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Implementation of Digital E-Procurement in the Sharia Banking Ecosystem

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A B S T R A C T

This study examines how e-Procurement implementation supports cost efficiency, strengthens sharia compliance, and addresses adoption challenges in Indonesian Islamic banks. Using a qualitative case study approach based on regulations, DSN-MUI fatwas, annual reports, and technological practices, the research highlights a conceptual gap in integrating maqāṣid al-sharīʿah within digital procurement. Findings indicate that procurement digitization lowers transaction costs and enhances sharia compliance through digital hisbah-based audits. The study's novelty lies in proposing a techno-fiqh integrative model that aligns economic efficiency with maqāṣid principles. Practical implications include recommendations for regulatory refinement, digital sharia auditing, and blockchain-based contract validation.

INTRODUCTION

The digitalization of Islamic banking is a strategic need to increase operational efficiency and transparency, especially in the procurement process of goods and services. The e-Procurement system is present as a digital solution that is able to replace manual procurement which has been vulnerable to corrupt practices, collusion, and cost inefficiencies (Wardhani et al., 2021). E-Procurement accelerates the procurement process through an electronic auction mechanism, as well as provides a digital audit trail that facilitates monitoring compliance with sharia principles that must be maintained by Islamic banking institutions (Agung, 2019).

The implementation of e-Procurement in Islamic banking is driven by several strong strategic reasons. First, e-Procurement significantly reduces procurement operational costs through process automation that was previously manual and prone to human error (Sa'adah, 2020). This is in accordance with the principle of efficiency in maqashid al-shariah which requires optimal use of resources without waste. Second, the system increases the transparency of the entire procurement process in accordance with the values of accountability and anti-gharar in sharia, eliminating the risk of manipulation and corrupt practices (Wardhani et al., 2021). This transparency is very important to maintain stakeholder trust and the legitimacy of sharia institutions.

Third, e-Procurement accelerates the procurement cycle so as to support the bank's operational responsiveness to dynamic needs, while increasing staff productivity (Runsystem, 2023). This speed and accuracy are particularly relevant in a digital era that demands rapid adaptation without sacrificing sharia compliance. Finally, e-Procurement supports real-time sharia compliance monitoring, opening up opportunities for more effective and efficient digital sharia audits (Pratami et al., 2021).

However, behind these benefits, significant challenges still need to be overcome, especially related to the harmonization of sharia regulations and techno-fi literacyand human resources so that implementation can run holistically and sustainably. Therefore, this study is directed to comprehensively examine the impacts, opportunities, and obstacles of e-Procurement in Indonesian Islamic banking.

On the other hand, the implementation of e-Procurement in Islamic banking faces complex regulatory challenges and high technological literacy needs for human resources (Pratami et al., 2021). For this reason, this study intends to investigate how e-Procurement not only improves cost efficiency and transparency, but is also able to integrate sharia values such as anti-gharar and the validity of digital contracts in the procurement process. This research is relevant to the digital transformation agenda of Islamic banking which must be able to compete with the conventional system while complying with sharia rules (Wahyudiono, 2019).

Previous research has placed more emphasis on the technical efficiency of e-procurement (Wardhani et al., 2021; Sa'adah, 2020), but has not integrated the framework of maqāṣid al-syarī'ah as a digital ethics evaluation tool. Therefore, this research aims to fill this gap by developing an integrative model of techno-fiqh in Islamic banking e-procurement. This research also contributes to identifying obstacles and opportunities for the implementation of e-Procurement in Indonesian Islamic banks, as well as compiling recommendations for regulatory policies and strengthening human resource capacity in the context of techno-fiḳḥ. Thus, the results of the research are expected to be a practical and scientific reference to encourage efficient, transparent, and sharia procurement governance.

LITERATURE REVIEW

The Divine Foundations and Principles of Maqāṣid al-Sharī'ah

Digitalization in Islamic banking cannot be separated from the basic principles of Islam that emphasize justice (*'adl*), trust, and transparency (*ṣidq*). The Qur'an affirms this in Surah An-Nisā' verse 58: "*Indeed, Allah has commanded you to convey the message to those who are entitled to receive it, and when you establish the law among men, you must establish it justly.*" This principle of justice is the basis for every business and financial activity, including in the governance of the procurement of goods and services through digital systems.

In addition, the prohibition against cheating is affirmed in Surah Al-Muṭaffifīn verses 1–3 which warns that humans should not diminish the rights of others. This can be interpreted as a warning against manipulative practices and non-transparency in transactions. The hadith of the Prophet Muhammad PBUH which states that "*Every trust is a responsibility*" (HR. Bukhari and Muslim) is also the moral basis in the implementation of e-procurement so that it runs honestly, accountably, and avoids *elements of gharar* (uncertainty) and *maysir* (speculative).

In this context, the digitization of e-procurement in Islamic banking serves as a means of realizing efficient governance as well as worship value, because it ensures justice, trust, and openness that are in line with maqāṣid al-sharī'ah. The main goal of maqāṣid, according to Ibn 'Āsyūr (2018), is the realization of benefits (*maṣlaḥah*) and the prevention of damage (*mafsadah*). He classified the benefits in three dimensions: the benefits that maintain the sustainability of the ummah, strengthen social relations, and meet human needs fairly. In the context of e-procurement, the implementation of digital systems must be able to bring real benefits such as efficiency, transparency, and asset protection (*ḥifẓ al-māl*), while preventing data misuse and transaction misappropriation. The sharia e-procurement system must be able to maintain these values by eliminating the elements of gharar (uncertainty) and maysir (speculation), as well as ensuring the halalness of transactions through the validity of digital contracts and real-time supervision of the Sharia Supervisory Board.

Ibn 'Āsyūr also emphasized the importance of *the approach of al-maqām* (context), *istiqrā'* (empirical induction), as well as the distinction between *wasā'il* (tools/procedures) and *maqāṣid* (goals). With this approach, e-procurement is not just the adoption of technology, but an ethical transformation that takes into account the social and spiritual context of Muslims (Ibn 'Āsyūr, 2018). Therefore, digital innovation must be directed to ensure the attainment of maqāṣid proportionately: economic efficiency, social justice, and moral sustainability.

Ethical governance in e-Procurement should focus on the protection of property (hifz al-mal), the benefit of the ummah collectively, and the balance of rights and obligations between the parties involved. The use of technology such as blockchain and smart contracts can be used as an instrument to maintain transaction integrity and prevent data misuse and fraud practices, thus fulfilling Ibn Assyria's maqashid in the realm of banking digitalization

Grand Theory

Transaction Cost Economics (TCE)

The theory of Transaction Cost Economics developed by Williamson (1981) explains that every business transaction involves additional costs beyond production costs, such as the costs of information retrieval, negotiation, contracts, and supervision. In a conventional procurement system, these transaction costs tend to be high due to long manual processes and are prone to errors. The implementation of e-procurement plays a role in reducing these costs through the digitization of the e-sourcing, e-tendering, and e-invoicing processes that reduce the need for face-to-face interaction and accelerate the flow of document verification (Sa'adah, 2020; Wardhani et al., 2021).

In the context of Islamic banking, the implementation of TCE is in accordance with the principle of ḥifẓ al-māl (property protection), because cost efficiency reflects efforts to prevent waste (isrāf) and maximize the usefulness of resources (Zuhdi, 2017). Reducing transaction costs while reducing the risk of fraud and inefficiencies makes e-procurement not only an economic tool, but also a sharia mechanism to manage mandates effectively.

Agency Theory

Agency Theory (Jensen & Meckling, 1976) highlights the relationship between principals (fund owners/customers) and agents (bank management) who have the potential to have different interests. In this framework, e-procurement acts as a digital surveillance instrument to reduce the risk of agency problems through the provision of real-time data and a transparent digital audit trail.

This system allows the Sharia Supervisory Board (DPS) to carry out the hisbah function effectively because all procurement activities are permanently documented (Pratami et al., 2021). Thus, e-procurement not only improves organizational efficiency but also strengthens sharia accountability-based governance. The integration of TCE and Agency Theory shows that cost efficiency and compliance control mechanisms can be achieved simultaneously through Islamic value-based digitalization (Wardhani et al., 2021).

Supporting Theories

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) from Davis (1989) is used to explain the factors of technology acceptance by users. Its two main components—perceived usefulness and perceived ease of use—have a significant effect on the adoption rate of digital systems. In the context of sharia e-procurement, the success of implementation is highly dependent on the perception of usefulness and ease of use by procurement staff and DPS.

In addition, the level of technological literacy and sharia awareness (techno-fiqh awareness) is an important factor so that users not only understand how the system works, but also the ethical value behind it (Nurcahyo, 2025). Research by Gürler and Kayadibi (2025) confirms that the success of procurement digitalization in Islamic banking requires synergy between technological ease and compliance risk management.

Maqāṣid al-Sharīʾah as a Normative Framework

The concept of maqāṣid provides an ethical framework that ensures that all digital processes are in line with the goals of sharia, namely safeguarding religion (*ḥifẓ an-dīn*), soul (*ḥifẓ an-nafs*), intellect (*ḥifẓ al-'aql*), heredity (*ḥifẓ an-nasl*), and property (*ḥifẓ al-māl*) (Sjahdeini, 2018). In e-procurement, these principles translate into transparency, honesty, fairness, and accountability.

Digitization of procurement helps avoid *gharar* (uncertainty) and *maysir* (speculation) because all processes are recorded automatically and can be audited in *real-time*. Thus, maqāṣid serves as a moral compass for the integration between technological efficiency and sharia compliance.

Implementation Challenges and Opportunities

Although it provides great benefits, the implementation of e-procurement in Islamic banking faces various challenges. The main obstacles include the resistance of human resources to digital changes, the need for regulatory harmonization between DSN-MUI fatwa and OJK or LKPP regulations, and limited system integration with *sharia core banking* (Wardhani et al., 2021). However, opportunities for strengthening are also wide open through the use of *blockchain technology* and *smart contracts* that are able to ensure the validity of digital contracts and support automated sharia audits (Pratami et al., 2021). The development of the digital halal ecosystem and *sharia fintech* further strengthens the urgency of developing maqāṣid-based e-procurement, which makes efficiency, justice, and public trust as pillars of modern sharia governance (Dewaya, 2024).

Synthesis of Literature Review

Based on the above literature, it can be concluded that e-procurement in Islamic banking is a strategic innovation that combines economic efficiency theory (TCE), agency control mechanisms (*Agency Theory*), and maqāṣid al-sharī'ah ethics. This integrative model enables digital procurement systems to not only reduce costs and prevent fraud, but also ensure fairness and trust in all transactions.

With the support of technology acceptance theory (TAM), this study proposes a *techno-fiqh* approach that places technology as a tool (*wasīlah*) to achieve sharia goals (*maqṣad*). Therefore, the focus of the research is directed at how the integration between economic efficiency, sharia compliance, and technology acceptance can shape sustainable e-procurement governance in Indonesian Islamic banking.

Figure 1 below shows a model designed to be consistent with the main theory (TCE & Agency Theory), the supporting theory (TAM & Maqāṣid al-Syarī'ah), as well as the direction of techno-fiqh research.

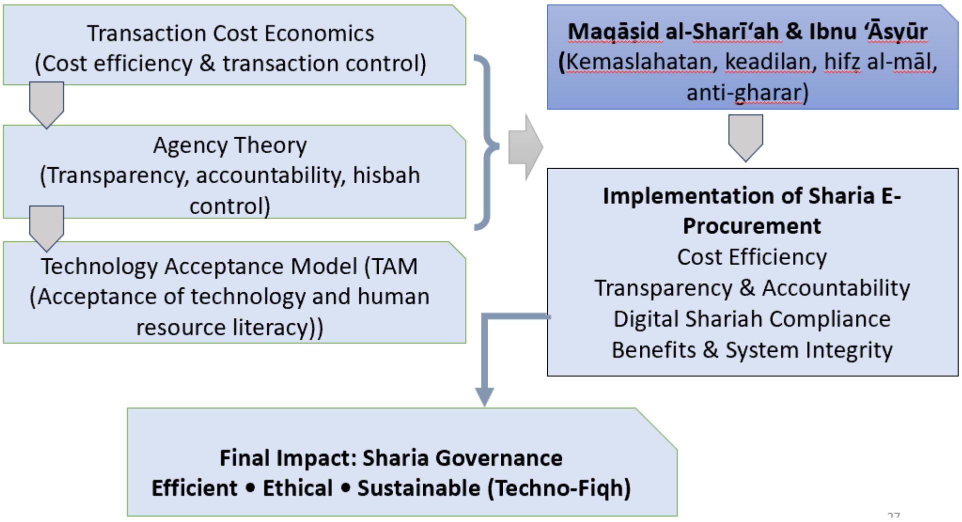


Figure 1. Sharia E-Procurement Integrative Conceptual Model

METHODOLOGY

This study uses a descriptive qualitative approach with a focused case study strategy that aims to understand in depth the implementation of e-procurement in procurement governance in Indonesian Islamic banking. The selection of a qualitative approach is based on the nature of the phenomenon being studied, namely the complex procurement digitization process, involving organizational actors, technology, and sharia regulations that interact with each other. Therefore, the research requires the exploration of meaning, experience, and contextual understanding of actors directly involved in the e-procurement system.

This study was carried out on three Islamic banks that have implemented e-procurement relatively maturely, namely Bank Syariah Indonesia (BSI), Bank Muamalat Indonesia (BMI), and Bank Mega Syariah (BMS). The three banks were selected through purposive sampling techniques based on the consideration that the institution has operated an e-procurement system for at least two years, has a documented digital-based procurement unit, and is supported by the Sharia Supervisory Board which plays a role in supervising digital transactions. In addition to these criteria, the accessibility of data and the willingness of the bank to provide interviews are decisive factors in the selection of research locations.

The research informants consisted of fourteen people selected using the purposive and snowball approaches, namely six procurement staff, three procurement managers, three members of the Sharia Supervisory Board, and two IT staff who manage the e-procurement platform. These informants are seen as actors who have direct knowledge of operational processes, technical constraints, and the dynamics of sharia compliance in the implementation of the digital procurement system.

Data collection was conducted through in-depth interviews using semi-structured guidelines to explore implementation experience, system benefits, operational challenges, and views on sharia compliance in digital transactions. Non-participatory observations were conducted to see e-sourcing, e-tendering, and e-invoicing practices directly, as well as assess the suitability between written procedures and field activities. In addition, this research uses various supporting documents such as internal procurement policies, bank annual reports, guidelines for sharia auditors, and DSN-MUI fatwa regarding digital contracts. The combination of the three techniques is carried out to ensure the completeness of the data and improve the accuracy of information through triangulation.

Data analysis was carried out in stages using thematic analysis methods. The first stage is data reduction, which is the process of sorting, selecting, and simplifying interview transcripts and field notes so that data relevant to the research objectives is obtained. The second stage is thematic categorization, which is the grouping of data into main themes based on the framework of the research theory. The theme of cost efficiency was analyzed using the perspective of Transaction Cost Economics, while the aspects of supervision and accountability were analyzed using Agency Theory. The theme of technology acceptance is interpreted using the Technology Acceptance Model, while the values of sharia compliance and maqāṣid al-sharī'ah are analyzed through an ethical and beneficial perspective based on Ibn 'Āsyūr's theory. In the third stage, all themes found were synthesized into integrative conclusions to formulate a sharia e-procurement implementation model that simultaneously reflects economic efficiency, agency control, technology acceptance, and compliance with sharia principles.

The validity of the data is maintained through several steps. The member checking process is carried out by asking the informants to review the summary of the findings to ensure the accuracy of the information. Peer debriefing was carried out through discussions with two academics who have competence in the field of Islamic banking and digital technology to validate the researchers' interpretations. In addition, triangulation of sources and methods is used to minimize bias and strengthen data consistency.

The flow of this research can be described through stages starting from the identification of problems and the selection of research locations, followed by the process of collecting data through interviews, observations, and documentation (Figure 2). Furthermore, the data is analyzed through a process of reduction, categorization, and integrative synthesis before being validated through member checking, peer debriefing, and triangulation. The entire process is directed to build a comprehensive understanding of the implementation of sharia e-procurement and produce a digital procurement governance model that is efficient, transparent, and in accordance with sharia principles.

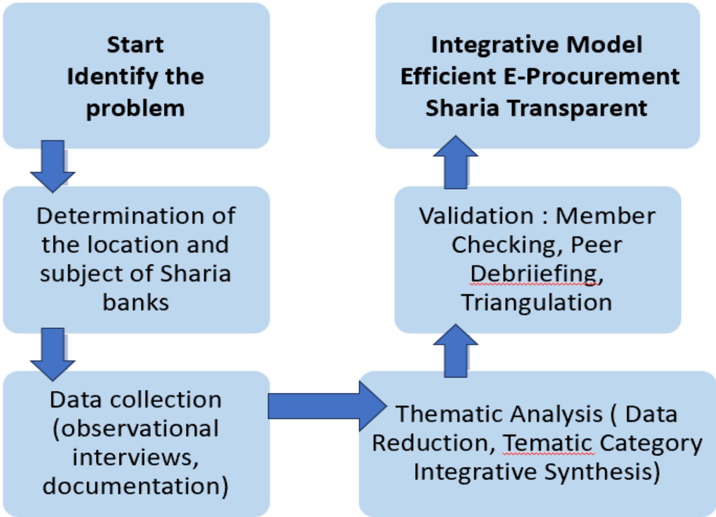


Figure 2. Research Method Flow Diagram

RESULTS AND DISCUSSION

Empirical Findings of E-Procurement Implementation

Cost Efficiency and Process Simplification

The results of research on three Islamic banks show that the implementation of e-procurement consistently increases cost efficiency and accelerates the procurement cycle of goods and services. All informants stated that the digital system significantly reduces the time of finding vendors, tender processes, and document verification compared to manual methods. The e-sourcing and e-tendering process reduces the need for face-to-face interaction, shortens the chain of coordination, and reduces operational costs such as procurement of physical documents, official travel costs, and other administrative costs.

Most of the procurement staff interviewed affirmed that digitization eliminates process duplication and minimizes the potential for data input errors. They reported a decrease in administrative burden, which was previously the main obstacle in manual procurement. IT informants also said that the system provides automated notifications to speed up the approval flow, so that procurement delays can be effectively suppressed.

DPS Transparency, Accountability, and Oversight

Field findings show that e-procurement strengthens transparency and accountability through automated digital audit trails. Every document change, item request, approval, and vendor evaluation is recorded in a precise time so that it cannot be manipulated. Members of the Sharia Supervisory Board (DPS) stated that this system facilitates the compliance monitoring process, because all transactions can be accessed at any time in real-time without having to wait for manual reports.

The implementation of e-auction and e-tendering presents more objective competition among vendors. Decision-making based on standardized digital parameters reduces the potential for personal intervention and strengthens the credibility of the procurement process.

Operational Challenges and Sharia Compliance

Despite the significant benefits, the study found some key challenges in implementation. The first challenge is the resistance of human resources who are not yet familiar with digital systems, especially at the migration stage from manual processes. The second challenge is the integration between the e-procurement system and the core sharia banking, which in some cases leads to inconsistencies in budget data and difficulties in synchronizing payment status.

In addition, DPS highlighted the need for a standard regarding the validity of digital contracts in the procurement process. Some banks still interpret electronic contracts differently, so clearer sharia guidelines are needed to ensure that all electronic contracts meet the principles of anti-gharar and hifz al-māl.

An analysis of the opportunities and challenges of e-Procurement in Islamic Banking

The SWOT analysis conducted confirmed that the main strength lies in improving the cost efficiency and transparency of audits, while great opportunities arise from the growing digital halal ecosystem and blockchain technology that enables sharia smart contract audits. Weaknesses such as limited human resources and system integration, and the threat of double regulation must be anticipated with planned change management.

In the analysis of strengths, e-Procurement in Islamic banking provides significant cost efficiency, reduces administrative burden and speeds up the procurement process. The system creates a permanent digital audit trail that strengthens transparency and accountability, thereby supporting the principles of anti-gharar and hisbah in sharia. In addition, the implementation of e-Procurement increases healthy competition through the e-Tendering and e-Auction mechanisms, which provide equal opportunities for all vendors to follow the process objectively. Islamic banks also benefit from the integration of the e-Procurement system with ERP systems and core banking which improves internal coordination and control.

On the weaknesses side, there is resistance from human resources who are still accustomed to manual processes and lack understanding of techno-fi literacy, so it requires intensive training and change management. Limited integration between the e-Procurement system and core sharia banking can disrupt the synchronization of financial data and cause reporting inconsistencies. In addition, the initial cost of investment for software, IT infrastructure, and training is an obstacle that cannot be ignored, especially for institutions with limited resources.

Then on the Opportunities, the development of the digital halal ecosystem and sharia fintech opens up opportunities to expand the sharia-compliant vendor base. The adoption of new technologies such as blockchain and smart contracts provides hope to increase the validity of digital contracts and strengthen sharia audits automatically. The government's aggressive digital financial inclusion is an opportunity for Islamic banking to increase market share through the full digitalization of procurement and other services. The availability of increasingly sophisticated digital technology also facilitates the development of product innovations and more effective risk management.

The threats that need to be watched out for include data security risks and cyber attacks that can endanger the integrity of the system and the validity of digital contracts. Regulatory inconsistencies between supervisory institutions such as OJK, LKPP, and DSN-MUI fatwa have the potential to create confusion and hinder the process of implementing e-Procurement effectively. Competitive pressure from conventional banks that have been further advanced in digitalization creates challenges to continue to innovate and maintain relevance. In addition, organizational culture resistance to digital change can also hinder the optimal technology adoption process.

By paying attention to the SWOT analysis, the e-Procurement implementation strategy must be designed holistically with a focus on strengthening human resources, developing technology infrastructure, improving integrated regulations, and changing the organizational mindset so that technology becomes the main enabler of efficient and credible Islamic banking governance.

Overall, the results of this study support the hypothesis that e-Procurement strengthens procurement efficiency while improving sharia governance and compliance in Indonesian Islamic banking. This digital system is not only a tool of efficiency, but also an ethical instrument that can maintain the principles of maqashid al-shariah such as the protection of property and fair transparency.

As an example, thechallenges and opportunities for the implementation of e-Procurement at Bank Syariah Indonesia (BSI) reflect the real conditions in the digital transformation faced by Islamic financial institutions today. In terms of challenges, BSI faces obstacles such as the need for large initial investments for the development and maintenance of digital platforms. In addition, the limitation of technological infrastructure and human resources who have techno-fi literacyis the main obstacle in system optimization. Organizational culture resistance to digital change is also still quite significant, requiring intensive training programs and targeted change management. Regulations that are not fully harmonized between sharia supervisory institutions and the government also affect the acceleration of implementation, which must still maintain compliance with sharia principles (BSI President Commissioner, Muliaman D. Hadad, 2023).

On the other hand, the opportunities that BSI has in implementing e-Procurement are quite large. With consolidation and collaboration between entities in the Islamic finance industry, BSI can optimize resources and accelerate the adoption of digital technology. The use of e-Procurement opens up opportunities to increase transparency and accountability in the procurement of goods/services, while accelerating the process cycle with real-time supervision by the Sharia Supervisory Board. The development of technology such as blockchain and smart contracts is an additional opportunity that can be strengthened to ensure the validity of digital contracts and minimize the risk of fraud in the future. In addition, BSI's initiative in sustainable finance development in line with maqashid sharia provides strategic added value in building customer and investor trust in the digital era (BSI Sustainability Report, 2022).

By understanding the challenges and taking advantage of these opportunities, BSI can accelerate the digital transformation of procurement that is not only efficient and transparent, but also in accordance with sharia principles that are the cornerstone of Islamic banking operations in Indonesia

Theoretical Analysis of Research Findings

Efficiency in the Perspective of Transaction Cost Economics

Empirical findings show that procurement digitalization reduces transaction costs through reducing the cost of information search, negotiation, and monitoring. Theoretically, this is in line with the Transaction Cost Economics (TCE) framework which asserts that process automation will reduce high-cost transactional activities. The efficiency experienced by Islamic banks reflects the reduced *bounded rationality* and *opportunism* that prevalent in manual processes. Thus, e-procurement effectively acts as a mechanism that reduces uncertainty and lowers the economic burden of transactions.

Digital Accountability in the Framework of Agency Theory

Strengthening accountability through a digital audit footprint is in line with the principles of Agency Theory which emphasizes the importance of supervisory mechanisms to align the interests of agents and principals. E-procurement creates symmetrical information transparency, thereby reducing the risk of irregularities, manipulation, and conflicts of interest. DPS obtains data that was previously difficult to access quickly, so that *the function of hisbah* as a sharia supervisor can be carried out more effectively. Digital systems act as a *monitoring tool* that reduces agency costs and increases managerial accountability.

Acceptance of Technology in TAM Perspective

The analysis shows that the success of implementation is strongly influenced by the perception of usefulness and ease of use, as described in the Technology Acceptance Model (TAM). Informants who feel real benefits in the form of efficiency and accuracy tend to accept digital systems more easily. Conversely, the lack of technological literacy and understanding of digital sharia lowers adoption rates. Thus, training and strengthening *techno-fiqh literacy* are key factors in the sustainability of the system.

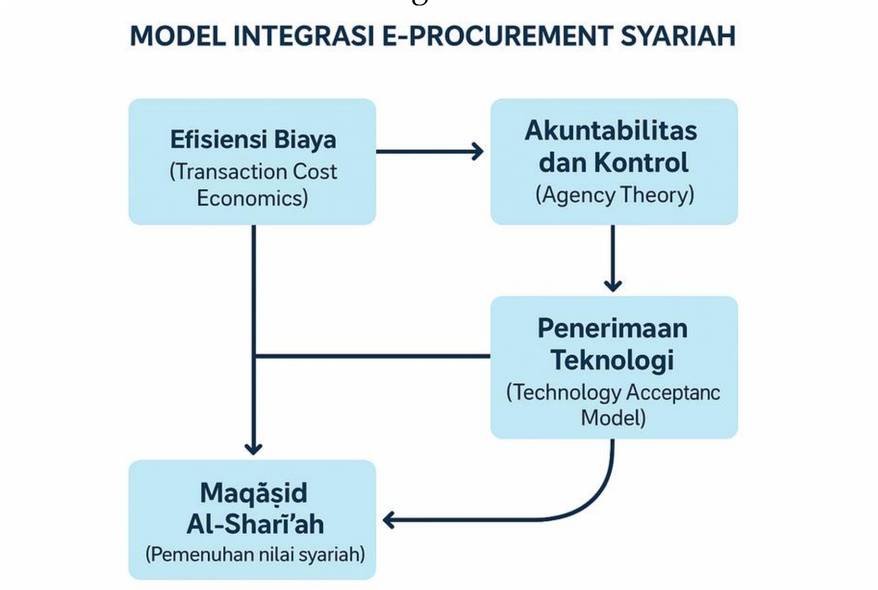
Shariah Compliance in the Perspective of Maqāṣid al-Sharī'ah

The e-procurement system supports the principles of maqāṣid al-sharī'ah, especially the protection of property (*hifẓ al-māl*) and the prevention of uncertainty (*daf' al-gharar*). By recording all transactions digitally, this system minimizes ambiguity, clarifies transaction objects and prices, and maintains the integrity of the contract. Strengthening DPS control through real-time access reflects efforts to maintain justice, trust, and maslahah in the procurement process. These findings show that technology can serve as *a testament* to achieving sharia goals when operated with the right ethical and compliance principles.

Sharia E-Procurement Integration Model

Based on the results of research and theoretical analysis, this study produced an integrative model of sharia e-procurement that shows the relationship between economic efficiency, supervisory accountability, technology acceptance, and the achievement of maqāṣid al-sharī'ah. This model emphasizes that the successful implementation of e-procurement does not only depend on technology, but also on sharia governance and human resource readiness. The sharia e-procurement integration model is built on four main pillars: (1) cost efficiency as a result of reducing transaction costs through digitalization (TCE), (2) strengthening accountability and control through digital audits and the role of DPS (Agency Theory), (3) acceptance and readiness of users to utilize digital systems (TAM), and (4) fulfilling the value of maqāṣid al-sharī'ah in every procurement process. The relationship to these four pillars is as illustrated in figure 3 below:

Figure 3



These four pillars form a techno-fiqh framework that positions e-procurement as an instrument to achieve efficiency, transparency, and benefits in procurement management in Islamic banking.

CONCLUSIONS AND RECOMMENDATION

This study found that the implementation of e-procurement in Islamic banking has a significant impact on increasing cost efficiency, strengthening transparency, and improving sharia supervision mechanisms. Empirical findings from three Islamic banks show that procurement digitization is able to reduce transaction costs, speed up the tender process, and improve data accuracy and consistency. The system also creates a digital audit trail that strengthens the control function and makes it easier for the Sharia Supervisory Board to ensure compliance with transactions with sharia principles.

However, the study also identified challenges in the form of human resource resistance to technological changes, limited integration with *core banking*, and the lack of standard standards related to the validity of digital contracts. This shows that the implementation of e-procurement requires not only technological innovation, but also organizational readiness and harmonization of sharia regulations.

In general, this study confirms that e-procurement has the potential to be a strategic instrument in realizing efficient, transparent, and maqāṣid al-sharī'ah procurement governance — especially property protection (*ḥifẓ al-māl*) and uncertainty prevention (*dafʿ al-gharar*).

Theoretical Implications

This research resulted in several important theoretical contributions. First, this study strengthens the theory of Transaction Cost Economics by showing that the digitization of procurement in Islamic financial institutions empirically reduces transaction costs and increases operational efficiency. Second, this study expands the understanding of Agency Theory in the context of Islamic banking by proving that e-procurement plays a role as a digital surveillance tool that narrows the gap between agency conflicts and increases accountability.

The most significant theoretical contribution is the formation of an integrative techno-fiqh model, which is a theoretical framework that combines TCE, Agency Theory, Technology Acceptance Model, and maqāṣid al-sharī'ah in explaining how technology can function as a wasīlah to achieve sharia goals. This model provides a new perspective that digitalization is not only oriented towards efficiency, but also on the fulfillment of the values of justice, trust, and benefit.

Practical Implications

From an implementation perspective, this research produces a number of recommendations for the Islamic banking industry, regulators, and Islamic auditors. Islamic banks need to strengthen the capacity of human resources through techno-fiqh training so that the understanding of digital technology is integrated with sharia principles. In addition, harmonization between OJK regulations, LKPP, and DSN-MUI fatwas must be accelerated to avoid regulatory overlap that has the potential to hinder the use of digital contracts.

Banks also need to improve the integration between e-procurement and core banking systems so that the entire procurement process is connected in real time with budget recording and payments. At the technological level, the use of blockchain and smart contracts is highly recommended to ensure the validity of digital contracts, improve transaction security, and strengthen automated sharia audits.

Practically, the findings of this research can be used as the basis for the development of internal policies, standard operating procedures (SOPs), and digital-based sharia audits that are more adaptive to technological developments.

ADVANCED RESEARCH

To strengthen the findings of this study, further studies need to be conducted with a quantitative approach so that the relationships between variables can be empirically tested. The integrative model formulated in this study can be tested using the Structural Equation Modeling (SEM) or Partial Least Squares (PLS) method to measure the influence of cost efficiency, digital accountability, technology acceptance, and maqāṣid fulfillment on the successful implementation of sharia e-procurement.

In addition, further research can expand the research object on non-bank institutions such as BPKH, BAZNAS, sharia fintech, or Islamic boarding school cooperatives to see how the techno-fiqh model works in various other sharia ecosystems. Digital ethnography studies can also be conducted to further understand organizational culture changes in the migration process from manual to digital systems.

With the expansion of the methodology and scope of the institution, future research is expected to enrich the theoretical framework and produce a more comprehensive, adaptive, and sustainable digital sharia procurement model.

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