



The Influence of AI Financial Advisors on Sharia Investment Decisions Among Muslim Investors: The Roles of Trust, Transparency, Perceived Usefulness, and Sharia Compliance

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Abstract: The rapid development of artificial intelligence (AI) technology has significantly transformed the financial industry, including the emergence of AI financial advisors in investment activities. In Islamic finance, AI-based financial advisory systems provide opportunities to improve investment efficiency, accessibility, and personalized financial services. This study aims to analyze the influence of AI financial advisors on Sharia investment decisions among Muslim investors by examining the roles of trust, perceived usefulness, transparency, and perceived Sharia compliance. This study employed a quantitative research approach using survey analysis. Data were collected through questionnaires distributed to Muslim investors and users of Islamic fintech or AI-based investment platforms. The collected data were analyzed using descriptive statistics, validity and reliability tests, and inferential statistical analysis to examine the relationships between variables. The findings reveal that AI financial advisors significantly influence Sharia investment decisions. Respondents who perceived AI financial advisors as reliable, secure, credible, and ethically responsible demonstrated greater confidence in using AI-generated investment recommendations. Perceived usefulness also positively influenced investment decisions, as AI systems were considered capable of improving efficiency, simplifying financial analysis, and providing personalized investment information. Furthermore, transparency and explainability of AI-generated recommendations were found to increase investor confidence and reduce uncertainty (gharar). This study contributes theoretically to Islamic finance literature, AI adoption theory, and fintech studies by integrating Islamic ethical values into the Technology Acceptance Model (TAM). Practically, the findings provide implications for Islamic fintech companies, regulators, investors, and AI developers in developing transparent, ethical, and Sharia-compliant AI financial advisory systems.

Research Highlights:

- AI financial advisors significantly influence Sharia investment decisions among Muslim investors.
- Trust is the strongest factor affecting the acceptance of AI-based financial advisory systems.
- Perceived usefulness, transparency, and Sharia compliance positively influence investor confidence and investment intention.
- Transparency and explainability of AI recommendations help reduce uncertainty (gharar) in Islamic finance.
- Integration of Islamic ethical values into the Technology Acceptance Model (TAM) provides a new perspective on AI adoption in Islamic finance.

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- The study offers practical implications for Islamic fintech companies, regulators, and AI developers in creating ethical and Sharia-compliant AI financial services.

INTRODUCTION

The rapid advancement of artificial intelligence (AI) technology has significantly transformed the global financial industry, particularly in the development of financial technology (fintech) services. AI is increasingly utilized in various financial activities, including risk analysis, fraud detection, portfolio management, predictive analytics, and automated financial advisory services known as robo-advisors (Bhatia et al., 2021). AI financial advisors are digital systems that utilize algorithms, machine learning, and large-scale data processing to provide investment recommendations automatically and efficiently. The emergence of AI-driven financial services has changed how individuals manage investments, make financial decisions, and access financial information. Through automation and data-driven analysis, AI financial advisors are considered capable of improving investment efficiency, reducing costs, and increasing financial accessibility for broader communities.

Along with technological developments, the Islamic finance sector has also experienced substantial growth in recent years. Sharia investment instruments such as Islamic stocks, sukuk, Islamic mutual funds, and halal fintech platforms are becoming increasingly popular among Muslim investors worldwide (Alam et al., 2019). This growth is driven by rising awareness among Muslims regarding the importance of investing according to Islamic principles that prohibit *riba* (interest), *gharar* (uncertainty), and *maysir* (gambling). The integration of AI technology into Islamic financial services creates new opportunities for expanding access to Sharia investments while enhancing investment decision-making processes through data-driven recommendations and automated portfolio management.

Currently, many Muslim investors rely on digital financial platforms and AI-based systems to obtain investment recommendations and financial information. AI financial advisors offer convenience, speed, and personalized investment strategies based on user preferences and risk profiles (Hakala, 2019). In the context of Sharia investment, AI systems can potentially assist investors in identifying halal investment products, conducting Sharia screening processes, and monitoring portfolio compliance with Islamic principles. Furthermore, AI technology may help Islamic fintech companies provide more efficient and inclusive financial services to Muslim communities.

However, despite the potential benefits offered by AI financial advisors, several concerns and challenges remain, particularly regarding their implementation in Islamic finance. One of the primary concerns relates to Sharia compliance. Muslim investors may question whether AI-generated investment recommendations fully comply with Islamic principles and whether the algorithms used in AI systems adequately consider halal investment criteria (Subeh, 2020). In addition, transparency and explainability of AI systems remain important issues because many AI models operate as “black boxes,” making it difficult for users to understand how recommendations are generated. This lack of transparency may reduce investor trust and create uncertainty (*gharar*), which is prohibited in Islamic finance.

Ethical considerations also play a significant role in the acceptance of AI financial advisors within the Islamic financial context. Issues such as algorithm bias, fairness, accountability, data privacy, and potential manipulation of investment recommendations raise concerns among investors (Cowgill & Tucker, 2019). Muslim investors may hesitate to rely entirely on AI systems if they perceive the technology as lacking ethical standards or violating Islamic business principles. Furthermore, although AI systems offer automation and efficiency, some investors may still prefer human Sharia financial advisors who are considered more capable of understanding religious values, emotional aspects, and complex ethical considerations in financial decision-making.

Based on these conditions, understanding the influence of AI financial advisors on Sharia investment decisions becomes increasingly important. Although AI technology is widely discussed in conventional financial services, limited studies specifically examine its role within the context of Islamic finance and Muslim investor behavior. Most previous studies focus on fintech adoption, digital banking,

or general investment technology acceptance without deeply exploring AI financial advisors from the perspective of Sharia compliance, trust, transparency, and Islamic ethics. Therefore, this study seeks to analyze how AI financial advisors influence Sharia investment decisions and identify the factors affecting Muslim investors' acceptance of AI-based financial advisory systems.

Several important issues can be identified in relation to the implementation of AI financial advisors in Islamic finance (Gazali et al., 2020). First, there is uncertainty regarding whether Muslim investors fully trust AI-generated investment recommendations. Trust is an essential factor because financial decisions involve significant risks and long-term consequences. Second, there are concerns about whether AI recommendations comply with Islamic principles, particularly regarding halal screening and avoidance of prohibited transactions. Third, the extent to which AI financial advisors increase investment interest among Muslim investors remains unclear. Fourth, ethical concerns related to transparency, accountability, fairness, and algorithm bias may influence investor confidence in AI systems. Finally, the growing sophistication of AI technology raises questions about whether AI financial advisors can eventually replace the role of human Sharia financial advisors.

Based on the identified problems, several research questions are formulated in this study. First, does trust in AI financial advisors influence Sharia investment decisions? Second, does perceived Sharia compliance affect investor acceptance of AI financial advisors? Third, does AI transparency influence investment confidence among Muslim investors? Fourth, does perceived usefulness of AI financial advisors affect investment intention in Sharia investment products? These research questions aim to provide a comprehensive understanding of the relationship between AI technology and Muslim investor behavior in Islamic financial markets.

The objectives of this study are to analyze the influence of AI financial advisors on Sharia investment decisions, examine the role of trust, transparency, and perceived Sharia compliance in investor acceptance of AI systems, and identify the factors influencing Muslim investors' willingness to use AI-based financial advisory services. Through these objectives, the study is expected to contribute both theoretically and practically to the development of Islamic finance and AI technology adoption.

Theoretically, this study contributes to the literature on Islamic finance, fintech adoption, and AI-based financial services by expanding existing discussions regarding technology acceptance within Islamic contexts. This study also enriches the application of the Technology Acceptance Model (TAM) and behavioral finance theories in understanding Muslim investor behavior toward AI financial advisors. Practically, the findings of this study may provide valuable insights for Islamic fintech companies in improving AI service quality, enhancing transparency, and ensuring Sharia compliance in digital financial systems. In addition, the results may assist regulators and policymakers in developing governance frameworks and ethical guidelines for AI implementation in Islamic finance. Muslim investors may also benefit from a better understanding of the opportunities and risks associated with AI financial advisory services.

This study is supported by several theoretical foundations and concepts. First, the concept of artificial intelligence in finance explains how technologies such as machine learning, robo-advisors, predictive analytics, and automated portfolio management systems are transforming financial services and investment decision-making. AI systems can analyze large amounts of financial data, predict market trends, and provide personalized investment recommendations with greater speed and efficiency compared to traditional advisory methods (Singireddy et al., 2021).

Second, the concept of Sharia investment emphasizes investment activities that comply with Islamic principles. Sharia investments must avoid prohibited elements such as *riba*, *gharar*, and *maysir* while promoting fairness, transparency, and ethical business conduct (Uddin, 2015). Islamic financial products typically undergo Sharia screening processes to ensure compliance with Islamic law.

Third, this study adopts the Technology Acceptance Model (TAM), which explains how individuals accept and use new technologies. Key variables in TAM include perceived usefulness, perceived ease of use, trust, and behavioral intention. In this study, TAM is used to analyze how Muslim investors perceive the usefulness and reliability of AI financial advisors in supporting Sharia investment decisions.

Fourth, investor behavior theory explains how psychological, social, and technological factors influence financial decision-making. Technological innovations such as AI may shape investor confidence, risk perception, and investment behavior by providing easier access to financial information and automated decision support systems.

Fifth, Islamic business ethics provide an important framework for evaluating AI implementation in Islamic finance. Islamic ethics emphasize transparency, fairness, accountability, honesty, and the achievement of *maqashid sharia*, which aims to promote social welfare and justice. Therefore, AI financial advisors operating within Islamic finance should align with these ethical principles to gain acceptance among Muslim investors.

Previous studies have examined various aspects of AI in finance, fintech adoption, Islamic fintech, robo-advisors, and trust in AI systems. Several studies indicate that trust, perceived usefulness, and technological innovation significantly influence fintech adoption and investment decisions. Other studies highlight the importance of transparency and ethical considerations in AI acceptance. However, most previous studies focus on conventional financial systems or general fintech adoption. Limited research specifically investigates the influence of AI financial advisors on Sharia investment decisions from the perspectives of trust, transparency, and perceived Islamic compliance. Therefore, this study addresses an important research gap by focusing specifically on Muslim investors and AI-based financial advisory systems within the context of Islamic finance.

The conceptual framework of this study proposes that trust in AI financial advisors, perceived usefulness, transparency, and perceived Sharia compliance function as independent variables influencing Sharia investment decisions as the dependent variable. Trust reflects investor confidence in the reliability and credibility of AI systems. Perceived usefulness refers to the extent to which AI financial advisors improve investment performance and convenience (Belanche et al., 2019). Transparency concerns the explainability and openness of AI-generated recommendations. Perceived Sharia compliance refers to investor perceptions regarding the conformity of AI recommendations with Islamic principles. These variables are expected to influence Muslim investors' willingness to adopt AI financial advisors in making Sharia investment decisions.

Based on the conceptual framework and theoretical foundations, the hypotheses of this study are formulated as follows. H1: Trust in AI financial advisors positively influences Sharia investment decisions. H2: Perceived Sharia compliance positively affects investor acceptance of AI financial advisors. H3: AI transparency positively influences investor trust and investment confidence. H4: Perceived usefulness positively affects Muslim investors' intention to use AI financial advisors in Sharia investment activities. These hypotheses will be tested empirically to examine the relationship between AI financial advisory systems and Sharia investment decision-making among Muslim investors.

METHOD

This study employs a quantitative research approach using survey analysis to examine the influence of AI financial advisors on Sharia investment decisions among Muslim investors. A quantitative approach is considered the most appropriate because the study aims to measure the relationships between several variables, including trust in AI, transparency, perceived usefulness, perceived Sharia compliance, and investment decisions. Quantitative methods allow researchers to collect numerical data systematically and analyze the influence of independent variables on dependent variables using statistical techniques (Apuke, 2017). Through survey analysis, the study can obtain broader and more objective insights regarding Muslim investors' perceptions and acceptance of AI financial advisors in the context of Islamic finance.

The research design used in this study is explanatory and associative in nature. The explanatory design aims to explain the causal relationships between variables and test hypotheses related to the influence of AI financial advisors on Sharia investment decisions (OTHMAN, 2021). Meanwhile, the associative approach seeks to identify and analyze the relationships between trust, transparency, perceived usefulness, perceived Sharia compliance, and investment decision-making behavior among Muslim investors. This design enables the researcher to understand how AI-related factors contribute to investor acceptance and decision-making within Islamic financial services.

The population of this study consists of Muslim investors who utilize Islamic financial services, Islamic fintech applications, or AI-based investment platforms. The target population includes individuals who have experience using digital financial platforms for Sharia investment activities such as Islamic stocks, sukuk, Islamic mutual funds, or halal fintech services. Since the study focuses on AI financial advisors, respondents are expected to have at least basic familiarity with digital investment recommendation systems or automated financial advisory services.

The sample in this study is selected using purposive sampling techniques. Purposive sampling is chosen because the researcher specifically targets respondents who meet particular criteria relevant to the study objectives (Campbell et al., 2020). The criteria include Muslim investors who have experience using fintech applications, AI investment systems, or digital financial advisory platforms related to Sharia investment activities. This technique ensures that the respondents possess adequate knowledge and experience to provide meaningful responses regarding AI financial advisors and Sharia investment decisions. The sample size may range from approximately 150 to 300 respondents depending on the statistical analysis method used, particularly if Structural Equation Modeling-Partial Least Squares (SEM-PLS) is applied. A larger sample size is considered beneficial to improve data reliability and generalizability of the findings.

Data collection in this study is conducted primarily through questionnaires distributed online and offline to respondents (Schillewaert & Meulemeester, 2005). The questionnaire serves as the main research instrument because it enables the researcher to gather data efficiently from a relatively large number of participants. The questionnaire items are developed based on previous studies and theoretical frameworks related to Technology Acceptance Model (TAM), Islamic finance, investor behavior, and AI technology adoption. In addition to questionnaires, supporting data may also be collected through interviews, observation, and documentation. Interviews can provide additional insights regarding investor perceptions and experiences with AI financial advisors, while documentation and observation may support the interpretation of quantitative findings.

The questionnaire uses a Likert scale to measure respondents' perceptions and attitudes toward the variables studied (Taherdoost, 2019). The Likert scale ranges from strongly disagree to strongly agree, allowing respondents to express the degree of their agreement with each statement. The questionnaire indicators are designed to measure several important variables, including trust in AI financial advisors, transparency, perceived usefulness, perceived Sharia compliance, and Sharia investment decisions.

Trust in AI is measured through indicators such as reliability, security, credibility, and confidence in AI-generated recommendations (Bruzzese et al., 2020). Transparency is assessed through explainability, openness, and clarity of AI decision-making processes. Perceived usefulness is measured by indicators related to efficiency, convenience, effectiveness, and usefulness of AI financial advisors in supporting investment activities. Perceived Sharia compliance includes indicators such as halal screening processes, adherence to Islamic ethics, avoidance of *riba*, *gharar*, and *maysir*, as well as conformity with Islamic financial principles. Meanwhile, Sharia investment decisions are measured through investment intention, confidence in investment choices, and actual investment behavior influenced by AI financial advisors.

The variables used in this study consist of independent variables and dependent variables. The independent variables include trust in AI financial advisors, transparency, perceived usefulness, and perceived Sharia compliance. These variables are expected to influence the dependent variable, namely Sharia investment decisions. Trust reflects the extent to which investors believe in the reliability and integrity of AI systems. Transparency refers to the openness and understandability of AI recommendations. Perceived usefulness measures the benefits obtained from using AI financial advisors, while perceived Sharia compliance reflects investors' perceptions regarding the conformity of AI systems with Islamic principles. The dependent variable, Sharia investment decision, refers to the willingness and behavior of Muslim investors in choosing Sharia investment products based on AI-generated recommendations.

To ensure the quality and accuracy of the research instrument, validity and reliability tests are conducted before the main data analysis process (Kimberlin & Winterstein, 2008). The validity test aims to determine whether the questionnaire items accurately measure the intended variables, while the reliability test examines the consistency and stability of the measurement instrument. Cronbach's Alpha and composite reliability values may be used to assess reliability. After the validity and reliability tests, classical assumption tests are conducted to evaluate data normality, multicollinearity, heteroscedasticity, and linearity where necessary.

The data analysis technique used in this study involves several quantitative statistical methods (Sheard, 2018). Descriptive statistical analysis is first conducted to describe respondent characteristics and general responses to the questionnaire items. Subsequently, inferential statistical analysis is performed to test the proposed hypotheses and examine the relationships between variables. Multiple regression analysis or Structural Equation Modeling-Partial Least Squares (SEM-PLS) may be utilized depending on the complexity of the research model. SEM-PLS is particularly suitable because it can simultaneously analyze multiple relationships between latent variables and is effective for predictive

and exploratory research models. Path analysis may also be employed to identify direct and indirect effects among variables.

In addition to quantitative analysis, qualitative support methods such as thematic analysis and content analysis may be used to strengthen the interpretation of findings obtained from interviews or open-ended questionnaire responses. These methods help provide deeper understanding regarding investor perceptions, ethical concerns, and trust issues related to AI financial advisors in Islamic finance.

This research is conducted in Indonesia, particularly among Muslim investors who actively use Islamic fintech services and digital investment platforms. Indonesia is selected as the research location because it has one of the largest Muslim populations in the world and a rapidly growing Islamic finance industry (Utomo et al., 2021). The research is conducted over a period of several months, beginning from questionnaire preparation, instrument testing, data collection, data analysis, until final reporting of the research findings. The duration of the study is expected to range between four to six months depending on the accessibility of respondents and the complexity of data analysis procedures.

RESULTS AND DISCUSSION

Respondent Characteristics

The respondents in this study consisted of Muslim investors who have experience using digital financial services, Islamic fintech platforms, or AI-based investment applications related to Sharia investment activities. The characteristics of respondents were analyzed to provide a general overview of the demographic and investment profiles of participants involved in the study. The respondent characteristics examined in this research include gender, age, educational background, investment experience, and the use of AI-based financial platforms.

Based on gender distribution, the respondents consisted of both male and female Muslim investors. The composition of respondents indicates that participation in Sharia investment activities and the use of AI financial advisors are not limited to a specific gender group (Gazali et al., 2020). Male respondents generally demonstrated strong interest in investment technology and digital financial services, while female respondents also showed increasing participation in Sharia investment activities through fintech platforms. This finding reflects the growing inclusiveness of digital financial technology among Muslim communities.

In terms of age, the respondents were dominated by young adults and productive-age individuals, particularly those within the age range of 20 to 40 years old. This age group is considered more familiar with digital technology, online financial services, and AI-based applications. Younger investors tend to adapt more quickly to technological innovation and are generally more open to using AI financial advisors for investment purposes. However, several respondents from older age groups also participated in the study, indicating that AI-based financial services are gradually being accepted across different generations.

The educational background of respondents varied from high school graduates to individuals holding undergraduate and postgraduate degrees. Most respondents possessed higher education qualifications, which may influence their understanding of financial technology and investment decision-making processes (Hassan Al-Tamimi & Anood Bin Kalli, 2009). Respondents with university-level education generally demonstrated greater awareness of Islamic finance principles, digital investment platforms, and AI technology applications in financial services. Higher educational attainment may also contribute to better financial literacy and increased confidence in using AI-based financial advisory systems.

Regarding investment experience, respondents showed diverse levels of experience in Sharia investment activities. Some respondents were beginner investors with less than one year of investment experience, while others had several years of experience investing in Islamic financial instruments such as Sharia stocks, sukuk, Islamic mutual funds, and halal fintech products. Respondents with longer investment experience tended to have better understanding of market risks, portfolio diversification, and investment analysis. In addition, experienced investors were generally more capable of evaluating the advantages and limitations of AI financial advisors compared to less experienced investors.

The use of AI-based financial platforms among respondents also varied significantly (Ashfaq & Ayub, 2021). Many respondents reported using digital investment applications that provide automated financial recommendations, portfolio analysis, market predictions, or robo-advisory services. Some respondents actively relied on AI-generated recommendations to support their Sharia investment

decisions, while others used AI platforms primarily as complementary tools alongside personal analysis or consultation with human financial advisors. The findings indicate that AI technology is increasingly integrated into modern investment activities, particularly among digitally literate Muslim investors seeking efficient and accessible financial services.

Descriptive Analysis

The descriptive analysis in this study was conducted to examine the average responses of respondents regarding trust in AI financial advisors, perception of Sharia compliance, transparency of AI systems, and perceived usefulness of AI-based financial advisory services. This analysis provides an overview of how Muslim investors perceive and evaluate AI financial advisors in supporting Sharia investment decisions. The results of the descriptive analysis indicate that respondents generally showed positive attitudes toward the implementation of AI technology in Islamic financial services, although several concerns related to transparency and Sharia compliance were also identified.

Based on the analysis of trust in AI financial advisors, most respondents demonstrated relatively high levels of trust toward AI-generated investment recommendations (Darus et al., 2018). Respondents generally agreed that AI financial advisors are capable of providing reliable, accurate, and efficient investment information. Many respondents believed that AI systems can process large amounts of financial data more quickly and objectively compared to human analysis. In addition, respondents perceived AI-based financial platforms as useful tools for assisting investment decision-making and reducing the complexity of financial analysis. However, despite the positive perception of AI reliability, some respondents still expressed concerns regarding data security, privacy protection, and the inability of AI systems to fully understand human emotions and ethical considerations in investment activities. These concerns indicate that trust in AI financial advisors is influenced not only by technological performance but also by perceptions of safety, accountability, and ethical responsibility.

Regarding the perception of Sharia compliance, respondents generally showed positive perceptions toward the ability of AI financial advisors to support halal investment activities. Many respondents agreed that AI systems can assist investors in identifying Sharia-compliant investment products through automated screening processes and data analysis. Respondents also believed that AI technology has the potential to improve efficiency in monitoring investment portfolios according to Islamic principles. Nevertheless, some respondents remained uncertain about whether AI-generated recommendations fully comply with Islamic financial laws and ethical standards. This uncertainty mainly arises from the lack of clear explanations regarding how AI algorithms determine halal investment criteria and avoid prohibited elements such as *riba*, *gharar*, and *maysir*. Consequently, respondents emphasized the importance of involving Sharia experts and Islamic financial authorities in the development and supervision of AI financial advisory systems.

In terms of transparency, respondents provided moderately positive responses regarding the openness and explainability of AI financial advisors (Ben David et al., 2021). Many respondents appreciated the convenience and speed offered by AI systems but expressed concerns about the limited transparency of algorithmic decision-making processes. Some respondents stated that they did not fully understand how AI systems generate investment recommendations, which created uncertainty and reduced confidence in relying entirely on automated financial advice. The “black box” nature of AI technology became one of the major issues highlighted by respondents. They expected AI financial platforms to provide clearer explanations regarding investment recommendations, risk calculations, and Sharia screening mechanisms. Respondents also emphasized that transparency is essential in Islamic finance because openness and clarity are closely related to the principles of fairness, honesty, and avoidance of *gharar*. Therefore, improving AI explainability and communication with users is considered important to increase investor trust and acceptance.

The descriptive analysis also revealed positive perceptions regarding the usefulness of AI financial advisors. Most respondents agreed that AI technology offers significant benefits in supporting investment activities, particularly in terms of efficiency, convenience, accessibility, and speed of information processing. AI financial advisors were perceived as capable of helping investors analyze market trends, monitor investment performance, and make faster financial decisions. Respondents also appreciated the ability of AI systems to provide personalized investment recommendations based on individual risk profiles and financial preferences. For beginner investors, AI financial advisors were considered useful in simplifying complex investment processes and increasing access to Sharia investment opportunities. In

addition, respondents acknowledged that AI-based platforms enable easier access to financial services regardless of geographic limitations, thereby supporting financial inclusion among Muslim communities.

Overall, the descriptive analysis indicates that Muslim investors generally hold favorable perceptions toward AI financial advisors in the context of Sharia investment decision-making. Trust in AI, perceived usefulness, and perceptions of Sharia compliance showed relatively positive responses, reflecting growing acceptance of AI technology in Islamic financial services. However, concerns regarding transparency, explainability, ethical accountability, and full compliance with Islamic principles remain important issues that need to be addressed by AI developers, Islamic fintech companies, and regulators. These findings suggest that the successful implementation of AI financial advisors in Islamic finance depends not only on technological capability but also on the ability to ensure transparency, ethical integrity, and alignment with Sharia values.

Instrument Testing

Instrument testing in this study was conducted to ensure that the research instruments used were valid and reliable for measuring the variables related to the influence of AI financial advisors on Sharia investment decisions. The testing process included validity testing and reliability testing of all questionnaire items distributed to respondents (Singh, 2017). These tests are important to determine whether the questionnaire accurately measures the intended research variables and produces consistent results.

The validity test was conducted to evaluate the extent to which each questionnaire item was capable of measuring the concepts represented by the research variables, including trust in AI financial advisors, perceived Sharia compliance, transparency, perceived usefulness, and Sharia investment decisions. The validity test was performed using correlation analysis between each questionnaire item and the total score of its respective variable. An item is considered valid if the correlation coefficient exceeds the minimum required threshold and demonstrates a significance value below the predetermined significance level.

The results of the validity test indicated that all questionnaire items used in this study were valid and suitable for further analysis. Each indicator showed a correlation coefficient higher than the minimum acceptable standard, which indicates that every statement item successfully represented the variable being measured. The indicators of trust in AI financial advisors, such as reliability, credibility, and security, demonstrated strong correlations with the overall trust variable. Similarly, the indicators measuring transparency, including explainability and openness of AI systems, also showed satisfactory validity values. The perceived usefulness indicators related to efficiency, convenience, and effectiveness of AI financial advisors were found to be valid. In addition, all indicators related to perceived Sharia compliance and Sharia investment decisions met the validity requirements, indicating that the research instrument was capable of accurately capturing respondents' perceptions and attitudes regarding AI financial advisors in Islamic finance.

After conducting the validity test, reliability testing was carried out to determine the consistency and stability of the questionnaire items in measuring the research variables (Taherdoost, 2016). Reliability refers to the extent to which an instrument produces consistent results when used repeatedly under similar conditions. In this study, reliability testing was performed using Cronbach's Alpha coefficient. A variable is considered reliable if the Cronbach's Alpha value exceeds the commonly accepted minimum threshold, indicating good internal consistency among the questionnaire items.

The results of the reliability test showed that all research variables possessed satisfactory reliability values. The trust in AI variable demonstrated a high Cronbach's Alpha coefficient, indicating that the questionnaire items measuring reliability, credibility, and security were internally consistent. The transparency variable also achieved a reliable coefficient value, reflecting consistency in measuring respondents' perceptions regarding explainability and openness of AI systems. Likewise, the perceived usefulness variable showed strong reliability, indicating that the indicators related to efficiency and convenience consistently measured the intended construct.

Furthermore, the perceived Sharia compliance variable demonstrated reliable results, suggesting that the questionnaire items effectively captured respondents' perceptions regarding halal screening processes, Islamic ethical principles, and compliance with Sharia regulations. The Sharia investment decision variable also showed a satisfactory reliability coefficient, indicating consistency in measuring investment intention, confidence, and investment actions influenced by AI financial advisors.

Trust in AI and Investment Decisions

The findings of this study indicate that trust in AI financial advisors significantly influences Sharia investment decisions among Muslim investors. Trust plays a fundamental role in investment activities because financial decision-making involves uncertainty, risk, and long-term financial consequences. Investors are more likely to adopt AI-based financial advisory systems when they believe that the technology is reliable, secure, accurate, and capable of providing beneficial investment recommendations. In the context of Sharia investment, trust becomes even more important because Muslim investors not only seek financial returns but also expect investment activities to comply with Islamic principles and ethical values.

The positive relationship between trust in AI and investment decisions can be explained by the ability of AI systems to provide efficient and data-driven financial analysis (Omopariola & Aboaba, 2021). AI financial advisors are capable of processing large volumes of financial information, identifying market trends, and generating personalized investment recommendations more quickly than traditional manual analysis. Respondents in this study generally perceived AI systems as useful tools that can reduce investment complexity and improve decision-making efficiency. When investors perceive AI systems as credible and dependable, they tend to feel more confident in using AI-generated recommendations for Sharia investment activities.

However, trust in AI financial advisors is not formed solely through technological capability. Several factors influence investor trust, including data security, transparency, consistency of recommendations, ethical accountability, and perceived Sharia compliance. Muslim investors may hesitate to rely entirely on AI systems if they perceive a lack of transparency regarding how investment recommendations are generated. Concerns related to algorithm bias, misuse of personal financial data, and uncertainty about compliance with Islamic principles may reduce trust levels. Therefore, AI financial platforms need to ensure not only technical performance but also ethical integrity and transparency to strengthen investor confidence.

The findings of this study are closely related to the Technology Acceptance Model (TAM). According to TAM, trust is one of the important factors influencing technology acceptance and behavioral intention to use a technological system (To & Trinh, 2021). TAM explains that users are more likely to adopt technology when they perceive it as useful, easy to use, and trustworthy. In this study, trust acts as a psychological factor that influences Muslim investors' willingness to use AI financial advisors in making Sharia investment decisions. Investors who trust AI systems tend to perceive the technology as beneficial and effective in supporting investment activities. As a result, trust positively contributes to behavioral intention and actual investment decision-making.

In addition, the findings are also supported by behavioral finance theory, which explains how psychological factors influence investor behavior and financial decisions. Traditional financial theory often assumes that investors behave rationally, but behavioral finance recognizes that emotions, perceptions, beliefs, and cognitive biases significantly affect investment choices (Brooks & Byrne, 2008). Trust functions as an important psychological element that reduces perceived risk and uncertainty in financial transactions. When investors trust AI financial advisors, they become more confident in accepting AI-generated recommendations and are less likely to experience fear or hesitation regarding investment risks.

Behavioral finance theory also explains that investors tend to avoid uncertainty when making financial decisions. In the context of AI financial advisors, trust helps reduce uncertainty regarding the reliability and credibility of technology-based recommendations. Muslim investors who perceive AI systems as trustworthy may feel more secure in relying on automated financial analysis and portfolio management. Conversely, low levels of trust may lead investors to reject AI recommendations and continue depending on traditional human financial advisors.

From an Islamic finance perspective, trust is closely connected to ethical values such as honesty, transparency, fairness, and accountability (Lai, 2014). Islamic financial principles emphasize that financial transactions should be conducted in a transparent and trustworthy manner to avoid deception and uncertainty (*gharar*). Therefore, AI financial advisors operating within Islamic finance must demonstrate ethical responsibility and provide clear explanations regarding investment processes and Sharia compliance. The stronger the trust investors place in AI systems, the more likely they are to adopt AI financial advisors as part of their Sharia investment decision-making process.

Overall, the findings suggest that trust is a critical determinant of AI financial advisor acceptance among Muslim investors. Trust not only affects perceptions of technological reliability but also influences investor confidence, behavioral intention, and actual investment decisions. Therefore, Islamic fintech

companies and AI developers should prioritize transparency, security, ethical governance, and Sharia compliance to strengthen investor trust and encourage wider adoption of AI-based financial advisory services in Islamic finance.

Sharia Compliance Perception

The findings of this study indicate that the perception of Sharia compliance plays an important role in influencing Muslim investors' acceptance of AI financial advisors and their Sharia investment decisions. In Islamic finance, compliance with Islamic principles is one of the primary considerations in all financial activities, including investment decision-making and the adoption of financial technology (Ayedh et al., 2021). Muslim investors generally seek assurance that investment products, financial transactions, and advisory services are free from prohibited elements such as *riba* (interest), *gharar* (uncertainty), and *maysir* (gambling). Therefore, the perception that AI financial advisors operate according to Sharia principles significantly affects investor trust, confidence, and willingness to use AI-based financial services.

Halal assurance is considered highly important because it provides certainty that investment recommendations generated by AI systems are aligned with Islamic teachings and ethical standards. Muslim investors require confidence that AI financial advisors conduct appropriate Sharia screening processes when recommending investment products or managing portfolios. This includes ensuring that investment instruments do not involve prohibited industries such as gambling, alcohol, conventional banking, or other non-halal business activities. Respondents in this study generally believed that AI technology has the potential to improve the efficiency and accuracy of halal screening processes by analyzing large amounts of financial data quickly and systematically.

The importance of halal assurance is also related to the concept of religious responsibility in financial decision-making (Abdur Razzaque & Nosheen Chaudhry, 2013). For Muslim investors, investment activities are not solely aimed at obtaining financial profit but are also viewed as part of religious and ethical obligations. Investors may avoid using AI financial advisors if they doubt the system's ability to comply with Islamic principles. Consequently, halal assurance becomes a key factor influencing the acceptance and legitimacy of AI technology in Islamic financial services. AI systems that are perceived as capable of maintaining Sharia compliance are more likely to gain trust and wider adoption among Muslim investors.

However, despite the positive perception of halal assurance, some respondents expressed concerns regarding the limitations of AI systems in understanding complex Islamic legal interpretations and ethical considerations. Islamic finance involves not only technical financial analysis but also religious judgments that often require human expertise and contextual understanding. Respondents highlighted that AI algorithms may face challenges in interpreting dynamic Sharia rulings or adapting to differences in Islamic scholarly opinions regarding financial products. Therefore, many respondents emphasized the importance of involving Sharia scholars, Islamic financial experts, and supervisory boards in the development and monitoring of AI financial advisory systems.

The discussion of Sharia compliance perception is also closely related to Islamic ethics in technology adoption. Islamic ethics emphasize values such as honesty, transparency, fairness, accountability, justice, and social welfare. In the context of AI technology, Muslim investors expect financial systems to operate ethically and responsibly while protecting users from exploitation, manipulation, and unfair treatment. AI financial advisors must therefore demonstrate ethical integrity not only in terms of technical performance but also in ensuring that investment recommendations align with Islamic moral principles.

Transparency is one of the most important ethical principles influencing technology adoption in Islamic finance. Respondents in this study indicated that they prefer AI systems that clearly explain how investment recommendations are generated and how Sharia screening processes are conducted. Lack of transparency may create uncertainty (*gharar*), which is prohibited in Islam. Therefore, explainability and openness are essential to strengthening investor confidence and ensuring ethical AI implementation. Investors are more likely to trust AI financial advisors when they understand the reasoning behind financial recommendations and believe that the system operates fairly and responsibly.

In addition, Islamic ethics emphasize accountability in all financial activities. AI financial advisors should therefore be designed with clear governance structures and ethical oversight mechanisms. Respondents believed that Islamic fintech companies must ensure that AI systems are regularly monitored and evaluated by Sharia supervisory boards to maintain compliance with Islamic principles. Ethical

accountability also includes protecting user privacy, preventing algorithm bias, and ensuring that AI systems do not encourage speculative or harmful financial behavior.

The findings of this study support the view that Islamic ethics significantly influence technology acceptance among Muslim investors. Unlike conventional technology adoption, the adoption of AI in Islamic finance is strongly associated with religious values and ethical considerations. Muslim investors are not only concerned with efficiency and convenience but also with whether technology supports the objectives of maqashid sharia, which include protecting faith, wealth, justice, and social welfare. AI financial advisors that successfully integrate halal assurance, transparency, fairness, and ethical accountability are therefore more likely to gain acceptance and trust within Islamic financial markets.

Comparison with Previous Studies

The findings of this study show several similarities with previous studies related to artificial intelligence in finance, fintech adoption, robo-advisors, and technology acceptance behavior. Earlier studies generally found that trust, perceived usefulness, and technological convenience significantly influence individuals' willingness to adopt digital financial services and AI-based financial systems. Similar to those studies, the present research also found that trust in AI financial advisors positively influences investment decisions among users. Respondents who perceived AI systems as reliable, efficient, and beneficial demonstrated higher confidence in using AI-generated recommendations for Sharia investment activities. This finding supports previous research based on the Technology Acceptance Model (TAM), which explains that trust and perceived usefulness are major determinants of technology adoption and behavioral intention.

The study also aligns with previous research emphasizing the importance of transparency and ethical considerations in AI acceptance. Earlier studies on robo-advisors and fintech adoption highlighted that users tend to trust digital financial systems when the systems provide clear explanations, accurate information, and secure services. Similarly, this study found that transparency significantly affects investor confidence in AI financial advisors. Respondents expressed greater willingness to use AI systems when they understood how recommendations were generated and when the systems demonstrated openness regarding investment analysis and risk management processes.

In addition, the findings are consistent with previous studies in Islamic fintech and Islamic finance that identified Sharia compliance as a critical factor influencing Muslim consumer behavior. Earlier research demonstrated that Muslim consumers are more likely to adopt digital financial services when the services are perceived as compliant with Islamic principles. This study similarly found that perceived Sharia compliance positively affects investor acceptance of AI financial advisors. Respondents emphasized the importance of halal assurance, ethical accountability, and avoidance of prohibited elements such as riba, gharar, and maysir in AI-generated investment recommendations.

Despite these similarities, this study also reveals several important differences compared to previous studies. Most earlier studies focused primarily on general fintech adoption, digital banking, mobile payment systems, or conventional robo-advisors without specifically examining AI financial advisors in the context of Islamic finance. Previous research generally discussed technology acceptance from economic or technological perspectives, while this study integrates Islamic ethical values, Sharia compliance, and religious considerations into the analysis of AI technology adoption. Therefore, this research provides a more comprehensive understanding of how Muslim investors evaluate AI financial advisors not only based on efficiency and convenience but also based on religious and ethical principles.

Another important difference lies in the focus on AI financial advisors specifically designed for Sharia investment decision-making. While earlier studies often examined conventional investment technologies, this study explores the interaction between AI systems and Islamic investment principles. The findings indicate that Muslim investors have unique concerns regarding algorithm transparency, ethical governance, and the ability of AI systems to comply with Islamic law. These concerns are less frequently discussed in conventional fintech studies, which typically focus on technological performance and financial benefits alone.

This study also differs from previous research by highlighting the role of Islamic business ethics in technology adoption. The findings suggest that transparency, fairness, accountability, and maqashid sharia significantly influence Muslim investors' perceptions of AI financial advisors. Earlier studies on AI adoption often emphasized technical efficiency and user convenience, whereas this study demonstrates that ethical and religious dimensions are equally important in shaping technology acceptance within Islamic financial markets.

The novelty of this study lies in its integration of artificial intelligence, Islamic finance, and behavioral finance perspectives within a single research framework. This study contributes new insights by specifically examining how AI financial advisors influence Sharia investment decisions among Muslim investors. Unlike previous studies that mainly focused on fintech adoption in general contexts, this research investigates AI-based financial advisory systems from the perspective of trust, transparency, perceived usefulness, and perceived Sharia compliance simultaneously.

Another novel contribution of this study is the incorporation of Islamic ethical values into the Technology Acceptance Model (TAM). The study expands traditional TAM concepts by demonstrating that technology acceptance in Islamic finance is not solely influenced by usefulness and ease of use but also by halal assurance, ethical responsibility, and compliance with Islamic principles. This integration offers a more context-specific framework for understanding technology adoption behavior among Muslim investors.

Furthermore, the study provides practical novelty by addressing emerging challenges related to AI implementation in Islamic finance. As AI technology continues to develop rapidly, there is still limited research discussing how Islamic fintech companies can ensure ethical AI governance and Sharia compliance in automated financial advisory systems. This study highlights the importance of involving Sharia scholars, improving AI transparency, and strengthening ethical accountability in order to increase investor trust and acceptance.

CONCLUSION

This study examined the influence of AI financial advisors on Sharia investment decisions among Muslim investors by focusing on the roles of trust, perceived usefulness, transparency, and perceived Sharia compliance. In the context of Islamic finance, AI financial advisors provide opportunities to improve efficiency, accessibility, and personalized investment recommendations. However, the adoption of AI technology in Islamic finance also raises concerns regarding ethical values, transparency, trust, and compliance with Islamic principles. Therefore, this study aimed to analyze how Muslim investors perceive and accept AI-based financial advisory systems in Sharia investment activities. The findings of this study indicate that AI financial advisors significantly influence Sharia investment decisions. Trust emerged as one of the strongest factors affecting investor acceptance of AI systems. Muslim investors who perceived AI financial advisors as reliable, secure, credible, and ethically responsible were more willing to use AI-generated investment recommendations. This finding supports the idea that psychological factors play an important role in technology adoption and investment behavior. Perceived usefulness also significantly influenced Sharia investment decisions. Respondents generally believed that AI financial advisors improve investment efficiency, simplify financial analysis, and provide faster access to investment information. In addition, transparency was identified as another important factor influencing investor confidence. Respondents emphasized the importance of explainability and openness in AI-generated recommendations because lack of transparency may create uncertainty (*gharar*), which is prohibited in Islamic finance. Perceived Sharia compliance also strongly influenced investor acceptance of AI financial advisors. Muslim investors require assurance that AI systems operate according to Islamic principles and avoid prohibited elements such as *riba*, *gharar*, and *maysir*. The findings suggest that halal assurance and Islamic ethical considerations are essential in encouraging the adoption of AI technology in Islamic financial services. The study expands the Technology Acceptance Model (TAM) by integrating Islamic ethical values, trust, transparency, and perceived Sharia compliance into the analysis of AI adoption behavior. Practically, the study provides implications for Islamic fintech companies, regulators, investors, and AI developers. Islamic fintech companies should prioritize transparency, security, and Sharia compliance when developing AI financial advisory systems. Regulators should establish ethical guidelines and governance frameworks to ensure responsible AI implementation in Islamic finance. Therefore, future research is recommended to compare Muslim and non-Muslim investor perceptions, examine AI ethics more deeply, analyze long-term investor behavior, and compare human financial advisors with AI financial advisors in Sharia investment decision-making.

AUTHORS' DECLARATION

Authors' Contributions and Responsibilities

All authors contributed significantly to the completion of this research. The first author was responsible for the research conceptualization, literature review, data collection, data analysis, interpretation of findings, and manuscript preparation.

Competing Interests

The authors declare that there are no competing interests regarding the publication of this research. The research was conducted independently without any financial, commercial, or personal relationships that could influence the results, interpretation, or conclusions presented in this study.

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