

Green banking practices and HRM in enhancing innovation capability: A knowledge management perspective on sharia banking performance

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Abstract

This study investigates the influence of green banking practices and human resource management (HRM) on innovation capability and examines the mediating role of knowledge management in enhancing Sharia banking performance. Using a quantitative approach with Structural Equation Modeling (SEM) based on Partial Least Squares (PLS), data were collected through questionnaires distributed to employees using a saturated sampling technique. The findings reveal that HRM significantly affects green banking, innovation capability, and knowledge management. However, innovation capability does not significantly mediate the relationship between green banking and performance, nor between HRM and performance. In contrast, knowledge management significantly mediates the effect of HRM on Sharia banking performance. The results highlight the critical role of HRM and knowledge management in driving organizational performance, while emphasizing the need for more effective implementation of green banking and innovation strategies to realize their full potential impact.

Keywords

green banking; human resource management; innovation capability; knowledge management; sharia banking performance

INTRODUCTION

The Islamic banking industry in Indonesia has experienced substantial growth in recent years, aligned with increasing public awareness of ethical finance and sustainable economic practices. Amid global efforts to promote environmentally responsible development, the concept of a green economy has emerged as a strategic framework for long-term sustainability. Within this context, the implementation of green banking practices becomes essential, as it integrates environmental considerations into financial services and operations. In addition, effective human resource management and knowledge management are recognized as critical drivers in enhancing innovation capability and overall organizational performance in Islamic banking. This study focuses on examining these

dynamics within a leading Islamic banking institution formed through the merger of several major banks in Indonesia (Sehen Issa et al., 2022; Din et al., 2024; Niazi et al., 2023).

Green banking not only focuses on environmentally friendly financial products, but also includes the implementation of efficient and environmentally friendly operational practices, including strategic human resource (HR) management (Jelli & Dura, 2023). Green banking practices are believed to contribute positively to enhancing bank innovation and competitiveness, especially in the context of Islamic banking. This is because the adoption of environmentally friendly principles requires banks to redesign products, services, and operational processes that align with sustainability goals. Such transformation encourages continuous innovation in financial

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instruments, risk management strategies, and customer engagement approaches, which in turn fosters a more adaptive and forward-looking organizational culture (Amuda & Alamri, 2024).

In line with that, according to (Awan et al., 2023) the role of human resource management (HRM) in knowledge management in the Islamic banking environment is also one of the key aspects that can support increased innovation capabilities. Human resources who are able to manage knowledge well will be a strategic asset in creating innovative banking products and services that are relevant to customer needs and in accordance with sharia principles (Putri et al., 2024; Setyaningrum & Muafi, 2023; Marditama et al., 2024).

The integration of green banking practices with effective human resource management (HRM) is increasingly recognized as a strategic approach to enhancing innovation and achieving sustainable performance in Islamic banking. However, previous studies have often examined these elements in isolation, without fully exploring their interconnections particularly how HRM can facilitate green initiatives and how knowledge management mediates these processes to influence innovation capability and organizational outcomes. This gap highlights the need for a more holistic analysis that incorporates green banking, HRM, innovation capability, and knowledge management in a unified model. Addressing this, the present study focuses on the case of Bank Syariah Indonesia (BSI) Central Java Regional Office, which faces the challenge of synergizing these components to improve performance and drive sustainable innovation.

Knowledge management is becoming increasingly relevant in efforts to improve innovation capabilities, especially in the digital era that demands rapid adaptation to technological changes and market preferences (Uddin et al., 2023). Knowledge management according to (Ahmad et al., 2023) allows banks to utilize knowledge spread across the organization to create innovative solutions that are not only oriented towards profit, but also

towards environmental sustainability and community welfare (Susilo & Mayowan, 2024).

BSI in Central Java, as part of the financial industry committed to sharia, has a great opportunity to develop this practice through synergy between green banking and HRM (Mubarak et al., 2024). From a human resource management (HRM) perspective, data shows that there are problems in the development and retention of employees who are competent in innovation and sustainability. Based on the 2023 human resources report, the retention rate of employees who have special skills in green banking is only 60%, with a fairly high turnover rate in strategic positions related to product innovation. This is due to the lack of incentives for employees who have competencies in sustainability, as well as limited career opportunities in professional development within the organization (Misbakul Munir & Saputra, 2022; Migdadi, 2022).

Furthermore, data obtained from BSI's Knowledge Management System (KMS) shows that employee participation in sharing innovative knowledge is very low, with only 30% of total employees actively using the platform (Liu et al., 2020; Nguyen et al., 2016). Of the total 10,000 innovation idea entries submitted through KMS over the past two years, only 5% were successfully implemented into new products or services. This low level of implementation reflects the existence of obstacles in the process of selecting and executing innovative ideas, which often stop at an early stage due to lack of management support and adequate resources.

In terms of finance, although BSI is trying to increase the contribution of green banking products to total revenue, data shows that BSI's green financial product market share is still very small. In 2022, only 18% of the total financing portfolio was allocated to sustainability-based projects, with a total value of IDR 1.5 trillion from a target of IDR 3 trillion. Meanwhile, financing for non-green projects still dominates with a percentage of 82%, which shows that Islamic banking still prioritizes the traditional sector over environmentally-based innovation.

However, the challenges faced in implementing knowledge management are not

simple. BSI Central Java Regional Office needs to overcome various obstacles, such as organizational culture that does not fully support innovation, technological limitations in knowledge management, and the need to increase HR capacity in understanding the importance of sustainability and innovation. In this context, HRM plays an important role in facilitating effective training, development, and knowledge transfer at all levels of the organization (Alsakarneh et al., 2024; Fawehinmi et al., 2020; Dakhan et al., 2020). In addition, there is an urgent need to strengthen collaboration between various internal and external stakeholders to support more innovative green banking practices (Amuda & Alamri, 2024).

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Resource-based view

The Resource-Based View (RBV) is a strategic management theory that posits an organization's sustainable competitive advantage is primarily derived from its internal resources and capabilities, rather than from external market conditions (Grant, 1991). These resources must meet four essential criteria valuable, rare, inimitable, and non-substitutable (VRIN) to provide a firm with a competitive edge (Wemerfelt, 1994). This theory provides a useful lens for understanding how internal capabilities such as human resource management (HRM), innovation capability, and knowledge management contribute to organizational performance, particularly in dynamic and competitive sectors such as Islamic banking (Pala et al., 2024; Albaity & Rahman, 2019).

Within the RBV framework, human resource management is considered a strategic asset that plays a vital role in shaping organizational behavior and culture. Skilled, motivated, and committed employees are difficult to replicate, and their collective competence forms a foundation for innovation and adaptive capacity (Zuñiga-Collazos et al., 2020). In the context of green banking, HRM is instrumental in driving environmental initiatives by equipping

employees with the necessary awareness, skills, and values to integrate sustainability into daily banking operations.

Innovation capability, another key construct in RBV, is viewed as a dynamic capability that enables organizations to respond to environmental changes and customer demands through the development of new products, processes, or services (Roxas & Chadee, 2016; Nurcahyo, Anis, et al., 2024). Innovation is not only driven by external pressures but is cultivated internally through the organization's ability to leverage its resources effectively. When green banking is pursued not merely as a compliance measure, but as a platform for innovation, it has the potential to enhance the bank's reputation, attract environmentally conscious customers, and improve overall competitiveness (Mubarak et al., 2024).

In this study, the RBV is applied as the grand theory to explain the relationships among green banking practices, HRM, innovation capability, and knowledge management in influencing Sharia banking performance.

Green banking

Green banking is a concept that is developing in the banking world that prioritizes the principle of environmental sustainability in the operations and products offered by banks (Bouteraa et al., 2020; Nawangsari & Sutawijaya, 2019; Din et al., 2024). According to the International Finance Corporation (IFC), green banking not only includes reducing negative impacts on the environment but also includes proactive efforts to support projects that contribute to environmental conservation (Ahmad et al., 2023).

In its phenomenon, banks are expected to integrate environmental considerations into every aspect of decision making, from financing to daily operations (Amuda & Alamri, 2024). Green banking theory emphasizes the importance of collaboration between financial institutions, governments, and the private sector to create a financial system that supports sustainable development. This is in line with the United Nations Sustainable

Development Goals (SDGs), which target the achievement of inclusive and sustainable economic growth, as well as environmental protection (Putri et al., 2024). By implementing green banking practices, banks not only act as financial institutions, but also as responsible agents of social change, supporting investment in renewable energy, energy efficiency, and environmentally friendly technologies (Chen et al., 2022).

Human resource management

Human Resource Management (HRM) is a discipline that focuses on managing the workforce in an organization to achieve strategic and operational goals (Rimi, 2016). HRM covers a variety of functions, from recruitment, selection, training, development, to performance management and employee relations. According to Gary Dessler, an HRM expert, HRM is the process of planning, attracting, developing, and retaining individuals who have the right qualifications to help an organization achieve its goals (Henry Simamora, 2012). HRM theory emphasizes that human resources are the most important asset in an organization. Therefore, effective and efficient management of HR is the key to increasing productivity and competitiveness (Mangkunegara, 2015).

HRM also plays a role in creating a positive organizational culture, where employees feel valued, motivated, and involved in the decision-making process (Schulers, 2011). In addition, by adopting an employee-based approach, organizations can build innovation capabilities, which are essential to adapt to market changes and new challenges (El Badawy et al., 2018). In this context, HRM focuses not only on administrative management, but also on developing strategies that support the growth and sustainability of the organization as a whole. Overall, HRM plays a key role in creating synergy between organizational goals and individual employee needs (Bouteraa et al., 2020; Niazi et al., 2023). By prioritizing the development of employee skills and abilities, HRM can help organizations face evolving

challenges and ensure that they remain relevant in a competitive market.

Innovation capability

Innovation capability refers to an organization's ability to generate new ideas and implement them in the form of better products, services, or processes (Kalmuk, 2016). This concept encompasses various aspects, including creativity, adaptability, and management of the resources needed to drive innovation (Tamer Cavusgil et al., 2003). According to Tidd and Bessant, innovation capability is the result of a combination of innovative culture, structured processes, and involvement of all levels in the organization. Organizations that have high innovation capabilities can more easily adapt to market changes, new technologies, and customer needs, thus being able to maintain their competitiveness.

Innovation capability theory also emphasizes the importance of knowledge management and collaboration in creating an environment that supports innovation (Bason, 2010). Through effective knowledge management, organizations can leverage existing experience and information to create innovative solutions. Collaboration between teams and departments also plays an important role, as diverse perspectives can generate new, more creative ideas (Sayadi; & Farzan, 2015). In this context, support from top management is essential to creating a culture that values innovation, provides freedom to experiment, and allows failure as part of the learning process.

Furthermore, in the ever-evolving digital era, innovation capabilities are becoming increasingly important. New technologies such as big data, artificial intelligence, and the Internet of Things (IoT) provide opportunities for organizations to create more sophisticated and efficient products and services (Cabrita, 2009). Organizations that are able to integrate these technologies into their innovation processes can respond more quickly to market needs and create sustainable competitive advantages (Mubarak et al., 2024).

Knowledge management

Knowledge Management is a systematic process involving the collection, organization, storage, and dissemination of knowledge within an organization to improve efficiency and innovation (Voss, 2003) . The main purpose of knowledge management is to ensure that relevant information and valuable experiences are accessible to individuals or teams across the organization to support better decision making and create competitive advantage (Tamer Cavusgil et al., 2003) . According to Nonaka and Takeuchi, knowledge management focuses on the transformation of tacit knowledge (implicit knowledge held by individuals, such as personal skills or experiences) into explicit knowledge (documented and shareable knowledge).

Knowledge management theory is based on the understanding that knowledge is a very important asset for organizations. There are two main forms of knowledge: tacit knowledge, which is usually intuitive and difficult to formalize, and explicit knowledge, which is easier to document, disseminate, and use by others (Suppiah & Sandhu, 2011). Organizations that are successful in knowledge management are able to maximize the use of both types of knowledge by creating processes that support continuous learning, collaboration between employees, and documentation of relevant knowledge (Juwaheer, 2019) .

In the context of modern business, knowledge management involves the use of technologies such as knowledge management systems (KMS) to manage, store, and disseminate information. These technologies enable organizations to quickly access the information they need, reduce redundancy, and improve operational efficiency (Ali & Atan, 2020) . In addition to technology, a culture of knowledge sharing within an organization is critical to driving innovation. Organizations that promote openness and collaboration among employees are typically better able to harness the full potential of their knowledge (Sarfraz et al., 2023) .

Sharia banking performance

Sharia Banking Performance refers to the operational and financial performance of Islamic banking institutions that operate in accordance with the principles of Islamic law (sharia) (Suseno & Muthohar, 2018) . Islamic banking has different characteristics from conventional banking, because it prioritizes compliance with sharia principles such as the prohibition of usury (interest), speculation, and investment in sectors that are considered haram according to Islamic law (Ahyani, 2021). Therefore, the performance of Islamic banking is not only measured based on financial performance, but also includes aspects of compliance with sharia and social responsibility in accordance with Islamic principles (Jawaid, 2021) .

According to the Maqashid al-Shariah theory, the goal of Islamic banking is to achieve fair social and economic welfare, which includes aspects of the welfare of the people, fairness in transactions, and equitable distribution of wealth (Firdaus, 2013) . The performance of Islamic banking is usually measured through several main indicators such as return on assets (ROA), return on equity (ROE), non-performing financing (NPF), and operational efficiency, which are also used in conventional banking (Mawardi, 2010). However, Islamic banking also measures its performance through sharia compliance indicators, which indicate the extent to which bank products and services comply with sharia rules set by the sharia supervisory board.

Another factor that influences the performance of Islamic banking is the application of the principles of mudharabah, musharakah, murabahah, and other sharia-based financing schemes (Hadjri, 2015) . The success of Islamic banks in managing risk through these products greatly affects their financial performance (Sehen Issa et al., 2022) . In addition, the performance of Islamic banks is also measured based on their ability to support sustainable and inclusive economic development, as well as their involvement in activities that contribute to corporate social

responsibility (CSR) in line with sharia principles (Yasa et al., 2017) .

Green banking and innovation capability

Green banking according to (Rimi, 2016) is a banking concept that integrates environmental sustainability principles into banking operations and services. The aim is to reduce the negative impact of banking activities on the environment by implementing environmentally friendly practices, both in terms of operations and in the products and services offered to customers (Aisyah, 2018) . This includes initiatives such as efficient energy use, carbon emission reduction, and digitization of services to reduce the use of paper and other resources. In addition, green banking also encourages financing of projects that support environmental conservation, such as renewable energy, energy efficiency, and green infrastructure (Bouteraa et al., 2020).

By implementing green banking principles, banks not only strive to operate more efficiently and environmentally friendly, but also play an active role in supporting sustainable development (Amuda & Alamri, 2024) . This is in line with the global trend where financial institutions are encouraged to play a bigger role in addressing climate change issues by providing financing that supports the green economy (Majeed, 2022) . For Islamic banking, the implementation of green banking can also be aligned with sharia principles that emphasize social responsibility, justice, and the welfare of humanity and the environment (Anjum et al., 2022) .

Innovation capability or innovation capability according to (Herman, 2018) refers to the ability of an organization to develop, adapt, and implement new ideas that can produce better products, services, or processes. In the context of banking, innovation capability includes the bank's ability to respond to changing market and technological needs by creating more efficient, secure, and sustainable financial solutions (Sajeda Alma'abreh et al., 2023) .

This capability depends not only on technology, but also on human resource management, knowledge management, and an

organizational culture that encourages creativity and collaboration (Santoso, 2022) . With strong innovation capabilities, banks are able to maintain their competitive advantage amidst increasingly fierce industrial competition, while meeting the demands for more modern and environmentally friendly services, such as in the implementation of *green banking*. (Bouteraa et al., 2020) .

H1: Green Banking has a positive and significant effect on Innovation Capability

Human resource management and green banking

Human Resource Management (HRM) is a set of practices and policies designed to manage, develop, and optimize the potential of employees in an organization (Schulers, 2011). The main goal of HRM is to ensure that the company has a qualified, motivated workforce, and able to contribute maximally to achieving organizational goals (Rehman et al., 2021). HRM includes various functions, such as recruitment, selection, training and development, performance management, compensation, and employee relationship management (Cabello, 2011) . Human Resource Management (HRM) plays a pivotal role in fostering organizational transformation, especially in aligning operational goals with sustainability objectives such as Green Banking (Niazi et al., 2023). Through strategic HRM practices such as recruitment of environmentally conscious employees, sustainability-focused training, and performance-based incentives organizations can cultivate a workforce that is both aware of and committed to green principles (Tirno et al., 2023; Herder, 2024). In the context of Islamic banking, where ethical values are central, integrating green awareness into HR policies strengthens the alignment between religious principles and environmental responsibility.

H2: HRM has a positive and significant effect on Green Banking

Human resource management and innovation capability

In the context of green banking, HRM according to (Anwar & Jati, 2023) is responsible for ensuring that employees have a deep understanding of the importance of environmental sustainability as well as the skills needed to support green banking practices. HRM can design training and development programs that focus on green initiatives, such as energy efficiency, waste management, and the use of digital technology to reduce environmental impacts (Amuda & Alamri, 2024; Jermisittiparsert, 2021; Tirno et al., 2023). On the other hand, HRM plays a role in enhancing innovation capability by creating a work environment that encourages creativity, collaboration, and effective knowledge management (Alsakarneh et al., 2024). By adopting HRM strategies that support innovation, such as digital skills development, leadership programs, and providing incentives for innovation, employees can be encouraged to contribute to creating new products and services that are relevant to market needs and in accordance with green banking principles (Awan et al., 2023).

H3: HRM has a positive and significant effect on Innovation Capability

Human resource management and knowledge management

HRM plays a role in managing employee potential and competence so that they are able to manage and utilize knowledge effectively (Nurcahyo, 2024). In knowledge management, HRM ensures that knowledge possessed by individuals or groups within the organization can be transferred, stored, and accessed by all employees, thereby encouraging innovation and productivity (Uddin et al., 2023). This process can be facilitated through training, competency development, and the creation of a collaborative knowledge sharing system. With good HRM support, Islamic banks are able to utilize knowledge related to Islamic financial products, regulations, and market

trends to improve services and competitiveness (Salman & Hamid, 2018). Human Resource Management (HRM) is a critical enabler of effective Knowledge Management (KM) within organizations. By strategically managing human capital, HRM ensures that the right people are recruited, trained, and motivated to create, share, and apply knowledge (Liu et al., 2020). HR policies that emphasize continuous learning, mentoring, and knowledge-sharing culture serve as the backbone for successful KM implementation (Ramles & Br Perangin Angin, 2024). Especially in knowledge-intensive industries like banking, HRM must proactively facilitate an environment where tacit and explicit knowledge can be effectively captured and utilized.

In this context, HRM influences Knowledge Management through the development of systems and structures that support learning and collaboration (Al Taweel & Al-Hawary, 2021). Initiatives such as team-based projects, cross-functional training, internal workshops, and reward systems for knowledge sharing all contribute to building a knowledge-centric organization.

H4: HRM has a positive and significant effect on Knowledge Management.

Human resource management and sharia banking performance

In sharia banking performance, HRM also plays a role in creating human resources that are able to implement sharia principles well. HRM needs to ensure that employees understand the sharia aspects in every product and service offered, and have integrity and commitment to sharia values (Iryani & SF, 2021). Effective human resource management can improve the quality of service, operational efficiency, and innovation capabilities of sharia banks. In addition, HRM can contribute to strengthening a work ethic that is in accordance with the principles of justice and social responsibility which are the core of sharia banking, so that it ultimately encourages an increase in the bank's financial performance and overall reputation

(Ahmmed, 2018). In Sharia banking, performance is not only measured by profitability but also by compliance with Islamic ethics, customer trust, and social responsibility (Lubis et al., 2023). Therefore, HRM must go beyond traditional roles and actively cultivate a workforce that is knowledgeable in Sharia principles, customer-oriented, and committed to ethical banking practices (Nurcahyo, Ferdianto, Kusumawati, 2024).

Effective HRM in Sharia banking involves tailored strategies such as specialized training in Islamic finance, leadership development rooted in Islamic values, and performance appraisal systems that reward both competence and integrity. When HRM is strategically aligned with the objectives of Sharia banking, it leads to increased employee motivation, service quality, and operational efficiency. These outcomes directly contribute to improved financial performance, customer satisfaction, and public trust in Islamic banking institutions (Masruki et al., 2020).

H5: HRM has a positive and significant effect on Sharia Banking Performance

Innovation capability and knowledge management

Innovation capability plays an important role in improving sharia banking performance. Innovation capability according to (Kalmuk, 2016) reflects the ability of sharia banks to generate new ideas and adapt them into products or services that meet customer needs while still complying with sharia principles (Haryadi et al., 2024; Ali, 2021). Sharia banks that have high innovation capabilities will find it easier to adapt to changes in regulations, technology, and consumer preferences. This allows banks to create unique and competitive financial products, such as sharia-based financing that supports sustainability or halal investment products, thereby increasing market attractiveness and performance (Suseno & Muthohar, 2018).

Meanwhile, knowledge management according to (Sayadi; & Farzan, 2015) plays a

key role in facilitating innovation and improving the performance of Islamic banking. Effective knowledge management ensures that information, experience, and insights held by employees can be accessed and used by the entire organization (Julia & Kassim, 2020). Through knowledge management, Islamic banks can utilize knowledge of sharia regulations, risk management, and market trends to create more innovative solutions that are in line with customer needs (Nart et al., 2024). In addition, knowledge management encourages internal collaboration between various departments, which in turn accelerates the innovation process and improves operational efficiency (Voss, 2003).

With synergy between innovation capabilities and knowledge management, the performance of Islamic banking can be significantly improved. (Alma et al., 2024). Islamic banks that are able to manage knowledge effectively and encourage innovation will be more competitive in the market, increase customer loyalty, and maintain sustainable financial growth in accordance with sharia principles (Haque et al., 2024).

H6: Innovation Capability has a positive effect on Sharia Banking Performance

Knowledge management and sharia banking performance

Knowledge Management (KM) has become a vital strategic tool in enhancing Sharia banking performance, especially in today's dynamic and competitive financial landscape (Liu et al., 2020). In Islamic banking, performance is not solely defined by financial metrics, but also by adherence to Sharia principles, customer trust, and the institution's ability to offer innovative, ethical financial solutions (Ganguly et al., 2019). Through effective KM, banks can systematically capture, store, and disseminate both tacit and explicit knowledge related to Sharia compliance, risk management, and Islamic financial products.

Table 1.
Operational definition and indicators

Variables	Indicator
Green Banking Green banking is a concept that is developing in the banking world that prioritizes the principle of environmental sustainability in the operations and products offered by banks (Bouteraa et al., 2020) .	- Environmentally Friendly Resource Management - Green Financial Products Development - Compliance with Environmental Regulations - Commitment to Environmentally Based Corporate Social Responsibility (CSR) (Julia & Kassim, 2020)
HRM HRM theory emphasizes that human resources are the most important asset in an organization. Therefore, effective and efficient management of HR is the key to increasing productivity and competitiveness (Mangkunegara, 2015) .	- Performance, - Award, - Job satisfaction itself - Accountability - Development opportunities (Mangkunegara, 2015)
Knowledge Management Knowledge Management is a systematic process that involves collecting, organizing, storing, and disseminating knowledge within an organization to improve efficiency and innovation (Voss, 2003) .	- Use of knowledge, - Share knowledge, - Reflection of knowledge, - Identification of knowledge (Voss, 2003)
Innovation Capability Innovation capability refers to an organization's ability to generate new ideas and implement them in the form of better products, services or processes (Kalmuk, 2016) .	- Invention, namely the creation of a new product, service, or process that has never been done before. - The proportion of firms in an industry that introduce new products and processes - The ability to apply creativity in order to solve problems (Bason, 2010)
Sharia Banking Performance Sharia Banking Performance refers to the operational and financial performance of Islamic banking institutions that operate in accordance with the principles of Islamic law (sharia) (Suseno & Muthohar, 2018) .	- Customer Service Quality - Compliance with Sharia Principles - Digital Service Efficiency - Sharia Product Innovation - Customer Trust Level - Social Performance (Sharia CSR) (Jawaid, 2021)

In practice, Knowledge Management enables Islamic banks to improve operational efficiency, service quality, and decision-making processes (Nurcahyo, Nurani, Thoha, Jayanti, 2024). By leveraging internal expertise and organizational learning, KM supports continuous improvement and institutional innovation. For example, when knowledge about customer preferences, product

performance, and regulatory updates is effectively shared across departments, banks can respond more quickly and accurately to market demands while maintaining compliance with Islamic financial standards (Sudarti & Fachrunnisa, 2022).

Furthermore, KM fosters collaboration and cross-functional synergy, which are essential in ensuring that all aspects of the bank's

operations ranging from product development to customer service are aligned with both business goals and Sharia values (Alma'abreh et al., 2023; Kim et al., 2020; Konno & Schillaci, 2021). This integrated approach not only enhances competitiveness but also builds stakeholder trust. As a result, effective Knowledge Management becomes a cornerstone in driving sustainable and ethical performance in Sharia banking institutions.

H7: Knowledge Management has a positive effect on Sharia Banking Performance

METHODS

Population and sample

In a study conducted at PT Bank Syariah Indonesia (BSI) Central Java Regional Office with a population of 285 employees, the researcher used a sampling technique with the saturated sample method. According to Sugiyono (2018), saturated samples are used when researchers do not want to make broader generalizations, but instead focus on the entire population in the study.

Data collection and analysis process

In this study, the data collection process was carried out using a survey method with a questionnaire as the main instrument. The questionnaire was designed to measure the variables studied, such as Green Banking Practices, Human Resource Management, Innovation Capability, Knowledge Management, and Sharia Banking Performance. Each item in the questionnaire was arranged in the form of a closed statement with a 5-point Likert scale, which gave respondents choices ranging from "strongly disagree" to "strongly agree." The data obtained from the questionnaire were then analyzed using the *Structural Equation Modeling-Partial Least Squares* (SEM-PLS) technique. SEM-PLS is a statistical analysis method used to test the relationship between latent variables and indicator variables

simultaneously (Hair, 2017). This method was chosen because SEM-PLS is able to handle models with complex latent variables, and does not require strict data distribution assumptions, making it suitable for research with a large sample size.

RESULTS AND DISCUSSION

Outer model

The outer model in this study describes the relationship between latent variables and the indicators that measure them. In the context of SEM PLS, the outer model functions to determine the extent to which the indicators are able to reflect the latent variables studied (Hair, 2017). This study will evaluate the quality of measurement of latent variables by examining the factor loading of each indicator, as well as its validity and reliability. This process involves statistical analysis to ensure that each indicator significantly and consistently represents the latent variable in question, so that the resulting model has high validity and can be relied on to measure the relationship between variables in this study.

This study uses *Partial Least Square* (PLS) to analyze and evaluate the validity and reliability of the model construct using Smart PLS. SmartPLS is conducted to test the *Outer Model* and *Inner Model* of the study. The *outer model test* is conducted to see the validity and reliability of an indicator and variable in the study (Hair, 2017). This can be seen based on 3 categories, namely (1) Convergent Validity which consists of an *outer loading value* with a value > 0.7 and an AVE value > 0.5 . (2) Internal Consistency which is seen based on the *Cronbach's alpha value* > 0.7 and *Composite Reliability* with criteria > 0.7 . (3) Discriminant Validity which is seen based on the *Fornell-Lacker value* where the root of the AVE square value (diagonal) is greater than all other variable values and HTMT (*heterotrait-monotrait* correlation ratio) is less than 1. Based on the provisions, the indicators and variables in this study can be said to be valid and reliable.

Table 2.
Measurement evaluation models

Latent Variables	Convergent Validity		Internal Reliability		Composite	Discriminant Validity
	Indicators	Loading > 0.70	AVE >0.50	CR >0.70	CA >0.70	HTML < 1
Green Banking	GB.1	0.723	0.735	0.777	0.720	YES
	GB.2	0.711				
	GB.3	0.881				
	GB.4	0.765				
HRM	HRM.1	0.747	0.754	0.885	0.741	YES
	HRM.2	0.767				
	HRM.3	0.856				
	HRM.4	0.814				
	HRM.5	0.764				
Knowledge Management	KM.1	0.846	0.812	0.832	0.876	YES
	KM.2	0.766				
	KM.3	0.883				
	KM.4	0.937				
Innovation Capability	IC.1	0.854	0.802	0.712	0.833	YES
	IC.2	0.778				
	IC.3	0.880				
Sharia Banking Performance	SBP.1	0.746	0.718	0.886	0.830	YES
	SBP.2	0.823				
	SBP.3	0.763				
	SBP.4	0.755				
	SBP.5	0.888				
	SBP.6	0.764				

Inner model

The inner model in this study explains the structural relationship between the latent variables studied in the research framework. This model describes how the latent variables interact and influence each other, and identifies the causal pathways in the research model. Using SEM PLS, the inner model analysis will be conducted to test the strength and direction of the relationship between variables, and to measure the direct and indirect effects between these variables.

The results of hypothesis testing using the SEM PLS method, where each relationship between variables is tested using the T-statistic and P-

value to see the significance of the influence. The following is an explanation per hypothesis based on the Table 3.

The influence of HRM on green banking

The T-statistic value of 8.853 and P-value of 0.000 indicate that Human Resource Management (HRM) has a significant effect on Green Banking. This shows that good human resource management can support the implementation of green banking practices in Islamic Banks (Banerjee, 2001). Effective human resource management can increase employee awareness and skills regarding environmentally friendly practices (Rath, 2015);

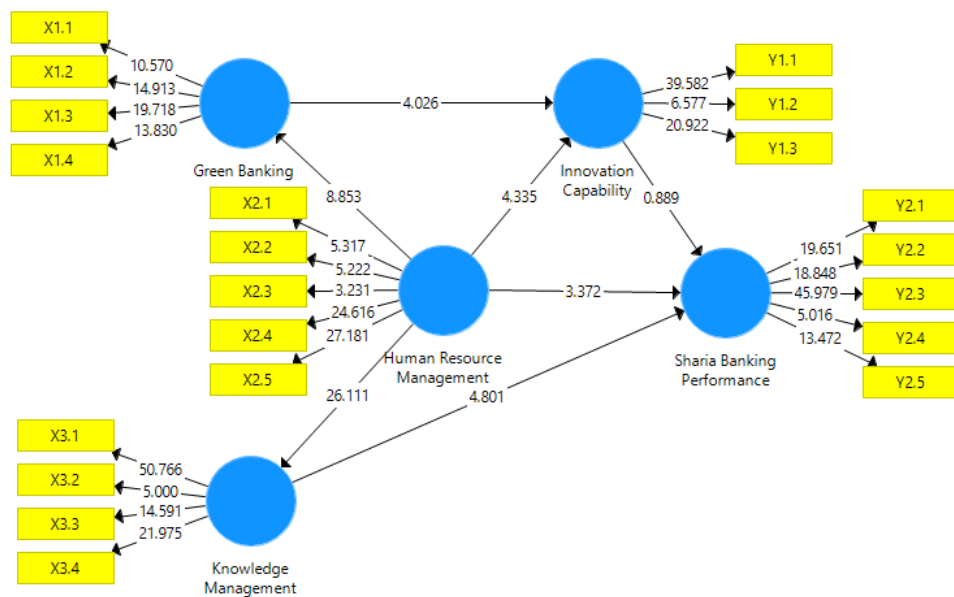


Figure 1.
Results

(Din et al., 2024). Structured training programs, developing an environmentally conscious organizational culture, and providing incentives to employees who support green initiatives can strengthen the bank's commitment to implementing Green Banking (Alsakarneh et al., 2024). In addition, good HRM also plays a role in encouraging proactive behavior from

employees to innovate and seek more environmentally friendly solutions in daily banking activities (Haque et al., 2024). Thus, effective HRM at PT BSI supports the implementation of Green Banking practices by ensuring employees have the knowledge, skills, and motivation needed to consistently

Table 3.
Hypothesis testing

	Original Sample	Sample Mean	Standard Deviation	T-Statistic	P-Value
Green Banking > Innovation Capability	0.424	0.427	0.105	4.025	0.000
HRM > Green Banking	0.632	0.639	0.071	8,853	0.000
HRM > Innovation Capability	0.443	0.439	0.102	4.335	0.000
HRM > Knowledge Management	0.830	0.834	0.032	26.111	0.000
HRM > Sharia Banking Performance	0.185	0.194	0.055	3.372	0.000
Innovation Capability > Sharia Banking Performance	0.106	0.119	0.119	0.889	0.187
Knowledge Management > Sharia Banking	0.733	0.714	0.153	4,801	0.000

carry out green banking practices (Awan et al., 2023).

The influence of HRM on innovation capability

T-statistic of 4.335 and P-value of 0.000 indicate that HRM also has a significant influence on Innovation Capability. In other words, effective HR management can improve innovation capability in Islamic banks. Effective human resource management, such as continuous training, skills development, and talent management, directly contribute to improving innovation capabilities in banks (Alsakarneh et al., 2024; Niazi et al., 2023). When employees feel empowered and supported by management, they are more likely to generate new and creative ideas that can be implemented in bank operations. This means that good HRM not only improves individual performance but also encourages innovation that has an impact on the competitiveness of banks in the Islamic banking industry (Uddin et al., 2023). In other words, the better the HR management, the higher the level of innovation capabilities in PT BSI, which ultimately contributes to the growth and success of the bank amidst market competition.

In addition to contributing to improving individual performance, the influence of HRM on Innovation Capability also creates a work environment that is conducive to creativity (Putri et al., 2024). When HR is well managed, employees are given space and opportunity to experiment with new ideas, and feel supported in facing innovation challenges (Nawang Sari & Sutawijaya, 2019). This improves problem-solving skills and encourages the creation of creative solutions that can be applied in Islamic banking operations. Furthermore, good HR management also allows for more efficient cross-functional collaboration, so that innovative ideas do not only come from one part, but from various divisions within the organization (Niazi et al., 2023).

The influence of HRM on knowledge management

The test results show a very high T-statistic value, which is 26.111, and a P-value of 0.000. This indicates that HRM has a very significant influence on Knowledge Management. Good HR management will have a very positive impact on how knowledge is managed in an organization (Nart et al., 2024). Good HR management encourages the creation of a knowledge-sharing culture. When HR is managed optimally, employees feel supported to share experiences, insights, and information openly, both formally through training and seminars, and informally through daily communication (Sarfraz et al., 2023; Julia & Kassim, 2020). This helps in accumulating and distributing relevant knowledge to all staff, which ultimately strengthens the organization's ability to respond to change and face existing challenges (Anjum et al., 2022). Furthermore, HRM strategies such as ongoing training and professional development programs ensure that knowledge is not only managed effectively but also updated in accordance with industry developments (Din et al., 2024). By improving employees' ability to manage information and integrate knowledge into daily tasks, Bank Syariah Indonesia is able to optimize decision-making and improve operational efficiency. Effective knowledge management also allows banks to be more responsive to innovation and market changes, which are important in maintaining competitiveness in the Islamic banking industry.

The influence of HRM on sharia banking performance

With a T-statistic of 3.372 and a P-value of 0.000, these results indicate that HRM has a significant influence on Sharia Banking Performance. Good HR management will contribute to improving the performance of Islamic banks (Awan et al., 2023). Good HRM focuses on employee skill development, talent management, and increasing motivation and job satisfaction (Zuñiga-Collazos et al., 2020). When employees are equipped with the right

Table 4.
Testing of mediation effects

	Original Sample	Sample Mean	Standard Deviation	T-Statistic	P-Value
HRM > Green Banking	0.268	0.274	0.080	3.347	0.000
> Innovation Capability					
Green Banking>	0.045	0.051	0.055	0.815	0.208
Innovation Capability>					
Sharia Banking					
Performance					
HRM > Green Banking	0.028	0.032	0.034	0.826	0.204
> Innovation Capability					
> Sharia Banking					
Performance					
HRM> Innovation	0.047	0.049	0.050	0.945	0.173
Capability> Sharia					
Banking Performance					
HRM>Knowledge	0.609	0.598	0.138	4.404	0.000
Management>Sharia					
Banking Performance					

skills and supported by strategic management, they are able to make a greater contribution to the operational efficiency and service quality of the bank. This has a direct impact on improving bank performance, such as increasing profitability, customer satisfaction, and compliance with sharia principles (Bouteraa et al., 2020; Ahmad et al., 2023; Nurcahyo et al., 2024). In addition, strong HRM helps build a collaborative and innovative work culture, where employees are encouraged to continue innovating and contributing to improving business processes. With the support of good HR management, employees feel more motivated to achieve organizational targets and goals, so that the overall performance of Islamic banks increases (Haque et al., 2024). High employee involvement and strategic HR management not only increase productivity, but also support the achievement of the bank's long-term goals in maintaining competitiveness in the Islamic banking industry.

The influence of innovation capability on sharia banking performance

T-statistic of 1.318 and P-value of 0.187 (greater than 0.05), indicating that Innovation Capability does not have a significant influence on Sharia Banking Performance. This indicates that increasing innovation capability in Islamic

banks does not directly impact banking performance. Although innovation capability is an important factor in developing more competitive products and services, these results suggest that existing innovations may not be sufficient to directly affect the overall performance of banks. Some factors that may explain this are that the innovations produced may still be in the development stage. early or not fully integrated into the bank's operational strategy effectively.

In addition, innovation takes time to be fully implemented and start to have an impact on bank performance. There may also be other factors, such as operational efficiency, customer satisfaction, or risk management, that play a greater role in determining Islamic banking performance than direct innovation capabilities. However, this does not mean that innovation is not important, but rather that more focused efforts are needed to ensure that innovation can be implemented more effectively and measurably in supporting Islamic bank performance.

The influence of knowledge management on sharia banking performance

T-statistic of 4.801 and P-value of 0.000 indicate that Knowledge Management has a

significant influence on Sharia Banking Performance. This shows that good knowledge management can contribute to improving the performance of Islamic banks. Good Knowledge Management includes the process of creating, storing, distributing, and utilizing knowledge within an organization (Kim & Jung, 2022). When knowledge is managed well, employees have access to relevant and up-to-date information, which can be used to improve service quality, operational efficiency, and better decision-making (Sharit et al., 2008; Alma'abreh et al., 2023). This allows banks to be more adaptive to changes in the market, regulations, and customer needs. In the context of Islamic banking, good knowledge management is also important to ensure that all procedures and products offered are in accordance with Islamic principles (Bouteraa et al., 2020). By utilizing knowledge management effectively, banks can increase innovation, accelerate problem-solving processes, and improve overall performance. Therefore, good knowledge management not only increases competitiveness but also contributes to the achievement of the bank's financial and operational targets, as well as advancing the bank's reputation as a trusted and Islamic-compliant financial institution (Julia & Kassim, 2020).

Based on the results of the mediation effect test in the table, there are several important findings related to the mediation effect between the variables that affect Sharia Banking Performance at PT Bank Syariah Indonesia, Central Java Regional Office. First, the relationship between HRM (Human Resource Management) and Green Banking through Innovation Capability shows a significant effect. With a T-statistic value of 3.347 and a P-value of 0.000, it can be concluded that Innovation Capability effectively mediates the relationship between HRM and Green Banking. This means that good human resource management can improve innovation capabilities in banks, which ultimately play a role in supporting green banking practices (Ahmar et al., 2024; Anjum et al., 2022; Niazi et al., 2023).

However, in the relationship between Green Banking and Sharia Banking Performance

through Innovation Capability, the test results show that the mediation effect is not significant, with a P-value of 0.208 and 0.204. Although Green Banking practices are expected to be able to encourage innovation that supports improved banking performance, in this study, the relationship was not strong enough. This indicates that other factors may be more important in bridging the influence of Green Banking on bank performance, or perhaps the innovation resulting from Green Banking is not yet mature enough to have a direct impact on Islamic banking performance (Moraes et al., 2019; Julia & Kassim, 2020; Sehen Issa et al., 2022).

Furthermore, testing the influence of HRM on Sharia Banking Performance through Innovation Capability also did not show significant results, with a P-value of 0.173. This shows that although HRM is able to encourage innovation, the innovation does not directly contribute to improving the performance of Islamic banking. This could be caused by several things, such as the implementation of innovation that is still in the early stages or other factors that prevent innovation from having a direct impact on bank performance. External factors such as regulation or market conditions may also play a role in slowing down the effects of innovation on bank performance. Finally, the relationship between HRM and Sharia Banking Performance through Knowledge Management shows a very significant influence, with a T-statistic of 4.404 and a P-value of 0.000. This indicates that Knowledge Management plays a key role as a mediator in the relationship. Good knowledge management allows banks to utilize human resources more effectively, improve collaboration, and ensure that the necessary knowledge is available to support strategic decisions (Wikaningrum & Kartikasari, 2023; Faeni, 2024; Ahmad et al., 2023). Ultimately, good knowledge management contributes to improving Sharia Banking Performance, making banks more competitive in the midst of market competition and ensuring that bank operations remain in accordance with sharia principles.

CONCLUSION

Based on the quantitative results, it can be concluded that the internal strengthening of Human Resource Management is a key driver of sustainability and innovation within Islamic banking institutions. Although Green Banking practices are important, their isolated implementation does not significantly improve performance unless supported by strategic organizational capabilities. The insignificant mediating role of Innovation Capability suggests that innovation efforts alone are insufficient unless they are deeply integrated into core operational and strategic frameworks. Conversely, the significant mediating effect of Knowledge Management justifies its role as a catalyst that enables HRM to influence performance. This demonstrates that organizations that systematically manage knowledge are more capable of aligning resources, enhancing internal collaboration, and executing strategies effectively, thereby achieving better banking performance. Therefore, future strategic planning should prioritize the integration of knowledge-driven HRM policies to achieve sustainable competitiveness in Islamic banking. Although Innovation Capability is not a significant mediator, other results show that Knowledge Management mediates the relationship between HRM and Sharia Banking Performance very well. Effective knowledge management has been shown to improve banking performance through optimal utilization of human resources. This indicates that when an organization is able to manage knowledge well, internal collaboration can be improved and more appropriate strategic decision making can be done, which ultimately contributes to better Islamic banking performance.

On the other hand, the mediation of Innovation Capability on the relationship between HRM and Sharia Banking Performance is not significant, indicating that the innovation produced has not had a direct impact on performance. Although HRM is proven to improve innovation capability, external factors or the early stages of

innovation development may inhibit its impact on sharia banking performance. Overall, the role of HRM and Knowledge Management is proven to be very important, while Green Banking and Innovation Capability require further strengthening to be able to provide a more significant influence on sharia bank performance.

Practical implications

The findings of this study suggest that Islamic banking institutions, particularly PT Bank Syariah Indonesia, should place greater emphasis on building a knowledge-driven culture supported by effective human resource management practices. Enhancing employee competencies and fostering innovation should be prioritized to enable responsiveness to market changes and sustainability challenges. Additionally, the development of a comprehensive innovation ecosystem is essential, as Innovation Capability alone has not shown a direct impact unless embedded in a broader strategic framework. Green Banking initiatives, while essential, must be accompanied by structured programs and internal alignment to effectively support performance improvement.

Managerial implications

From a managerial perspective, the study underscores the need for leaders in Islamic banking to adopt integrative strategies that connect HRM policies with knowledge management systems. Managers should design training and development programs not only to enhance skills but also to promote innovation and environmental awareness. Since Knowledge Management has been proven to significantly mediate the effect of HRM on performance, it is critical for management to invest in knowledge-sharing platforms, documentation systems, and collaborative tools. Furthermore, the implementation of Green Banking should be strengthened through clear policies and cross-departmental coordination, ensuring that sustainability becomes an embedded value

across organizational processes and decision-making.

Limitations

The limitation of this study lies in the limited population coverage of PT Bank Syariah Indonesia, Central Java Regional Office, so the results may not fully describe the condition of Islamic banking nationally. In addition, the data collection method using questionnaires may contain respondent bias, such as the tendency to provide answers that are considered the safest or according to expectations. Finally, although the research model uses SEM PLS for statistical analysis, there are limitations in measuring the long-term impact of Green Banking and Innovation Capability on Sharia Banking Performance, so further research is needed to explore these aspects more deeply.

REFERENCES

- Ahmad, F., Hossain, M. B., Mustafa, K., Ejaz, F., Khawaja, K. F., & Dunay, A. (2023). Green HRM Practices and Knowledge Sharing Improve Environmental Performance by Raising Employee Commitment to the Environment. *Sustainability (Switzerland)*, 15(6). <https://doi.org/10.3390/su15065040>
- Ahmar, N., Rahmah, L. Al, & Darminto, D. P. (2024). Green banking disclosure from the perspective of corporate governance, financial slack and human resource slack in Indonesia. *Banks and Bank Systems*, 19(2), 101–114. [https://doi.org/10.21511/bbs.19\(2\).2024.08](https://doi.org/10.21511/bbs.19(2).2024.08)
- Ahmed, N. M. U. & (2018). Islamic Banking and Green Banking for Sustainable Development: Evidence from Bangladesh. *Journal of Islamic Economics*, 10, 34–48.
- Ahyani. (2021). Building the Values of Rahmatan Lil 'Alamin for Indonesian Economic Development at 4.0 Era from the Perspective of Philosophy and Islamic Economic Law. *Al-Ihkam: Jurnal Hukum & Pranata Sosial*, 16, 111–136.
- Aisyah, M. (2018). Islamic Bank Service Quality. *Al-Iqtishad: Jurnal Ilmu Ekonomi Syariah (Journal of Islamic Economics)*, 10(2), 367–388.
- Al Taweel, I. R., & Al-Hawary, S. I. (2021). The mediating role of innovation capability on the relationship between strategic agility and organizational performance. *Sustainability (Switzerland)*, 13(14), 1–14. <https://doi.org/10.3390/su13147564>
- Albaity, M., & Rahman, M. (2019). The intention to use Islamic banking: an exploratory study to measure Islamic financial literacy. *International Journal of Emerging Markets*, 14(5), 988–1012. <https://doi.org/10.1108/IJOEM-05-2018-0218>
- Ali. (2021). "A social practice theory perspective on green marketing initiatives and green purchase behavior." *Cross Cultural & Strategic Management*, 18, 818–838.
- Ali, N., & Atan, T. (2020). ... of Human Resource Management Practices on Sustainable Performance in the Banking Sector (a Comparative Study between Islamic and Conventional Banks *Journal of Early Childhood Special ...*, XXIX, 1811–1826. <https://doi.org/10.24205/03276716.2020.1177>
- Alma, S., Nur, S., Zulkiffli, A., Hazimah, N., & Mat, N. (2024). The Link between Green Human Resource Management and Job Performance: Investigating the Mediating Role of Organizational Culture. *Journal of System and Management Sciences*, 14(12), 114–128. <https://doi.org/10.33168/jsms.2024.1207>
- Alsakarneh, A., Shatnawi, H. A., Alhyasat, W. B. A. K., Zowid, F., Alrababah, R. A. M., & Eneizan, B. (2024). The effectiveness of human resource management practices on increasing organizational performance and the mediating effect of employee engagement. *Uncertain Supply Chain Management*, 12(2), 1141–1154. <https://doi.org/10.5267/j.uscm.2023.11.019>
- Amuda, Y. J., & Alamri, R. A. (2024). Green banking practices: Towards sustainable banking sector for financial inclusion in attaining Saudi Arabia's Vision 2030. *Journal of Infrastructure, Policy and Development*, 8(9), 4565. <https://doi.org/10.24294/jipd.v8i9.4565>
- Anjum, N., Rahaman, M. S., Choudhury, M. I., & Rahman, M. M. (2022). An Insight into Green HRM Practices for Sustainable Workplace in the Banking Sector of Bangladesh: The Role of Electronic HRM. *Journal of Business Strategy Finance and Management*, 04(01), 66–80. <https://doi.org/10.12944/jbsfm.04.01.06>
- Anwar, M. Z., & Jati, L. J. (2023). Increasing the Organizational Green Performance through Green HRM Practices and Islamic Spiritual Intelligence. *The Journalish: Social and Government*, 4(4), 496–512. <https://doi.org/https://doi.org/10.55314/tsg.v4i4.626>
- Awan, U., Braathen, P., & Hannola, L. (2023). When and how the implementation of green human resource management and data-driven culture to improve the firm sustainable environmental development? *Sustainable Development*, 31(4), 2726–2740. <https://doi.org/10.1002/sd.2543>
- Banerjee. (2001). Shades of Green: A Multidimensional Analysis of Environmental Advertising. *Journal of Advertising*, 24, 1–12.
- Bason. (2010). Co-creation is key to innovation in government. *Ipsos MORI Understanding*

- Society*, 10, 111–121.
- Bouteraa, M., Hisham, R. R. I. bin R., & Zainol, Z. (2020). Green Banking Practices From Islamic and Western Perspectives. *International Journal of Business, Economics and Law*, 21(5), 1–11.
- Cabello. (2011). No TitleLeveraging the innovative performance of human capital through HRM and social capital in Spanish firms. *International Journal of Human Resource Management*, 12, 807–828.
- Cabrita. (2009). Intellectual Capital and Business Performance in Pourtugise Banking Industry. *International Technology Management*, 03, 47–58.
- Chen, J., Siddik, A. B., Zheng, G. W., Masukujjaman, M., & Bekhzod, S. (2022). The Effect of Green Banking Practices on Banks' Environmental Performance and Green Financing: An Empirical Study. *Energies*, 15(4), 1–22. <https://doi.org/10.3390/en15041292>
- Dakhan, S. A., Sohu, J. M., Jabeen, A., Mirani, M. A., Shaikh, J. A., & Iqbal, S. (2020). Impact of Green HRM on Employees Pro-Environmental Behavior: Mediating Role of Women Environmental Knowledge at Higher Education Institutions. *IJCSNS International Journal of Computer Science and Network Security*, 20(12), 202–208. <https://doi.org/10.22937/IJCSNS.2020.20.12.222>
- Din, A. U., Yang, Y., Yan, R., Wei, A., & Ali, M. (2024). Growing success with sustainability: The influence of green HRM, innovation, and competitive advantage on environmental performance in the manufacturing industry. *Heliyon*, 10(10), e30855. <https://doi.org/10.1016/j.heliyon.2024.e30855>
- El Badawy, T. A., Chinta, R., & Magdy, M. M. (2018). Does 'gender' mediate or moderate the relationship between 'quality of work life' and 'organizational commitment'? Evidence from SMEs in Egypt. *Gender in Management*, 33(4), 332–348. <https://doi.org/10.1108/GM-04-2017-0050>
- Faeni, D. P. (2024). Green practices and employees' performance: The mediating roles of green human resources management policies and knowledge development. *Journal of Infrastructure, Policy and Development*, 8(8), 4924. <https://doi.org/10.24294/jipd.v8i8.4924>
- Fawehinmi, O., Yusliza, M. Y., Mohamad, Z., Noor Faezah, J., & Muhammad, Z. (2020). Assessing the green behaviour of academics: The role of green human resource management and environmental knowledge. *International Journal of Manpower*, 41(7), 879–900. <https://doi.org/10.1108/IJM-07-2019-0347>
- Firdaus. (2013). *Maslahah Scorecard (Masc) Sistem Kinerja Bisnis Berbasis Maqashid Al-Shari'ah*. Jakarta (1st ed.). Sekolah Pascasarjana UIN Syarif Hidayatullah.
- Ganguly, A., Talukdar, A., & Chatterjee, D. (2019). Evaluating the role of social capital, tacit knowledge sharing, knowledge quality and reciprocity in determining innovation capability of an organization. In *Journal of Knowledge Management*. <https://doi.org/10.1108/JKM-03-2018-0190>
- Grant. (1991). The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation. *California Management Review*, Spring, 02, 56–61.
- Hadjri. (2015). International Review of Management and Marketing Islamic Human Resource Management, Organizational Commitment and Employee Performance: A Case Study on Sharia Bank in South Sumatera. *International Review of Management and Marketing*, 01, 123–129.
- Hair. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). SAGE Publications.
- Haque, M. A., Islam, M. A., & Soh, S. H. (2024). Green HRM practices and green work engagement: The roles of green knowledge sharing and green group cohesion. *Global Business and Organizational Excellence*, 14, 1–16. <https://doi.org/10.1002/joe.22266>
- Haryadi, Y., Narimawati, U., & Syafei, M. Y. (2024). Tec Empresarial The Effect of Information Technology Utilization. *Business International Management*, 21, 13–26. <https://doi.org/https://doi.org/10.1229/tecempresarialjournal.v19i2.490>
- Henry Simamora. (2012). *Manajemen Sumber Daya Manusia* (1st ed.). Gramedia Pustaka Utama.
- Herder, J. (2024). AI-Driven Human Resource Analytics for Enhancing Workforce Agility and Strategic Decision-Making. *Economic Development*, 1(5), 471–485.
- Herman. (2018). The Influence of Market Orientation and Product Innovation on the Competitive Advantage and Its Implication toward Small and Medium Enterprises (UKM) Performance. *International Journal of Science and Engineering Invention*, 08, 1–22.
- Iryani, & S.F, L. (2021). Implementation of Green Islamic Banking in Indonesia. *Utopia y Praxis Latinoamericana*, 26, 140–160. <https://www.redalyc.org/articulo.oa?id=27968020013>
- Islam, M. A., Yousuf, S., H. (2014). Green financing in Bangladesh: challenges and opportunities- a descriptive approach. *International Journal of Green Economics*, 09, 17–32. <https://doi.org/www.sciencedirect.com/10.1504/IJGE.2014.064469>
- Jawaid. (2021). Islamic banking and customer satisfaction in Pakistan: evidence from internal and external customers. *Journal of Islamic Marketing, Ahead-of-Print(Aheadof-Print)*., 11, 11–23. <https://doi.org/https://doi.org/10.1108/JIMA-09-2020-0297>
- Jelli, R., & Dura, J. (2023). Analysis Of The Influence Of Green Banking And Operational Cost

- Efficiency On Return On Assets. *International Journal of Educational Research & Social Sciences*, 12, 747–752. <https://ijersc.org/>
- Jermisittiparsert, K. (2021). Linking Green Human Resource Management Practices with Green Employee Behavior: The Role of Environmental Knowledge as a Mediator. *E3S Web of Conferences*, 277. <https://doi.org/10.1051/e3sconf/202127706002>
- Jillani, H., Chaudhry, M. N., Zahid, H., & Iqbal, M. N. (2024). The mediating role of stakeholders on green banking practices and bank's performance: The case of a developing nation. *PLoS ONE*, 19(5 May), 1–17. <https://doi.org/10.1371/journal.pone.0300585>
- Julia, T., & Kassim, S. (2020). Exploring green banking performance of Islamic banks vs conventional banks in Bangladesh based on Maqasid Shariah framework. *Journal of Islamic Marketing*, 11(3), 729–744. <https://doi.org/10.1108/JIMA-10-2017-0105>
- Juwaheer. (2019). Analysing the impact of green marketing strategies on consumer purchasing patterns in Mauritius. *World Journal of Entrepreneurship, Management and Sustainable Development*, 19, 36–59.
- Kalmuk. (2016). The Mediating Role of Organizational Learning Capability on The Relationship Between Innovation and Firm's Performance: A Conceptual Framework. *Procedia – Social and Behavioral Sciences*, 14, 164–169.
- Kim, J. (Sunny), Milliman, J., & Lucas, A. (2020). Effects of CSR on employee retention via identification and quality-of-work-life. *International Journal of Contemporary Hospitality Management*, 32(3), 1163–1179. <https://doi.org/10.1108/IJCHM-06-2019-0573>
- Kim, J., & Jung, H. S. (2022). The Effect of Employee Competency and Organizational Culture on Employees' Perceived Stress for Better Workplace. *International Journal of Environmental Research and Public Health*, 19(8). <https://doi.org/10.3390/ijerph19084428>
- Konno, N., & Schillaci, C. E. (2021). Intellectual capital in Society 5.0 by the lens of the knowledge creation theory. *Journal of Intellectual Capital*, 22(3), 478–505. <https://doi.org/10.1108/JIC-02-2020-0060>
- Liu, C. H., Chang, A. Y. P., & Fang, Y. P. (2020). Network activities as critical sources of creating capability and competitive advantage: The mediating role of innovation capability and human capital. *Management Decision*, 58(3), 544–568. <https://doi.org/10.1108/MD-08-2017-0733>
- Lubis, R., Matondang, Z., & Cahyani, U. E. (2023). Key Success Factors Islamic Human Resources in North Sumatera Islamic Banking With Analytical Network Process (ANP). *Jurnal Aplikasi Bisnis Dan Manajemen*, 9(3), 898–907. <https://doi.org/10.17358/jabm.9.3.898>
- Majeed. (2022). Green Marketing Approaches and Their Impact on Green Purchase Intentions: Mediating Role of Green Brand Image and Consumer Beliefs towards the Environment. *Sustainability (Switzerland)*, 14, 51–67.
- Mangkunegara. (2015). *Manajemen Sumber Daya Manusia Perusahaan* (5th ed.). Remaja Rosdakarya.
- Marditama, T., Yusliza, M. Y., & Purnomo, A. K. (2024). The Link Between Green Human Resource Management and Environmental Performance through Green Innovation Practices: A Mini Literature Review During Year 2019-2023. *Jesya*, 7(2), 1317–1331. <https://doi.org/10.36778/jesya.v7i2.1581>
- Masruki, R., Hanefah, M. M., & Dhar, B. K. (2020). Shariah Governance Practices of Malaysian Islamic Banks in the Light of Shariah Compliance. *Asian Journal of Accounting and Governance*, 13, 91–97. <https://doi.org/10.17576/ajag-2020-13-08>
- Mawardi. (2010). *Fiqh Minoritas: Fiqh al-'Aqalliyāt dan Evolusi Maqāsid al-Sharī'ah dari Konsep ke Pendekatan* (1st ed.). PT Elexmedia Komputindo.
- Migdadi, M. M. (2022). Knowledge management processes, innovation capability and organizational performance. *International Journal of Productivity and Performance Management*, 71(1), 182–210. <https://doi.org/10.1108/IJPPM-04-2020-0154>
- Misbakul Munir, M., & Saputra, R. (2022). Human Resource Management Perspective of Al Maqasid Al Šar'iyyah in Islamic Education Institutions. *Journal of World Science*, 1(12), 1183–1195. <https://doi.org/10.58344/jws.v1i12.150>
- Moraes, S. de S., Chiappetta Jabbour, C. J., Battistelle, R. A. G., Rodrigues, J. M., Renwick, D. S. W., Foropon, C., & Roubaud, D. (2019). When knowledge management matters: interplay between green human resources and eco-efficiency in the financial service industry. *Journal of Knowledge Management*, 23(9), 1691–1707. <https://doi.org/10.1108/JKM-07-2018-0414>
- Mubarak, N., Khan, J., Ali, M., & Pesämaa, O. (2024). Roadmap to Achieve Green Project Performance: The Role of Knowledge Co-creation. *Journal of the Knowledge Economy*, 0123456789. <https://doi.org/10.1007/s13132-024-01779-2>
- Nart, S., Bilgili, A., & Orgut, E. D. (2024). The Effect of Green Human Resources Management Practices on Corporate Sustainability from the Perspective of Employees. *Economics*, 18(1). <https://doi.org/10.1515/econ-2022-0060>
- Nawangsari, L. C., & Sutawijaya, A. H. (2019). Green Human Resources Management for Business Sustainability in Banking Institutions. *International Journal of Managerial Studies and Research*, 7(9), 12–16. <https://doi.org/10.20431/2349-0349.0709002>
- Nguyen, T. V., Phan, A. T. T., & Nguyen, M. T. T.

- (2016). Knowledge Creation, Innovation and Financial Performance of Firms: Evidence from Vietnam. *International Journal of Business and Management*, 11(6), 95–107. <https://doi.org/10.5539/ijbm.v11n6p95>
- Niazi, U. I., Nisar, Q. A., Nasir, N., Naz, S., Haider, S., & Khan, W. (2023). Green HRM, green innovation and environmental performance: the role of green transformational leadership and green corporate social responsibility. *Environmental Science and Pollution Research*, 30(15), 45353–45368. <https://doi.org/10.1007/s11356-023-25442-6>
- Nurchahyo, S. A. (2024). The Role of Organizational Learning Culture and Workplace Empowerment in Improving Workplace Spirituality through Knowledge Sharing Behavior as a Mediation Variable. *International Journal of Islamic Business Ethics*, 9(1), 15. <https://doi.org/10.30659/ijibe.9.1.15-31>
- Nurchahyo, S. A., Anis, M., & Thoha, A. M. (2024). Humanistic Leadership for Organizational Learning Capability: Integration of Maqashid Syariah and Knowledge Management. *Journal Ihyia Ulum Al Din*, 26(2), 217–232.
- Nurchahyo, S. A., Widagdo, T. H., & Ali, A. (2024). Talent Management Strategy in Career Development with Capacity Building Practices within the Local Government Organization of Semarang Regency. *Proceedings of the 4th International Conference on Law, Social Sciences, Economics, and Education, ICLSSEE 2024, 25 May 2024, Jakarta, Indonesia*, 02, 19–34. <https://doi.org/10.4108/eai.25-5-2024.2348957>
- Pala, F., Erdoğan, A., Ali, M., Alnori, F., & Barut, A. (2024). Analyzing the linkage between Islamic financial literacy and Islamic banking services adoption: evidence from Turkey. *Journal of Islamic Accounting and Business Research*, 15(5), 784–817. <https://doi.org/10.1108/JIABR-12-2021-0324>
- Putri, R. N., Putri, J. K., Christanti, R., & Nugroho, A. H. L. (2024). Investigating the Impact of Green Banking on Efficiency Strategy: Evidence from Indonesia. *The Indonesian Journal of Accounting Research*, 27(01), 157–178. <https://doi.org/10.33312/ijar.751>
- Ramles, P., & Br Perangin Angin, R. (2024). Leadership Development Strategies in Organizations: The Role of Human Resource Management in Improving Effectiveness and Productivity. *Jurnal EMT KITA*, 8(2), 801–810. <https://doi.org/10.35870/emt.v8i2.2382>
- Rath. (2015). An Impact og Green Marketing on Practices of Supply Chain Management in Asia: Emerging Economic Opportunities and Challenges. *International Journal of Supply Chain Management*, 02, 11–19.
- Rehman, A., Ullah, I., Afridi, F. e. A., Ullah, Z., Zeeshan, M., Hussain, A., & Rahman, H. U. (2021). Adoption of green banking practices and environmental performance in Pakistan: a demonstration of structural equation modelling. *Environment, Development and Sustainability*, 23(9), 13200–13220. <https://doi.org/10.1007/s10668-020-01206-x>
- Rimi, N. N. (2016). Green HRM for Green Services: A Proposed Best Practices Green HRM Model for Green Banking Performance in Bangladesh. *European Journal of Business and Management Wwvliste.Org ISSN*, 8(8), 60–69. www.iiste.org
- Roxas, B., & Chadee, D. (2016). Knowledge management view of environmental sustainability in manufacturing SMEs in the Philippines. *Knowledge Management Research and Practice*, 14(4), 1–11. <https://doi.org/10.1057/kmrp.2015.30>
- SA Nurchahyo; BK Nurani; AM Thoha; FD Jayanti. (2024). Improving Sustainable Competitive Advantage through Knowledge of Sharia Banking in a Spiritual Well-Being. *IQTISHADIA Jurnal Ekonomi & Bisnis Islam*, 17, 79–110.
- Sajeda Alma'abreh, Siti Nur 'Atikah Zulkiffli, & Nik Hazimah Nik Mat. (2023). Leveraging Green Human Resource Management and Organizational Culture in Performance. *Journal of Namibian Studies: History Politics Culture*, 33, 121–134. <https://doi.org/10.59670/jns.v33i.418>
- Salman, S., & Hamid, S. (2018). Journal of Organisational Studies and Innovation. *Journal of Organisational Studies and Innovation*, 5(1), 25–36.
- Santoso. (2022). Pentahelix's Collaboration In The Development of Halal Tourism For Sustainable Regional Economic Development. *IQTISHADIA Jurnal Ekonomi & Perbankan Syariah*, 22, 1–27.
- Sarfraz, M., Khawaja, K. F., Khalil, M., & Han, H. (2023). Knowledge-based HRM and business process innovation in the hospitality industry. *Humanities and Social Sciences Communications*, 10(1). <https://doi.org/10.1057/s41599-023-02140-9>
- Satria Avianda Nurchahyo;Raditya Ferdianto; Dyah Ayu Kusumawati. (2024). Religious-Centric Product Strategy dan Sharia Product Knowledge dalam Peningkatan Business Performance dengan Competitive Advantage sebagai Variabel Mediasi. *Ekonomi Dan Bisnis*, 02, 111–124.
- Sayadi, S., & Farzan, F. (2015). the Mediating Effect of the Knowledge Management Capabilities on the Relationship Between the Human Resource Management and Innovation in. *Indian Journal of Fundamental and Applied Life Sciences*, 5, 135–145.
- Schulers. (2011). Global Talent Management and Golbal Talent Challenges: Global Talent Strategic Opportunities for HRM. *Journal of World Business*, 01, 88–92.
- Sehen Issa, J., Abbaszadeh, M. R., & Salehi, M. (2022). The Impact of Islamic Banking

- Corporate Governance on Green Banking. *Administrative Sciences*, 12(4). <https://doi.org/10.3390/admsci12040190>
- Setyaningrum, R. P., & Muafi, M. (2023). Green Human Resources Management on Business Performance: The Mediating Role of Green Product Innovation and Environmental Commitment. *International Journal of Sustainable Development and Planning*, 18(1), 209–220. <https://doi.org/10.18280/ijstdp.180122>
- Sharit, J., Hernández, M. A., Czaja, S. J., & Pirolli, P. (2008). Investigating the roles of knowledge and cognitive abilities in older adult information seeking on the Web. *ACM Transactions on Computer-Human Interaction*, 15(1), 1–29. <https://doi.org/10.1145/1352782.1352785>
- Sudarti, K., & Fachrunnisa, O. (2022). Human Value Development of Salesteam: An Effort to Strengthen Shari'a Insurance Institution. *IJISH (International Journal of Islamic Studies and Humanities)*, 5(2), 49–74. <https://doi.org/10.26555/ijish.v5i1.5757>
- Suppiah, V., & Sandhu, M. S. (2011). Organisational culture's influence on tacit knowledge-sharing behaviour. *Journal of Knowledge Management*, 15(3), 462–477. <https://doi.org/10.1108/13673271111137439>
- Suseno, G., & Muthohar, M. (2018). *The effect of service Quality to customer satisfaction and loyalty in Sharia Bank*. 186(Insyma), 186–190. <https://doi.org/10.2991/insyma-18.2018.46>
- Susilo, H., & Mayowan, Y. (2024). Developing a Model for Increasing Human Resource Capacity in Multi- Businesses for the SME sector in Indonesia a Comprehensive Approach. *International Journal of Religion*, 5(11), 8612–8625. <https://doi.org/10.61707/vgwsep98>
- Tamer Cavusgil, S., Calantone, R. J., & Zhao, Y. (2003). Tacit knowledge transfer and firm innovation capability. *Journal of Business & Industrial Marketing*, 18(1), 6–21. <https://doi.org/10.1108/08858620310458615>
- Tirno, R. R., Islam, N., & Happy, K. (2023). Green HRM and ecofriendly behavior of employees: Relevance of proecological climate and environmental knowledge. *Heliyon*, 9(4), e14632. <https://doi.org/10.1016/j.heliyon.2023.e14632>
- Uddin, M. S., Rahaman, M. A., Latif, W. Bin, Dona, P. Das, & Kundu, D. (2023). Impact of green HRM practices on bank employee service behaviors. *Banks and Bank Systems*, 18(4), 85–93. [https://doi.org/10.21511/bbs.18\(4\).2023.08](https://doi.org/10.21511/bbs.18(4).2023.08)
- Voss, D. (2003). *Knowledge Management, An Introduction to creating competitive advantage from intellectual capital* (1st ed.). Vision Book.
- Wemerfelt. (1994). A resource-based view of the firm. *Strategic Management Journal*, 01, 21–31.
- Wikaningrum, T., & Kartikasari, L. (2023). Integration of talent management and knowledge management for enhancing innovation performance. *Jurnal Ekonomi Dan Bisnis*, 26(Oktober), 331–348.
- Yasa, P. A., Suciptawati, N. L. P., & Susilawati, M. (2017). Implementasi Analisis Faktor Dalam Menganalisis Kepuasan Nasabah Terhadap Kualitas Layanan (Studi Kasus: Lpd Sidakarya). *E-Journal Matematika*, 6(2), 152–160.
- Zuñiga-Collazos, A., Lozada, N., & Perdomo-Charry, G. (2020). Effect of absorption capacity acquired on organisational performance. *International Journal of Innovation Management*, 24(5), 1–19. <https://doi.org/10.1142/S1363919620500486>