



# Artificial Intelligence and the Transformation of Digital Services in Islamic Banking: A Case Study of Bank Syariah Indonesia

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**Abstract** - Digital transformation in the Islamic banking sector is necessary in the era of technological disruption. However, implementing artificial intelligence (AI) still faces challenges, especially in non-metropolitan areas. This research aims to explore the role of AI in transforming digital services at Bank Syariah Indonesia (BSI) Semarang Branch, while emphasizing its compliance with maqashid Sharia principles. This research uses a phenomenological qualitative approach through in-depth interviews, participatory observation, and analysis of internal documentation of employees and customers. The main findings show that AI significantly improves service efficiency through digital onboarding, chatbot "Hasanah Assistant", and a pattern-based automated transaction system. This innovation is considered to accelerate services while maintaining the principles of property protection (*hifzh al-mal*) and life (*hifzh al-nafs*). However, challenges arise regarding AI's limited adaptation to local cultural contexts, senior employees' resistance to digitalization, and customers' limited digital literacy. This highlights the importance of a hybrid approach between technology and humanization of Islamic banking services. The uniqueness of this research lies in its focus on regional branches that have not been widely explored in the academic literature, as well as its contribution to expanding the understanding of AI as a strategic medium, not just an automation tool. The implications of this research emphasize the need for an efficient, ethical, and inclusive AI system design, oriented towards Islamic values. The research suggests a participatory digital transformation strategy that is adaptive to local values and consistent with maqashid Sharia to ensure the sustainability of technological innovation in Islamic banking.

**Keywords:** Artificial Intelligence, Digital Transformation, Maqashid Sharia, Islamic Banking.

## 1. INTRODUCTION

The advancement of digital technology has triggered a significant revolution in various industrial sectors, including the banking industry (Zhou & Xu, 2023). Amidst the acceleration of digitalization, Islamic banking in Indonesia faces the challenge of adapting and transforming its services through cutting-edge technology such as Artificial Intelligence (AI) (Suhartanto et al., 2022). AI is present as a strategic solution to improve operational efficiency, accelerate service processes, and provide a more personal and relevant customer experience. Bank Syariah Indonesia (BSI), Indonesia's largest Islamic financial institution, has initiated concrete steps to integrate AI into its service ecosystem (Yussaivi et al., 2021).



The phenomenon of digitalization in the banking sector shows a significant growth trend in the use of AI, both in front-end aspects such as chatbots and voice assistants, and back-end aspects such as fraud detection and credit scoring (Abbas & Hafeez, 2021). Data from the Financial Services Authority (2023) shows that over 60% of commercial banks have implemented AI elements in their digital banking processes. However, AI penetration in Islamic banking is still relatively low compared to conventional banks.

**Table 1.** AI Technology Adoption Rate in Commercial Banks and Islamic Banks in Indonesia

Bank Type	Percentage of AI Usage	Focus on Using AI
National Conventional Bank	78%	Chatbot, fraud detection, analytics data
National Islamic bank	42%	Chatbot, layanan nasabah, scoring
Regional Islamic bank	15%	Terbatas pada digital onboarding

Source: Bank Indonesia (2023)

This condition shows a digital gap regarding AI technology integration between conventional and Islamic banks. Therefore, studying how AI has begun transforming digital services in Islamic banking is essential, especially at the Bank Syariah Indonesia Semarang Branch. Although this area is classified as non-metropolitan, Semarang has high Sharia economic potential because of its religious community culture and support for an economy based on Islamic values (Rabbani et al., 2023). This research is also essential because most previous research has focused on big cities such as Jakarta, Bandung, and Surabaya.

This research fills the gap in academic studies that specifically discuss the implementation of AI in digital services in the regional Islamic banking environment. So far, research related to AI in the Islamic financial sector is still limited to conceptual and quantitative aspects (Rinjani et al., 2024). At the same time, qualitative approaches that deeply examine the reality of implementation in the field are still minimal. This research gap opens up space for scientific contributions in understanding the extent to which AI can support the principles of maqashid Sharia in banking services and assessing organizational readiness and user acceptance of these changes.

The Technology-Organization-Environment (TOE) theory approach developed by Tornatzky and Fleischer is used in this research to explain the phenomenon of digital transformation (Balusamy et al., 2025). This theory helps explain the factors that influence technology adoption in an organization, namely, from the aspect of available technology, organizational characteristics, and the external environment (Olutoyin & Flowerday, 2016). TOE is suitable for analyzing the complexity of AI adoption in the Islamic banking environment, which must balance digital efficiency and compliance with Sharia principles.

Several previous studies provide an overview of the relevance of this topic. For example, a survey by Mbaidin et al. (2024) implementing AI-based chatbots in one of the national Islamic banks increased customer satisfaction by up to 35%. Meanwhile, research from Alghadi et al. (2024) highlighted the importance of banks' internal digital readiness as the main prerequisite for successfully adopting new technologies. However, neither research has examined local studies such as bank branches in regions with different dynamics in digital infrastructure, organizational culture, and customer characteristics.

The importance of this research is increasingly felt considering the potential of AI to support Sharia values through fairer, more transparent, and faster services. In the study of Maqashid Sharia, the presence of AI can be integrated to support the principle of *hifzh al-mal* (protection of assets) through a fraud detection system based on machine learning, as well as *hifzh al-nafs* (protection of lives) by reducing the administrative burden of bank employees who are at risk of burnout.

Based on various facts and gaps in the existing study, the researcher must conduct in-depth qualitative field research to comprehensively explore how AI-based digital services transform at the Bank Syariah Indonesia Semarang Branch. The researcher wants to understand



the organization's internal dynamics, employee perceptions, and direct customer experiences interacting with AI-based services. This research is expected to provide conceptual contributions in developing digital strategies for Islamic banks that are technologically sophisticated and in line with Sharia values. The study aims to comprehensively explore the role of AI in changing the face of Islamic banking services at the branch level and how social, cultural, and organizational dynamics influence its success. This research provides new insights into integrating advanced technologies within a holistic framework of Islamic values.

## **2. RESEARCH METHOD**

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This research uses a qualitative approach with a case study method. The primary focus is to explore the organization's experiences, perceptions, and social dynamics in implementing Artificial Intelligence (AI) at Bank Syariah Indonesia (BSI) Semarang Branch. This approach was chosen to gain a holistic understanding of how AI technology affects digital services for Islamic banking at the local level and how it aligns with the values of Maqashid Sharia.

The data in this research were collected through in-depth interviews, participant observation, and internal bank documentation (Katila et al., 2023). 15 informants, including branch managers, IT staff, front-line staff, and customers from various age backgrounds and digital literacy levels, were interviewed. The selection of informants was purposively carried out to ensure relevant representation of the issues being studied. Observations were made on the flow of digital services and the use of AI in the branch office environment and mobile banking applications.

Using a thematic approach, the data were analyzed through open, axial, and selective coding stages. Researchers used NVivo software to manage and identify thematic patterns from interview transcripts and field notes. Data validity was tested through triangulation of sources and techniques by comparing interview findings with observations and internal bank documents (Cogin & Ng, 2016).

The research's primary objective, to understand the phenomenon of digital transformation in-depth and contextually, influenced the selection of this method. Therefore, qualitative methods were considered most appropriate for revealing the complexity of the interaction between technology, Sharia values, and social realities in AI-based financial services in the BSI Semarang Branch environment.

## **3. RESULTS AND DISCUSSION**

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The results of in-depth interviews with the management and frontliners of the BSI Semarang Branch showed that digital onboarding is the most significant form of transformation in the past year. Customers can now open accounts without coming directly to the branch office by uploading documents via a mobile banking application equipped with Optical Character Recognition (OCR) technology and biometric verification. This technology allows the identification and authentication process to run automatically and quickly (Van Hoai et al., 2021).

Implementing Artificial Intelligence (AI) in Islamic banking operations in Indonesia, especially at Bank Syariah Indonesia (BSI) Semarang Branch, has significantly changed the workflow and organizational culture. This change has triggered positive responses and perceptions among employees, such as enthusiasm and increased efficiency, and negative, such as anxiety about their future roles.

Based on the results of interviews and field observations, most employees showed a pretty good basic understanding of the concept of AI applied in the daily work system. They



understand that AI at BSI is not here to replace the role of humans completely but rather to support performance through systems such as chatbots, transaction recommendation systems, and digital document verification. However, this understanding is not always accompanied by uniform readiness to adapt. Most employees under the age of 35 welcomed the presence of this technology and felt more motivated to develop their digital competencies. They enthusiastically participated in internal training organized by BSI, especially in modules related to the use of AI in customer service and document automation. In contrast, more senior employees showed doubts and concerns. They felt that the presence of AI could reduce the relevance of the conventional skills they had built over the years (Song et al., 2021).

The development of artificial intelligence (AI) technology has brought about a significant transformation in the interaction between customers and financial institutions, including Islamic banking (Singh et al., 2024). BSI Semarang Branch, one of the national Islamic banking institutions, also implements AI-based services to support service efficiency and improve the quality of digital customer interactions. Most customers felt helped by the presence of AI in banking services. They stated that features such as the Hasanah Assistant chatbot, digital verification when opening an account, and an AI-based notification system have shortened service time and reduced the need for direct interaction that previously took time. One respondent said that opening an account only took less than 10 minutes through the BSI Mobile application, without having to come to the branch office. However, not all customers have a positive experience. Customers from the older age group or those unfamiliar with digital technology experience obstacles in understanding the flow of AI-based digital services. Some complain about the application interface, which is considered less intuitive, and the chatbot response, which sometimes does not match the question. This causes frustration and lowers the level of satisfaction.

Implementing artificial intelligence (AI) at the BSI Semarang Branch has significantly impacted the efficiency and quality of banking services. However, its relevance and suitability with the principles of Maqashid Sharia are fundamental issues that need further research. Research findings reveal that using AI in various aspects of services, such as customer identification systems, interactive chatbots, and transaction data management, still raises various perceptions among stakeholders, including employees and customers.

### *3.1. AI-Based Digital Service Transformation in BSI Semarang Branch*

Digital transformation in the Islamic banking sector has undergone significant developments, primarily through the adoption of Artificial Intelligence (AI) technology (Widodo et al., 2024). At the BSI Semarang Branch, the application of AI has touched various aspects of service, starting from the digital onboarding process for new customers, the use of virtual assistants to answer general questions, and the automation of routine customer transactions. This transformation is aimed at efficiency and ensuring that Sharia values remain integrated into every digitalization process.

A Natural Language Processing (NLP)-based chatbot named “Hasanah Assistant” has been actively answering customer questions through the official BSI application and social media (Liaanjani & Sutikno, 2021). This chatbot is trained using a database of frequently asked questions related to Sharia products such as mudharabah, murabahah, zakat, and waqf contracts. Most employees stated that the chatbot reduced the burden of questions that previously had to be answered directly by customer service. However, several customers complained that the chatbot did not fully understand questions in local Semarang studies or that they were delivered with a regional accent or language style.

BSI Semarang Branch has adopted scheduled payment features and AI-based notifications that provide recommendations for payment times and amounts based on previous customer transaction patterns regarding automatic transaction services. This is considered very



helpful for customers in managing their finances more orderly. Most customers feel this feature makes it easier and educates them on financial management using Islamic prudential principles (*tahqiqul maslahat*). To clarify how Artificial Intelligence (AI) is implemented in digital services at Bank Syariah Indonesia (BSI) Semarang Branch, the following table summarizes the types of services, technologies used, main positive impacts, and challenges faced. This table results from qualitative data processing from interviews and field observations.

**Table 2.** Digital Service Transformation in BSI Semarang Branch

Types of AI-Based Services	Technologies Used	Main Positive Impacts	Challenges Faced
Digital Onboarding	OCR & Biometric Verification	The account opening process becomes faster	Technical issues with document upload
Virtual Assistant (Chatbot)	NLP	Reduce CS burden, Sharia product education	Regional languages are not fully recognized
Automated Transactions & Notifications	Pattern Recognition AI	Help customers manage Sharia-based finances	Minor errors in time prediction

Source: Qualitative data processing results, 2025.

Table 2 shows that while AI has successfully improved the efficiency of Islamic services and product education, there are still significant challenges, such as the limitations of technology in understanding the local context. This emphasizes the need for digital strategies that are adaptive to local culture and values and the harmonious integration of intelligent systems and human approaches in Islamic banking services. These results show that AI has successfully transformed how Islamic banking services are run regarding process efficiency and customer experience. However, local studies face challenges, especially regarding the adaptation of AI to variations in communication culture and regional preferences.

Theoretically, these findings can be elaborated through the Artificial Intelligence in Business Processes framework that emphasizes the role of AI in improving efficiency, accuracy, and personalization of services (Adinugraha et al., 2024). Digital onboarding using OCR and biometrics reflects the application of supervised learning technology, which aims to verify data with high accuracy. NLP in chatbots is a form of machine learning that continuously adapts to user input. Meanwhile, automated transactions demonstrate the integration of predictive analytics in proactive financial services (Nezami & Rukham, 2022).

Adopting AI according to the Sharia perspective must remain within the framework of maqashid Sharia. Researchers found that the digital transformation carried out by BSI still pays attention to Sharia values, especially in *hifzh al-mal* (protection of property) and *hifzh al-nafs* (protection of life). For example, the digital security system used during onboarding and automatic transactions provides a sense of security for customers. The “Hasanah Assistant” chatbot has been calibrated not to provide financial advice contrary to Sharia principles, and is equipped with a content filter to avoid incorrect contract information.

This finding is supported by previous research from Aspiranti et al. (2023), which shows that AI can improve the user experience in Islamic financial services if the system is designed according to Sharia norms. Likewise, a research by Rochmad et al. (2024) on Islamic banks in Jakarta, it was emphasized that AI increases service efficiency and is essential in educating the public about Sharia-based products.

The role of humans remains crucial in value-based Islamic banking services (Kurniawan et al., 2022). Customers in Semarang, who mostly come from religious and traditional communities, still show a dependence on direct interaction. They consider that the human touch in explaining Islamic contracts has a trust value that AI cannot wholly replace (Supriyatni, 2021).



Therefore, digital transformation at BSI is not carried out in its entirety, but as a form of collaboration between intelligent systems and service humanization.

The AI-based digital service transformation at the BSI Semarang Branch illustrates a technology adaptation process sensitive to local studies and Islamic values. Although AI offers various advantages, implementation success depends on organizational readiness, customer acceptance, and AI's ability to understand users' socio-cultural phenomena. This emphasizes the importance of an inclusive and sustainable approach in the digital transformation of Islamic banking.

### 3.2. Employee Responses and Perceptions of AI Implementation at BSI Semarang Branch

Digital readiness is an essential aspect in this adaptation process (Nurfadilah et al., 2023). From observations and BSI internal training records, it can be seen that only around 62% of employees stated that they felt ready to face AI-based digital changes, while the rest were still experiencing difficulties, both technically and psychologically. Even in several focus group discussions, passive resistance was found among senior employees who felt they were not involved in the digitalization decision-making. Some stated that the changes took place too quickly and without mapping their impact on their career development. To better understand the organization's internal dynamics, it is essential to see how employees respond to implementing AI in their daily work. The following table summarizes the qualitative findings related to perceptions, digital readiness, and attitudes towards technological change among BSI Semarang Branch employees.

**Table 3.** Employee Responses to AI Implementation at BSI Semarang Branch

Employee Response Aspects	Key Findings	Additional Information
Understanding of AI	Generally understand basic AI functions	Especially on chatbots and digital verification
Digital Readiness	62% feel ready, 38% not fully ready	Younger employees are more prepared than seniors
Participation in Training	High among junior staff	Senior employees tend to be passive or less engaged
Attitudes towards Change	Varied: enthusiastic to anxious	Anxiety, especially among those with conventional skills
Perception of the Role of AI	AI is seen as a tool, not a total replacement	But there are still concerns about the reduction of human roles

Source: Qualitative data processing results, 2025.

The data in Table 3 shows that acceptance of AI is strongly influenced by age, previous exposure to the technology, and internal training support. While young employees tend to be enthusiastic and adaptive, senior employees show resistance triggered by concerns about their future roles. This emphasizes the importance of intergenerational approaches and participatory communication in an equitable and sustainable digital transformation process. The acceptance of AI cannot be separated from factors such as age, work experience, and previous exposure to digital technology. The Technology Acceptance Model (TAM) theory states that perceptions of perceived ease of use and perceived usefulness greatly determine the extent to which someone is willing to accept and use new technology (Sudarsono et al., 2020). Young employees of the BSI Semarang Branch feel that AI makes their work easier and provides a more efficient work experience, so they accept the technology more quickly. In contrast, senior employees find it challenging to understand the new system and question the added value they get, thus showing resistance.



The TOE (Technology-Organization-Environment) and TAM (Technology Acceptance Model) approaches are introduced in this research as the main analytical framework for understanding AI adoption at BSI Semarang. TOE examines technology readiness, organizational characteristics, and external environmental factors supporting digital transformation. Meanwhile, the TAM helps explain how employees' and customers' perceptions of the ease and benefits of AI influence their acceptance of this technology. The mapping of qualitative findings shows that technology readiness (OCR, NLP, predictive AI) and organizational support are high. Still, resistance from senior employees (organizational factors) and low digital literacy of elderly customers (environmental factors) are challenges. Positive perceptions of service efficiency (TAM) increase adoption, especially among young employees. The TOE-TAM framework helps interpret these dynamics holistically within the study of Shariah values.

Psychologically, this finding can also be analyzed using the organizational change theory approach, which divides the change process into three stages: unfreezing, changing, and refreezing (Michael Hughes et al., 2022). BSI has entered the changing stage, but has not fully succeeded in the “unfreezing” stage, which is the stage where the organization must create readiness and collective awareness of the importance of change. Failure to build two-way communication between management and employees, especially seniors, makes refreezing or internalizing new AI-based values less than optimal.

Support for these findings is also seen from previous research. Research conducted by Anggraeni & Muhammad (2024) at a branch of an Islamic bank in Yogyakarta showed that employee involvement in the digitalization process greatly influences the success of AI implementation. From the start, employees feel responsible for the success of the new technology. Meanwhile, a research by Haidar (2024) showed that trust and understanding of Sharia values are key factors in accepting AI technology in the Islamic banking environment. AI that is considered to be contrary to Sharia principles or is not explained ethically will be silently rejected by employees and customers.

This research reveals the need to design more contextual and inclusive training. Employees stated that training that is too technical, with difficult-to-understand language, is a barrier. They proposed an intergenerational mentoring-based approach within the organization so senior employees can learn collaboratively from juniors and not feel left behind. This approach aligns with the concept of peer-assisted learning, which has been shown to increase the effectiveness of technology learning in the organizational environment (Chong & Olesen, 2017).

The implementation of AI at the BSI Semarang Branch is a real representation of the challenges of digital transformation in value-based financial institutions. Technological changes impact not only technical aspects but also an organization's social, cultural, and spiritual aspects. Therefore, the success of AI integration is determined by the sophisticated system used and the organization's ability to manage change, build inclusive narratives, and facilitate cross-generational learning. This research confirms that the acceptance of AI technology in the Islamic banking sector is closely related to the managerial approach, organizational values, and internal communication patterns. To achieve the goal of sustainable digital transformation, BSI needs to ensure that the digitalization process takes place in a participatory, fair manner and respects differences in employee competencies as institutional wealth, not obstacles.

### *3.3. Customer Experience in Interacting with AI-Based Services at the BSI Semarang Branch*

Regarding the trust aspect, most customers stated that they still feel safe transacting using AI because BSI has a reputation as a national Islamic bank (Faha et al., 2022). However, this trust is more institutional than the technology itself. There are still some customers who are worried about the potential for misuse of personal data, especially in the biometric verification process. They feel that the security system has not been explained openly and in detail to users,



thus creating ambiguity regarding protecting personal data. To gain a deeper understanding of user perceptions of AI-based services, this research identified key elements of the customer experience. Based on interviews and field observations, the following table summarizes the crucial aspects that influence customer interactions with BSI's digital systems.

**Table 4.** Essential Elements of Customer Experience and Response at BSI Semarang Branch

Customer Experience Aspects	Key Findings	Additional Notes
Ease of Use	High among younger customers	Senior customers experience app navigation issues
Satisfaction Level	Generally satisfied with the speed and efficiency of service	However, chatbot responses are considered less contextual
Trust Level	Trust in institutions is high, and technology is moderate	Concerns raised about biometric data security
Constraints Faced	App interface not universally friendly	Need for more inclusive digital education

Source: Qualitative data processing results, 2025.

The data in Table 4 shows that while most customers find AI services helpful, there are significant differences in satisfaction levels and ease of use based on age and digital background. This emphasizes the importance of an inclusive and education-based digital strategy, so that technological transformation can be accepted equally across customer segments.

These findings underline that demographic factors, digital background, and perceptions of digital risk heavily influence user experiences with AI services. Theoretically, this can be explained through the User Experience in AI Systems framework, which emphasizes the importance of usability, trust, and transparency in human interactions with AI-based systems (Heyder et al., 2023). When users feel that the system is easy to use, transparent in decision-making, and safe, their experiences tend to be positive. The implementation of the Hasanah Assistant chatbot, for example, operates using Natural Language Processing (NLP). However, based on field findings, the chatbot has not been able to capture local language nuances or non-standard questions. In AI theory, this limitation is related to the performance of training data and NLP algorithms that have not been optimized for local socio-cultural conditions. This is in line with research by Agnihotri & Bhattacharya (2024), which shows that the effectiveness of chatbots is highly dependent on semantic accuracy and understanding of conversational context.

The trust in AI theory is relevant to explain how users build confidence not only based on the technical functions of the system, but also the ethical values and transparency of the institution in terms of security and trust (Li et al., 2021). In the case of BSI, even though Sharia principles use AI, customers still need an explicit explanation of how their data is managed and protected. This transparency is essential, especially for customers concerned about privacy and digital ethics.

This finding is supported by a previous research by Kasim et al. (2024), which examined customer satisfaction with AI services in Malaysian Islamic banks. The research showed that clarity of digital information and user education are the primary keys to increasing the acceptance of AI technology among Sharia customers. The results of this research show a similar pattern: Customers who receive adequate information about the functions and benefits of AI tend to be more satisfied and trust the services provided.

This research has found a gap between technology and cultural readiness. Although AI provides efficiency, not all customers are ready to replace human interaction with machines. Some customers stated that they still feel more comfortable talking directly to bank employees to explain Sharia contracts or products, because there are spiritual and ethical dimensions that



they think AI cannot yet convey. This indicates the importance of a hybrid approach: collaboration between technology and humans in Islamic banking services. Customer experience using AI-based services at the BSI Semarang Branch is complex and multidimensional. The success of AI-based digital transformation depends not only on the sophistication of technology but also on a humanistic approach and adaptation of local values in its implementation. Strategic interventions are needed, such as developing more inclusive interfaces, digital training for customers, and further transparency regarding the security and ethics of AI use. This research makes an essential contribution to understanding how customer experience is a key indicator in evaluating the success of AI technology in the Islamic banking sector. Furthermore, these results can be the basis for developing digital service policies that are more user-friendly, value-based, and responsive to the needs of the Muslim community in the digital era.

#### *3.4. Compliance of AI Implementation with Maqashid Sharia Values and Principles at BSI Semarang Branch*

Regarding justice and inclusivity, AI-supported digital systems can provide more equitable access to services, especially for people with limited physical access to branch offices. Customers can open accounts, apply for financing, and transact independently through the BSI Mobile application. This finding reflects the value of justice (*al-'adl*) in the principles of Maqashid Sharia, namely, providing easy services to all parties without discrimination. However, challenges arise when the AI system is not adaptive enough to the needs of users from segments of society who are less familiar with technology. The elderly or people with low levels of digital literacy still have difficulty understanding system instructions and using services independently. This raises concerns about the emergence of digital inequality, contrary to the principle of universal justice (Stephens & Sokol, 2023).

Based on transparency and protection of assets (*hifzh al-mal*), using AI technology to verify transactions and detect potential fraud has helped prevent misuse of customer funds. The abnormal transaction pattern recognition system and automatic notifications sent through the application provide a sense of security to users. BSI employees confirmed that the AI-based system can identify potential fraud faster than manual verification. However, some customers stated that they have not received sufficient information about how AI works and how their data is used, stored, and protected. In this case, the lack of transparency can weaken user trust in banking systems and institutions and harm the principle of protection of assets, which is an essential element in Maqashid Sharia (Arini et al., 2020).

Regarding life protection (*hifzh al-nafs*), AI also helps maintain user comfort and safety, especially during COVID-19 and the post-pandemic period. By minimizing physical interaction, this technology allows customers to continue receiving services without coming to the branch office. This is a positive contribution to the protection of life and public safety. However, ignoring the emotional and spiritual aspects in technological interactions can be a psychological barrier for some customers who feel more comfortable communicating directly with officers who understand Sharia studies and Islamic values, humanely. The sophistication of AI has not been able to replace the empathetic communication aspect that is the essence of Sharia services (Taufik, 2021). To provide a more systematic picture of the extent to which the implementation of AI and maqashid Sharia principles match, this study presents a qualitative mapping through Table 5. This table summarizes the evaluation of AI implementation at BSI Semarang Branch based on the principles of justice, protection of wealth, protection of life, and transparency as the main dimensions of Maqashid Sharia.



**Table 5.** Alignment of AI Implementation with Maqashid Sharia Principles at BSI Semarang Branch

Principles of Maqashid Sharia	Implementation of AI	Compliance Evaluation
Justice	Equitable, efficient, and fast access to digital services	Compliant, but there is a digital divide for vulnerable groups
Protection of Property	AI-based anti-fraud system, transaction monitoring	Quite appropriate, but needs more transparency in data management
Protection of Life	Minimal physical interaction, safe services during the pandemic	Technically appropriate, but needs an empathetic approach
Transparency	Information is still limited about how AI works	Not entirely appropriate, needs education and system accountability

Source: Qualitative data processing results, 2025.

Based on Table 5, it can be concluded that the application of AI at BSI Semarang has shown a positive trend in supporting the maqashid Sharia values. However, there is still room for improvement, especially in system transparency and digital inclusiveness, which are key to ensuring the sustainability and acceptance of Islamic value-based technology. In artificial intelligence theory, the system used at BSI utilizes the principle of supervised learning to detect abnormal activity in transactions and natural language processing (NLP) in the chatbot system. These technologies align with AI's adaptive, efficient, and continuously evolving character based on input data.

However, from Maqashid Sharia's perspective, AI's success is not only measured from the technical side. Still, it must also touch on substantial values that guarantee benefits (*maslahah*), avoid damage (*mafsadah*), and maintain the integrity of people's lives (Taufik et al., 2023). According to the maqashid theory put forward by Al-Ghazali and developed by Al-Shatibi, every technological innovation must be tested for its relevance in five main dimensions, namely protection of religion (*hifzh al-din*), soul (*hifzh al-nafs*), reason (*hifzh al-'aql*), descendants (*hifzh al-nasl*), and property (*hifzh al-mal*) (Salman, 2023). Implementing AI without considering social, spiritual, and ethical impacts is feared to bring partial benefits but create invisible harm in the long term. Therefore, AI in Islamic banks must be designed holistically, involving technology experts, scholars, and the community as end users.

Previous studies by Aysan et al. (2022) showed that the success of digitizing Islamic banking services is not only in speed or features, but in maintaining Islamic values across all service lines. Their research also emphasized the importance of clear Islamic fatwas or guidelines in implementing digital technology. The same thing was voiced by Ali et al. (2019), who stated that the use of AI in Islamic financial institutions needs to be equipped with an ethical framework based on maqashid, not just technical regulations. Support for this finding can also be seen from research by Swain & Gochhait (2022), which suggests that the success of AI in the Islamic banking sector is highly dependent on an educational and participatory approach in designing efficient and ethical systems. This further research confirms that the implementation of AI at the BSI Semarang Branch has been on a path of positive transformation. Still, it requires strengthening transparency, digital literacy, and more explicit integration of Islamic values.

This finding states that AI's suitability with maqashid Sharia is dynamic and cannot be measured statically or technically alone. This process requires continuous evaluation, broad stakeholder involvement, and the courage to develop efficient AI systems that are *maslahah*-oriented and spiritually sensitive. Islamic banks will become modern financial institutions and socio-religious institutions that maintain the mandate of technology within the framework of Islamic values.



#### 4. CONCLUSION

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This regional-based focus provides a new empirical contribution to the literature on the digital transformation of Islam. This research has systematically answered the main problem raised, namely, how the implementation of Artificial Intelligence (AI) at Bank Syariah Indonesia (BSI) Semarang Branch affects the transformation of digital services, and to what extent Sharia values and principles guide the transformation. Based on field findings, AI has been proven to have changed how Islamic banking services work through digital onboarding, interactive chatbots, and automated transactions that increase service efficiency and convenience. However, this implementation has not eliminated local cultural barriers and varying digital literacy among customers and employees. The novelty of this research lies in the phenomenological approach used to explore the perceptions and experiences of employees and customers in the regional Islamic bank environment, which has so far been less of a focus of research. This research also proves that the AI technology adopted by BSI contributes to maintaining the principles of maqashid Sharia, especially in protecting property (*hifzh al-mal*) and life (*hifzh al-nafs*). However, there are still challenges in transparency and empathetic communication, which are part of the value of justice (*al-'adl*) in Islamic-based services. AI in Islamic banking is seen as a technological tool and a strategic medium to support efficient and spiritually valuable services. The success of digital transformation is determined not only by AI's technical capabilities but also by the suitability of the values it brings to Islamic principles. Therefore, the sustainability of this transformation requires a collaborative approach between technology, local cultural values, and Sharia principles in a holistic manner. For example, implementing hybrid service models or localized AI literacy programs.

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