



## The Role of Artificial Intelligence in Enhancing Employee Performance through SHRM and Organizational Creativity at ABC Bank Yogyakarta Area Office

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**ABSTRACT:** This study explores the role of Artificial Intelligence (AI) in mediating the effects of Sustainability Human Resource Management (SHRM) and Organizational Creativity on employee performance. Conducted at ABC Bank's Yogyakarta Area Office, the research employs a quantitative survey method and Structural Equation Modeling (SEM) to analyze data. SHRM practices, including HR development, diversity, and occupational safety, directly contribute to employee engagement and productivity. Similarly, Organizational Creativity, encompassing individual creativity, team collaboration, and knowledge creation, enhances innovation and adaptability within the workplace.

The findings demonstrate that SHRM and Organizational Creativity have a significant positive impact on employee performance. SHRM fosters a sustainable work environment, while Organizational Creativity drives the generation of new ideas and solutions to meet organizational goals. However, AI's role as a mediator between these variables and employee performance was found to be statistically insignificant. This suggests that while AI facilitates HR processes and supports strategic decisions, its integration as a mediator depends on factors such as technological readiness and employee adaptability.

This study underscores the importance of aligning SHRM and Organizational Creativity with technological advancements to enhance employee performance. While the mediating effect of AI requires further exploration, its potential to transform HR and creativity processes remains promising. These findings provide valuable insights for organizations seeking to optimize employee performance by leveraging sustainable practices, fostering innovation, and integrating advanced technologies.

**KEYWORDS:** Artificial Intelligence, Banking Industry, Employee Performance, Organizational Creativity, SHRM.

### INTRODUCTION

The banking industry is currently undergoing a significant transformation due to rapid globalization, technological advancements, and increasing customer expectations. In such a dynamic and competitive environment, financial institutions must continuously innovate and adapt to maintain their relevance and competitiveness (Malik et al., 2021). One critical area of focus for banks is employee performance, as it directly influences customer satisfaction, service quality, and overall organizational success. Employee performance in the banking sector is more than meeting key performance indicators (KPIs); it encompasses productivity, creativity, adaptability, and the ability to respond effectively to evolving market demands (Na-Nan et al., 2018). Among the various approaches to enhancing employee performance, leveraging cutting-edge technologies like Artificial Intelligence (AI) has emerged as a transformative solution.

Artificial Intelligence (AI) has revolutionized numerous industries, including banking, by offering tools and technologies that enhance operational efficiency, decision-making, and employee productivity. In the realm of Human Resource Management (HRM), AI has become a catalyst for automating routine administrative tasks, personalizing training programs, and facilitating data-driven decisions to improve workforce capabilities (Jochheim et al., 2021). AI systems, including machine learning and predictive analytics, are capable of providing actionable insights that HR managers can use to design interventions tailored to employee needs. Moreover, AI enhances the speed and accuracy of processes such as recruitment, performance evaluation, and employee development, freeing up time for HR professionals to focus on strategic initiatives (Fajimolu et al., 2023).

While AI plays a significant role, it does not operate in isolation. Its effectiveness is often enhanced when integrated with holistic HRM approaches, particularly Sustainability Human Resource Management (SHRM). SHRM emphasizes creating a balanced and sustainable work environment that focuses on long-term employee well-being, diversity, and continuous development. SHRM



practices align organizational goals with employee welfare, fostering a sense of belonging and commitment among employees (Jerónimo et al., 2020). This alignment is especially important in banking, where employees often face high-pressure environments that require resilience and adaptability. SHRM not only ensures employee satisfaction and retention but also contributes to the bank's long-term sustainability by promoting practices that are socially and environmentally responsible (Waldman et al., 2024). Another crucial factor in enhancing employee performance is Organizational Creativity, which refers to the ability of an organization to generate new ideas and innovative solutions to problems. In a banking context, Organizational Creativity involves the development of novel approaches to customer service, financial products, and operational processes (Rumanti et al., 2023). Creativity is fostered through a combination of individual ingenuity, team collaboration, and a supportive internal environment. It is further strengthened by knowledge creation, where organizations continuously learn and adapt based on internal and external insights. For banks like ABC Bank's Yogyakarta Area Office, fostering a culture of creativity can help them differentiate themselves in a highly competitive market.

The interplay between SHRM, Organizational Creativity, and AI creates a robust framework for improving employee performance. While SHRM provides the foundation for sustainable HR practices, Organizational Creativity fuels innovation and adaptability. AI acts as an enabler, bridging the gap between strategy and execution by providing advanced tools for data analysis, process automation, and performance monitoring. Together, these elements contribute to an organizational ecosystem that supports employee growth, efficiency, and innovation.

At ABC Bank's Yogyakarta Area Office, the need to enhance employee performance has become increasingly critical. The banking sector in Yogyakarta, like many others, faces challenges such as intense competition, evolving customer needs, and the pressure to adopt digital transformation (Gayatri et al., 2020). Despite various initiatives to improve service quality, customer feedback indicates areas of improvement, particularly in terms of employee responsiveness, efficiency, and problem-solving capabilities. Issues such as delayed responses, inadequate customer service, and inconsistencies in addressing client needs have been noted, highlighting the importance of a comprehensive strategy to improve employee performance.

### **The Role of SHRM in Employee Performance**

SHRM is a strategic approach that integrates sustainability principles into HRM practices to promote employee wellbeing and long-term organizational success. Key components of SHRM include HR development, diversity, and occupational safety (Jerónimo et al., 2020). HR development involves continuous training and upskilling of employees, ensuring they are equipped to handle current and future challenges. Diversity focuses on creating an inclusive workplace where differences in background, gender, and experience are valued. Occupational safety prioritizes the physical and mental health of employees, reducing workplace stress and accidents. Studies have shown that organizations implementing SHRM practices often experience higher employee satisfaction, improved retention rates, and enhanced productivity (Ren et al., 2023). For example, at ABC Bank, SHRM practices such as structured training programs and health initiatives have helped address some performance gaps. However, the integration of AI into SHRM practices remains underexplored. By combining AI-driven analytics with SHRM strategies, banks can create a more personalized and effective HRM system that aligns employee goals with organizational objectives.

### **The Role of Organizational Creativity in Employee Performance**

Organizational Creativity is critical for navigating the complexities of the modern banking sector. Creativity within an organization enables employees to think outside the box, develop innovative solutions, and adapt to changing market conditions (Hjorth et al., 2018). At ABC Bank, fostering creativity could involve encouraging collaboration across departments, rewarding innovative ideas, and providing employees with tools and resources to experiment and innovate.

Indicators of Organizational Creativity, such as individual creativity and group collaboration, directly influence employee performance. Employees who feel supported in their creative endeavors are more likely to contribute innovative ideas that improve processes and enhance customer satisfaction. A supportive internal environment, characterized by open communication and trust, further strengthens the impact of creativity on performance (Rumanti et al., 2023).

### **The Role of AI as a Mediator**

AI plays a pivotal role in integrating SHRM and Organizational Creativity to enhance employee performance. Through advanced data analytics, AI can identify patterns in employee behavior, predict performance trends, and provide insights for targeted



interventions (Huang & Rust, 2018). AI tools such as chatbots, predictive analytics, and automated performance tracking systems can help streamline HR processes and improve efficiency.

However, the role of AI as a mediator is not without challenges. Factors such as employee resistance to technology, inadequate training, and the complexity of AI systems can limit their effectiveness (Fajimolu et al., 2023). At ABC Bank, these challenges must be addressed to ensure AI's successful integration into HR and creativity frameworks.

## Research Objectives

This study aims to explore the interplay between SHRM, Organizational Creativity, and AI in enhancing employee performance at ABC Bank's Yogyakarta Area Office. Specifically, it seeks to:

1. Examine the direct impact of SHRM on employee performance.
2. Assess the influence of Organizational Creativity on employee performance.
3. Investigate AI's mediating role between SHRM and employee performance.
4. Explore AI's mediating role between Organizational Creativity and employee performance.

By addressing these objectives, this research provides actionable insights for banks to optimize their HRM strategies, foster innovation, and effectively integrate AI technologies. The integration of SHRM, Organizational Creativity, and AI offers a comprehensive approach to enhancing employee performance in the banking industry. At ABC Bank's Yogyakarta Area Office, these elements hold the potential to address current performance challenges and create a sustainable, innovative work environment. While SHRM and Organizational Creativity lay the groundwork for employee development, AI serves as a powerful tool to drive efficiency and decision-making. This study contributes to the growing body of research on HRM, creativity, and technology, offering practical recommendations for the banking sector to thrive in an increasingly competitive landscape.

## LITERATURE REVIEW

### Sustainability Human Resource Management (SHRM)

Sustainability Human Resource Management (SHRM) represents a strategic approach to HR practices that integrates sustainability principles, balancing economic, social, and environmental goals within the organizational context. SHRM focuses on fostering long-term employee well-being, enhancing workplace diversity, and ensuring occupational safety. These practices aim to align employee development with organizational objectives while promoting sustainability at every level of the business.

A core component of SHRM is HR Development, which involves equipping employees with the skills and knowledge necessary to meet present and future challenges. Organizations achieve this through targeted training programs, professional development opportunities, and mentorship initiatives. These efforts not only enhance individual employee capabilities but also contribute to the organization's adaptability in dynamic market environments (Jerónimo et al., 2020). For example, structured development programs at ABC Bank can address skills gaps and prepare employees for evolving technological and regulatory landscapes.

Another crucial dimension of SHRM is diversity, which emphasizes creating an inclusive workplace that values and leverages differences among employees. By fostering a culture of inclusivity, organizations can drive innovation and creativity while ensuring equitable opportunities for all (Ren et al., 2023). For ABC Bank's Yogyakarta Area Office, diversity initiatives could involve promoting gender balance, encouraging cross-departmental collaboration, and recognizing varied cultural perspectives.

Occupational safety is the third pillar of SHRM and focuses on maintaining a safe and healthy work environment. Ensuring workplace safety reduces risks, enhances employee morale, and improves productivity. Safety measures, such as ergonomic workplace design and mental health support programs, directly contribute to an organization's sustainability by promoting long-term employee engagement and retention (Malik et al., 2021).

SHRM's holistic approach aligns organizational success with employee well-being and societal goals. At ABC Bank, incorporating SHRM into everyday operations can enhance employee satisfaction, increase retention, and establish the bank as a socially responsible organization. These practices also align with broader sustainability objectives, fostering resilience in a competitive banking environment.

### Organizational Creativity

Organizational Creativity refers to the ability of organizations to generate innovative and valuable ideas that enhance performance and foster adaptability. Creativity plays a pivotal role in addressing complex challenges, driving innovation, and responding to



changing customer needs. It encompasses individual creativity, team collaboration, and knowledge creation, all of which thrive in a supportive and dynamic work environment (Rumanti et al., 2023).

Individual creativity is the foundation of organizational innovation. It refers to the ability of employees to develop original and effective ideas that contribute to problem-solving and process improvements. Factors such as personal motivation, access to resources, and opportunities for experimentation significantly influence individual creativity (Hjorth et al., 2018). For example, ABC Bank could encourage individual creativity by providing employees with access to innovation labs and rewarding successful ideas.

Group creativity, or collaborative innovation, occurs when teams bring diverse skills, perspectives, and experiences to jointly develop innovative solutions. Team dynamics, open communication, and mutual trust are critical for fostering group creativity. Research indicates that teams with strong collaboration practices often outperform individuals in generating comprehensive and impactful ideas (Rumanti et al., 2023). At ABC Bank, creating cross-functional teams to address customer service challenges can exemplify the application of group creativity.

Knowledge creation is the process of developing and disseminating new knowledge within an organization. This often involves learning from past experiences, leveraging external insights, and incorporating feedback from stakeholders. Knowledge creation is instrumental in maintaining an organization's relevance in competitive industries. For ABC Bank, knowledge creation could involve analyzing customer feedback, identifying service gaps, and using these insights to design innovative solutions.

The role of internal organizational environment cannot be overstated. A supportive environment that values experimentation, tolerates failure, and recognizes contributions significantly enhances organizational creativity (Damanpour, 1991). Leaders at ABC Bank can create such an environment by implementing policies that encourage risk-taking and reward innovation.

Organizational creativity is integral to maintaining a competitive edge in the banking sector. By fostering creativity, ABC Bank can address complex customer needs, innovate service delivery, and adapt to market changes. A focus on creativity not only drives performance but also ensures the organization remains agile in a fast-evolving industry.

## Artificial Intelligence (AI)

Artificial Intelligence (AI) has transformed the landscape of Human Resource Management (HRM) and organizational processes by providing powerful tools for automation, data analysis, and decision-making. In the context of HRM, AI enables organizations to enhance efficiency, personalize employee experiences, and optimize resource allocation. For ABC Bank, AI offers a pathway to improve employee performance by integrating advanced technologies into HR and operational frameworks.

AI-driven automation simplifies routine tasks such as payroll management, scheduling, and performance tracking, freeing HR professionals to focus on strategic initiatives (Huang & Rust, 2018). At ABC Bank, automating these processes can reduce administrative burdens and improve efficiency. For example, AI-powered systems can generate performance reports, track employee attendance, and manage leave requests with minimal manual intervention.

Predictive analytics, a key component of AI, helps organizations anticipate employee needs and trends. By analyzing historical data, AI can identify patterns in employee behavior, predict attrition rates, and suggest tailored interventions to improve retention and satisfaction (Fajimolu et al., 2023). For instance, at ABC Bank, AI can be used to predict training needs based on employee performance trends, ensuring that resources are allocated effectively.

AI in recruitment and onboarding has become increasingly prevalent, as it streamlines candidate selection and enhances the onboarding experience. AI tools can sift through resumes, conduct initial screenings, and match candidates to roles based on predefined criteria (Jochheim et al., 2021). This not only saves time but also reduces biases in hiring processes. ABC Bank can leverage AI to identify the best-fit candidates and ensure a seamless transition into the organization.

Beyond HRM, AI also enhances organizational creativity by providing tools for data-driven ideation and innovation. AI-powered platforms can analyze market trends, customer feedback, and operational data to generate insights that inform creative decision-making (Huang & Rust, 2018). For ABC Bank, using AI to analyze customer reviews and identify service gaps could lead to the development of innovative banking solutions.

Despite its transformative potential, the integration of AI is not without challenges. Issues such as employee resistance, data privacy concerns, and the need for technological infrastructure can hinder AI adoption (Fajimolu et al., 2023). Organizations must address





these barriers by investing in training programs, establishing clear policies, and fostering a culture that embraces technological advancements.

AI's role in enhancing employee performance and organizational creativity is both direct and indirect. By automating routine tasks, providing data-driven insights, and facilitating collaboration, AI enables employees to focus on more complex and strategic activities. For ABC Bank, the integration of AI into HRM and creative processes represents an opportunity to optimize performance, foster innovation, and stay ahead in a competitive banking industry.

Sustainability Human Resource Management (SHRM), Organizational Creativity, and Artificial Intelligence (AI) are interconnected elements that collectively drive employee performance and organizational success. SHRM lays the groundwork for sustainable practices that prioritize employee well-being and long-term development. Organizational Creativity fosters a culture of innovation, enabling organizations to address complex challenges and adapt to changing market demands. AI acts as a powerful enabler, streamlining processes, providing data-driven insights, and enhancing collaboration.

For ABC Bank's Yogyakarta Area Office, integrating these elements can create a robust framework for enhancing employee performance. SHRM practices ensure that employees feel valued and supported, while Organizational Creativity encourages innovation and adaptability. AI serves as a bridge between strategy and execution, amplifying the impact of HRM and creativity initiatives. By leveraging the synergies between SHRM, Organizational Creativity, and AI, ABC Bank can establish itself as a leader in the competitive banking sector.

## METHODOLOGY

This study adopted a quantitative research design, aimed at investigating the influence of Sustainability Human Resource Management (SHRM) and Organizational Creativity on employee performance, with Artificial Intelligence (AI) serving as a mediating variable. The research was conducted at the ABC Bank Yogyakarta Area Office, a leading financial institution in the region. To ensure the validity and reliability of the results, a structured survey was distributed among employees, and data were analyzed using Structural Equation Modeling (SEM), a statistical technique that allows for the assessment of complex relationships between observed and latent variables.

### Research Design and Approach

A quantitative research design was chosen for this study as it enables the collection of measurable data, which can be analyzed statistically to test hypotheses and assess relationships between variables. The use of a survey instrument provided a standardized way of gathering data from a large group of respondents, allowing the study to examine the impact of SHRM, Organizational Creativity, and AI on employee performance across various employee categories.

Quantitative research is particularly effective for testing relationships between variables in a large population, providing results that are generalizable and statistically robust (Creswell, 2014). In this study, the focus was on understanding the direct and indirect effects of SHRM and Organizational Creativity on employee performance, with AI acting as a potential mediator. The choice of SEM as the analysis method was driven by its ability to simultaneously assess multiple relationships, including direct effects, indirect effects (mediations), and the interactions between latent constructs, making it suitable for the complexity of the research model.

### Sampling Method

A random sampling technique was used to select participants for this study. Random sampling is a key method in quantitative research that ensures every member of the population has an equal chance of being selected. This reduces selection bias and helps to ensure that the sample is representative of the population, thereby enhancing the generalizability of the results (Bryman, 2016).

At ABC Bank, the target population consisted of employees working in various departments, ranging from customer service to management. The diversity in job roles and responsibilities allowed for a comprehensive understanding of how SHRM practices, organizational creativity, and AI influence employee performance across different employee groups. The random selection process was aimed at capturing a broad spectrum of responses, which would reflect the diverse work experiences, perceptions, and challenges that employees face at the bank.

The final sample size was determined based on statistical considerations for SEM, which typically requires a sample size large enough to ensure stable and reliable results (Hair et al., 2010). For this study, a sample size of 200 employees was targeted, which



is considered sufficient for SEM analysis, where the rule of thumb is a minimum of 5 to 10 participants per parameter being estimated (Kline, 2016).

## Survey Instrument

The primary data collection tool was a structured survey, designed to capture respondents' perceptions and experiences related to the variables under study: SHRM, Organizational Creativity, AI, and employee performance. The survey consisted of multiple-choice questions, Likert scale items, and a few open-ended questions to gather both quantitative and qualitative insights.

The survey items for each variable were derived from existing, validated instruments in the literature. For SHRM, items related to HR development, diversity practices, and occupational safety were adapted from the work of Piwovar-Sulej (2021) and Ren et al. (2023). The Organizational Creativity scale included items based on the frameworks developed by Rumanti et al. (2023) and Damanpour (1991), focusing on individual creativity, group collaboration, and knowledge creation. AI-related items were drawn from studies by Huang & Rust (2018) and Jochheim et al. (2021), addressing aspects such as AI automation, data-driven decision-making, and performance analytics. Finally, employee performance was measured using dimensions of job time, job quality, and job quantity, as defined by Na-Nan et al. (2018).

Each item in the survey was rated on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). This scale was chosen for its simplicity and ability to measure the intensity of respondents' attitudes or perceptions toward specific statements (Cohen et al., 2017). A total of 29 questions were included in the final survey, which respondents completed anonymously to encourage honest and unbiased responses.

Before the full-scale survey administration, a pilot test was conducted with a small group of employees ( $n = 30$ ) from different departments to ensure the clarity, reliability, and validity of the instrument. The pilot test revealed that the items were clear, and the response rate was high, suggesting that the survey was well-received by employees.

## Data Collection Process

Data were collected over a period of two weeks. During this time, employees at the ABC Bank Yogyakarta Area Office were invited to participate in the survey via email and through internal communication channels such as the company's intranet and messaging systems. To maximize participation, the survey was made available both online and in paper format. Participants were informed about the study's purpose, assured of their anonymity, and encouraged to provide honest feedback. An incentive, in the form of a small gift voucher, was offered to encourage participation, though this was entirely voluntary.

The survey was distributed to 140 employees, and 129 responses were collected, resulting in a response rate of 92.14%. The responses were recorded and stored in a Google Sheet for easy access and management. After screening for incomplete or invalid responses, 129 valid surveys were retained for analysis. This sample size was considered sufficient for SEM, ensuring the results were statistically significant and robust.

## Data Analysis

Once the data were collected, they were analyzed using Structural Equation Modeling (SEM) to assess both direct and mediated relationships between the variables. SEM is a statistical technique that combines factor analysis and multiple regression analysis to evaluate complex models involving multiple variables and constructs (Hair et al., 2010). SEM is particularly suited for this study because it allows for the examination of both the direct effects of SHRM and Organizational Creativity on employee performance, as well as the indirect effects through AI as a mediator.

The data were first screened for normality, outliers, and missing values. Missing data were handled using full information maximum likelihood estimation, which is an effective method for handling incomplete data without losing too many cases (Byrne, 2016). The measurement model was then assessed to evaluate the reliability and validity of the survey items. This included checking convergent validity (e.g., using factor loadings and Average Variance Extracted, AVE) and discriminant validity (e.g., using the Fornell-Larcker criterion).

Once the measurement model was validated, the structural model was tested to assess the relationships between SHRM, Organizational Creativity, AI, and employee performance. Standardized path coefficients were used to determine the strength and direction of these relationships, and the fit of the model was evaluated using goodness-of-fit indices such as Chi-square, RMSEA, CFI, and TLI (Hair et al., 2010).



Bootstrapping was employed to test the significance of the indirect effects (mediation) of AI between SHRM, Organizational Creativity, and employee performance. This technique generates confidence intervals for indirect effects, which provides a more accurate assessment of the mediating role of AI (Preacher & Hayes, 2008).

#### Ethical Considerations

Ethical considerations were integral to this study. The participants were informed of the study's purpose, their voluntary participation, and their right to withdraw at any time without consequences. Informed consent was obtained, and all responses were kept confidential. Personal identifiers were not collected, and all data were anonymized during the analysis. Ethical approval for the study was granted by the institutional review board (IRB) of the university.

The methodology employed in this study was designed to ensure a rigorous and systematic approach to examining the relationships between SHRM, Organizational Creativity, AI, and employee performance at ABC Bank. The use of a well-designed survey, combined with random sampling, ensured that the data were representative and reliable. SEM was an appropriate analytical tool for testing the complex relationships in the research model, providing insights into both the direct and indirect effects of the variables under study. This approach not only ensures the robustness of the findings but also enhances the generalizability and relevance of the study in the context of the banking industry.

## A. RESULTS

The results of this study provide a detailed understanding of the relationships between Sustainability Human Resource Management (SHRM), Organizational Creativity, Artificial Intelligence (AI), and employee performance within the context of ABC Bank's Yogyakarta Area Office. The primary objective of this study was to examine the direct and indirect effects of SHRM and Organizational Creativity on employee performance, with AI serving as a potential mediating variable. The data were analyzed using Structural Equation Modeling (SEM), which allowed for a thorough investigation of both direct and mediated relationships among the key constructs in the research model.

#### Descriptive Statistics

Before delving into the hypothesis testing, the descriptive statistics of the survey responses were examined. The sample consisted of 200 valid responses from employees at ABC Bank, with a balanced distribution across various job roles, including customer service representatives, branch managers, and support staff. The survey was designed to capture data on employee perceptions of SHRM practices, organizational creativity, and AI's impact on performance.

The mean scores for SHRM practices were relatively high, indicating that employees felt the bank's HR practices were aligned with sustainable development goals. The highest-rated aspects of SHRM included HR development programs and occupational safety measures, suggesting that employees recognize the bank's efforts to invest in their professional growth and well-being. Similarly, Organizational Creativity was rated positively, particularly in areas related to team collaboration and knowledge sharing. Employees reported a strong sense of involvement in innovation processes, which points to an organizational culture that encourages creativity and adaptability.

On the other hand, AI's perceived role in improving employee performance was rated more moderately. While employees acknowledged the use of AI tools for process automation and performance monitoring, they did not feel that AI significantly contributed to their day-to-day performance or creativity. This observation hinted at the complexity of AI's integration into the work environment and set the stage for the deeper analysis of its mediating role.

#### Measurement Model Evaluation

Before assessing the structural relationships, the measurement model was evaluated for reliability and validity. Confirmatory Factor Analysis (CFA) was performed to test the validity of the constructs. The results indicated that the measurement model had acceptable fit indices: Comparative Fit Index (CFI) = 0.91, Tucker-Lewis Index (TLI) = 0.90, and Root Mean Square Error of Approximation (RMSEA) = 0.05. These values suggest a good model fit, confirming that the items used to measure SHRM, Organizational Creativity, AI, and employee performance were valid and reliable.

Convergent validity was assessed through the Average Variance Extracted (AVE) for each construct. All constructs exhibited AVE values greater than 0.5, indicating that more than 50% of the variance in each item could be explained by its respective construct, further supporting the validity of the measures.



Discriminant validity was confirmed by comparing the square root of the AVE for each construct with the correlation between constructs. The results showed that each construct was sufficiently distinct from others, suggesting that SHRM, Organizational Creativity, AI, and employee performance are separate and distinct constructs in the model.

## Structural Model Evaluation

The next step involved assessing the structural model, which examines the relationships between the constructs. In SEM, the structural model evaluates the direct and indirect relationships between the variables and provides insights into the strength and direction of these relationships. Several key findings emerged from the structural model analysis.

## Direct Effects of SHRM and Organizational Creativity on Employee Performance

The analysis revealed that both SHRM and Organizational Creativity had a significant and positive impact on employee performance. Specifically, the path coefficient between SHRM and employee performance was 0.41 ( $p < 0.01$ ), indicating a moderate to strong positive relationship. This suggests that employees who perceive SHRM practices, such as HR development and diversity initiatives, as effective are more likely to report higher levels of job satisfaction, engagement, and overall performance. SHRM's focus on employee well-being, career development, and work-life balance enhances employees' commitment to the organization, ultimately leading to increased productivity and performance.

Similarly, Organizational Creativity had a significant effect on employee performance, with a path coefficient of 0.38 ( $p < 0.01$ ). This finding underscores the importance of fostering an innovative and collaborative work environment. Employees who perceive their organization as creative and open to new ideas are more likely to feel motivated and empowered to contribute meaningfully to their work. Organizational creativity encourages employees to think critically, solve problems collaboratively, and take initiative, all of which directly enhance their performance.

## Mediating Role of AI

The primary focus of this study was to examine whether AI mediates the relationship between SHRM, Organizational Creativity, and employee performance. However, the results indicated that AI's mediating role was not statistically significant. The path coefficient for AI's mediation between SHRM and employee performance was 0.05 ( $p > 0.05$ ), and between Organizational Creativity and employee performance was 0.06 ( $p > 0.05$ ). These values suggest that AI, while positively perceived by employees in terms of process automation and performance tracking, did not significantly influence the relationship between SHRM or Organizational Creativity and employee performance.

This finding was somewhat unexpected, as AI is often thought to enhance employee performance by providing data-driven insights, automating routine tasks, and enabling more personalized development strategies. The lack of a significant mediating effect of AI can be attributed to several factors. Firstly, while AI tools were used at ABC Bank for performance monitoring and process automation, their integration into employees' day-to-day activities appeared limited. Many employees did not perceive AI as directly contributing to their performance or creativity, likely due to the relatively low level of AI utilization in creative decision-making processes. Moreover, AI's role in performance improvement was still evolving at the time of the study, and employees may not have fully recognized its potential to influence their work in meaningful ways.

## Indirect Effects and Hypothesis Testing

The study also tested the indirect effects of SHRM and Organizational Creativity on employee performance through AI, which represents the mediation hypothesis. However, as mentioned earlier, the mediation analysis using bootstrapping showed that the indirect effects were not significant, with bias-corrected confidence intervals crossing zero for both SHRM  $\rightarrow$  AI  $\rightarrow$  employee performance and Organizational Creativity  $\rightarrow$  AI  $\rightarrow$  employee performance. This indicates that AI does not act as a mediator in the relationships between SHRM, Organizational Creativity, and employee performance.

## DISCUSSION OF FINDINGS

The findings of this study confirm that SHRM and Organizational Creativity directly influence employee performance at ABC Bank's Yogyakarta Area Office. The positive effects of SHRM suggest that employees value the sustainable and employee-focused HR practices implemented by the bank, which enhance their engagement and motivation. Organizational Creativity also plays a critical role, with employees who perceive a culture of innovation and collaboration performing better. These results align with





existing literature that emphasizes the importance of supportive HR practices and creativity in driving employee performance (Jerónimo et al., 2020; Malik et al., 2021).

However, the lack of significant mediation by AI suggests that while AI holds promise as a tool for improving efficiency and productivity, it may not yet be fully integrated into the bank's organizational and creative processes. The limited role of AI in this study highlights the need for further exploration into how AI can be better leveraged to support employee performance, particularly in areas that involve innovation and creative problem-solving. Future research could explore how more advanced AI applications, such as machine learning-driven performance feedback systems or AI-powered collaborative platforms, could enhance the relationship between SHRM, Organizational Creativity, and employee performance.

In conclusion, the study confirms that both SHRM and Organizational Creativity significantly improve employee performance. The findings also suggest that AI, while recognized as a valuable tool, does not yet serve as a significant mediator in the relationship between SHRM, Organizational Creativity, and employee performance. These results provide important insights for organizations looking to optimize their HR practices, foster creativity, and integrate AI more effectively to enhance overall performance.

## B. DISCUSSION

The findings of this study provide valuable insights into the relationships between Sustainability Human Resource Management (SHRM), Organizational Creativity, Artificial Intelligence (AI), and employee performance at ABC Bank's Yogyakarta Area Office. Specifically, the results confirm that both SHRM and Organizational Creativity independently contribute to enhancing employee performance. However, the study also reveals that the integration of AI as a mediator between SHRM, Organizational Creativity, and employee performance is not yet statistically significant. This section will discuss these findings in greater detail, exploring their implications, potential reasons for the lack of significant mediation by AI, and suggestions for future research and practice.

### SHRM and Employee Performance

The positive relationship between SHRM and employee performance aligns with existing research that highlights the critical role of sustainable HR practices in promoting long-term organizational success (Piwowar-Sulej, 2021; Ren et al., 2023). SHRM emphasizes the integration of social, environmental, and economic goals into HRM practices, ensuring that employee welfare is prioritized alongside organizational objectives. At ABC Bank, SHRM practices such as HR development, diversity initiatives, and occupational safety were found to significantly enhance employee engagement and productivity. These results suggest that employees who perceive the bank's HR practices as supportive of their growth and well-being are more likely to be motivated and committed to their roles.

A key implication of this finding is that banks and other organizations should continue to invest in SHRM practices as a means of boosting employee performance. By prioritizing professional development, fostering a diverse and inclusive work environment, and ensuring employee health and safety, organizations can enhance employee satisfaction and reduce turnover. For ABC Bank, these practices contribute not only to improved employee performance but also to the long-term sustainability of the organization by creating a motivated and engaged workforce.

### Organizational Creativity and Employee Performance

Similarly, the significant impact of Organizational Creativity on employee performance further emphasizes the importance of an innovative work environment. Creativity within organizations is essential for problem-solving, innovation, and adapting to rapidly changing market conditions. Employees who feel that their organization encourages creativity and provides opportunities for collaborative idea generation tend to be more engaged and productive (Hjorth et al., 2018; Rumanti et al., 2023). At ABC Bank, fostering creativity through team collaboration, knowledge sharing, and an open organizational culture was found to significantly enhance employee performance.

This finding highlights the value of creating a workplace culture that not only supports but actively encourages creativity. By promoting a collaborative environment and providing employees with the resources and freedom to explore new ideas, banks and other organizations can drive innovation and enhance employee satisfaction. For ABC Bank, encouraging creativity through cross-functional teams, innovation workshops, and knowledge-sharing platforms could lead to more effective solutions to customer needs and operational challenges. As the banking industry becomes more competitive and customer demands evolve, organizations that embrace creativity will be better positioned to maintain a competitive edge.



## AI's Role as a Mediator: Lack of Significant Mediation

The most surprising finding of this study was the lack of a statistically significant mediating effect of AI between SHRM, Organizational Creativity, and employee performance. While AI tools were recognized by employees for their role in automating tasks and providing data-driven insights, they did not perceive AI as significantly enhancing the relationship between SHRM or Organizational Creativity and employee performance. The path coefficients for AI's mediation were found to be low and not statistically significant, suggesting that AI, as it is currently integrated at ABC Bank, does not yet function as a key enabler in these relationships.

This result raises important questions about the current state of AI integration within organizations and its effectiveness in enhancing employee performance. One possible explanation for the lack of mediation is the limited integration of AI into daily workflows. While AI tools were used for performance monitoring, task automation, and data analytics, their role in directly improving employee creativity or enhancing the impact of SHRM practices was minimal. AI tools at ABC Bank may have been seen more as administrative tools rather than strategic enablers of creativity or performance improvement.

Moreover, the adaptability of the workforce to AI technologies could be another contributing factor. As AI becomes more integrated into business operations, employees may need additional training and support to fully leverage its capabilities. If employees do not feel confident in using AI tools or if these tools are perceived as replacing human creativity or decision-making, their impact on employee performance may be limited. This is especially true if AI is not perceived as enhancing the creative processes or directly supporting employees' professional development, as is the case in this study.

## Challenges to AI Implementation

Several challenges to AI implementation may explain the lack of significant mediation by AI in this study. One of the primary barriers is the complexity of AI systems. AI tools, particularly those used for data analysis and performance monitoring, often require significant technical expertise to be effectively utilized. Employees may find it difficult to engage with AI systems if they are not user-friendly or if adequate training and support are not provided. In such cases, employees may view AI as an additional layer of complexity rather than a tool that enhances their performance.

Furthermore, the resistance to change is a common challenge in AI adoption. Employees may be hesitant to adopt new technologies due to fears of job displacement, concerns about the reliability of AI systems, or general resistance to technological changes. This resistance can hinder the successful integration of AI and limit its potential to mediate the effects of SHRM and Organizational Creativity on performance. At ABC Bank, if employees did not fully embrace AI or were unsure of its role in enhancing their work, its potential as a mediator would naturally be diminished.

Lastly, organizational culture plays a crucial role in AI adoption. If the organizational culture is not aligned with the principles of innovation and technology adoption, employees may not see AI as a tool to enhance their performance. For AI to act as a mediator, there needs to be a strong organizational commitment to innovation, as well as clear communication about the benefits of AI for both employees and the organization as a whole.

## Implications for Practice

The findings of this study suggest that while SHRM and Organizational Creativity are key drivers of employee performance, organizations should carefully consider the challenges associated with AI adoption. To fully realize the potential of AI as a mediator, organizations must invest in the training and development of employees to ensure they are equipped to use AI tools effectively. Additionally, organizations should foster a culture that embraces technological innovation and supports the integration of AI into creative and strategic decision-making processes.

At ABC Bank, this could involve providing employees with more opportunities to engage with AI in creative tasks, such as using AI-driven analytics to identify customer trends or developing innovative financial products. Furthermore, ensuring that AI is perceived as a tool that complements, rather than replaces, human creativity and decision-making is essential for improving its acceptance and effectiveness.

## Future Research Directions

Future research should focus on exploring how AI can be more effectively integrated into SHRM and Organizational Creativity practices. Longitudinal studies could examine how the increasing use of AI in HR and creative processes impacts employee performance over time. Additionally, research could explore the role of different types of AI technologies (e.g., machine learning,



natural language processing, etc.) and how their specific applications in HRM influence employee creativity, engagement, and performance.

Further studies could also investigate employee perceptions of AI in more depth, examining factors such as trust in AI, perceived fairness, and the role of AI in enhancing employee skills. Additionally, exploring the cultural and organizational factors that influence AI adoption and its impact on performance would provide a more comprehensive understanding of the barriers and enablers of AI's role in employee performance enhancement.

In conclusion, while SHRM and Organizational Creativity significantly enhance employee performance, the integration of AI as a mediator requires further exploration. Challenges such as AI implementation barriers, workforce adaptability, and organizational culture may limit the effectiveness of AI as a mediator. For AI to successfully enhance the impact of SHRM and Organizational Creativity on employee performance, organizations must prioritize employee training, address resistance to change, and create an innovation-driven culture that fully embraces AI's potential. Further research will be essential to fully understand the complex dynamics between AI, SHRM, Organizational Creativity, and employee performance in the modern workplace.

### C. CONCLUSION

This study set out to examine the role of Sustainability Human Resource Management (SHRM), Organizational Creativity, and Artificial Intelligence (AI) in enhancing employee performance, with a focus on the Yogyakarta Area Office of ABC Bank. The research aimed to understand how SHRM and Organizational Creativity independently influence employee performance and whether AI acts as a mediator in these relationships. The results provided insightful findings on the direct impact of SHRM and Organizational Creativity on performance, while also shedding light on the challenges associated with AI integration into the workplace.

The findings of this study support the importance of SHRM and Organizational Creativity in enhancing employee performance. Both SHRM and Organizational Creativity were found to have significant positive effects on performance, confirming that sustainable HR practices and an innovative organizational culture are crucial drivers of employee engagement and productivity.

SHRM's emphasis on employee well-being, career development, and workplace safety plays a vital role in creating a positive and productive work environment. Employees who perceived SHRM practices as effective were more likely to report higher levels of job satisfaction, engagement, and performance. By investing in sustainable HR practices, organizations can not only improve employee performance but also foster long-term organizational sustainability by building a motivated and loyal workforce.

Similarly, fostering Organizational Creativity emerged as a significant contributor to employee performance. Employees who worked in an environment that promoted creativity, collaboration, and knowledge sharing were more likely to feel empowered to innovate and perform at their best. Organizational creativity not only improves the ability of employees to solve complex problems but also contributes to the generation of new ideas and solutions, which can improve both customer service and internal operations. While the roles of SHRM and Organizational Creativity in directly influencing employee performance were clear, the role of AI as a mediator was less conclusive. Despite AI being recognized as a powerful tool in HR management and organizational processes, its ability to mediate the relationship between SHRM, Organizational Creativity, and employee performance was not statistically significant in this study. This suggests that while AI can certainly enhance various HR functions, it does not yet play a critical role in directly influencing how SHRM and Organizational Creativity contribute to employee performance at ABC Bank.

#### AI's Role and Challenges

The lack of significant mediation by AI may be attributed to several factors, most notably the stage of AI integration at ABC Bank. While AI tools are employed for automating HR tasks, monitoring performance, and analyzing data, employees did not perceive AI as directly contributing to their creative processes or enhancing their overall performance. The AI tools available at the time of the study were more focused on administrative functions, such as performance tracking and task automation, rather than on fostering creativity or providing real-time feedback and development opportunities that directly impact performance.

Additionally, the adaptability of employees to AI technologies likely played a role in limiting its effectiveness as a mediator. If employees are not fully trained to leverage AI tools or if they perceive AI as a threat to their roles, they may not engage with the technology in a way that allows it to significantly impact their performance. The resistance to change and lack of AI literacy could be limiting factors in the successful integration of AI into the workplace, particularly in its role as a mediator of performance.



Another challenge to AI adoption is organizational culture. If the culture within the organization does not fully embrace technological innovation or view AI as a tool to enhance human capabilities, then AI's potential impact on performance is limited. To maximize the benefits of AI, organizations must foster a culture that encourages the use of technology to complement human skills, rather than seeing it as a replacement. The perception of AI as an enabler, rather than an obstacle, is essential for its integration into SHRM and Organizational Creativity processes.

### **The Importance of Integrating SHRM, Organizational Creativity, and AI**

Despite the inconclusive findings regarding AI's mediating role, the study highlights the synergistic potential of integrating SHRM, Organizational Creativity, and AI to enhance employee performance. Both SHRM and Organizational Creativity independently contribute to a more engaged, satisfied, and productive workforce. However, AI has the potential to amplify these effects if it is more deeply integrated into organizational processes and culture.

SHRM can be further enhanced through AI by providing more personalized HR services, such as customized training programs or performance feedback systems. AI tools can help identify skill gaps, suggest career development pathways, and optimize talent management processes. Additionally, AI can assist in streamlining administrative tasks, allowing HR professionals to focus more on strategic decision-making and employee development.

In terms of Organizational Creativity, AI can be used to analyze data and identify trends that could inspire new ideas and innovations. For example, AI can help employees track customer feedback, market trends, and operational data to identify areas where creativity and innovation are needed. AI-driven collaboration tools can also facilitate communication and idea-sharing among teams, leading to more effective problem-solving and creative output.

For AI to play a more significant role in mediating between SHRM, Organizational Creativity, and employee performance, organizations must invest in both the technological infrastructure and employee readiness to fully integrate AI into their work processes. This includes providing comprehensive training on how to use AI tools effectively, ensuring that AI systems are user-friendly and accessible, and fostering an organizational culture that embraces technological innovation.

### **Implications for Practice**

For organizations like ABC Bank, this study emphasizes the importance of maintaining a balanced approach to SHRM, Organizational Creativity, and AI integration. By continuing to prioritize SHRM practices and fostering a creative, innovative workplace culture, organizations can drive significant improvements in employee performance. However, AI should not be viewed as a standalone solution but rather as a complementary tool that can enhance existing HR and creativity practices.

Organizations should focus on the holistic integration of AI into HR and creative processes. This could include using AI to improve employee learning and development, providing real-time performance feedback, and supporting innovation through data-driven insights. Additionally, organizations should focus on developing AI literacy among employees and ensuring that AI is viewed as a tool that enhances, rather than replaces, human creativity and decisionmaking.

### **Future Research Directions**

Future research should focus on the evolution of AI in the workplace and its potential to impact employee performance, particularly in the context of HRM and creativity. Longitudinal studies that track the implementation of AI over time could offer valuable insights into how its role in enhancing performance changes as AI technology becomes more sophisticated. Additionally, research could explore the employee perceptions of AI, including factors such as trust, transparency, and the perceived value of AI in their work processes. Understanding these perceptions will be crucial for overcoming resistance to AI adoption and maximizing its benefits.

Furthermore, research could investigate the interaction between AI and organizational culture. How do cultural factors, such as openness to innovation and trust in technology, influence the successful integration of AI in enhancing employee performance? Exploring these questions will help organizations understand how to create a culture that supports the adoption of AI as a tool for improving employee engagement and creativity.

In conclusion, while AI's role as a mediator between SHRM, Organizational Creativity, and employee performance remains inconclusive, the findings of this study demonstrate the critical importance of integrating SHRM and Organizational Creativity into an organization's strategy to improve employee performance. The potential of AI to enhance these processes is evident, but its successful integration requires addressing challenges related to technology adoption, employee readiness, and organizational culture.





Organizations that invest in both technology and their employees' capacity to leverage it will be better positioned to achieve sustainable and high-performing work environments in the future.

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## REFERENCES

1. Bryman, A. (2016). *Social research methods*. Oxford University Press.
2. Cohen, L., Manion, L., & Morrison, K. (2017). *Research methods in education*. Routledge.
3. Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
4. Damanpour, F. (1991). *Organizational innovation: A meta-analysis of effects of determinants and moderators*.
5. Fajimolu, O. C., Onyemaobi, C. A., & Sunday, P. S. (2023). *The Role of Artificial Intelligence Capability and Organizational Creativity on Performance*.
6. Gayatri, R., Malik, A., & Verma, T. (2020). *Employee Engagement in the Financial Sector: Challenges and Opportunities*.
7. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2010). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage.
8. Hjorth, D., Rumanti, R., & Elsayy, D. (2018). *Organizational Creativity and Its Impact on Innovation Strategies*.
9. Huang, M., & Rust, R. T. (2018). *Artificial Intelligence and Organizational Innovation: An Integrative Framework*.
10. Jochheim, M., Andrews, P., & Meyer, T. (2021). *The Role of Artificial Intelligence in Enhancing Human Resource Practices*.
11. Jerónimo, M., Elsayy, D., & Piwowar-Sulej, K. (2020). *Sustainable HRM Practices and Their Impact on Employee Outcomes*.
12. Kline, R. B. (2016). *Principles and practice of structural equation modeling*. Guilford press.
13. Malik, A., De Silva, T. L., & Jerónimo, M. (2021). *Human Resource Management in Competitive Environments*.
14. Preacher, K. J., & Hayes, A. F. (2008). *Asymptotic methods for resampling in the mediation analysis*.
15. Ren, A., Elias, K., & Nasir, M. (2023). *Sustainability HRM Practices and Employee Outcomes: A Global Perspective*.
16. Rumanti, R., Piwowar-Sulej, K., & Waldman, D. (2023). *Fostering Creativity in Banking Organizations: A Case Study*.

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