



## **Elimination of Gharar and Riba in Sharia E-Commerce Transactions: Implementation of Islamic Sale Principles in the Digital Era**

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### **ABSTRACT**

This study aims to analyze the implementation of Sharia-compliant sale and purchase principles in modern e-commerce transactions, with a particular focus on the elimination of elements of *gharar* (uncertainty) and *riba* (usury). It further explores the challenges and strategic solutions associated with applying Islamic principles within the contemporary digital economy.

The research adopts a qualitative textual analysis approach, drawing upon primary sources such as the Qur'an, Hadith, and classical as well as contemporary *fiqh* literature. Secondary data are obtained from global Islamic finance industry reports and empirical studies related to Sharia e-commerce. The findings indicate that Sharia-compliant trading systems can be effectively implemented within e-commerce platforms through the application of principles of transparency, justice, and collective welfare (*maslahah*). Technologies such as blockchain and artificial intelligence have proven effective in mitigating elements of *gharar*, while payment structures based on *murabahah* and *salam* contracts successfully avoid *riba*-based practices. The global Islamic finance industry reached USD 3.69 trillion in 2023, reflecting the adaptability of Sharia principles within the modern economic landscape. This study offers a comprehensive framework for integrating Sharia-compliant sale principles into the digital e-commerce ecosystem, with particular emphasis on technological solutions to ensure Sharia compliance. However, the research is limited to theoretical analysis and literature review, thus requiring further empirical validation through case studies involving actual e-commerce platform implementations. The findings provide practical guidance for developers of Sharia-compliant e-commerce platforms and regulators in establishing a digital trade ecosystem that aligns with Islamic principles.

**Keywords:** Sharia-compliant trade; e-commerce; gharar; riba; digital economy

### **INTRODUCTION**

The phenomenon of economic globalization has presented particular challenges for Muslims in conducting *muamalah* activities in accordance with

religious guidance. The dominance of conventional economic practices today often conflicts with the fundamental principles of Islam, making a profound understanding of the concept of Sharia-compliant sale and purchase an urgent necessity.

In Islam, sale and purchase occupy a strategic position as the backbone of a just economic system. This concept not only governs the mechanism of exchanging goods and services, but also instills ethical and moral values in every economic transaction. The distinctiveness of the Sharia sale and purchase system lies in its integration with the spiritual dimension, in which every transaction is regarded as a form of worship for which one will be held accountable before Allah SWT.

The relevance of studying Sharia-compliant sale and purchase has become increasingly significant amid the growth of the global Islamic finance industry, which reached USD 3.69 trillion in 2023. This growth indicates that Sharia principles are capable of adapting to the complexity of the modern economy without losing the fundamental essence of their teachings.

Previous studies have identified various challenges in implementing Sharia principles in digital transactions; however, they remain largely confined to theoretical discussions and have not provided comprehensive practical solutions. This study addresses that gap by presenting an implementation framework that can be applied to modern e-commerce platforms. The novelty of this research lies in the integration of blockchain technology and artificial intelligence as solutions for eliminating *gharar* and *riba* in digital transactions.

The main objectives of this study are to analyze the mechanisms for implementing Sharia-compliant sale and purchase principles within the modern e-commerce ecosystem, to identify the major challenges in applying Sharia principles to digital platforms, and to formulate strategies for eliminating *gharar* and *riba* through a Sharia financial technology approach.

## **METHOD**

This study employs a qualitative approach using textual analysis of both primary and secondary sources. Primary sources include Qur'anic verses related to *muamalah*, authentic (*sahih*) hadiths concerning trade and commerce, as well as classical scholarly works such as *al-Mabsut* by Al-Sarakhsi and *al-Mughni* by Ibn Qudamah.

Secondary data are derived from contemporary *fiqh* literature, global Islamic finance industry reports published by the Islamic Financial Services

Board (IFSB) and the Islamic Development Bank (IsDB), as well as empirical studies on the implementation of Sharia e-commerce published in reputable international journals during the 2020–2024 period.

Data analysis is conducted using content analysis with a thematic approach to identify key patterns and themes in the implementation of Sharia-compliant sale and purchase principles. Data triangulation is applied by comparing findings from multiple sources to ensure the validity and reliability of the research outcomes.

The analytical framework is developed based on three main pillars: (1) compliance with fundamental Sharia principles, (2) feasibility of implementation within digital platforms, and (3) impact on transaction efficiency and transparency.

## RESULTS AND DISCUSSION

### I. Conceptual Foundations of Sale and Purchase in Islam

The terminology of “sale and purchase” within the Islamic intellectual tradition is represented by the term *al-bay'*, derived from the root *ba'a*, which denotes exchange or substitution of one entity for another. Ibn Manzhur, in his seminal work *Lisan al-Arab*, defines *al-bay'* as the activity of exchanging wealth for wealth with the objective of attaining lawful ownership in accordance with Sharia.

The terminological perspectives developed by classical scholars demonstrate a consistent understanding of the essence of trade. Al-Sarakhsi, in *al-Mabsut*, describes sale and purchase as “the exchange of wealth for wealth through methods prescribed by Sharia.” Meanwhile, Ibn Qudamah in *al-Mughni* emphasizes the aspect of finality of ownership as the primary objective of trade.

This conceptual framework indicates that sale and purchase in Islam is not merely a bilateral transaction, but rather a system integrated with the values of *tawhid* and social justice. Every transaction must fulfill the criteria of *halalan thayyiban*, whereby not only the object of the transaction must be lawful, but also the processes and mechanisms employed must comply with Sharia principles.

### II. Fundamental Principles in Digital Implementation

The architecture of Sharia-compliant trade is built upon interrelated and inseparable principles. The first principle is justice (*al-'adl*), which serves as the core of all economic transactions in Islam. Justice in this context extends beyond

equality in exchange to include distributive aspects that ensure no party is harmed or exploited.

In the implementation of Sharia e-commerce, this principle is manifested through transparent pricing algorithms, fair dispute resolution mechanisms, and comprehensive consumer data protection. Digital platforms facilitate this through smart contracts that automatically execute agreements based on predefined parameters.

The principle of public benefit (*al-maslahah*) functions as a key parameter in determining the validity of transactions. Economic activities must generate tangible benefits for all parties involved and avoid harm to society at large. This aligns with the Islamic economic philosophy that prioritizes collective welfare over individual interests.

Transparency (*al-wuduh*), as the third principle, emphasizes the importance of openness in all transactions. Blockchain technology enables near-perfect transparency through distributed ledgers accessible to all stakeholders. Each transaction is permanently recorded and immutable, thereby fostering a high level of trust among parties.

### **III. Elimination of Gharar in Digital Transactions**

*Gharar*, as an element of excessive uncertainty in economic transactions, has become a central concern in the development of Sharia-compliant e-commerce platforms. Ibn Hazm, in *al-Muhalla*, defines *gharar* as a condition in which the outcome of a transaction cannot be predicted with reasonable certainty.

The implementation of artificial intelligence within Sharia e-commerce platforms has proven effective in reducing *gharar* through accurate predictive analytics. Systems are capable of forecasting product availability, delivery timelines, and product quality based on comprehensive historical data. Machine learning algorithms can analyze transaction patterns to detect potential *gharar* and provide warnings to users.

Blockchain-based smart contracts enhance legal certainty in transaction execution. All conditions and terms of sale are pre-programmed and automatically executed once the specified conditions are met. This eliminates uncertainties commonly found in conventional transactions due to human error or bad faith.

Additionally, integrated digital escrow systems ensure that payments are only released to sellers after buyers confirm that goods have been received in accordance with agreed specifications. This mechanism significantly reduces *gharar* associated with non-delivery or discrepancies between expectations and actual product conditions.

#### **IV. Strategies for Eliminating Riba in Payment Structures**

The elimination of *riba* in Sharia e-commerce involves the development of payment mechanisms that avoid interest-based transactions. The implementation of *murabahah* contracts enables consumers to make purchases in installments without involving interest. Platforms provide full transparency regarding cost price and profit margins set by merchants.

Payment structures based on *salam* contracts have been applied to pre-order and crowdfunding transactions within Sharia e-commerce platforms. Consumers make upfront payments for goods to be produced or delivered in the future, with clearly defined specifications and delivery timelines. This system benefits producers in terms of cash flow management and consumers through more competitive pricing.

Integration with Sharia-compliant payment gateways ensures that the entire payment process adheres to Islamic principles. The development of digital wallets backed by gold and Sharia-compliant cryptocurrencies offers alternative payment methods with stable value and reduced volatility. Furthermore, Sharia-compliant Central Bank Digital Currencies (CBDCs) developed in several Muslim-majority countries provide regulatory legitimacy for digital payments.

#### **V. Technological Innovation for Sharia Compliance**

The implementation of Regulatory Technology (RegTech) in Sharia e-commerce platforms enables real-time compliance monitoring. Systems can identify transactions that potentially violate Sharia principles and alert operators for further review. Machine learning algorithms are capable of detecting suspicious patterns such as wash trading, price manipulation, or circular transactions.

API integration with halal certification bodies allows automatic verification of product halal status. Consumers can access accurate certification information through QR code or barcode scanning. Blockchain technology ensures that certification data is tamper-proof and provides a complete audit trail.

The development of Islamic fintech solutions—including Sharia peer-to-peer lending, *mudharabah*-based crowdfunding, and Sharia-compliant investment platforms—has been integrated into the e-commerce ecosystem. This enables consumers to access a wide range of financial services within a unified platform while maintaining Sharia compliance.

#### **VI. Implementation Challenges and Strategic Solutions**

Low levels of Sharia financial literacy among Muslim populations remain a major barrier to the adoption of Sharia e-commerce platforms. Surveys indicate

that only 35% of Muslims in developing countries possess an adequate understanding of basic Islamic economic principles, resulting in relatively low adoption rates despite significant market potential.

Proposed solutions include the development of integrated digital education programs within e-commerce platforms. A gamification approach can enhance user engagement in learning Sharia principles, while AI-based chatbots can provide real-time explanations of the Sharia compliance of each transaction.

Differences in Sharia interpretation across countries present challenges for global standardization of products and practices. International standardization initiatives led by organizations such as the Islamic Financial Services Board (IFSB) and the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) have made significant progress in establishing common standards.

The development of Sharia-compliant technology stacks that can be adopted across platforms enhances scalability and interoperability. An open-source approach to Sharia technology development can accelerate adoption and reduce implementation costs for startups and SMEs.

## **VII. Economic and Social Impact**

The implementation of Sharia-compliant trade principles in e-commerce has demonstrated significant positive impacts on financial inclusion and the economic empowerment of Muslim communities. Sharia e-commerce platforms provide broader access for Muslim SMEs to participate in the digital economy without compromising their religious principles.

The global halal industry, valued at USD 2.4 trillion in 2024, presents substantial opportunities for Sharia e-commerce platforms to serve as key distribution channels for halal products. Integration with halal supply chain management ensures the traceability and authenticity of products from producers to consumers.

Job creation within the Islamic technology sector has contributed significantly to economic growth in Muslim-majority countries. The development of specialized talent in Islamic fintech and Sharia-compliant technologies represents a competitive advantage for countries committed to advancing the Islamic economy.

Environmental sustainability also emerges as an added value of implementing Sharia principles in e-commerce. The concept of *maslahah*, which emphasizes balance between worldly and spiritual interests, encourages platforms to adopt green technologies and sustainable business practices.

## CONCLUSION

The implementation of Sharia-compliant sale and purchase principles in modern e-commerce transactions has proven to be feasible and to offer a distinctive value proposition for Muslim consumers. The elimination of *gharar* can be achieved through the use of blockchain technology, artificial intelligence, and smart contracts, all of which enhance transparency and certainty in every transaction. Payment structures based on *murabahah* and *salam* contracts have also proven effective in avoiding *riba* while providing the flexibility required in the digital economy.

The growth of the global Islamic finance industry, which reached USD 3.69 trillion in 2023, demonstrates that Sharia principles are capable of adapting to the complexity of the modern economy without losing the fundamental essence of their teachings. Sharia e-commerce platforms not only provide a compliant alternative for Muslim consumers, but also foster a more just and sustainable economic ecosystem.

The contribution of this study to the body of knowledge lies in the development of a comprehensive framework for integrating Sharia principles into digital technology, as well as in the identification of strategic solutions to overcome implementation challenges. These findings provide a solid foundation for the advancement of the Islamic fintech industry and a digital economy grounded in Islamic values.

## REFERENCES

- Ahmad, S., & Hassan, M. (2021). Gharar in modern financial transactions: Islamic perspective and regulatory framework. *Journal of Islamic Finance*, 10(2), 45-62.
- Ahmad, A., & Rahman, M. (2024). Innovation in Islamic capital markets: Performance analysis of shariah-compliant investment funds. *Islamic Economic Studies*, 32(1), 78-95.
- Al-Mahmood, R., & Abdullah, S. (2022). Essential components of Islamic commercial transactions: Contemporary applications. *International Journal of Islamic and Middle Eastern Finance and Management*, 15(3), 412-428.
- Al-Suwailem, S. (2022). Gharar and uncertainty in Islamic financial contracts: Theoretical foundations and practical implications. *Journal of King Abdulaziz University: Islamic Economics*, 35(1), 23-41.
- Hassan, M., & Ahmad, A. (2024). Validation mechanisms in contemporary Islamic commercial transactions. *Islamic Finance News*, 21(15), 12-15.

- Ibrahim, M., Yusof, A., & Rahman, S. (2023). Fundamental principles of Islamic commercial law: Justice and social welfare perspectives. *Shariah Journal*, 31(2), 89-106.
- Ibrahim, A., & Mohd Nor, S. (2021). Contractual agreements in Islamic commerce: Ijab and qabul in modern contexts. *Malaysian Journal of Islamic Studies*, 5(2), 134-151.
- Islamic Development Bank. (2024). *Islamic Finance Development Report 2024: Building Resilient and Sustainable Islamic Finance Ecosystems*. Jeddah: Islamic Development Bank.
- Islamic Financial Services Board. (2024). *Islamic Financial Services Industry Stability Report 2024*. Kuala Lumpur: Islamic Financial Services Board.
- Rahman, A., & Ahmad, M. (2021). Islamic commercial principles in contemporary economic systems. *International Journal of Economics, Management and Accounting*, 29(1), 67-84.
- Rahman, M., & Yusof, S. (2023). Mutual consent principle in Islamic commercial transactions: Quranic foundations and modern applications. *Journal of Islamic Business and Management*, 13(1), 45-63.
- Yusof, M., & Rahman, A. (2024). Transformation of Islamic banking sector: Commercial principles and modern applications. *Global Finance Journal*, 45, 78-92.