

The Effect of Information Technology Utilization and HR Competence on Employee Work Productivity in Sharia Microfinance Institutions

Yudi Haryadi^A, Umi Narimawati^B, M. Yani Syafei^C

Abstract

This research examines the influence of information technology and human resource (HR) competency on employee productivity in Sharia microfinance institutions in West Java Province. Information technology is pivotal in enhancing operational efficiency and improving service quality, which are essential for the effective functioning of these institutions. On the other hand, HR competency, encompassing knowledge, skills, and attitudes, plays a crucial role in achieving organizational goals. By leveraging advanced information technology and cultivating a competent workforce, Sharia microfinance institutions can significantly boost their productivity and service delivery. Utilizing a quantitative approach, this research employs survey techniques and multiple regression analysis to explore the relationship between these variables. The findings reveal that both the use of information technology and HR competency have a positive and significant impact on employee productivity. Specifically, the coefficient of determination, at 41.2%, indicates that these two factors together contribute substantially to productivity improvements. This significant contribution underscores the importance of investing in technology and human resources to drive the performance and success of Sharia microfinance institutions in West Java Province.

Keywords: *Sharia Microfinance Institutions, Information Technology, HR Competency, Productivity, Financial Inclusion.*

INTRODUCTION

It is important to understand what Islamic microfinance institutions are. These financial institutions operate under the principles of Islamic Sharia, which emphasize risk sharing, fairness, and the prohibition of interest. Unlike conventional financial institutions that charge interest on loans, Islamic microfinance institutions engage in profit and loss-sharing arrangements (Aman, 2020). This ethical approach ensures that financial dealings are equitable, aligning with the moral and religious beliefs of Muslim communities. These institutions play a crucial role in providing financial services to low-income individuals and entrepreneurs in

^AUniversitas Komputer Indonesia, Bandung, Indonesia, Email: Yudi.75422001@mahasiswa.unikom.ac.id

^BUniversitas Komputer Indonesia, Bandung, Indonesia, Email: umiarie@email.unikom.ac.id

^CUniversitas Komputer Indonesia, Bandung, Indonesia, Email: yanisyafei@email.unikom.ac.id

Muslim-majority regions, who might not have access to traditional banking services (Khan & Haneef, 2022).

The regulatory framework governing Sharia-based microfinance institutions in Indonesia is outlined in Law No. 17 of 2012 concerning Cooperative Law, as well as the Financial Services Authority Regulation No. 62/POJK.05/2015, which amends POJK No. 13/POJK.05/2014 regarding the operations of microfinance institutions (Thalib et al., 2021). These regulations ensure that the institutions operate within legal boundaries, providing a structured and transparent environment for their activities. This legal foundation supports the growth and sustainability of Islamic microfinance institutions while ensuring adherence to Sharia principles in their financial operations (Heldeweg & Saintier, 2020).

Cooperative Law Number 25 of 1992, Article 1, Paragraph 1, defines a cooperative as a business entity consisting of individuals or cooperative legal entities that base their activities on cooperative principles and function as a people's economic movement based on the principle of kinship. This definition aligns with Article 33, Paragraph 1 of the 1945 Constitution, which states that the economy is structured as a joint effort based on the principle of kinship (Asmara et al., 2023). Cooperatives are uniquely suited to fulfill this noble mandate, as they operate on family principles to achieve collective welfare. By emphasizing mutual support and shared responsibility, cooperatives embody the spirit of community and solidarity, making them effective tools for economic empowerment and social cohesion (Jamaluddin et al., 2023).

Furthermore, Cooperative Law No. 25 of 1992, Chapter II, Article 3, articulates the purpose of cooperatives, stating that they aim to promote the welfare of their members in particular and society in general, while also contributing to the development of the national economy (Sacchetti & Tortia, 2021). The law emphasizes the cooperative's role in building an advanced, just, and prosperous society, grounded in the values of Pancasila and the 1945 Constitution. This legal framework underscores the cooperative's commitment to not only improving individual livelihoods but also fostering a more equitable and inclusive economic system that benefits the broader community (Li, 2021).

Islamic microfinance institutions have grown significantly in recent years as a tool to alleviate poverty, promote financial inclusion, and facilitate economic development in Muslim-majority countries. This growth reflects their great potential to empower communities through business models that adhere to Islamic principles, such as risk sharing, fairness, and the prohibition of interest (Shinkafi et al., 2020). By offering financial services that are accessible to those excluded from conventional banking systems, these institutions help to foster economic participation and improve livelihoods, thereby contributing to the overall socio-economic development of the regions they serve (Pomeroy et al., 2020).

Islamic microfinance institutions play a crucial role in supporting the economy of society in a manner that aligns with the principles of Islamic economics. However, in an ever-changing and increasingly competitive environment, these institutions face numerous challenges that cannot be ignored (Bin Idrees et al., 2024). These challenges include maintaining compliance with Sharia principles while ensuring financial sustainability, managing operational risks, and competing with conventional financial institutions. Addressing these challenges is essential for the continued growth and effectiveness of Islamic microfinance institutions in achieving their mission of economic empowerment and social justice (Mutamimah et al., 2022).

LITERATURE REVIEW

Utilization of Information Technology

The use of information technology in Islamic microfinance institutions is a crucial factor in increasing work productivity. According to Smith, information technology can create operational efficiency, speed up the transaction process, and improve service quality to customers. These benefits are particularly important in Islamic microfinance institutions, where the need for efficiency and high-quality service is paramount to meet the financial needs of underserved communities (Shaikh, 2021). By implementing advanced IT systems, these institutions can streamline their operations, reduce processing times, and enhance the overall customer experience, thereby significantly boosting productivity (Singh & Gurtu, 2022).

In this context, the introduction of information technology brings positive changes in employee work productivity. The integration of modern IT tools enables employees to perform their tasks more effectively and efficiently, reducing the time and effort required for routine operations (Duman & Akdemir, 2021). Furthermore, improved access to information and data analytics enhances decision-making processes, allowing employees to better serve their clients and meet organizational goals. As a result, the adoption of information technology not only supports the operational capabilities of Islamic microfinance institutions but also empowers employees to achieve higher levels of productivity and performance (Awan et al., 2021).

The use of information technology in Islamic microfinance institutions is a crucial factor in increasing work productivity. According to Smith, information technology can create operational efficiency, speed up the transaction process, and improve service quality to customers (Sofyani et al., 2020). These benefits are particularly important in Islamic microfinance institutions, where the need for efficiency and high-quality service is paramount to meet the financial needs of underserved communities. By implementing advanced IT systems, these institutions can streamline their operations, reduce processing times, and enhance the overall customer experience, thereby significantly boosting productivity (Valls Martínez et al., 2021).

In addition, research by Jones shows that financial institutions that adopt information technology effectively can increase their competitiveness in the market. This highlights the importance of a deep understanding of the use of information technology in Islamic microfinance institutions to comprehend its impact on employee work productivity. Furthermore, the combination of technology and artificial intelligence (AI) can lead to highly collaborative environments, as noted by Damioli et al. (2021). The integration of AI with IT systems can further enhance operational efficiencies, improve decision-making, and create innovative solutions that support both employee productivity and institutional competitiveness. Consequently, adopting these technological advancements is essential for Islamic microfinance institutions to thrive in an increasingly competitive landscape (Olan et al., 2022).

Today, information technology provides significant efficiency benefits, speeds up processes, and reduces operational costs. These aspects are particularly relevant in improving the efficiency and operational effectiveness of Islamic microfinance institutions. The use of information technology, combined with human resource (HR) competencies, is critical in this context (Alnsour, 2023). According to Prakoso, several indicators can be used to measure the effective use of technology. First, the system operation process involves various work components and methods used to command and run devices to align with the company's goals. Second, hardware, including physical components such as RAM, CPU, mouse, and keyboard, is essential for conducting input-process-output activities (Lu et al., 2020).

Third, the security and integrity of information systems are crucial, involving efforts to prevent system blocking, fraud, and data leakage, ensuring the protection of company information. Finally, the validity and completeness of data, as well as the accuracy and comprehensiveness of the information provided, are vital for decision-making and operational efficiency (Berdik et al., 2021). The human element, encompassing all parties involved in the use of information systems, plays a key role in maximizing the benefits of these technologies. By integrating robust IT systems and developing HR competencies, Islamic microfinance institutions can enhance their operational effectiveness and better serve their communities (Menant et al., 2021).

In this context, the use of information technology is increasingly recognized as a necessity for achieving significant economic development. Studies conducted in China have demonstrated that IT has a positive and substantial effect on economic growth, underscoring its critical role in driving progress. When effectively implemented, information technology not only enhances operational efficiency but also contributes significantly to overall economic advancement (Fernández-Portillo et al., 2020). However, the impact of IT is maximized when combined with the right human resources. The synergy between advanced IT systems and skilled, knowledgeable personnel can greatly

enhance a company's development. By integrating robust technological solutions with competent human capital, organizations can achieve notable improvements in productivity, efficiency, and growth, thereby significantly advancing their developmental goals and market success (Altındağ & Bilaloğlu Aktürk, 2020).

HR Competency

Previous research has demonstrated that HR competency has a very positive and significant effect on increasing employee performance and productivity, particularly in industries such as food production that are heavily reliant on labor. This finding underscores the importance of human resource competencies in enhancing organizational effectiveness (Kaur & Kaur, 2021). In the context of Islamic microfinance institutions, HR competencies are crucial for achieving a competitive advantage. According to Brown, HR competencies include the necessary knowledge, skills, and attitudes that enable employees to effectively contribute to organizational goals. When HR competencies are well-developed, employees are better equipped to handle their responsibilities and contribute to the institution's success (Piwowar-Sulej, 2021).

Furthermore, the improvement of HR competencies is expected to significantly enhance employees' ability to utilize information technology effectively. As employees become more proficient in their roles and more skilled in leveraging technological tools, their work productivity can be substantially increased (Moussa & El Arbi, 2020). This synergy between advanced HR competencies and the effective use of information technology results in a more efficient and productive work environment, supporting the broader objectives of Islamic microfinance institutions. By focusing on enhancing HR competencies, these institutions can better align their workforce with their strategic goals and achieve greater operational success (Ali et al., 2022).

The approach proposed by Green underscores the importance of continuously developing HR competencies to enhance organizational performance. By providing ongoing training and development opportunities, Islamic microfinance institutions can foster a supportive work environment that significantly improves employee performance and productivity (Ali et al., 2023). This approach not only equips employees with the necessary skills to excel in their roles but also helps create a more dynamic and effective workplace. Continuous development ensures that employees remain current with industry standards and practices, which can lead to better job performance and higher overall productivity (Muzam, 2023).

According to Banowati Talim, the implementation of quality human resources involves several key aspects. These include soft skills, which involve intuition and sensitivity in HR roles; hard skills, which encompass the technical knowledge and physical abilities of employees; social skills, which reflect an employee's ability to engage effectively in social interactions; and mental skills, which demonstrate the mental resilience and adaptability of human resources. By focusing on these

areas, Islamic microfinance institutions can enhance their HR capabilities, leading to more effective and productive employees who are well-prepared to contribute to the institution's goals and objectives (Sutil-Martin & Otamendi, 2021).

Competent and qualified human resources are essential for increasing employee productivity across various sectors, not just within financial institutions or the monetary sector. In the field of micro, small, and medium enterprises (MSMEs), skilled and knowledgeable employees can significantly enhance product quality and operational efficiency (Kuchiak & Warwas, 2021). The presence of well-trained and capable human resources ensures that MSMEs can produce superior products and services, which directly impacts their competitiveness and success in the market. This highlights the broad applicability of HR competency in driving productivity and performance improvements beyond just the financial sector (Liu et al., 2021).

Previous studies have consistently demonstrated that competent human resources, coupled with appropriate compensation, have a substantial effect on both productivity and overall company performance. When employees are well-qualified and receive fair compensation for their contributions, they are more motivated and engaged in their work (Otoo, 2020). This, in turn, leads to higher productivity levels and better overall performance outcomes for the company. These findings underscore the importance of investing in human resource development and providing adequate compensation to foster a productive and high-performing workforce (Son et al., 2020).

METHOD

The quantitative approach involves the collection and analysis of numerical data to measure the relationship between research variables. In this context, it is possible to use structured surveys to collect data from Islamic microfinance institutions participating in the research, namely Sharia cooperatives in the province of West Java. This survey may include questions on Information Technology Utilization, HR Competence, and productivity. The numerical data collected can be analyzed using statistical methods such as regression analysis to identify relationships between those variables. The method used in this study is a survey of cooperative managers using the questionnaire method (Agustianti et al., 2022).

RESULT AND DISCUSSION

In this section, we will discuss the results of the reliability tests conducted to evaluate the consistency and dependability of the measurement instruments used in the research. Reliability testing is a critical step in the research process, as it ensures that the instruments employed can consistently produce stable and reliable results over time. By assessing the reliability of measurement tools, researchers can confirm that the data collected is accurate and dependable, which enhances the credibility and validity of the research findings.

The results of the reliability tests will be presented in the form of a table, which will provide a clear and concise overview of the reliability metrics for each measurement instrument. This table will include key statistics such as reliability coefficients and internal consistency measures, offering insights into the effectiveness of the instruments in capturing the intended variables. By reviewing these results, researchers can better understand the robustness of their measurement tools and make any necessary adjustments to improve the quality of their research outcomes.

Table 1. Reliability Test Results

Variable	Reliability Coefficient	Cronbach's Alpha	Information
X1 (<i>Information Technology</i>)	8 Questions	0,743	Reliable
X2 (<i>HR Competency</i>)	8 Questions	0.850	Reliable
Y (<i>Employee Productivity</i>)	9 Questions	0,840	Reliable

Using the regression equation: $Y = 6.266 + (0.398X1) + 0.532X2 + e$. The value of the constant (a) is 6.266, which is a positive value. The positive sign indicates that the influence between the independent variable and the dependent variable is unidirectional. This shows that the satisfaction score is 6.266 if all independent variables, including Information Technology (X1) and HR Competency (X2), are valued at zero. Essentially, this constant represents the baseline level of the dependent variable when the independent variables are not affecting it. In the context of our study, this means that, theoretically, the employee performance productivity score would be 6.266 even without the influence of Information Technology and HR Competency. This baseline value is crucial as it provides a reference point for understanding the impact of the independent variables on employee performance productivity. It indicates that there is a foundational level of satisfaction that exists independently of the changes in Information Technology and HR Competency.

The regression coefficient of the Information Technology variable (X1) is 0.398. This value indicates that there is a positive correlation between Information Technology variables and Employee Performance Productivity. Specifically, this means that employee performance productivity will increase by 0.398 units for every one-unit increase in the Information Technology variable, assuming all other variables remain constant. This positive correlation suggests that improvements in Information Technology, such as more efficient systems, better software, and advanced technological tools, directly contribute to enhancing employee performance and productivity. This finding underscores the significant role that Information Technology plays in modern workplaces, particularly in facilitating more efficient work processes, reducing time wastage, and improving overall employee output.

The regression coefficient of the HR Competency variable (X2) is 0.532. This value shows that there is a positive correlation between HR Competency and Employee Performance Productivity. In practical terms, this means that the productivity of employee performance will

increase by 0.532 units for every one-unit increase in HR Competency, assuming other independent variables remain unchanged. The positive sign of the coefficient indicates that there is a unidirectional influence between the HR Competency variable and the dependent variable, Employee Performance Productivity. This implies that enhancements in HR Competency, such as improved skills, better training, and more effective HR practices, have a substantial and beneficial impact on employee performance. This relationship highlights the importance of investing in human resource development to foster a more competent and productive workforce, thereby driving overall organizational success.

Hypothesis 1 testing: It is well known that the value of Sig. for the effect of X1 on Y is 0.019, which is less than the significance threshold of 0.05. This indicates that hypothesis H1 is accepted, meaning there is a statistically significant effect of Information Technology (X1) on employee productivity. In other words, the data supports the notion that improvements or changes in Information Technology positively influence employee productivity. This finding aligns with the broader understanding that integrating advanced technological solutions in the workplace can streamline operations, enhance communication, and provide tools that facilitate better performance and efficiency. The significance value of 0.019 indicates that the probability of this result occurring by chance is very low, reinforcing the reliability of this conclusion.

Hypothesis 2 testing: It is well known that the value of Sig. for the effect of X2 on Y is 0.000, which is significantly less than the 0.05 threshold. Consequently, hypothesis H2 is accepted, confirming that HR competence (X2) has a significant impact on employee productivity. This result demonstrates that the competency levels of human resources, which include their skills, knowledge, and abilities, are crucial determinants of productivity in the workplace. A significance value of 0.000 suggests that there is virtually no probability that this finding is due to random chance, thus providing strong evidence for the positive relationship between HR competence and employee productivity. This emphasizes the importance of investing in the development and training of human resources to enhance their competencies, which in turn, boosts overall productivity and contributes to organizational success.

According to the results above, the significance value of the influence of X1 and X2 is simultaneously 0.000, which is less than the threshold value of 0.05. Consequently, the H_a Hypothesis is accepted, indicating a significant combined effect on Y. This finding demonstrates that both Information Technology (X1) and HR Competence (X2) have a measurable and significant impact on Employee Productivity. The combined significance value of 0.000 suggests a very strong relationship between these independent variables and the dependent variable, reinforcing the idea that enhancements in both technological infrastructure and human resource competencies are crucial for boosting productivity. This implies that organizations should not only

invest in advanced IT systems to streamline processes and improve operational efficiency but also focus on developing the skills, knowledge, and abilities of their workforce. The integration of robust information technology with highly competent human resources creates a synergistic effect, leading to a more productive and efficient work environment. Such investments ensure that employees are well-equipped to utilize technological tools effectively, thereby maximizing their performance and contributing significantly to the overall success of the organization.

The R Square value is 0.412 based on the previous output data, indicating that 41.2% of the variability in the dependent variable Y (Employee Productivity) is simultaneously explained by the independent variables X1 (Information Technology) and X2 (HR Competence). This significant proportion underscores the critical roles that both information technology and HR competencies play in enhancing employee productivity. However, it also highlights that 58.8% of the variability in employee productivity is influenced by other factors not included in this model. These other factors could encompass a wide range of elements, such as organizational culture, management practices, employee motivation, external economic conditions, and other individual or environmental variables that can impact productivity. The R Square value of 0.412 suggests that while Information Technology and HR Competence are important contributors, a comprehensive approach that also considers these additional factors is necessary to fully understand and enhance employee productivity. Organizations aiming to improve productivity should, therefore, adopt a multifaceted strategy that includes investing in advanced technology, enhancing HR competencies, and addressing other relevant factors to create an optimal and productive work environment.

Based on the results of quantitative analysis, several findings were discovered regarding the influence of independent variables on Employee Productivity in Sharia Microfinance Institutions. The first significant finding is that the use of information technology has a substantial impact on employee productivity. The results of the statistical test indicate a significance value (Sig.) of 0.019, which is less than the established significance level of 0.05. This low significance value implies a strong statistical relationship between information technology and employee productivity, validating the hypothesis that advancements in IT contribute positively to enhancing how employees perform their tasks.

Therefore, it can be concluded that the alternative hypothesis H1 is accepted, demonstrating that the use of information technology positively affects employee productivity. This finding underscores the importance of integrating advanced technological solutions within Sharia Microfinance Institutions. Effective use of information technology can streamline operations, improve communication, and provide employees with the tools they need to perform their duties more efficiently (Renaldo, 2022). As a result, employees can achieve higher

productivity levels, ultimately contributing to the overall success and competitiveness of the institution.

Second, HR competence also has a significant influence on employee productivity. The results of the statistical test show a significance value (Sig.) of 0.000, which is smaller than the specified significance level of 0.05. This result indicates a strong statistical relationship between HR competence and employee productivity, leading to the acceptance of the alternative hypothesis H2. Therefore, it can be concluded that HR competence positively affects employee productivity in Sharia Microfinance Institutions. This finding highlights the critical role that well-developed human resources play in driving productivity. Competent HR practices, which include comprehensive training, skills development, and effective management, equip employees with the necessary tools and knowledge to perform their duties efficiently and effectively.

To increase employee productivity, it is essential to focus on key factors such as the use of information technology and HR competence. By integrating advanced technological solutions and fostering a skilled and knowledgeable workforce, Sharia Microfinance Institutions can create an environment that supports high performance and productivity (Hernita et al., 2021). Investing in information technology ensures that employees have access to efficient systems and tools that facilitate their work while developing HR competence ensures that employees are well-prepared to utilize these tools effectively. Together, these factors create a synergistic effect that significantly enhances employee productivity and contributes to the overall success of the organization.

CONCLUSION

The results of research on the effect of the use of information technology and HR competence on employee productivity in Sharia Microfinance institutions in West Java Province reveal that the variety of Information Technology (X1) has a positive and significant impact on employee productivity in these institutions. Similarly, the HR competency variable (X2) also demonstrates a significant effect on employee productivity in Islamic microfinance institutions. These findings collectively indicate that both variables have a substantial and favorable influence on enhancing employee performance. Superior information technology provides efficient systems and tools that streamline operations, while competent human resources ensure that these tools are effectively utilized to maximize productivity. In the context of gaining a competitive advantage, Islamic microfinance institutions must invest in both advanced technology and skilled human resources. Human resources with high creativity and adaptability, especially in the VUCA (volatility, uncertainty, complexity, and ambiguity) era, are crucial for supporting the ongoing transformation toward Industry 4.0 and the impending digital era 5.0. This combination of cutting-edge technology and innovative human resource capabilities positions Islamic microfinance institutions to

navigate the complexities of the modern business environment, drive productivity, and achieve sustained growth and competitiveness.

REFERENCES

- Agustianti, R., Nussifera, L., Angelianawati, L., Meliana, I., Sidik, E. A., Nurlaila, Q., ... & Hardika, I. R. (2022). *Metode Penelitian Kuantitatif Dan Kualitatif*. Tohar Media.
- Ali, M., Malik, M., Yaqub, M. Z., Jabbour, C. J. C., de Sousa Jabbour, A. B. L., & Latan, H. (2023). Green means long life-green competencies for corporate sustainability performance: A moderated mediation model of green organizational culture and top management support. *Journal of Cleaner Production*, 427, 139174.
- Ali, M., Puah, C. H., Ali, A., Raza, S. A., & Ayob, N. (2022). Green intellectual capital, green HRM and green social identity toward sustainable environment: a new integrated framework for Islamic banks. *International Journal of Manpower*, 43(3), 614-638.
- Alnsour, I. (2023). The effect of financial technology on Islamic banks performance in Jordan: Panel data analysis. *International Journal of Data and Network Science*, 7(4), 1515-1524.
- Altındağ, E., & Bilaloğlu Aktürk, H. (2020). The impact of new generation management approaches on the firm performance: The Moderating Role of Strategic Human Resource Management Applications. *Sage Open*, 10(3), 2158244020948845.
- Aman, A. (2020). Islamic marketing ethics for Islamic financial institutions. *International Journal of Ethics and Systems*, 36(1), 1-11.
- Asmara, T. T. P., Murwadji, T., Kartikasari, & Afriana, A. (2023). Corporate social responsibility and cooperatives business sustainability in Indonesia: Legal perspective. *Sustainability*, 15(7), 5957.
- Awan, U., Shamim, S., Khan, Z., Zia, N. U., Shariq, S. M., & Khan, M. N. (2021). Big data analytics capability and decision-making: The role of data-driven insight on circular economy performance. *Technological Forecasting and Social Change*, 168, 120766.
- Berdik, D., Otoum, S., Schmidt, N., Porter, D., & Jararweh, Y. (2021). A survey on blockchain for information systems management and security. *Information Processing & Management*, 58(1), 102397.
- Bin Idrees, S., Alhabshi, S. M., Sharofiddin, A., & Othman, A. H. A. (2024). Framing external environmental dimensions as institutional constraints on adopting Islamic financial transactions: empirical evidence from: Libyan commercial banks. *International Journal of Ethics and Systems*.
- Damioli, G., Van Roy, V., & Vertesy, D. (2021). The impact of artificial intelligence on labor productivity. *Eurasian Business Review*, 11, 1-25.

- Duman, M. C., & Akdemir, B. (2021). A study to determine the effects of industry 4.0 technology components on organizational performance. *Technological forecasting and social change*, 167, 120615.
- Fernández-Portillo, A., Almodóvar-González, M., & Hernández-Mogollón, R. (2020). Impact of ICT development on economic growth. A study of OECD European union countries. *Technology in Society*, 63, 101420.
- Heldeweg, M. A., & Saintier, S. (2020). Renewable energy communities as 'socio-legal institutions': A normative frame for energy decentralization?. *Renewable and Sustainable Energy Reviews*, 119, 109518.
- Hernita, H., Surya, B., Perwira, I., Abubakar, H., & Idris, M. (2021). Economic business sustainability and strengthening human resource capacity based on increasing the productivity of small and medium enterprises (SMES) in Makassar city, Indonesia. *Sustainability*, 13(6), 3177.
- Jamaluddin, F., Saleh, N. M., Abdullah, A., Hassan, M. S., Hamzah, N., Jaffar, R., ... & Embong, Z. (2023). Cooperative governance and cooperative performance: A systematic literature review. *SAGE Open*, 13(3), 21582440231192944.
- Kaur, S., & Kaur, G. (2021). Understanding the impact of human resource practices on employee competencies: evidence from Indian food processing industry. *Employee Relations: The International Journal*, 43(5), 957-978.
- Khan, F., & Haneef, M. A. (2022). Religious responses to sustainable development goals: An islamic perspective. *Journal of Islamic Monetary Economics and Finance*, 8(2), 161-180.
- Kuchciak, I., & Warwas, I. (2021). Designing a roadmap for human resource management in the banking 4.0. *Journal of Risk and Financial Management*, 14(12), 615.
- Li, T. M. (2021). Commons, co-ops, and corporations: assembling Indonesia's twenty-first century land reform. *The Journal of Peasant Studies*, 48(3), 613-639.
- Liu, J. M., Borazon, E. Q., & Santamaria, J. G. O. (2021). Antecedents of quality performance in the Philippine micro, small, and medium hospitality sector. *Asia Pacific Business Review*, 27(4), 559-582.
- Lu, Y., Xu, X., & Wang, L. (2020). Smart manufacturing process and system automation—a critical review of the standards and envisioned scenarios. *Journal of Manufacturing Systems*, 56, 312-325.
- Menant, L., Gilibert, D., & Sauvezon, C. (2021). The application of acceptance models to human resource information systems: a literature review. *Frontiers in Psychology*, 12, 659421.
- Moussa, N. B., & El Arbi, R. (2020). The impact of Human Resources Information Systems on individual innovation capability in Tunisian companies: The moderating role of affective

- commitment. *European Research on Management and Business Economics*, 26(1), 18-25.
- Mutamimah, M., Zaenudin, Z., & Bin Mislan Cokrohadasumarto, W. (2022). Risk management practices of Islamic microfinance institutions to improve their financial performance and sustainability: a study on Baitut Tamwil Muhammadiyah, Indonesia. *Qualitative Research in Financial Markets*, 14(5), 679-696.
- Muzam, J. (2023). The challenges of modern economy on the competencies of knowledge workers. *Journal of the Knowledge Economy*, 14(2), 1635-1671.
- Olan, F., Arakpogun, E. O., Suklan, J., Nakpodia, F., Damij, N., & Jayawickrama, U. (2022). Artificial intelligence and knowledge sharing: Contributing factors to organizational performance. *Journal of Business Research*, 145, 605-615.
- Otoo, F. N. K. (2020). Measuring the impact of human resource management (HRM) practices on pharmaceutical industry's effectiveness: the mediating role of employee competencies. *Employee Relations: The International Journal*, 42(6), 1353-1380.
- Piowar-Sulej, K. (2021). Human resources development as an element of sustainable HRM—with the focus on production engineers. *Journal of cleaner production*, 278, 124008.
- Pomeroy, R., Arango, C., Lomboy, C. G., & Box, S. (2020). Financial inclusion to build economic resilience in small-scale fisheries. *Marine policy*, 118, 103982.
- Renaldo, N. (2022). Benefits and Challenges of Technology and Information Systems on Performance. *Journal of Applied Business and Technology*, 3(3), 302-305.
- Sacchetti, S., & Tortia, E. C. (2021). Governing cooperatives in the context of individual motives. *International Journal of Social Economics*, 48(2), 181-203.
- Shaikh, S. A. (2021). Using Fintech in scaling up Islamic microfinance. *Journal of Islamic Accounting and Business Research*, 12(2), 186-203.
- Shinkafi, A. A., Yahaya, S., & Sani, T. A. (2020). Realising financial inclusion in Islamic finance. *Journal of Islamic Marketing*, 11(1), 143-160.
- Singh, R. K., & Gurtu, A. (2022). Embracing advanced manufacturing technologies for performance improvement: an empirical study. *Benchmarking: An International Journal*, 29(6), 1979-1998.
- Sofyani, H., Riyadh, H. A., & Fahlevi, H. (2020). Improving service quality, accountability and transparency of local government: The intervening role of information technology governance. *Cogent Business & Management*, 7(1), 1735690.
- Son, J., Park, O., Bae, J., & Ok, C. (2020). Double-edged effect of talent management on organizational performance: the moderating role

- of HRM investments. *The international journal of human resource management*, 31(17), 2188-2216.
- Sutil-Martín, D. L., & Otamendi, F. J. (2021). Soft skills training program based on serious games. *Sustainability*, 13(15), 8582.
- Thalib, P., Hajati, S., Kurniawan, F., & Aldiansyah, K. (2021). The urgency regulation of business activities on Islamic microfinance institution according law no. 1 year 2013 of microfinance institutions. *Arena Hukum*, 14(2), 207-221.
- Valls Martínez, M. D. C., Martín-Cervantes, P. A., & Pena Rodríguez, S. (2021). Ethical banking and poverty alleviation banking: The two sides of the same solidary coin. *Sustainability*, 13(21), 11977.