In the West, failed entrepreneurs are often respected under the ethos of “fail fast, learn fast” but in Muslim society failure is treated as a stigma. The excessive emphasis on employment within family and society further suppresses entrepreneurial spirit, even though the Companions were known more as business entrepreneurs than as job-seekers.

4.3.5. Theme 5: Technological Unpreparedness and Digital Divide

Description: In the era of the Fourth Industrial Revolution, a lack of digital

skills, unfamiliarity with digital platforms, and any absence of the concept of technological entrepreneurship emerged as a distinct theme.

Respondents' statements

"I have heard of AI or blockchain, but I don't know how to use them in business. These topics are not in our religious education." — (Respondent, a tabligh brother, 30 years old)

"To do business online, you need to know digital marketing, but I know how to use a phone, but I don't know how to use a business digital platform." — (Respondent, female, 35 years old)

"I have heard about opening an e-commerce site, but I have no idea how to start, how to sell products online." — (Respondent, a potential entrepreneur, 35 years old)

Analytical explanation: AI, e-commerce, and digital marketing skills are essential for entrepreneurs in the era of the Fourth Industrial Revolution, yet these are almost entirely absent from Muslim society, particularly within religious educational institutions. This digital divide is holding Muslim entrepreneurs back in global competition.

4.4. Summary of thematic analysis

Table 8: Summary of thematic analysis

Theme	Main Challenge	Key Learnings from Respondents' Statements	Quantitative Support
1. Religious misconceptions	considering entrepreneurship as the opposite of worship	anti-entrepreneurial attitude of religious leadership	76.8% consider risk as an obstacle
2. Lack of institutional support	capital crisis, non-responsiveness of Islamic banks	Small entrepreneurs are out of Islamic banks	Difficulty in accessing 70% of investments
3. Skill deficit	lack of hard and soft skills	absence of entrepreneurship education in madrasas	63% lack hard skills
4. Socio-cultural barriers	job-centric attitude, stigma of failure	negative view of entrepreneurs in society	69% consider their jobs secure
5. Technological unpreparedness	lack of digital skills, AI-ignorance	absence of digital entrepreneurship subject in religious education	63% lack of digital skills

4.5. Relationship between research objectives and results

Table 9: Relationship between research objectives and results

Objectives	Results	Level of achievement of the intended results
Objective 1: Identify and classify the instructions related to business entrepreneurship from the verses of the Quran and the six major hadith books.	Five themes emerged from the Quran (principles of transactions, prohibition of interest, honesty, hard work, social responsibility) and five from the Hadith (dignity of the businessman, honesty, prohibition of interest, prohibition of gharar, encouragement of hard work).	✓ Fully earned
Objective 2: To investigate the challenges (financial, institutional, cultural, religious, technological) that hinder Muslim entrepreneurship in the current AI- driven context of the Fourth Industrial Revolution.	Five challenge themes were identified through frequency and thematic analysis of data from 95-100 participants across 5 dimensions.	✓ Fully earned

4.6. Summary

4.6.1. Summary of Quantitative Results:

The top challenges identified were: (1) 76.8% perceived entrepreneurship as risky, (2) 70% reported difficulty accessing Shariah-complaint investments, (3) 69% held job-centric social attitudes, (4) 64% cited an initial capital shortage, and (5) 63% repoted a lack of hard skills.

4.6.2. Summary of Qualitative Results:

Five themes were identified: (1) religious misconceptions, (2) lack of institutional support, (3) skill shortages, (4) socio-cultural barriers, and (5) technological unpreparedness. Respondents' direct statements show that narrow religious education, negative attitudes within family and society, and the lack of entrepreneur-friendly policies among Islamic banks are the three main obstacles on the path to Muslim entrepreneurship.

4.7. Overall Conclusion:

The Quran and Hadith clearly provide guidance for business entrepreneurs on honesty, justice, freedom from interest, risk-sharing, and hard work, yet current Muslim society is failing to follow this guidance due to religious distortions, a lack of institutional support, skill shortages, socio-cultural barriers, and technological unpreparedness. This finding is fully consistent with the research gaps and problems identified in the introduction and background, and it forms the basis for the discussion and recommendations in the following chapters.

5. Discussion

This chapter offers an analytical and critical interpretation of the results presented in Chapter Four. The results are analyzed from theoretical, religious, practical, and policy perspectives, linking them back to the study's title, introduction, background, literature review, and objectives. It also highlights where the results are consistent or in tension with previous research, and examines their contribution to filling the identified research gap.

5.1. Discussion of the first objective: Quranic-Hadith guidance for business entrepreneurs

5.1.1. Relevance and contemporary application of Quranic guidance

The research findings identify five themes in the Quran: (1) basic principles of transactions, (2) prohibition of interest, (3) honesty and justice, (4) effort and initiative, and (5) social responsibility. Together, these themes provide a coherent ethical framework for Islamic entrepreneurship, distinguishing it from the Western entrepreneurial model, in which profit maximization is the primary goal (Chapra, 2000).

Special relevance: The instruction in Surah al-Jumu'ah (62:10) to “spread out in the land and seek the bounty of Allah” shows that Islamic entrepreneurship complements rather than contradicts worship — a direct antidote to the common misconception in contemporary Muslim society that business is an obstacle to worship. This verse directly counters the view held by the 14.7% of respondents identified in Section 4.2.1 who saw business as the opposite of worship, and can serve as Quranic guidance for them.

5.1.2. Practical Significance of Hadith Guidance

The five Hadith themes — (1) the dignity of the merchant, (2) honesty in transactions, (3) prohibition of interest, (4) prohibition of risk and uncertainty (gharar), and (5) encouragement of effort — provide practical guidance for the Islamic entrepreneur. In particular, the declaration that “the truthful merchant is the companion of the Prophets, the Siddiqs, and the martyrs” (Sunan Tirmidhi, 1209) elevates the entrepreneur's status to the highest level, offering a powerful counter to the anti-entrepreneurial attitude in contemporary Muslim society.

Consistent with the literature review: These results are consistent with the studies of Ramadani et al. (2015) and Husna, & Rahman (2024), who identified the Quran-Hadith as the foundation of Islamic entrepreneurship. But previous research was largely limited to a descriptive presentation of these guidelines, whereas this study categorizes them and connects them to current challenges—which is the novelty of the research.

5.2. Discussion of the second objective: Analysis of current challenges

5.2.1. Religious misconceptions and mental barriers (Theme 1)

As a result, 76.8% of the respondents considered entrepreneurship risky and uncertain. This is very worrying, because the basic principles of Islamic entrepreneurship are planned risk-taking (*mukhtara*) and trust in Allah (*tawakkul*). The companions, such as Abdur Rahman Ibn Auf (RA) who established a market in Medina at great risk, are recognized in history.

- Theoretical relevance: 33.7% The idea that "Sustenance is determined by fate, so there is no need to take initiative" — this is a distorted interpretation of Islamic fate. Allah says in the Quran: "Man will have only what he strives for" (Surah An-Najm, 53:39). This verse proves that even though sustenance is determined by fate, effort and initiative are essential. Therefore, it is important to correctly interpret these verses and highlight the importance of entrepreneurship in mosque-madrasa-based education.
- Consistency with literature review: Malaysian Sulaiman et al's (2023) study also identified risk aversion and religious distortions among Muslim entrepreneurs. However, this study specifically identified the role of religious leadership (scholars, pirs), which was neglected in previous studies.

5.2.2. Lack of Institutional and Financial Support (Theme 2)

70% of respondents identified difficulties in accessing Sharia-compliant investment platforms. This is a structural problem—Islamic banks generally prioritize large institutions and corporate clients, while neglecting small and medium entrepreneurs (Rahman, 2024). Yet the fundamental principle of Islamic economics is the equitable distribution of wealth and the development of small entrepreneurs (Surah Al-Hashr, 59:7).

- Practical Proposal: These results demonstrate the need for Islamic banks and financial institutions to develop entrepreneur-friendly products (e.g. micro-Mudaraba, crowd funding, venture capital), which would meet the needs of 70% of respondents to Question 2.

5.2.3. Skills Shortage (Theme 3)

A further 63% of respondents acknowledged a lack of hard skills (business planning, financial literacy, digital skills). This is especially significant given that digital skills are essential for entrepreneurship in the era of the Fourth Industrial Revolution (Xu et al., 2018).

- Key problem: Half of respondents (50%) did not know what skills were needed, pointing to a failure of the education system: entrepreneurship education is almost entirely absent from traditional madrasa education in

Bangladesh, even though the Companions themselves acquired business skills. As one madrasa student put it, “In our madrasas, we only teach Quran-Hadith and Fiqh; there is no education in business and commerce”— a statement that highlights this structural weakness.

- Consistency with the literature review: Alvadina et.al.’s (2023) study in Indonesia likewise identified the absence of entrepreneurship subjects in madrasa-based education. This study, however, specifically identifies the skills-oriented policies of religious institutions, which is a novel contribution.

5.2.4. Socio-cultural barriers (Theme 4)

A further 69% of respondents identified a job-oriented social attitude, a cultural barrier deeply rooted in Muslim society — despite the fact that most Companions and Tabi’in were themselves entrepreneurs, including Abu Bakr (RA) as a cloth merchant, Uthman (RA) as a merchant emperor, and Abdur Rahman ibn Auf (RA) as the owner of a business empire.

- Critical analysis: A further 41% mentioned society’s negative view of failed entrepreneurs. In the West, failed entrepreneurs are often respected under the ethos of "sail fast, learn fast," but in Muslim society failure is seen as a stigma. Changing this attitude requires raising awareness among religious leadership and society more broadly about the importance of entrepreneurship (Ohman et Al., 2025).

5.2.5. Technological Unpreparedness and Digital Divide (Theme 5)

The ignorance and unpreparedness of Muslim entrepreneurs regarding Fourth Industrial Revolution technologies — AI, blockchain, big data — emerged in this study as a distinct theme, with 63% admitting to a lack of digital skills, consistent with previous studies (Xu et al., 2018)

- Critical observation: Notably 49% expressed reluctance to explore the relationship between Islamic economics and modern entrepreneurship — a psychological barrier arguably more serious than technological unpreparedness itself, since entrepreneurs can only learn new technologies if they are willing to do so. This reluctance stems from the narrowness of religious education and a “forsaking worldly knowledge” attitude that contradicts the Quranic injunction to “travel in the land and seek the bounty of Allah” (Surah Al-Jumu’ah, 62:10).

5.3. Summary

This chapter has offered an analytical and critical interpretation of the data analysis results. The guidance of the Quran and Hadith provides a comprehen-

sive moral framework for Islamic entrepreneurship, one that directly counters the religiously distorted ideas prevalent in current Muslim society. The current challenges — religious misconceptions, lack of institutional support, skill shortages, socio-cultural barriers, and technological inadequacies — are, in turn, fully consistent with the identified research gap and form the basis for the framework proposed in the next chapter.

6. Recommendations and Integrated Framework

This chapter proposes an integrated entrepreneurship framework based on the data analysis in Chapter four and the discussion in Chapter five, combining the guidance of the Quran and Hadith, historical entrepreneurial models, and the technologies of the Fourth Industrial Revolution. It also offers practical recommendations for Muslim societies, religious institutions, Islamic banks, policymakers, and educational institutions, drawing on the conclusions of the research results and discussion. Each recommendation is linked to the guidance of the Quran and Hadith, the research findings, and the contemporary context.

6.1. Integrated Framework of Islamic Entrepreneurship

Based on the research findings and discussions, a three-pillar integrated framework is proposed, which will serve as a guiding model for the revival of Islamic entrepreneurship.

6.1.1. Pillar 1: Theoretical Foundation

Elements:

- **Quranic Guidance:** Principles of Transaction, Prohibition of Interest, Honesty and Justice, Effort, Social Responsibility (Surah An-Nisa 4:29; Surah Al-Baqarah 2:275-280; Surah Al-Mutaffifin 83:1-6; Surah Al-Jumu'ah 62:10; Surah Al-Hashr 59:7)
- **Hadith Guidance:** The Dignity of the Merchant, Honesty in Transactions, Prohibition of Interest, Prohibition of Risk and Uncertainty, Encouragement of Effort (Sunan Tirmidhi 1209; Sahih Bukhari 2079; Sahih Muslim 1597; Sahih Bukhari 2078)
- **Historical Models:** Entrepreneurial Biographies of the Prophets and Companions (Adam, Noah, Abraham, Shu'aib, Yusuf, Muhammad SAW; Abu Bakr, Uthman, Abdur Rahman Ibn Auf, Khadija (RA))

Purpose: This pillar provides the moral, spiritual and legal foundation of Islamic entrepreneurship, which makes entrepreneurs aware of the guidance of the Quran and Hadith and encourages them to consider entrepreneurship as an act of worship.

6.1.2. Pillar 2: Skill Development and Education

Elements:

- Hard skill development: Business planning, financial management, digital skills (e-commerce, digital marketing, AI application), Sharia-compliant transaction knowledge
 - Soft skill development: Confidence, leadership, risk-taking, decision-making, communication skills, problem-solving
 - Religious education reform: Inclusion of entrepreneurship subjects in madrasa and mosque-based education; Teaching practical application of business verses and hadiths of the Quran and Hadith
- Objective: This pillar addresses the 63% hard skill and 51% soft skill deficit identified in the research results and eliminates the skill-bias in religious education.

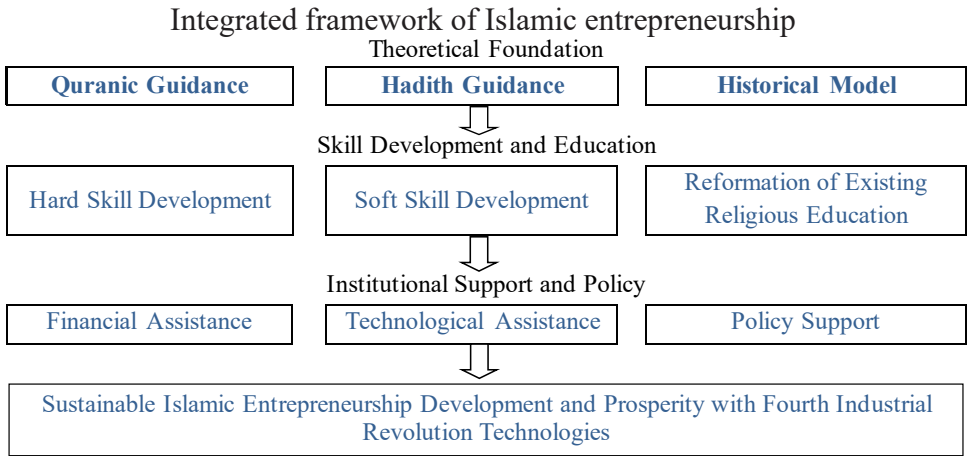
6.1.3. Pillar 3: Institutional Support and Policy

Elements

- Financial support: Islamic micro-finance, interest-free loans, Mudaraba and Musharaka-based venture capital, crowdfunding platforms
- Technical support: Digital platforms, e-commerce training, blockchain-based transparent transactions, AI-powered market analytics
- Human resource development: Entrepreneurial mentorship, training centers, shaping entrepreneurial-friendly attitudes of religious leadership, promoting examples of successful entrepreneurs
- Policy support: Government entrepreneurship development policies, entrepreneur-friendly products of Islamic banks, tax benefits and incentives

Objective: This pillar addresses 70% of the investment access difficulties, 64% of the capital shortage and 69% of the lack of institutional support identified in the research results.

6.1.4. Visual Representation of Integrated Structure



6.2. Practical Recommendations Based on the research findings and discussions, the following recommendations are provided for various stakeholders:

6.2.1. Recommendations for Religious Institutions and Leadership

A. Reform of Mosque-Madrasa-Based Education

The research results showed that 66% of respondents admitted to a lack of Sharia-based business knowledge, and qualitative analysis identified a near-total absence of entrepreneurial education in madrasas. The following recommendations are therefore made:

- Include business entrepreneurship and economics in the madrasa curriculum, where practical application of business guidance from the Quran and Hadith will be taught.
- Include discussions on the importance of entrepreneurship, the business biographies of the companions, and interest-free economics in mosque-based Friday sermons.
- Launch entrepreneurship training programs for religious leaders (Alim, Pir, Mufti) so that they can promote an entrepreneurial-friendly religious outlook in society.

B. Antidote to religious misconceptions

The study found that 76.8% of respondents considered risk an obstacle and 33.7% believed sustenance to be determined by fate. The following recommendations are therefore made:

- Promoting the correct interpretation of Surah Al-Jumu'ah (62:10) and Surah An-Najm (53:39) of the Quran, which prove that effort and initiative are essential conditions for obtaining sustenance.
- Creating and distributing books, leaflets, and digital content on the entrepreneurial biographies of the Prophets and Companions, so as to prove that entrepreneurship is complementary to worship.
- Promoting the Hadith declaration that "the truthful businessman is the companion of the Prophets and Martyrs" (Sunan Tirmidhi, 1209) as an antidote to the idea that "business is the opposite of worship."

6.2.2. Recommendations for Islamic banks and financial institutions

The study found that 70% of respondents identified difficulty in accessing Sharia-compliant investments and 64% identified an initial capital shortage. The following recommendations are therefore made:

A. Creating entrepreneur-friendly Islamic financing products

- Launching micro-Mudaraba and Musharaka-based loan programs for small entrepreneurs, where profit-sharing models will be followed instead of interest.
- Creating crowdfunding and peer-to-peer (P2P) Islamic financing platforms, where small entrepreneurs can raise investment from the community.
- Relaxing collateral requirements for entrepreneurial loans and introducing alternative collateral mechanisms (e.g. personal guarantees, group guarantees).

B. Digital Islamic Finance for Tech Entrepreneurs

- Launching blockchain-based smart contracts, which will ensure transparent and interest-free transactions and monitor whether all stages of the transaction are Sharia-compliant.
- Creating an Islamic Fintech app, which will provide entrepreneurs with easy Sharia-compliant investments, Zakat calculations, and interest-free transactions.

6.2.3. Recommendations for Educational Institutions

The study found that 63% of respondents lacked hard skills and 50% had no clear idea what skills were needed. The following recommendations are therefore made:

A. Inclusion of Entrepreneurship Education Curriculum

- Including Islamic Entrepreneurship and Economics as compulsory or optional courses in the business education departments of universities and colleges.
- Including Business Fiqh, Islamic Economics and Entrepreneurship in Madrasas and religious educational institutions, so that religious students can also become entrepreneurs.
- Organizing business games, competitions, fairs to build an entrepreneurial mindset at the school level.

B. Skill Development Training

- Hard Skill Training: Launching practical training courses on business planning, financial accounting, digital marketing, e-commerce, AI and data analysis.
- Soft Skill Training: Organizing workshops and seminars on confidence, leadership, risk-taking, decision-making, communication skills.
- Internship and Mentorship: Launching internship and mentorship

programs for students with successful Muslim entrepreneurs.

6.2.4. Recommendations for Family and Society

The study found that 69% of respondents held job-oriented attitudes and 41% held negative attitudes toward failed entrepreneurs. The following recommendations are therefore made:

A. Creating an entrepreneur-friendly social attitude

- Encouraging children to develop an entrepreneurial mindset in the family, building the courage to take risks, and teaching them to accept failure as a lesson.
- Promoting stories of successful Muslim entrepreneurs in the society, especially the entrepreneurial biographies of the companions and prophets, so that a positive attitude towards entrepreneurs is created in the society.
- Creating a sympathetic and encouraging attitude of the society towards failed entrepreneurs—so that entrepreneurs are encouraged to try again instead of not taking initiatives due to fear of failure.

6.2.5. Recommendations for Policymakers and Government

The study found that 64% respondents cited capital crisis, 60% a lack of training, and 52% the unavailability of Islamic finance. Therefore, the following recommendations are made:

A. National Entrepreneurship Development Policy

- Formulate an Islamic Entrepreneurship Development Policy, which will provide interest-free entrepreneurship loans, tax benefits, training programs, and technical assistance.
- Establish an Islamic Entrepreneurship Fund, which will provide commission-free or profit-sharing capital for entrepreneurs.
- Provide government support and subsidies for the creation of halal e-commerce platforms.

B. Digital Infrastructure for Technological Entrepreneurship

- Establish digital skills development training centers, especially for rural and madrasa-based students, so that they can become proficient in AI, e-commerce, and digital marketing.
- Establish Islamic Fintech Incubators and Accelerators, which will provide technical, financial, and consulting support to entrepreneurs.

6.2.6. Recommendations to seize the opportunities of technology and the fourth industrial revolution

The research found that 49% of respondents were unwilling to explore the relationship between Islamic economics and entrepreneurship, and 63% lacked digital skills. The following recommendations are therefore made:

A. Islamic application of AI and digital technology

- Creating AI-powered market analysis tools that will help entrepreneurs identify market opportunities in a Sharia-compliant manner.
- Introducing a blockchain-based transparent transaction system that will ensure transparency and interest-freeness at all stages of the transaction and eliminate fraud and uncertainty (Gara).
- Creating a digital Mudaraba platform where entrepreneurs and investors can engage in Sharia-compliant partnerships online.

B. Digital promotion of Islamic entrepreneurship

- Creating and promoting digital content (e-books, podcasts, videos, webinars) on Islamic entrepreneurship, which will make entrepreneurs aware of the combination of Quran-Hadith guidance and modern technology.
- Promoting interviews, case studies and inspirational stories of successful Islamic entrepreneurs on digital platforms, which will create an entrepreneurial-friendly attitude in society.

6.3. Future Research Directions

Based on the study's limitations and results, the following topics are proposed for future research:

- i. Comparative research across Muslim countries: This study was limited to Bangladesh. In the future, comparative research can be conducted with Malaysia, Indonesia, and Middle Eastern countries, which will help understand the context of global Muslim entrepreneurship.
- ii. Practical research combining AI and Islamic entrepreneurship: Although this study proposes a theoretical framework, detailed research is needed on how to create a practical model combining AI, blockchain, and Islamic entrepreneurship.
- iii. Impact assessment of mosque-madrasa-based entrepreneurship training: This study identified the absence of entrepreneurship education in madrasas. Its impact can be assessed by introducing madrasa-based entrepreneurship training in the future.
- iv. Impact of entrepreneurship-friendly products of Islamic banks: Long-term research is needed to determine the impact if Islamic banks introduce entrepreneurship-friendly products.

- v. Challenges of female Islamic entrepreneurs: This study did not analyze the specific challenges of female entrepreneurs separately. In the future, research can be conducted on the obstacles and possibilities of female Islamic entrepreneurs.

6.4. Limitations of the Study

The following limitations should be taken into account in interpreting the study's findings and recommendations:

- i. Sample limitations: The study sample was limited to Bangladesh only and convenience sampling method was used, which is not completely random. As a result, the results are not representative of the entire Muslim world.
- ii. Data limitations: For the second objective, data was collected from 100 participants, which may not be sufficient to represent a larger population. Future research with larger samples may provide more reliable results.
- iii. Time limitations: The study was conducted over a specific period of time, but the challenges of Muslim entrepreneurs may change over time. Long-term research will help understand this change.
- iv. Technological limitations: The discussion of the Fourth Industrial Revolution technologies (AI, Blockchain) in the study was limited to the theoretical level; it was not possible to test the practical application of these technologies.

6.5. Conclusion

This study proposes an integrated framework for reviving Islamic entrepreneurship by combining the guidance of the Quran and Hadith, historical entrepreneurial models, and the technologies of the Fourth Industrial Revolution. The results show that current Muslim society lags behind on the path to Islamic entrepreneurship due to religious distortions, a lack of institutional support, skill shortages, socio-cultural barriers, and technological unpreparedness. The Quran and Hadith, however, offer clear instruction on honesty, justice, freedom from interest, risk-sharing, and hard work — instruction that provides a strong moral and spiritual foundation for Muslim entrepreneurs.

The proposed integrated framework rests on three pillars: (1) theoretical foundation (Quran and Hadith and historical models), (2) skill development and education (hard and soft skills, religious education reform), and (3) institutional support and policies (financial, technical, human resources, and

policy support). Implementing this framework will require the concerted efforts of religious institutions, Islamic banks, educational institutions, families, society, policymakers, and the technology sector.

Above all, this study demonstrates that Islamic entrepreneurship is not merely an economic activity but a form of worship, a social responsibility, and a spiritual pursuit. If the technologies of the Fourth Industrial Revolution are integrated with Islamic ethics, Muslim society will be able to offer a just, sustainable, and blessed entrepreneurial model to the global economy — one that ensures worldly prosperity while also paving the way to success in the hereafter.

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