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Adopting artificial intelligence and employee performance  
at the National Bank of Oman.

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**Abstract:**



This study explores the impact of artificial intelligence (AI) adoption on employee performance at the National Bank of Oman, focusing on two branches: the main branch in Al Athaiba and a branch in Al Dakhiliyah, specifically in Samail. The research employed a quantitative methodology, relying on a questionnaire administered to a sample of 133 employees from both branches. The study focuses primarily on human resources staff. In addition, it includes an overview of employees from customer service and information technology departments, as these are the departments that implement artificial intelligence systems, although the nature of their systems differs. The human resources department is responsible for employee performance. The results showed that the majority of employees believe that AI adoption significantly contributes to improving their job performance, accelerating efficient banking decision-making, reducing human error, and expediting the automation of routine tasks such as smart recruitment. This indicates that AI systems have a positive impact on the bank. In addition, some findings have revealed challenges in adopting AI systems, such as a lack of technical skills and fear of job loss.

However, AI strategies play a crucial role in overcoming these challenges. These strategies are developed by human resources management through employee training programs, systems integration, and employee motivation and incentives, thereby helping to increase employee confidence in AI systems. The study concludes that artificial intelligence supports the functions of human resources management and other departments in the bank, such as customer service and information technology, due to the integration of these departments in implementing artificial intelligence technologies and their combined impact on employee performance in the bank.

**Keywords:** AI adoption, AI system, AI strategies, Employee performance, Human Resource Technology.

## 1. Introduction

The Sultanate of Oman has numerous banks, and one of the most prominent is the National Bank of Oman, which is headquartered in the Muscat Governorate, specifically in Al-Azaiba. It has more than 60 branches around the Sultanate, as well as more than 173 banking machines in all branches. Artificial intelligence systems were adopted in 2019, such as systems for analyzing big data for customers, systems for detecting and monitoring fraudulent transactions. Artificial intelligence is considered one of the new techniques provided by the bank, and employees still face difficulties in adapting to artificial intelligence (National Bank of Oman SAOG, 2025).

Artificial intelligence has been adopted in all areas of work, and the first countries that started using artificial intelligence were developing countries such as Japan and China due to their technological advancement and strong infrastructure (Decker et al, 2017). Artificial intelligence is also expected to have a significant impact on the workplace. Developed Countries have used AI in areas such as banking for data analysis, customer service in online transactions, and rapid response to detect financial fraud. For example, in e-commerce, AI robots are used to respond to customers around the clock and automate routine transactions (Bhardwaj, 2026). The application of AI in the workplace impacts employee performance, including the use of robots for customer service, data analysis and reporting, electronic fraud detection, and financial transaction automation. It depends on employee performance in the work environment, as it is

essential to train, lead, motivate, collaborate, and supervise employees effectively when utilizing artificial intelligence technologies (Wenda Li, 2025).

Despite technological advancements in artificial intelligence (AI) in banks worldwide serving developing regions, AI adoption with employee performance in the Omani banking sector still suffers from gaps in adapting to modern systems and a lack of skills in using the technology. This study seeks to discover how artificial intelligence systems can be adopted to develop and assist employee performance in the work environment, and to keep pace with developments in modern technology within the banking sector.

## **2. Statement of the Research Problem**

Artificial intelligence (AI) systems have become crucial in the business environment, particularly in the Omani banking sector, to enhance operational efficiency and deliver high-quality services. The National Bank of Oman is one of the banks in the Sultanate of Oman adopting AI across various departments, including Customer Service, Information Technology, and Human Resources. However, National Bank of Oman employees face challenges in adopting artificial intelligence. These challenges include a lack of technical skills and knowledge in using AI systems, fear of job loss and the disappearance of traditional skills when smart systems are implemented, and concerns related to information security, specifically their inability to protect customer data privacy. And the fear of reduced employee wages when relying on operating systems. These challenges negatively impact employee performance and limit the effectiveness of AI adoption within the bank.

However, it indicates a study by Mago (2025) Many employees face difficulties adapting to artificial intelligence technologies, such as difficulty using financial data analysis programs, the Power BI reporting system, and Tableau banking operations monitoring, Difficulty in using and dealing with electronic fraud detection systems such as SAS fraud management, this leads to stress and decreased job performance of employees and affects the quality of customer service (Mago, 2025). Additionally, a study by Ali (2025) investigated the impact of artificial intelligence (AI) on Omani banks. This application utilizes smart machines equipped with AI systems that interact with customer service. Employees faced resistance to technological change and a skills gap due to their limited proficiency in using AI-enabled smart devices, such as interactive smart

devices and smart financial analytics platforms. These obstacles negatively impacted employee performance, leading to decreased productivity, revenue, and customer satisfaction (Ali, 2025).

Based on the above, this research aims to solve the problem of obstacles that occur in the work environment when adopting artificial intelligence and employee performance in the Omani banking sector, Develop a plan to increase employee performance efficiency and leverage artificial intelligence through technical change management, employee training to develop their skills and capabilities, and reward and motivate them, Extracting the synergies between AI adoption and employee performance.

## **Aims and Objectives of the study**

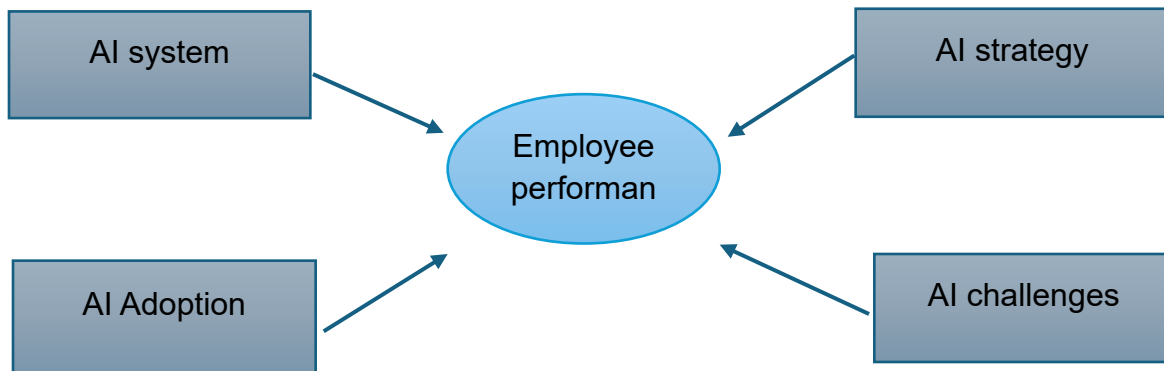
### **Aims**

The study aims to analyse, evaluate, and identify the impact of adopting artificial intelligence on employee performance at the National Bank of Oman.

### **Research Objectives**

1. To evaluate the impact of artificial intelligence systems on employee productivity and performance at the National Bank of Oman.
2. To study the relationship between the adoption of artificial intelligence and employee performance at the National Bank of Oman.
3. To analyse how to overcome the challenges employees face when adopting artificial intelligence at the National Bank of Oman.
4. To recommend strategies for developing employee performance through the adoption of artificial intelligence at the National Bank of Oman.

## 2.2 Conceptual Framework



Conceptual framework: The relationship between AI adoption and employee performance at the National Bank

### Literature Review:

#### **The impact of artificial intelligence systems on employee productivity and performance.**

Artificial intelligence (AI) adoption can be defined as the current technological systems to assist employees in automating financial transactions, hence enhancing the productivity of the tasks and the employee performance (Kassa and Worku, 2025). A study conducted by Abdel Rahim (2025) on the effect that AI systems have on the performance and productivity of employees indicated that AI has enhanced the efficiency and performance of employees and job satisfaction because it automates the work performed by employees and enhances new skills and capabilities. According to Madanchian, M. (2024). The artificial intelligence systems have a positive influence on the human resources employees because they enhance the decision-making process and make the tasks more automated. To illustrate, machine learning can support HR departments in the recruitment process by recognizing and assessing the candidates and picking the most appropriate employee. Chatbots are also employed to answer questions directly and quickly for candidates to assist the staff in making quick decisions.

Polireddi (2024) states that the adoption of artificial intelligence (AI) has a positive effect on employee performance and skills. Under the implementation of AI, employees need to be trained on artificial intelligence systems to improve their performance, technical knowledge, and

capability of applying functional data analytics systems. Polireddi indicates that this technology has helped some technologies that are now used by banks to filter job applicants. According to Polireddi, several technologies, most notably Capital One, Banks can use this technology to screen job candidates, review their resumes, and expedite the hiring process. It can also be used for big data analytics, leading to faster hiring decisions and increased productivity.

### **The relationship between the adoption of artificial intelligence and employee performance.**

The modern, technologically advanced world has introduced artificial intelligence systems in the workplace environment, and these technologies and systems have gained great significance in the banking industry due to their ability to simplify operational procedures and enhance the quality of work done by employees. As indicated by Iligondi and Osagi (2020), a study done by banks in Nigeria found that AI adoption was positively correlated with employee performance. The study revealed that AI supports the process of decision-making, analysis of big data, simplification of operations during transactions, and instant execution of customer-oriented tasks. The implementation of AI systems by banks complements the operations of these institutions, and the employees need to be trained on AI technologies because machine-assisted tasks lead to the simplification of the automation of banking transactions. Moreover, AI helps to build the skills of employees and enhance their performance. The adoption of artificial intelligence in the workplace presents a challenge to banks in terms of cyber fraud and the impact it has on the performance and efficiency of employees.

Rodgers et al (2023) argue that managers and employees are usually under pressure and time constraints during decision-making. But, in cases where organizations embrace artificial intelligence (AI), it directly helps to speed up the decision-making process in support of the human resources department, such as recruitment and selection processes, employee performance, workforce planning, and data analysis, hence, enhancing the efficiency of decision-making. Moreover, as Shaik et al. (2025) state, data analysis and decision-making predictive models in human resources departments can forecast the risks of employee turnover and forecast productive employees in the future. It proves that this AI-driven platform is able to assist the banks, namely, the HR departments, in making decisions in a quick and efficient way, relying on the experience of the employees. Also, the research revealed that a productivity model

defines how data or information can be converted into decisions with the help of an AI system without going against the principle of transparency in ethics.

### **How to overcome the challenges employees face when adopting artificial intelligence:**

The world is witnessing a significant development in the banking sector, with the adoption of artificial intelligence systems in the workplace. According to Ghandour, A. (2021), a study of financial institutions that have benefited from artificial intelligence (AI) indicated that some have faced difficulties in getting their employees to adapt to AI systems. This is due to employees' limited experience and knowledge of the technological advancements in this field that could improve their job performance. Some employees struggle to accept the idea of adopting AI in the workplace for fear of losing their jobs and of being unable to manage banking transactions due to a lack of technical skills.

Al-Bukhari et al. (2024) assert that despite the numerous benefits associated with artificial intelligence, cyber fraud attacks (customer card spoofing, phishing, risky transfers, and direct hacking) are also present. These scams have a direct effect of affecting work-related loss of finances, reduced employee confidence in smart systems, lowered employee workload due to investigating suspicious banking activities, and the congested workload due to data verification and monitoring of bank accounts. In order to prevent such cases, it is critical to equip AI systems with proper security mechanisms to avoid fraud and hackers.

According to Awalddin et al. (2024), the internet plays a pivotal role in the responsiveness of artificial intelligence systems. These systems require an upgraded infrastructure to scale the range of services offered and seamlessly transition between networks. The internet impacts infrastructure to enable faster data transfer, the processing of massive amounts of data, and rapid application response times. As noted by Tamanna et al. (2024), neglecting to update network infrastructure and banking systems leads to slow response times for digital transactions, reporting delays, weakened transaction security and thus easier hacking, reduced employee performance, and increased financial losses.

### **The strategies for developing employee performance through the adoption of artificial intelligence:**

A study by Saeed and Dole (2021) reveals that artificial intelligence (AI) systems have become components of banking services. The paper emphasizes the use of these systems in the achievement of the success of the business performance improvement strategies. The productivity of the AI systems can also be preserved by ensuring that one keeps up with the changes in smart technology, systems, and infrastructure. According to the study, net costs decrease in the banking industry due to the updating of operating systems. Moreover, the upgrade of strategic operating systems enhances the performance of businesses through the redesign of banking processes. Moreover, Casola (2023) says that the upgrades in the systems help employees to concentrate on proper customer communication strategies, strategic decision-making, solving complex issues, and creating strategic solutions.

According to Korzyński et al (2024), the world is witnessing technological advancements, and organizations are adopting artificial intelligence systems in their operations, as digital transformation has become a crucial element of strategy in the banking sector. Studies indicate that it is important for organizational management to provide support to employees in digital transformation and guide strategies by providing training programs to develop employees' skills on artificial intelligence systems and raising their awareness of controlling the challenges they face, providing easy-to-use systems, effective communication between management and employees, explaining the benefits of operating systems and talking to them about reducing fear and adapting to resist change, As Korzenski et al. (2024) stated, senior management's support for how to use AI systems, such as in data analysis and processing, and how to overcome challenges like cyberattacks or customer data theft.

Table 1: Demographic information

<b>specifics</b>	<b>Description</b>	<b>values</b>	<b>Percentage</b>
<b>Gender</b>	Male	64	64.6%
	Female	35	31.4%
	SUM	99	100%
<b>Nationality</b>	Omani	99	99%
	Other	0	1%
	SUM	99	100%
<b>Qualification</b>	Diploma	51	51.5%
	Bachelor	45	45.5%

	Master	3	3%
	PHD	0	0
	SUM	99	100%
<b>Age</b>	20-24	28	28.3%
	25-29	38	38.4%
	30-39	31	31.3%
	40 and above	2	2%
	SUM	99	100%

## Instrument design

Quantitative data were collected using a structured questionnaire. The research instrument consisted of 20 questions designed to identify four key variables related to AI: its adoption, system, challenges, and strategies. The questionnaire was divided into two sections. The first section included four demographic questions to gather data on participating employees, including gender, nationality, age, and educational qualifications. The second section contained 16 closed-ended questions, aligned with the four objectives for assessing AI adoption and its impact on employee performance. The questionnaire included a statement explaining the purpose and significance of the research, emphasizing the confidentiality of participants' responses and their anonymity, thus enhancing the reliability of the results.

## Demographic variables description

Demographic factors play an important role in comprehending the participants, and in this case, they are gender, nationality, age, and educational qualification. The information used in this research was gathered among workers in two National Bank of Oman branches, considering the demographic characteristics of the respective workers. Branch size was another demographic variable that was considered since the number of employees in different branches could be different and thus influence the adoption of AI and the performance of the employees. The demographic data of the participants is indicated in the table above.

## Data analysis and results

Data analysis in this research study was conducted using the Smart-PIS program in terms of the ability to quantify complicated models and the compatibility of numerical variables. The Smart PLS program is based on the structural equation model, which is divided into two parts: the internal model, which focuses on studying the relationships between the independent and dependent variables, and the external model, which focuses on the relationships between the dependent variables and the defined indicators (Taylor & Francis,2025). The measurement model includes one dependent variable, which is employee performance, in addition to 4 independent variables, such as AI adoption, AI systems, AI strategies, and AI challenges, and it was noted that all the results of the variables have high reliability as they exceeded 0.7, and this indicates the validity of the applied indicators. This indicates that AI systems positively impact employee performance ( $B=0.268$ ), demonstrating their effectiveness in improving performance. Furthermore, AI adoption shows a positive impact ( $B=0.311$ ), meaning it has a significant effect on employee performance. The positive impact of AI strategy on improving employee performance was also observed ( $B=0.284$ ). However, the challenges posed by AI have a weak positive impact on performance ( $B=0.296$ ), highlighting the importance of addressing them. Overall, the model demonstrates that all four variables are reliable and positive, and capable of positively influencing employee performance in relation to AI adoption.

**Figure 1 (Measurement model):**

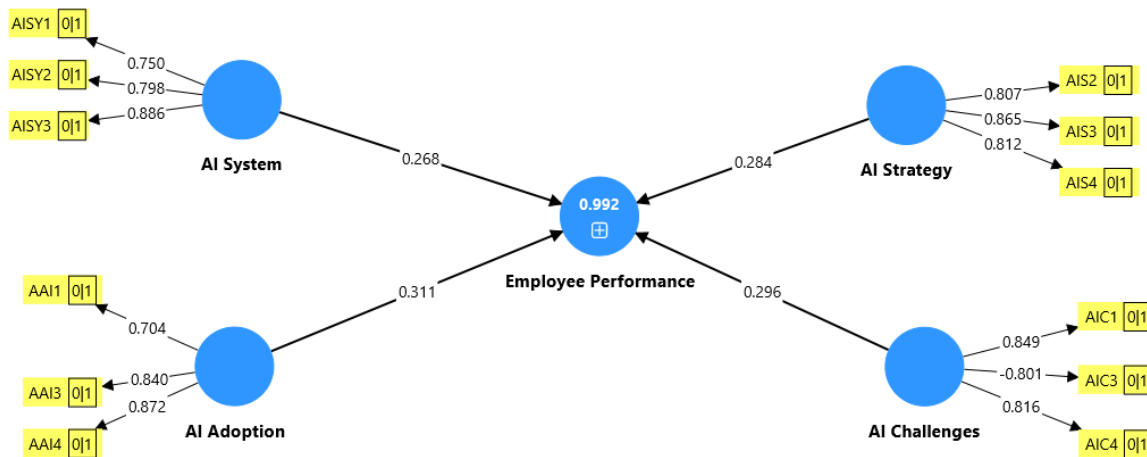


Table 2 presents the composite reliability ( $\rho_a$ ) and the extracted mean variance (AVE). Regarding composite reliability, the results indicate that all retained variables achieved acceptable reliability, with  $\rho_a$  values exceeding the recommended limit of 0.70. The highest value (0.909) was observed in employee performance, while the lowest value (0.737) was observed in AI adoption. Furthermore, all variables recorded AVE values greater than 0.50, confirming the sufficient convergence of the measurement model. The highest value (0.686) was observed in the AI strategy, and the lowest value (0.50) was observed in employee performance.

Table 2: Composite ( $\rho_a$ ) and AVE

	Composite reliability ( $\rho_a$ )	Average variance extracted (AVE)
<b>AI Adoption</b>	0.737	0.653
<b>AI Challenges</b>	0.765	0.676
<b>AI Strategy</b>	0.773	0.686
<b>AI System</b>	0.761	0.662
<b>Employee Performance</b>	0.909	0.50

The results of the cross-loading analysis are shown in Table 3, where all the resulting indices exhibited the highest loading coefficients on the intended variables, confirming the validity of the discrimination. Furthermore, some indices have negative loading coefficients because they were formulated inversely.

Table 3: Cross-Loadings

	AI Adoption	AI Challenges	AI Strategy	AI System	Employee Performance
<b>AAI1</b>	0.704	0.574	0.464	0.586	0.686
<b>AAI1</b>	0.704	0.574	0.464	0.586	0.686
<b>AAI3</b>	0.840	0.609	0.623	0.390	0.710
<b>AAI3</b>	0.840	0.609	0.623	0.390	0.710
<b>AAI4</b>	0.872	0.718	0.605	0.479	0.788
<b>AAI4</b>	0.872	0.718	0.605	0.479	0.788

<b>AIC1</b>	0.720	0.849	0.503	0.573	0.778
<b>AIC1</b>	0.720	0.849	0.503	0.573	0.778
<b>AIC2</b>	-0.540	-0.750	-0.502	-0.506	-0.709
<b>AIC3</b>	-0.551	-0.801	-0.528	-0.538	-0.672
<b>AIC4</b>	0.663	0.816	0.510	0.538	0.756
<b>AIC4</b>	0.663	0.816	0.510	0.538	0.756
<b>AIS2</b>	0.598	0.574	0.807	0.511	0.719
<b>AIS2</b>	0.598	0.574	0.807	0.511	0.719
<b>AIS3</b>	0.574	0.486	0.865	0.406	0.681
<b>AIS3</b>	0.574	0.486	0.865	0.406	0.681
<b>AIS4</b>	0.566	0.482	0.812	0.319	0.636
<b>AIS4</b>	0.566	0.482	0.812	0.319	0.636
<b>AISY1</b>	0.444	0.466	0.381	0.750	0.596
<b>AISY1</b>	0.444	0.466	0.381	0.750	0.596
<b>AISY2</b>	0.440	0.557	0.328	0.798	0.591
<b>AISY2</b>	0.440	0.557	0.328	0.798	0.591
<b>AISY3</b>	0.564	0.602	0.502	0.886	0.738
<b>AISY3</b>	0.564	0.602	0.502	0.886	0.738

The results in Table 4 (Furnell-Larker) show that most variables have discriminatory validity. Table 5 (HTMT) shows values exceeding the acceptable limit, indicating conceptual overlap in some variables, which is understandable given their theoretical similarities. Furthermore, according to the results in Table 3 (cross-loading), discriminatory validity is acceptable for this study. However, a few values are in the upper range due to the small sample size, which is regarded as a limitation of the study.

Table 4: Fornell-Larcker Criterion

	AI Adoption	AI Challenges	AI Strategy	AI System	Employee Performance
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<b>AI Adoption</b>	0.808				
<b>AI Challenges</b>	0.788	0.822			
<b>AI Strategy</b>	0.700	0.623	0.828		
<b>AI System</b>	0.598	0.668	0.503	0.814	
<b>Employee Performance</b>	0.904	0.897	0.822	0.794	0.702

Table 5: Heterotrait-Monotrait Ratio (HTMT)

	AI Adoption	AI Challenges	AI Strategy	AI System	Employee Performance
<b>AI Adoption</b>					
<b>AI Challenges</b>	1.050				
<b>AI Strategy</b>	0.932	0.812			
<b>AI System</b>	0.814	0.887	0.650		
<b>Employee Performance</b>	1.105	1.072	0.982	0.976	

## The structure model and hypothesis testing

A structural model was used to analyze the relationships between the study variables, a method similar in concept to regression analysis. This model demonstrates the strength and significance of the relationships through impact coefficients (beta) and t- and p-values, as illustrated in Figure 2. The results indicate that the adoption of artificial intelligence, its systems and strategies, and the challenges associated with it have direct and positive effects on employee performance, as all relationships are statistically significant, with p-values less than 0.05 and t-values greater than 1.96. Furthermore, the high value of the coefficient of determination ( $R^2$ ) (0.992) suggests that these variables collectively explain a very large proportion of the variance in employee performance. The structural model also demonstrates good predictive power and supports the direct hypotheses proposed in this study.

**Figure 2 (Structure model)**

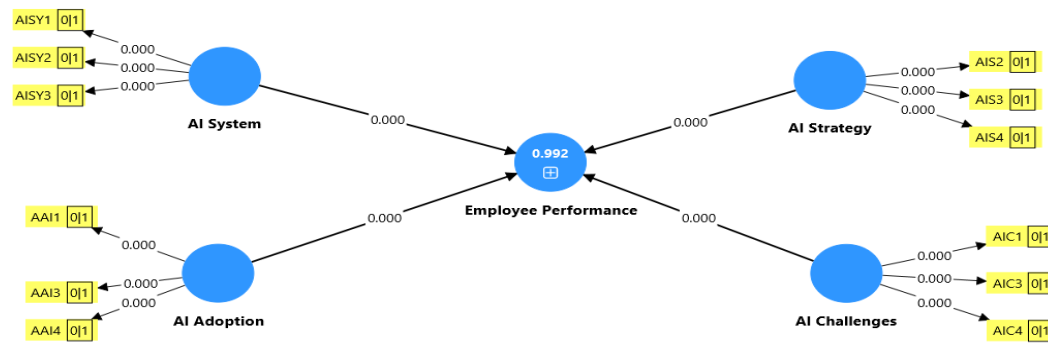


Table 6 presents the results of direct hypothesis testing using structural path analysis. The results show that all independent variables (AI Adoption, AI Challenges, AI Strategy, and AI System) have statistically significant positive effects on employee performance. All path coefficients ( $\beta$ ) are positive, all t-values are greater than 1.96, and all p-values are less than 0.05, indicating strong statistical significance. The results show that AI Adoption has the strongest effect ( $\beta = 0.311$ ,  $t = 13.986$ ,  $p = 0.000$ ), demonstrating a large and direct impact on employee performance. AI Challenges also have a strong effect ( $\beta = 0.295$ ,  $t = 13.695$ ,  $p = 0.000$ ), indicating that overcoming challenges contributes to improved performance. Additionally, the AI strategy ( $\beta = 0.285$ ,  $t = 12.141$ ,  $p = 0.000$ ) demonstrates the role of strategic planning in enhancing performance. Finally, the AI system also shows a positive effect ( $\beta = 0.268$ ,  $t = 11.209$ ,  $p = 0.000$ ). Based on these results, all hypotheses were accepted due to their high statistical significance, thus strengthening the validity of the proposed structural model.

*Table 6: Mean, STDEV, T values, p values*

	Original sample (O)	Sample means (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values	Remarks
<b>AI Adoption -&gt; Employee Performance</b>	0.311	0.311	0.022	13.986	0.000	Supported

<b>AI Challenges -&gt; Employee Performance</b>	0.295	0.295	0.022	13.695	0.000	Supported
<b>AI Strategy -&gt; Employee Performance</b>	0.285	0.284	0.024	12.141	0.000	Supported
<b>AI System -&gt; Employee Performance</b>	0.268	0.268	0.024	11.209	0.000	Supported

## Summary of findings

This chapter deals with the analysis to evaluate the research objectives and the accuracy of its results. The coefficient of determination ( $R^2$ ) results indicate that variables point to (0.992), a significant percentage of the variance of employee performance. Additionally, the hypothesis testing results confirmed the acceptance of all four hypotheses through structural path analysis. The results showed that the adoption of artificial intelligence (AI) had the strongest effect ( $\beta = 0.311$ ,  $t = 13.986$ ,  $p = 0.000$ ), AI challenges also had a strong effect ( $\beta = 0.295$ ,  $t = 13.695$ ,  $p = 0.000$ ), AI strategy ( $\beta = 0.285$ ,  $t = 12.141$ ,  $p = 0.000$ ) had a strong positive effect, and AI systems also demonstrated a positive effect ( $\beta = 0.268$ ,  $t = 11.209$ ,  $p = 0.000$ ). Based on these results, all hypotheses were accepted because they had a statistically positive effect on the dependent variable, which is employee performance. In addition to the results of the cross-loading, all indicators achieved the highest load on their variables, confirming the discriminant validity of the standard model.

## Summary of findings

This study presents research findings on the adoption of artificial intelligence and its impact on employee performance at the National Bank of Oman. The study employed a quantitative approach, collecting 99 responses from bank employees through a questionnaire. The main results were that adopting artificial intelligence systems through Survey results showed that employees have a high level of acceptance of the bank's artificial intelligence systems, including those used to analyze customer data, make necessary decisions, and speed up banking transactions. Therefore, employee responses indicate that AI systems effectively help them achieve their desired goals and expedite job performance. Also, a survey revealed a significant impact of artificial intelligence systems on employee performance, with responses indicating that

the systems increased work productivity, reduced human error, and accelerated task completion.

In addition, challenges

exist. While the adoption of artificial intelligence has a strong impact on the bank, some challenges exist, such as concerns about complete reliance on AI systems due to fear of job loss, and a lack of technical expertise. It is important to adequately train employees and integrate human and technical decision-making to maintain fairness.

## **Conclusion**

This study demonstrated that the adoption of artificial intelligence (AI) systems positively impacts employee performance at the National Bank of Oman. Focusing on four key variables—AI adoption, AI systems, AI strategies, and AI challenges- the study identified how these elements effectively influence employee performance. Furthermore, the study highlighted the roles of AI systems in analyzing candidate data, Payroll analysis, customer inquiry response, electronic recruitment, employee performance monitoring, and training programs. These systems contribute to a more efficient work environment. Despite challenges such as skills gaps and resistance to change, the SmartPLS analysis yielded positive results. These results indicate the importance of investing in artificial intelligence systems, improving strategies to align AI with human resource management, and increasing employee performance to achieve a competitive advantage in the banking sector.

## **Recommendations**

Based on the research findings, several practical, social, and theoretical recommendations can be made to the bank. The bank should invest in training employees on artificial intelligence systems to ensure the organization's goals of providing the best customer service in smart systems, developing employee skills, and raising their performance level in their jobs are achieved. Also, the approach to AI systems should be integrated with human intervention, using intelligent systems to support digital transactions and decision-making. This approach does not eliminate human intervention in recruitment, performance evaluation, or administrative decisions such as employee promotions and rewards, thus maintaining transparency, trust, and accountability. In addition, the implementation should include a review and evaluation of the impact of using artificial intelligence systems on employee performance through clear

performance indicators that measure the quality of customer services provided, employee satisfaction with operating systems, and productivity levels, to ensure that the artificial intelligence systems achieve the organization's strategic goals and objectives. And, More clarity should be provided regarding the use of artificial intelligence systems in employee human resources management, through recruitment and performance evaluation, with a focus on reducing the impact of bias in algorithms, thereby increasing employee acceptance and confidence in operating systems. Also, the bank should provide strategies for artificial intelligence systems to ensure the success of digital transactions. These strategies provide a competitive advantage in the market and increase the bank's productivity and efficiency in the field of technology. Also, the bank should design artificial intelligence systems and programs that suit all job categories and levels of technical skill, to ensure that no employee category is excluded due to digital transformation. Future studies should incorporate trust in technology and job satisfaction as mediating variables in the relationship between artificial intelligence and employee performance.

### **Future Research**

This research suffers from some shortcomings; there are many opportunities for future research to focus better on the area of AI adoption and employee performance in banks. For example, the scope of the search could be expanded to include more banks in the Sultanate of Oman that have adopted artificial intelligence. Also, a mixed methodology can be used to combine quantitative and qualitative approaches, and an interview with a bank employee can be conducted to gain a broader understanding of the impact of artificial intelligence on employee performance. The impact of adopting artificial intelligence on job performance can be explored in other departments, such as credit and finance, and the banking marketing department within the bank. In addition, future research could focus more on the challenges employees face when adopting AI systems in the banking sector.

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