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Utilization of Digital Technology in Improving Human Resources Performance in Islamic Banking

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Abstract: This study aims to explore the role of digital technology in improving human resource (HR) performance in Islamic banking. The method used is a qualitative research method with a thematic analysis approach. This study examines how the implementation of digital technology such as fintech, mobile banking, and AI contributes to improving HR competence, efficiency, and productivity in the Islamic banking sector. The results indicate that the adoption of digital technology positively impacts HR performance. However, challenges such as low digital literacy and inadequate regulations need to be overcome to maximize the benefits of this technology.

Keywords: Utilization of Digital Technology, Performance, Human Resources, Islamic Banking

Introduction

The digital transformation of Islamic banking has created challenges and opportunities for sustainable growth. (Susanti, 2024). This transformation has significantly increased the accessibility of Islamic financial services, operational efficiency, and product innovation tailored to market needs (Susanti, 2024; Trimulyana, 2024). To maintain its existence in the digital era, Islamic banks must focus on developing human resource skills, maximizing the use of technology through fintech, and ensuring proper regulation (Rosida, 2022). Implementation of digital products in Islamic banking requires careful design to align with Islamic principles and contracts (Shodiqin & Arifin, 2021). To increase the adoption of digital Islamic banking products, banks must conduct public outreach, utilize social media for promotion, and set new regulations for customers who use these products (Shodiqin & Arifin, 2021). However, addressing regulatory, financial literacy and consumer protection aspects is essential to maximize benefits for all stakeholders (Trimulyana, 2024).

Research Aim and Research Questions

Recent research highlights the importance of digital technology in improving human resource performance in Islamic banking. The implementation of digital banking has had a positive impact on customer satisfaction by increasing the reliability and responsiveness of services.(Marlina & Bimo, 2018). To adapt to technological changes, Islamic banks focus on developing employee competencies through comprehensive training programs, including retraining and skills enhancement initiatives.(Halawa et al., 2022; Omang et al., 2022). This effort aims to improve employee performance, especially in understanding and implementing standard operating procedures. The adoption of digital services by Islamic banks is seen as a key factor in improving Islamic financial literacy and inclusion.(Aripin et al., 2022). By offering competitive digital products, Islamic banks are better positioned to meet customer expectations and adapt to changing consumer behavior in the digital era, ultimately contributing to the growth of the Islamic banking sector.

The urgency of research related to the use of digital technology in improving HR performance in Islamic banking is very important in responding to the challenges faced by this sector in the digital era. Rapid digital transformation requires Islamic banking to not only improve operational efficiency and product innovation, but also ensure that human resources have adequate competence in facing technological developments. Improving HR digital skills and literacy is crucial so that Islamic banks can maximize the potential of technology such as fintech and other digital services, which play an important role in expanding Islamic financial inclusion. In addition, this study provides the insights needed to develop a more effective HR development strategy, ensuring that employees are not only able to operate new technologies, but also understand the sharia principles underlying these services. With the right regulations and adequate training infrastructure, the use of this digital technology can significantly improve HR performance, which ultimately strengthens the competitiveness of Islamic banking amidst increasingly digital global changes.

This study emphasizes the importance of utilizing digital technology in improving human resource (HR) performance in Islamic banking, especially amidst increasingly tight competition in the digital era. This study aims to explore how the application of digital technology can contribute to improving HR competency, productivity, and operational efficiency in Islamic banking in Indonesia. This study will also discuss gaps in previous research, including challenges in technology adoption, lack of digital literacy, and the need to develop regulations that support digital transformation in Islamic banking. Thus, this paper seeks to provide a foundation for a more innovative HR development strategy that is responsive to technological developments in the Islamic banking sector.

Research Results

The results of this study show the great potential of digital technology in improving the performance of human resources (HR) in Islamic banking, but there are still many challenges that need to be overcome to maximize these benefits. Analysis of various themes proves that although Islamic banking has begun to adopt technologies such as mobile banking, blockchain, and AI to improve services and operational efficiency, the integration of these technologies is often hampered by limited digital literacy among HR and inadequate infrastructure.

Based on a search in the POP application using the Google Scholar database, articles included in the search category were found as many as 100 papers according to the keywords "utilization of digital technology" and "performance" and "human resources" and "Islamic banking". Furthermore, the search results of the article were validated, namely checking the title, abstract, and keywords to review whether the article was valid according to the research objectives. In the final stage, 11 of the most relevant papers were found. These references are arranged based on themes related to the utilization of digital technology in improving the performance of human resources (HR) in Islamic banking. Researchers have categorized them as follows:

Table 1

Digital Transformation in Islamic Banking Operations and Innovation

AUTHOR	Title	Publication
(Billytona et al., 2024)	Utilization of Technology in the Development of Islamic Banking Operations	Economic and Business Management International Journal
(Haerunnisa & Sugitanata, 2024)	Exploration of Clayton Christensen's Digital Disruption Theory and Maqashid Syariah on Islamic Banking Innovation in the Digital Era	J-EBI: Journal of Islamic Business Economics
(Sofiyanto et al., 2024)	Leadership Transformation in Strategic Management in the Digital Era: A Literature Review	Masharif al-Syariah Journal: Journal of Islamic Economics and Banking

Table 2

Improving HR Performance through Digital Technology

AUTHOR	Title	Publication
(Irfandani et al., 2023)	The Influence of Digital Transformation on Employee Performance of PT. Pegadaian Jamblang Branch Office - Cirebon	Journal of Management, Business, Accounting and Economics Research
(Husna, 2020)	The Face of Economy 4.0: Digital Islamic Banking, Increasing Competitiveness and Islamic Preaching Strategy	Idarotuna: Journal of Da'wah Management Studies

Table 3

Financial Inclusion and Digital Literacy in Islamic Banking

AUTHOR	Title	Publication
(Aripin et al., 2022)	Sharia Bank Digital Services as a Driving Factor for Sharia Financial Literacy and Inclusion Index	Syarikat: Journal of the Sharia Economic Group

Table 4

Opportunities and Challenges of Digitalization in the Islamic Financial Industry

AUTHOR	Title	Publication
(Qothrunnada et al., 2023)	Digital Transformation of Islamic Financial Institutions: Opportunities and Implementation in the Industrial Era 4.0	Indonesian Journal of Humanities and Social Sciences
(Rafidah & Maharani, 2024)	Innovation and Development of Islamic Financial Products: Challenges and Prospects in the Industrial Revolution 4.0 Era	Edunomika Scientific Journal

Table 5

Digital Marketing Strategy in Islamic Banking

AUTHOR	Title	Publication
(Widyanti et al., 2022)	Online Marketing as a Service Quality Strategy in Islamic Banking	Al-Buhuts
(Sifwah et al., 2024)	Implementation of Digital Marketing as a Marketing Strategy to Increase the Competitiveness of MSMEs	MANTAP: Journal of Management Accounting, Tax and Production

Table 6

SWOT and Digital Infrastructure Development Strategy

AUTHOR	Title	Publication
(Dayini, 2024)	Economy SWOT Analysis of Public Digital Infrastructure (PDI) in Increasing Financial Inclusion in Indonesia	SAUJANA: Journal of Sharia Banking and Sharia Economics

Conclusions

The conclusion of this study shows that the use of digital technology has a crucial role in improving the performance of human resources (HR) in Islamic banking, where the adoption of technologies such as mobile banking, AI, and blockchain can improve operational efficiency and expand access to financial services. However, this study faces limitations in terms of generalizability of the results, because the main focus is only on a few Islamic banking institutions in Indonesia. Therefore, it is recommended to conduct further research that includes a wider variety of institutions and contexts to gain a more comprehensive perspective. The implications of this research indicate that the success of digital technology implementation depends not only on the existing infrastructure, but also on the competence and digital literacy of HR. This finding emphasizes the importance of investing in HR training and development to support digital transformation in the Islamic banking sector, as well as strengthening their position in the increasingly competitive financial industry.

References

Aripin, N. T., Fatwa, N., & Hannase, M. (2022). Sharia bank digital services as a driving factor for the Sharia financial inclusion and literacy index. *Syarikat: Journal of Sharia Economics, 5*(1), 29–45. https://doi.org/10.25299/syarikat.2022.vol5(1).9362

Billytona, C., Rizal, M., Khoiriyah, M., Kurnia, D., & Oktavia, R. (2024). Utilization of technology in the development of Islamic banking operations. *Economic and Business Management International Journal, 6*(2), 113–119. https://ejurnal.kampusakademik.co.id/index.php/jrme/article/view/1580

Dayini, A. (2024). Economics SWOT analysis of public digital infrastructure (IDP) in increasing financial inclusion in Indonesia. *SAUJANA: Journal of Islamic Banking and Islamic Economics, 6*(01), 60–72. https://doi.org/10.59636/saujana.v6i1.137

Haerunnisa, H., & Sugitanata, A. (2024). Exploration of Clayton Christensen's digital disruption theory and maqashid syariah on Islamic banking innovation in the digital era. *J-EBI: Journal of Islamic Business Economics, 3*(01). https://doi.org/10.57210/j-ebi.v3i01.290

Halawa, S., Ndruru, L., Silaen, N. R., & Siregar, P. N. (2022). Analysis of the role of human resource development in improving employee performance at Bank Syariah Indonesia Medan. *Global Management Journal, 11*(2), 56. https://doi.org/10.46930/global.v11i2.2481

Hidayah, N., Amanda, A., & Az Jahra, S. (2024). Examining the challenges of Islamic banks in facing developments in the digital era. *Journal of Waqf and Islamic Economic Philanthropy, 1*(3), 1–8. https://doi.org/10.47134/wiep.v1i3.295

Husna, F. (2020). The face of economy 4.0: Digital Islamic banking, increasing competitiveness and Islamic da'wah strategy. *Idarotuna: Journal of Da'wah Management Studies, 3*(1), 59. https://doi.org/10.24014/idarotuna.v3i1.11328

Irfandani, R. L., Arin, A., & Suwandi, S. (2023). The influence of digital transformation on employee performance at PT. Pegadaian Jamblang branch office – Cirebon. *Journal of Management, Business, Accounting and Economics Research, 2*(2), 48–71. https://doi.org/10.58468/jambak.v2i2.78

Kasman, P. S. P. (2021). Factors affecting the performance of Indonesian Islamic banks: Human resource empowerment, work motivation and organizational change (management literature review). *Journal of Educational Management and Social Sciences, 2*(2), 689–696. https://doi.org/10.38035/jmpis.v2i2.625

Marlina, A., & Bimo, W. A. (2018). Bank digitalization towards improving bank customer service and satisfaction. *Inovator, 7*(1), 14. https://doi.org/10.32832/inovator.v7i1.1458

Omang, N., Siradjuddin, S., & Haddade, A. W. (2022). Leadership and Islamic culture in developing human resource competence in Islamic banking amidst the competition of technological change. *Iqtisaduna Journal, 8*(2), 62–79. https://doi.org/10.24252/iqtisaduna.v8i2.31271

Qothrunnada, N. A., Iswanto, J., Fitrotus, D., Hendrati, B. G., & Subekan, S. (2023). Digital transformation of Islamic financial institutions: Opportunities and implementation in the industrial era 4.0. *Indonesian Journal of Humanities and Social Sciences, 4*(3), 741–756. https://ejournal.iai-tribakti.ac.id/index.php/IJHSS

Rafidah, A. S., & Maharani, H. N. (2024). Innovation and development of Islamic financial products: Challenges and prospects in the industrial revolution 4.0 era. *Edunomika Scientific Journal, 8*(1), 1–14. https://jurnal.stie-aas.ac.id/index.php/jie/article/view/11649

Rosida, I. N. (2022). Analysis of the potential of Islamic banking in Indonesia in maintaining existence in the digital era. *Human Falah: Journal of Islamic Economics and Business Studies, 9*(1). https://doi.org/10.30829/hf.v9i1.11454

Shodiqin, D. H., & Arifin, S. R. (2021). Optimizing the implementation of contracts in Islamic banking digital products. *At-Tasharruf: Journal of Islamic Economics and Business Studies, 3*(2), 64–71.

Siahaan, D. Z. R., & Marliyah, M. (2023). Development of Islamic banking in the digital economy era. *Ekonom: Journal of Economics and Business, 3*(1), 29–36. https://doi.org/10.58432/ekonom.v3i1.765

Sifwah, M. A., Nikhal, Z. Z., Dewi, A. P., Nurcahyani, N., & Latifah, R. N. (2024). Implementation of digital marketing as a marketing strategy to increase the competitiveness of MSMEs. *MANTAP: Journal of Management Accounting, Tax and Production, 2*(1), 109–118. https://doi.org/10.57235/mantap.v2i1.1592

Sofiyanto, M., Isa Anshori, M., & Andriani, N. (2024). Leadership transformation in strategic management in the digital era: A literature review. *Jurnal Masharif Al-Syariah: Journal of Islamic Economics and Banking, 9*(1), 290–297. https://doi.org/10.30651/jms.v9i1.21057

Susanti, K. H. (2024). Challenges and opportunities of Islamic banking in the digital era in sustainable growth. *Persya: Journal of Islamic Banking, 2*(1), 13–19. https://doi.org/10.62070/persya.v2i1.53

Trimulyana, R. A. (2024). Digital transformation in Islamic banking and its impact on Muslim society. *Persya: Journal of Islamic Banking, 2*(1), 8–12.

Widyanti, R. N., Pabbajah, M., & Darwis, M. (2022). Online marketing as a service quality strategy in Islamic banking. *Al-Buhuts, 18*, 658–672. https://journal.iaingorontalo.ac.id/index.php/ab/article/view/3115