

THE EFFECT OF WAQF DIGITALIZATION AND NAZHIR COMPETENCIES ON THE OPTIMIZATION OF PRODUCTIVE WAQF BASED ON MAQASHID SHARIAH

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ABSTRACT

This study examines the effects of waqf digitalization and nazhir competence on productive waqf optimization based on *Maqashid al-Shariah*, with Islamic business knowledge serving as a mediating variable. The study employed a quantitative explanatory approach involving 171 nazhirs from productive waqf institutions registered with the Indonesian Waqf Board (BWI), selected through purposive sampling. Data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS software. The findings indicate that the measurement model satisfies the validity and reliability requirements and demonstrates a good overall model fit. Waqf digitalization has a positive and significant effect on Islamic business knowledge and productive waqf optimization. Nazhir competence also positively and significantly influences productive waqf optimization and Islamic business knowledge. Furthermore, Islamic business knowledge positively and significantly affects productive waqf optimization and mediates the relationship between waqf digitalization and productive waqf optimization. However, it does not mediate the relationship between nazhir competence and productive waqf optimization. These findings highlight nazhir competence as the strongest determinant of productive waqf optimization and emphasize the importance of strengthening digitalization, competency development, and practical Islamic business knowledge in waqf management.

Keywords: Waqf digitalization; Nazhir competence; Islamic business knowledge; Productive waqf optimization; *Maqashid al-Shariah*.

INTRODUCTION

Islam, as a comprehensive religion, not only regulates acts of worship but also provides guidance for all economic activities aimed at promoting the welfare (maslahah) of society. This objective is embodied in the concept of Maqashid Shariah, which encompasses the preservation of religion (hifz al-din), life (hifz al-nafs), intellect (hifz al-'aql), lineage (hifz al-nasl), and wealth (hifz al-mal) as the foundation for economic development that emphasizes prosperity and sustainability (Auda, 2020; Ascarya et al., 2021). Within the context of Islamic economics, one of the instruments with significant potential to achieve these objectives is waqf. Waqf is not only regarded as a form of continuous charity (sadaqah jariyah) whose benefits endure over time, but also as a socio-economic instrument capable of generating sustainable benefits through the productive management of endowed assets.

Indonesia possesses enormous waqf potential. According to the Indonesian Waqf Board (Badan Wakaf Indonesia), there are 440,512 waqf land plots covering approximately 57,263 hectares, while the potential for cash waqf is estimated at IDR 180 trillion annually (Badan Wakaf Indonesia, 2023; Badan Wakaf Indonesia, 2024). Despite this substantial potential, the productive utilization of waqf assets remains far from optimal. National data indicate that only around 9.27% of waqf land assets have high productive value or the potential to be developed into productive waqf (Risalah, 2025). This condition reflects a considerable gap between the vast potential of waqf assets and the level of optimization in their management, resulting in the underutilization of waqf's contribution to economic development and the achievement of Maqashid Shariah.

Productive waqf represents a paradigm of waqf management that seeks to generate sustainable economic benefits while preserving the principal value of the endowed assets. The implementation of productive waqf can be realized through property development, Sharia-compliant investments, and various business models based on muamalah contracts that create economic value for society (Aristyanto & Riduwan, 2025). Previous studies have demonstrated that professionally managed productive waqf contributes to poverty alleviation, economic equity, and improved community welfare as part of the implementation of Maqashid Shariah (Aulia & Triyawan, 2025; Ristawati & Makhrus, 2025). Therefore, optimizing productive waqf has become a strategic priority in strengthening the role of waqf as an instrument of Islamic economic development.

The optimization of productive waqf largely depends on the competency of nazhir, who are entrusted with managing, developing, supervising, and reporting waqf assets as stipulated in Law No. 41 of 2004 on Waqf. Nazhir competency extends beyond administrative capabilities to include managerial skills, entrepreneurship, governance, and strategic decision-making in the development of waqf assets. However, numerous studies indicate that nazhir competency in Indonesia continues to face significant challenges, including limited managerial literacy, inadequate understanding of Sharia business principles, and insufficient innovation in waqf management models (Imron et al., 2024; Alkaf et al., 2025). These competency limitations constitute one of the primary reasons why a substantial proportion of waqf assets have not yet been managed productively.

In addition to nazhir competency, Sharia business knowledge plays a crucial role in supporting the successful management of productive waqf. Sharia business knowledge includes an understanding of Islamic entrepreneurship principles, muamalah contracts, business feasibility analysis, risk management, and business development strategies that align with Islamic values (Sa'adah et al., 2025). Such knowledge enables nazhir to formulate more innovative management strategies, identify Sharia-compliant investment opportunities, and implement effective and accountable waqf governance (Komarudin et al., 2020; Mursalin & Adnan, 2022). Accordingly, Sharia business knowledge is viewed as a mechanism that strengthens the relationship between nazhir competency and the optimization of productive waqf.

The advancement of digital technology has also created new opportunities for waqf management in Indonesia. Waqf digitalization is no longer limited to online fundraising; it has evolved into an integrated system encompassing digital payment services, financial reporting, asset data management, and real-time dissemination of waqf information. The Indonesian Waqf Board emphasizes that digital transformation is a key prerequisite for enhancing the efficiency, transparency, and accountability of productive waqf management in the digital economy era (Badan Wakaf Indonesia, 2025). Previous research further suggests that digitalization expands the reach of waqf fundraising while improving nazhir's access to information and Sharia business knowledge that supports professional waqf management (Aristyanto & Riduwan, 2025; Nuryanti & Lubis, 2024).

Nevertheless, the implementation of waqf digitalization in Indonesia continues to encounter several challenges. The adoption of the Waqf Information System (SIWAK) has not been accompanied by adequate human resource readiness across waqf institutions, causing the digitalization process to progress relatively slowly due to limited training opportunities and low levels of digital literacy among nazhir (YEWI, 2025). Furthermore,

many waqf institutions still rely on manual administrative systems with suboptimal levels of transparency (Wakafmulia.org, 2026). The Indonesian Waqf Board has also identified the limited number of qualified nazhir, the high risk of human error, and weak entrepreneurial capabilities as major obstacles to the development of productive waqf (Badan Wakaf Indonesia, 2024). These findings indicate that the potential of digitalization and nazhir competency has not yet been fully translated into effective waqf management practices in Indonesia.

Previous studies have examined waqf digitalization, nazhir competency, and productive waqf management as separate research themes. However, studies integrating waqf digitalization and nazhir competency in explaining the optimization of productive waqf, with Sharia business knowledge serving as a mediating variable and Maqashid Shariah employed as the underlying measurement perspective, remain limited (Sa'adah et al., 2025; Shofiatin et al., 2025). Moreover, most previous research has primarily adopted qualitative or conceptual approaches, providing limited empirical evidence regarding the causal relationships among these variables within the context of waqf institutions in Indonesia.

METHODS

This study employed a quantitative approach with an explanatory research design to examine the effects of waqf digitalization and nazhir competency on the optimization of productive waqf based on the Maqashid Shariah framework, with Sharia business knowledge serving as a mediating variable. The study adopted a cross-sectional design, in which data were collected once during the research period to capture the relationships among variables at a single point in time. Data were analyzed using Structural Equation Modeling–Partial Least Squares (PLS-SEM) with SmartPLS 4.0 software, as this method is appropriate for testing models involving multiple latent constructs and mediating variables while not requiring strict multivariate normality assumptions (Hair et al., 2021; Sarstedt et al., 2022).

The study population consisted of productive waqf nazhirs in Indonesia who were registered with or affiliated with the Indonesian Waqf Board (Badan Wakaf Indonesia). The sampling technique used was purposive sampling, with respondents selected based on the following criteria: (1) serving as a nazhir or administrator of a productive waqf institution, (2) being actively involved in the management of productive waqf assets, and (3) voluntarily agreeing to complete the questionnaire. Following the recommendation of Hair et al. (2021), the minimum sample size for PLS-SEM ranges from five to ten times the number of research indicators. With a total of 20 indicators across four research constructs, this study collected data from 171 respondents, thereby exceeding the recommended minimum sample size.

The study utilized both primary and secondary data. Primary data were collected through an online questionnaire distributed via Google Forms to nazhirs of productive waqf institutions across Indonesia. The research instrument employed a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Prior to the main data collection, the questionnaire was pilot-tested with 10 respondents to ensure the clarity and comprehensibility of all measurement items. Secondary data were obtained from reports published by the Indonesian Waqf Board, official publications, and relevant national and international scholarly articles.

The research instrument was developed based on theoretical foundations and previous empirical studies and consisted of four constructs: waqf digitalization, nazhir competency, Sharia business knowledge, and productive waqf optimization based on Maqashid Shariah. Each construct was measured using five indicators adapted from previous studies, covering aspects of digital waqf management, the technical, managerial, and spiritual competencies of nazhirs, knowledge of Sharia business principles, and the dimensions of Maqashid Shariah, namely *hifz al-din*, *hifz al-nafs*, *hifz al-'aql*, *hifz al-nasl*, and *hifz al-mal*.

Data analysis was conducted through the evaluation of the outer model and the inner model. The outer model assessment examined convergent validity using outer loadings (≥ 0.70) and Average Variance Extracted (AVE) (≥ 0.50), discriminant validity using the Fornell–Larcker criterion and the Heterotrait–Monotrait Ratio (HTMT) (≤ 0.90), and construct reliability using Cronbach's Alpha and Composite Reliability (≥ 0.70). The inner model assessment included the analysis of the coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2). Hypothesis testing was performed using the bootstrapping procedure with 5,000 subsamples at a 10% significance level (one-tailed). A hypothesis was considered supported when the t-statistic was ≥ 1.282 and the p-value was ≤ 0.10 . In addition, indirect effect analysis was conducted to examine the mediating role of Sharia business knowledge within the proposed research model.

RESULT AND DISCUSSION

This section presents the empirical findings obtained from the Partial Least Squares–Structural Equation Modeling (PLS–SEM) analysis using SmartPLS 4.0 and discusses the findings in relation to previous studies and the *Maqashid al-Shariah* framework. The analysis was conducted using data collected from 171 nazhirs of productive waqf institutions in Indonesia who met the research sampling criteria. The discussion focuses on the relationships among waqf digitalization, nazhir competence, Islamic business knowledge, and productive waqf optimization.

First, Measurement Model Evaluation

The measurement model was evaluated to assess the validity and reliability of all latent constructs before testing the structural relationships. Convergent validity was examined using outer loading and Average Variance Extracted (AVE), while construct reliability was evaluated using Composite Reliability and Cronbach's Alpha. The evaluation results indicate that all constructs satisfy the recommended thresholds for validity and reliability.

Table 1. Construct Reliability and Convergent Validity

Construct	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)	Interpretation
Islamic Business Knowledge	0.890	0.901	0.919	0.693	Reliable and Valid
Waqf Digitalization	0.896	0.901	0.923	0.706	Reliable and Valid

Construct	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)	Interpretation
Nazhir Competence	0.899	0.903	0.926	0.715	Reliable and Valid
Productive Waqf Optimization Based on <i>Maqashid al-Shariah</i>	0.918	0.918	0.938	0.753	Reliable and Valid

Source: processed data SmartPLS (2026)

The coefficient of determination (R^2) was used to evaluate the explanatory power of the structural model. The results show that waqf digitalization and nazhir competence explain 24.3% of the variance in Islamic Business Knowledge (Adjusted $R^2 = 0.233$). Meanwhile, waqf digitalization, nazhir competence, and Islamic Business Knowledge jointly explain 64.5% of the variance in Productive Waqf Optimization Based on *Maqashid al-Shariah* (Adjusted $R^2 = 0.638$). These findings indicate that the proposed structural model has moderate explanatory power for Islamic Business Knowledge and substantial explanatory power for Productive Waqf Optimization.

Second, Structural Model Evaluation

The structural model evaluation was conducted to examine the explanatory power and predictive relevance of the proposed research model. The assessment included the coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2).

Table 2. Structural Model Evaluation

	<i>R-square</i>	<i>R-square adjusted</i>
Islamic Business Knowledge	0.243	0.233
Productive Waqf Optimization Based on <i>Maqashid al-Shariah</i>	0.645	0.638

Source: processed data SmartPLS (2026)

Third, Hypothesis Testing and Discussion

Hypothesis testing was conducted using the bootstrapping procedure with 5,000 subsamples and a significance level of 10% (one-tailed). The results of the hypothesis testing are presented in Table 3.

Table 3. Results of Hypothesis Testing

Hypothesis	Relationship	Path Coefficient	t-statistic	P-Value	Decision
H1	Digitalisasi Wakaf → Pengetahuan Bisnis Syariah	0,297	2,405	0,008	Supported
H2	Kompetensi Nazhir → Pengetahuan Bisnis Syariah	0,225	1,522	0,064	Supported
H3	Digitalisasi Wakaf →	0,261	2,153	0,016	Supported

Hypothesis	Relationship	Path Coefficient	t-statistic	P-Value	Decision
Optimalisasi Wakaf Produktif					
H4	Kompetensi Nazhir → Optimalisasi Wakaf Produktif	0,472	4,573	0,000	Supported
H5	Pengetahuan Bisnis Syariah → Optimalisasi Wakaf Produktif	0,187	1,950	0,026	Supported
H6	Digitalisasi Wakaf → PBS → Optimalisasi Wakaf Produktif	0,056	1,379	0,084	Supported
H7	Kompetensi Nazhir → PBS → Optimalisasi Wakaf Produktif	0,042	1,075	0,141	Not Supported

Source: *processed data SmartPLS (2026)*

The hypothesis testing results indicate that most of the proposed hypotheses are supported. Waqf digitalization has a positive and significant effect on Islamic business knowledge and productive waqf optimization. Likewise, nazhir competence has a positive and significant effect on Islamic business knowledge and productive waqf optimization. Islamic business knowledge also has a positive and significant effect on productive waqf optimization. However, the mediation analysis reveals different roles of Islamic business knowledge in the proposed model.

Waqf Digitalization and Islamic Business Knowledge

The findings indicate that waqf digitalization has a positive and significant effect on Islamic business knowledge. This result suggests that the adoption of digital technology facilitates access to information, improves transparency, and enhances the managerial knowledge of nazhirs in productive waqf institutions. Digital platforms enable nazhirs to obtain information related to waqf management, reporting systems, and Sharia-compliant financial practices more efficiently. Consequently, digitalization becomes an important instrument for improving Islamic business knowledge among nazhirs. This finding is consistent with previous studies highlighting digital transformation as an important driver of governance and innovation in waqf institutions. Digital technology not only simplifies operational processes but also strengthens institutional accountability and information dissemination within productive waqf management.

Nazhir Competence and Islamic Business Knowledge

Nazhir competence has a positive and significant effect on Islamic business knowledge. This finding indicates that nazhirs with better managerial, technical, and spiritual competencies tend to possess stronger understanding of Islamic business principles required for productive waqf development. Competence enables nazhirs to understand business feasibility, Islamic financial management, and entrepreneurial practices that support productive waqf sustainability. Therefore, competency development remains an important strategy for strengthening the quality of productive waqf management.

Waqf Digitalization and Productive Waqf Optimization

The findings demonstrate that waqf digitalization positively and significantly affects

productive waqf optimization. The implementation of digital platforms, online reporting systems, and digital fundraising services contributes to greater transparency, operational efficiency, and public trust. From the perspective of *Maqashid al-Shariah*, digitalization supports more effective distribution of waqf benefits and improves institutional performance in generating sustainable social and economic impacts.

Nazhir Competence and Productive Waqf Optimization

Nazhir competence positively and significantly influences productive waqf optimization. This finding implies that competent nazhirs are better able to manage waqf assets professionally, develop innovative productive programs, and implement accountable governance. Among all variables examined in this study, nazhir competence provides the strongest direct contribution to productive waqf optimization. This result emphasizes that improving human resource capacity is essential for maximizing productive waqf performance.

Islamic Business Knowledge and Productive Waqf Optimization

Islamic business knowledge has a positive and significant effect on productive waqf optimization. This finding confirms that knowledge of Sharia-compliant business principles, investment management, and Islamic entrepreneurship supports sustainable waqf development. Better Islamic business knowledge enables nazhirs to make strategic business decisions while maintaining compliance with Islamic principles and the objectives of *Maqashid al-Shariah*.

The Mediating Role of Islamic Business Knowledge

The mediation analysis shows that Islamic business knowledge mediates the relationship between waqf digitalization and productive waqf optimization. This finding indicates that digitalization contributes to productive waqf optimization partly through improving nazhirs' Islamic business knowledge. However, Islamic business knowledge does not mediate the relationship between nazhir competence and productive waqf optimization. This result suggests that nazhir competence has a stronger direct influence on productive waqf optimization than its indirect influence through Islamic business knowledge.

Practical and Theoretical Implications

The findings provide empirical evidence that integrating waqf digitalization, nazhir competence, and Islamic business knowledge strengthens productive waqf optimization within the *Maqashid al-Shariah* framework. Practically, the findings emphasize the importance of strengthening digital infrastructure, enhancing nazhir competency development, and providing continuous Islamic business training to improve the performance of productive waqf institutions in Indonesia.

CONCLUSION

Based on the SEM-PLS analysis, this study concludes that waqf digitalization, nazhir competency, and Sharia business knowledge significantly contribute to the optimization of productive waqf based on *Maqashid Shariah*. Waqf digitalization positively affects Sharia

business knowledge and directly enhances productive waqf optimization by improving efficiency, transparency, accountability, and accessibility in waqf management. Nazhir competency also has a positive and significant influence on both Sharia business knowledge and productive waqf optimization, indicating that competent nazhirs are better able to manage and develop waqf assets in a productive and sustainable manner. In addition, Sharia business knowledge significantly supports productive waqf optimization through a better understanding of Islamic business principles, financial management, business feasibility, and risk management. The mediation analysis shows that Sharia business knowledge mediates the relationship between waqf digitalization and productive waqf optimization, indicating that digital transformation strengthens productive waqf management both directly and indirectly through improving nazhirs' knowledge. However, Sharia business knowledge does not mediate the relationship between nazhir competency and productive waqf optimization, suggesting that nazhir competency has a direct contribution to achieving productive waqf optimization.

Overall, nazhir competency is identified as the strongest direct determinant of productive waqf optimization, while waqf digitalization contributes through both direct and indirect pathways. These findings highlight the importance of integrating digital transformation, competency development, and Sharia business education to strengthen productive waqf management in Indonesia. Future research should involve a broader range of waqf institutions across different regions of Indonesia and include additional variables, such as institutional governance, digital literacy, innovation capability, or organizational support, to provide a more comprehensive model of productive waqf optimization based on *Maqashid Shariah*.

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