

The Impact of Quality Management Skills on Employee Performance: The Mediating Role of Innovation in UAE Banking Institution

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Received: April 3, 2026 Accepted: June 10, 2026 Published: June 28, 2026

doi:10.5296/ijssr.v14i3.23868 URL: <https://doi.org/10.5296/ijssr.v14i3.23868>

Abstract

This study examines the relationship between quality management skills and employee performance, with innovation acting as a mediating variable within the UAE banking sector. The study focuses on three dimensions of quality management skills, namely problem-solving skills, analytical skills, and leadership, and investigates their direct and indirect influence on employee performance within the National Bank of Ras Al Khaimah in the UAE. The study is grounded in the Resource-Based View (RBV), Human Capital Theory, and Dynamic Capabilities Theory, which emphasize the strategic importance of employee competencies and innovation capability in achieving organizational effectiveness and competitive advantage. A quantitative research approach was adopted, and data were collected from 363 employees of the National Bank of Ras Al Khaimah. The study employed Partial Least Squares Structural Equation Modelling (PLS-SEM) using SmartPLS software to evaluate the measurement and structural models and test the proposed hypotheses. The findings revealed that problem-solving skills, analytical skills, and leadership have significant positive effects on employee performance. The results also demonstrated that innovation significantly mediates the relationships between problem-solving skills and employee performance, as well as between leadership and employee performance. However, the mediating effect of innovation on the relationship between analytical skills and employee

performance was not significant. The study confirms that quality management skills and innovation capability are essential determinants of employee effectiveness, operational efficiency, and service quality within UAE banking institutions. The study contributes to the existing literature by providing empirical evidence regarding the combined influence of quality management skills and innovation on employee performance in the UAE banking sector. The findings offer practical implications for banking institutions seeking to improve employee competencies, strengthen innovation capability, and enhance organizational competitiveness through effective quality management practices.

Keywords: quality management skills, innovation, employee performance, UAE banking sector, PLS-SEM, leadership, analytical skills, problem-solving skills.

1. Introduction

The UAE banking sector plays a vital role in supporting national economic growth, financial sustainability, and regional investment activities. As the sector continues to expand, banking institutions face increasing pressure to maintain high service quality, operational efficiency, and customer satisfaction in a highly competitive environment (Alhosani & Tariq, 2020). Despite the importance of quality management within banking operations, insufficient employee competencies in quality management practices continue to affect service reliability, operational effectiveness, and organizational competitiveness. Existing studies have acknowledged the importance of quality management practices in improving organizational outcomes; however, limited empirical attention has been given to how employees' quality management competencies directly influence employee performance within UAE banking institutions (Shwedeh et al., 2023).

Previous research has emphasized the importance of quality management and innovation in enhancing organizational performance. For example, Ali AlShehail et al. (2022) found that quality management practices positively influence organizational performance through innovation capability. Similarly, Al Maamari and Isa (2024) highlighted the importance of innovation-oriented quality management practices in improving organizational outcomes. Studies have also demonstrated that leadership, analytical thinking, and problem-solving skills contribute significantly to operational effectiveness and service quality improvement (Santos et al., 2021; Silva et al., 2021). Nevertheless, these competencies have rarely been integrated into a comprehensive framework examining employee performance within the UAE banking sector.

The research gap becomes more evident within the UAE context, where studies have primarily focused on organizational-level performance rather than employee-level outcomes. Although UAE banks continue to invest heavily in digital transformation, innovation capability, and quality improvement initiatives, limited studies have examined how specific quality management competencies such as problem-solving skills, analytical skills, and leadership influence employee performance (Nasaj & Al Marri, 2020). Furthermore, the role of innovation as a mediating mechanism linking quality management competencies to employee performance remains underexplored, particularly within banking institutions operating in technologically dynamic and highly regulated environments.

The importance of examining quality management competencies has increased due to rapid technological advancement and changing banking service requirements. Modern banking institutions increasingly rely on employees' ability to adapt to technological changes, support continuous improvement initiatives, and maintain high-quality service standards (Santos et al., 2021). Innovation capability has therefore become essential for banks seeking to enhance operational efficiency, customer satisfaction, and competitiveness in the digital era (Antunes et al., 2021). Employees possessing strong quality management skills are better positioned to contribute to innovation initiatives, improve operational processes, and support organizational adaptability.

In addition, UAE banking institutions operate under strict regulatory requirements and

continuously evolving customer expectations. These conditions require employees to possess advanced competencies in problem-solving, analytical thinking, leadership, and quality management practices to ensure service excellence and operational reliability (Alhosani & Tariq, 2020). However, limited empirical evidence exists regarding the specific quality management competencies required to improve employee performance within UAE banks. Existing literature has largely examined quality management, innovation, and employee performance separately without adequately explaining how these variables interact collectively in the banking context (Ali AlShehail et al., 2022; Antunes et al., 2021).

Accordingly, this study addresses the identified research gap by examining the impact of quality management skills on employee performance, with innovation serving as a mediating variable within UAE banking institutions. Specifically, the study focuses on three dimensions of quality management skills: problem-solving skills, analytical skills, and leadership. The study further contributes to the literature by proposing and empirically testing a conceptual framework using Partial Least Squares Structural Equation Modelling (PLS-SEM) through SmartPLS software.

2. Literature Review

2.1 UAE Banking Sector Context

The UAE banking sector is a major contributor to national economic development and has experienced rapid growth driven by digital transformation, financial innovation, and increasing competition (Alhosani & Tariq, 2020). UAE banks continue to invest heavily in technological advancement and customer-oriented services to enhance operational efficiency and competitiveness (Alshurideh et al., 2024). However, banking institutions face growing challenges related to regulatory compliance, customer expectations, technological disruption, and service quality management. Consequently, employee competencies such as analytical thinking, leadership, and problem-solving have become essential for sustaining operational excellence and innovation capability within the sector (Nasaj & Al Marri, 2020).

2.2 Quality Management Skills

Quality management skills refer to employees' competencies that support quality improvement, operational efficiency, and organizational effectiveness (Oliveira & Gomes, 2024). In service-oriented sectors such as banking, these skills are increasingly viewed as strategic capabilities that strengthen service quality, customer satisfaction, and innovation performance (Liu et al., 2023). Contemporary quality management extends beyond traditional quality control and is closely linked with continuous improvement and digital transformation initiatives (Antony et al., 2024).

Problem-solving skills enable employees to identify operational issues, analyse root causes, and implement effective corrective actions that improve service reliability and customer satisfaction (Santos et al., 2021). In banking environments, effective problem-solving reduces operational errors and enhances responsiveness to customer concerns (Adeoye & Jimoh, 2023).

Analytical skills involve the systematic evaluation of information and data to support decision-making and operational monitoring (Ababneh, 2021). Such competencies are particularly important in banking because employees must interpret financial information, assess risks, and support data-driven service improvements (Stek & Schiele, 2021).

Leadership skills represent employees' ability to motivate, guide, and influence others toward achieving organizational goals and quality standards. Leadership contributes significantly to employee engagement, innovation culture, and organizational adaptability (Silva et al., 2021; Canbay & Akman, 2023).

2.3 Innovation

Innovation refers to the implementation of new ideas, technologies, processes, and services that improve organizational competitiveness and long-term sustainability (Antunes et al., 2021). In banking institutions, innovation includes digital banking systems, FinTech applications, service automation, and process improvement initiatives aimed at enhancing customer experience and operational efficiency (Koomson, 2024).

Within the UAE banking sector, innovation has become a strategic necessity due to increasing digitalization and market competition. Innovative banking technologies such as mobile banking, artificial intelligence, and digital payment systems have significantly transformed service delivery and operational processes. Innovation also enhances organizational adaptability, customer satisfaction, and operational performance (Antunes et al., 2017). Employees operating within innovative environments tend to demonstrate greater adaptability, creativity, and performance effectiveness.

2.4 Employee Performance

Employee performance refers to employees' ability to accomplish assigned tasks efficiently and contribute toward organizational objectives (Insani et al., 2024). In banking institutions, employee performance is reflected through service quality, operational efficiency, customer responsiveness, compliance accuracy, and goal achievement.

High-performing employees contribute significantly to customer satisfaction, service reliability, and organizational competitiveness (Ahinful et al., 2024). Within UAE banking institutions, employee performance is increasingly influenced by employees' quality management competencies, innovation capability, and adaptability to technological transformation. Therefore, enhancing employee performance remains a strategic priority for banks seeking sustainable operational excellence.

2.5 Theoretical Foundation

This study is grounded in the Resource-Based View (RBV), Human Capital Theory, and Dynamic Capabilities Theory. RBV explains that organizations achieve competitive advantage through valuable and difficult-to-imitate internal resources such as employee competencies (Barney, 1991). In UAE banking institutions, quality management skills represent strategic resources that improve operational effectiveness and innovation capability.

Human Capital Theory emphasizes that employees' knowledge, competencies, and skills directly contribute to organizational productivity and performance. Investments in employee capability development improve service quality, innovation, and operational outcomes (Barney & Wright, 1998; Grant, 1996).

Dynamic Capabilities Theory highlights organizations' ability to integrate and reconfigure internal competencies to respond effectively to technological and environmental changes (Cordeiro et al., 2023). In the UAE banking sector, innovation capability and technological adaptation are critical dynamic capabilities that enhance organizational competitiveness and employee performance.

2.6 Empirical Literature Review

Previous studies consistently demonstrate that quality management skills positively influence employee performance and innovation outcomes. Problem-solving skills improve operational effectiveness, service reliability, and customer satisfaction by enabling employees to resolve operational inefficiencies effectively (Santos et al., 2021). Analytical skills support data-driven decision-making, risk assessment, and process improvement, thereby enhancing productivity and service quality (Ababneh, 2021). Leadership contributes significantly to employee motivation, organizational commitment, and innovation culture within service organizations (Silva et al., 2021).

Research also indicates that quality management competencies positively influence innovation capability. Employees with strong problem-solving and analytical abilities are more likely to support process improvement and technological innovation (Adeoye & Jimoh, 2023; Stek & Schiele, 2021). Leadership further strengthens innovation culture by encouraging creativity, adaptability, and continuous improvement initiatives (Canbay & Akman, 2023).

Innovation itself positively affects employee productivity, operational efficiency, and service quality. Innovative work environments encourage adaptability and improve employees' ability to respond to technological and organizational changes (Koomson, 2025). Furthermore, previous studies suggest that innovation mediates the relationship between quality management practices and organizational performance outcomes (Ali AlShehail et al., 2022; Antunes et al., 2021). However, empirical evidence examining this mediating relationship within UAE banking institutions remains limited.

2.7 Research Gap

Despite growing interest in quality management and innovation, limited studies have examined the combined relationship between quality management skills, innovation, and employee performance within UAE banking institutions. Existing research has focused primarily on organizational-level outcomes, while employee-level performance remains underexplored (Shwedeh et al., 2023). Moreover, limited empirical evidence exists regarding the specific roles of problem-solving skills, analytical skills, and leadership in enhancing innovation and employee performance within UAE banks.

Additionally, few studies have investigated innovation as a mediating mechanism linking quality management competencies to employee performance, particularly using PLS-SEM analysis. This study addresses these gaps by examining the direct and indirect relationships among quality management skills, innovation, and employee performance within the UAE banking sector.

2.8 Conceptual Framework and Hypotheses Development

The conceptual framework of this study, as presented in Figure 1, proposes that quality management skills, represented by problem-solving skills, analytical skills, and leadership, positively influence employee performance both directly and indirectly through innovation. Innovation acts as a mediating variable that strengthens the relationship between employee competencies and performance outcomes within UAE banking institutions. The framework is grounded in the Resource-Based View (RBV), Human Capital Theory, and Dynamic Capabilities Theory, which emphasize the strategic importance of employee competencies and innovation capability in achieving organizational effectiveness and competitive advantage. Based on the literature and theoretical foundations, the study proposes the following hypotheses:

H1: Problem-solving skills positively influence employee performance.

H2: Analytical skills positively influence employee performance.

H3: Leadership positively influences employee performance.

H4: Innovation mediates the relationship between problem-solving skills and employee performance.

H5: Innovation mediates the relationship between analytical skills and employee performance.

H6: Innovation mediates the relationship between leadership and employee performance.

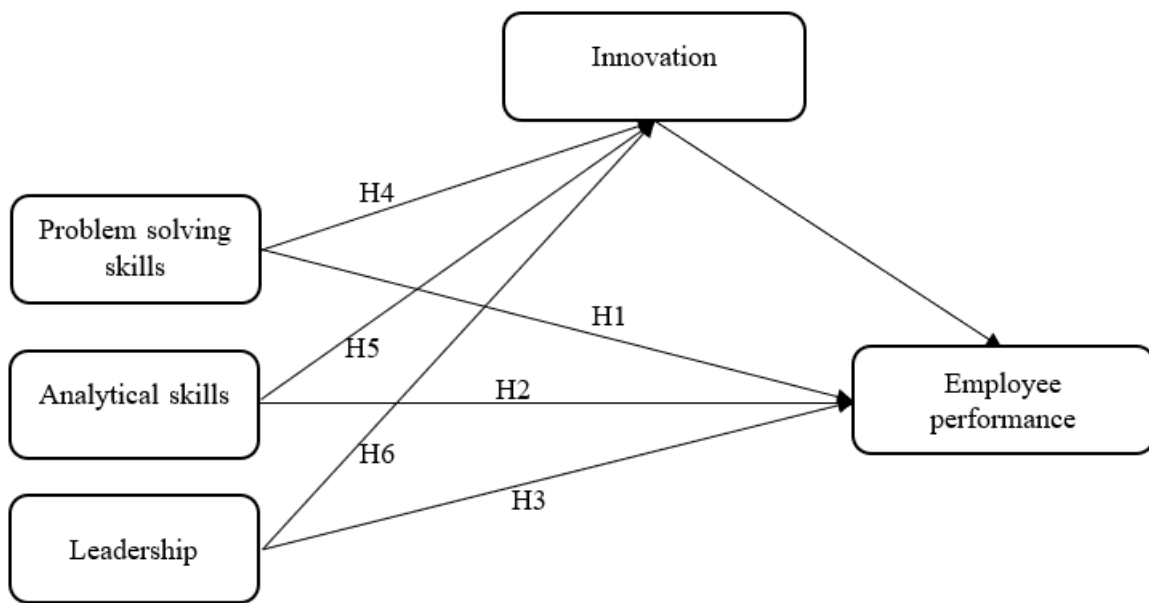


Figure 1. Conceptual framework

3. Model Assessment

This section presents the modelling of the conceptual framework to examine the relationships among the study constructs using the Partial Least Squares Structural Equation Modelling (PLS-SEM) approach through SmartPLS software. PLS-SEM was selected because it is suitable for analyzing complex models involving multiple constructs, mediation effects, and predictive relationships. The analysis was conducted using data collected from 363 employees of the National Bank of Ras Al Khaimah (RAKBANK), UAE. The proposed model examines the direct effects of quality management skills, namely problem-solving skills, analytical skills, and leadership, on employee performance, as well as the indirect effects through innovation as a mediating variable. The modelling process includes the assessment of the measurement model and the structural model to evaluate the reliability, validity, and significance of the proposed relationships among the constructs.

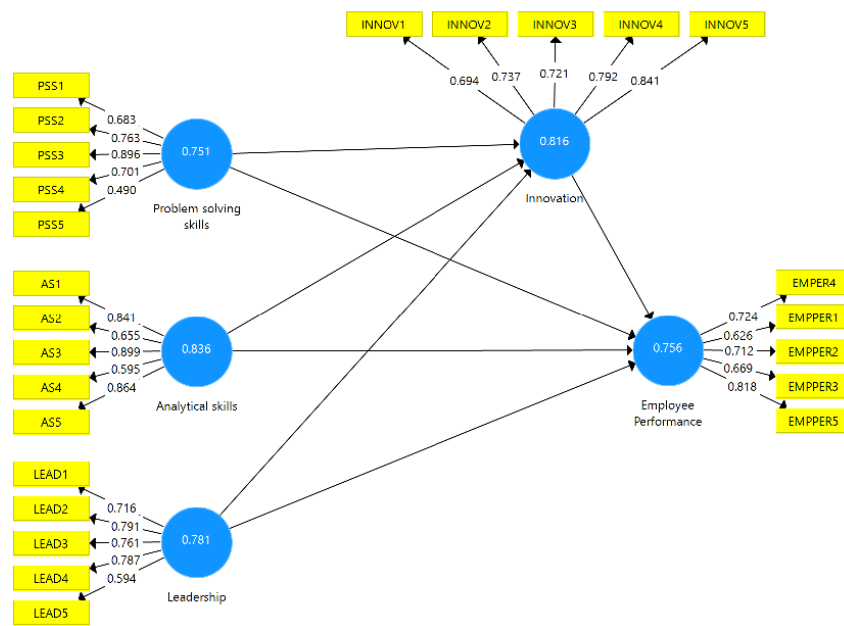


Figure 2. Framework Modelled in Smartpls software

3.1 Measurement Model Assessment

3.1.2 Consistency Reliability and Convergent Validity

Consistency reliability and convergent validity are important procedures in evaluating the adequacy of the measurement model in PLS-SEM analysis. Reliability refers to the degree to which measurement items consistently measure a construct and are free from random measurement errors. In this study, consistency reliability was assessed using Cronbach’s alpha and Composite Reliability (CR). Previous studies emphasized that reliability analysis is essential for ensuring the stability and consistency of measurement scales in organizational and quality management research (Santos et al., 2021; Ababneh, 2021).

Composite Reliability values above 0.70 indicate satisfactory internal consistency reliability, while values above 0.60 are considered acceptable in exploratory studies (Santos et al., 2021). As presented in Table 1, all constructs achieved Cronbach’s alpha values ranging from 0.751 to 0.836 and Composite Reliability values ranging from 0.838 to 0.884. These findings confirm that all constructs demonstrate adequate internal consistency reliability.

Convergent validity refers to the extent to which measurement indicators of a construct share a high proportion of variance. In this study, convergent validity was assessed using the Average Variance Extracted (AVE). Previous quality management and innovation studies suggested that AVE values should exceed 0.50 to confirm acceptable convergent validity (Antunes et al., 2021; Koomson, 2024). The AVE values shown in Table 1 range from 0.508 to 0.609, indicating that all constructs exceeded the recommended threshold and adequately explained the variance of their indicators. Overall, the results confirm that the measurement model achieved satisfactory levels of consistency reliability and convergent validity,

indicating that the measurement items are reliable and appropriate for assessing the study constructs.

Table 1. Consistency reliability and convergent validity

Constructs	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Analytical Skills	0.836	0.884	0.609
Employee Performance	0.756	0.836	0.508
Innovation	0.816	0.871	0.576
Leadership	0.781	0.852	0.538
Problem-Solving Skills	0.751	0.838	0.517

3.1.2 Discriminant Validity

Discriminant validity refers to the extent to which a construct is empirically distinct from other constructs within the research model. It confirms that each construct measures a unique concept and does not excessively overlap with other variables in the structural model. In quality management and organizational research, discriminant validity is important for ensuring the accuracy and credibility of the measurement model (Abbas & Kumari, 2023).

In this study, discriminant validity was assessed using the Fornell–Larcker criterion. According to this criterion, the square root of the Average Variance Extracted (AVE) for each construct should be greater than its correlations with other constructs in the model. This indicates that a construct shares more variance with its own indicators than with other constructs (Antunes et al., 2021).

As presented in Table 2, the square root of the AVE values for all constructs exceeded the inter-construct correlation values. For example, Analytical Skills recorded a square root AVE value of 0.880, which was higher than its correlations with Employee Performance (0.782), Innovation (0.665), Leadership (0.701), and Problem-Solving Skills (0.691). Similar results were observed for all other constructs. Therefore, the findings confirm that satisfactory discriminant validity was achieved and that the study constructs are empirically distinct from one another.

Table 2. Fornell–Larcker criterion

Constructs	Analytical Skills	Employee Performance	Innovation	Leadership	Problem-Solving Skills
Analytical Skills	0.880				
Employee Performance	0.782	0.812			
Innovation	0.665	0.759	0.799		
Leadership	0.701	0.750	0.770	0.833	
Problem-Solving Skills	0.691	0.752	0.623	0.740	0.789

3.2 Structural Model Assessment

3.2.1 Coefficient of Determination (R^2)

The coefficient of determination (R^2) measures the predictive accuracy of the structural model by indicating the proportion of variance in the endogenous constructs explained by the exogenous constructs. In PLS-SEM analysis, R^2 is used to evaluate the explanatory power of the model and assess how well the independent variables predict the dependent variables (Koomson, 2024). Higher R^2 values indicate greater predictive capability and stronger model accuracy.

Previous studies suggested that R^2 values of 0.25, 0.50, and 0.75 can be interpreted as weak, moderate, and substantial explanatory power, respectively (Antunes et al., 2021). In this study, the R^2 values for Employee Performance and Innovation are presented in Table 3.

Table 3. R^2 Assessment

Constructs	R Square	R Square Adjusted
Employee Performance	0.821	0.819
Innovation	0.868	0.867

As shown in Table 3, the R^2 value for Employee Performance is 0.821, indicating that 82.1% of the variance in employee performance is explained by problem-solving skills, analytical skills, leadership, and innovation. Similarly, the R^2 value for Innovation is 0.868, showing that 86.8% of the variance in innovation is explained by the quality management skill dimensions included in the model.

These findings indicate that the structural model possesses substantial explanatory power because all R^2 values exceed the recommended threshold of 0.75. The results therefore confirm that the proposed model demonstrates strong predictive accuracy in explaining employee performance and innovation within UAE banking institutions.

3.2.2 Effect Size (f^2)

The effect size (f^2) assesses the relative contribution of each exogenous construct to the explanatory power of the endogenous constructs in the structural model. While the coefficient of determination (R^2) explains the overall predictive accuracy of the model, the effect size indicates the individual impact of each predictor construct on the endogenous variables (Koomson, 2024). In this study, the effect size was used to evaluate the contribution of problem-solving skills, analytical skills, leadership, and innovation to employee performance and innovation.

The effect size was calculated using the following formula:

Effect Sizes:

$$f^2 = \frac{R^2_{incl} - R^2_{excl}}{1 - R^2_{incl}} \quad (1)$$

Where:

f^2 = effect sizes

R^2_{incl} = R^2 inclusive (R^2 with a particular construct included in the model)

R^2_{excl} = R^2 excluded (R^2 with a particular construct excluded from the model)

1 = Constant

Previous studies suggested that f^2 values of 0.02, 0.15, and 0.35 represent small, medium, and large effect sizes, respectively (Antunes et al., 2021). The effect size results for this study are presented in Table 4.

Table 4. Effect Size (f^2)

Constructs	Employee Performance	Innovation
Analytical Skills	0.250	0.001
Innovation	0.093	-
Leadership	0.075	0.116
Problem-Solving Skills	0.510	1.852

As shown in Table 4, Problem-Solving Skills recorded a large effect size on Employee Performance ($f^2 = 0.510$) and Innovation ($f^2 = 1.852$), indicating that problem-solving competencies strongly contribute to improving employee performance and innovation capability within UAE banking institutions. Analytical Skills demonstrated a medium effect on Employee Performance ($f^2 = 0.250$), while its effect on Innovation ($f^2 = 0.001$) was negligible. Leadership showed a small effect on both Employee Performance ($f^2 = 0.075$) and Innovation ($f^2 = 0.116$). In addition, Innovation demonstrated a small effect on Employee Performance ($f^2 = 0.093$).

Overall, the findings indicate that problem-solving skills represent the strongest predictor within the structural model, while leadership and innovation exert smaller but meaningful contributions to employee performance and innovation outcomes in UAE banking institutions.

3.2.3 Predictive Relevance (Q^2)

Predictive relevance (Q^2) evaluates the predictive capability of the structural model by assessing how well the observed values are reconstructed through the model and its parameter estimates. In PLS-SEM analysis, Q^2 is used to determine the predictive relevance

of endogenous constructs using the blindfolding procedure (Koomson, 2024). A Q^2 value greater than zero indicates that the model has satisfactory predictive relevance for a particular endogenous construct (Antunes et al., 2021).

In this study, predictive relevance was assessed using the blindfolding procedure in SmartPLS. The cross-validated redundancy approach was applied to examine the predictive accuracy of the endogenous constructs, namely Employee Performance and Innovation. The results of the predictive relevance assessment are presented in Table 5.

Table 5. Predictive relevance (Q^2)

Constructs	SSO	SSE	$Q^2 (=1-SSE/SSO)$
Analytical Skills	1840	1840	
Employee Performance	1840	1112.589	0.395
Innovation	1840	947.399	0.485
Leadership	1840	1840	
Problem-Solving Skills	1840	1840	

As presented in Table 5, the Q^2 values for Employee Performance and Innovation were 0.395 and 0.485, respectively. Since both values are greater than zero, the findings confirm that the structural model possesses satisfactory predictive relevance. The results indicate that the model demonstrates adequate predictive capability in explaining employee performance and innovation within UAE banking institutions.

3.2.4 Path Coefficients and Hypotheses Testing

Path coefficient analysis was conducted to examine the direct and indirect relationships among the study constructs within the structural model. In PLS-SEM, path coefficients are used to evaluate the strength and direction of the relationships between exogenous and endogenous constructs (Koomson, 2024). The significance of the relationships was assessed using the bootstrapping procedure in SmartPLS. A relationship is considered significant when the p-value is less than 0.05.

Figure 3 presents the structural model of the study, while Tables 6 and 7 summarize the direct and indirect effect results. The findings provide empirical evidence regarding the influence of quality management skills on employee performance and the mediating role of innovation within the National Bank of Ras Al Khaimah in the UAE.

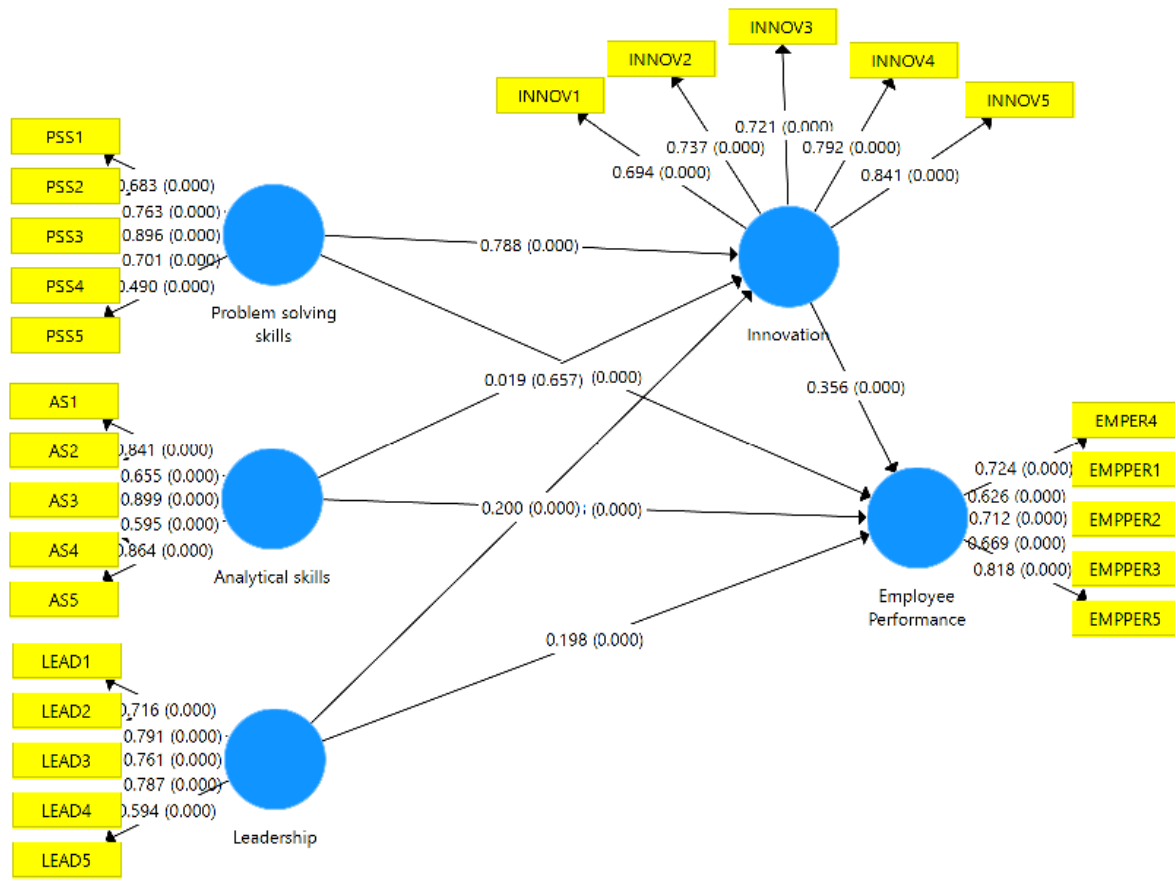


Figure 3. The model after bootstrapping procedure

3.2.4.1 Direct Effects

The direct effect analysis examined the influence of problem-solving skills, analytical skills, and leadership on employee performance. The results indicate that Problem-Solving Skills have a significant positive effect on Employee Performance ($\beta = 0.814$, $t = 11.218$, $p = 0.000$). Therefore, H1 is supported. This finding suggests that employees with strong problem-solving competencies are more capable of improving operational efficiency and service quality within UAE banking institutions.

Similarly, Analytical Skills demonstrated a significant positive effect on Employee Performance ($\beta = 0.318$, $t = 7.386$, $p = 0.000$). Hence, H2 is supported. The result confirms that analytical competencies contribute positively to employee productivity, operational effectiveness, and decision-making performance. Leadership also showed a significant positive effect on Employee Performance ($\beta = 0.198$, $t = 4.196$, $p = 0.000$). Therefore, H3 is supported. This finding indicates that leadership competencies play an important role in motivating employees, enhancing service quality, and improving organizational performance.

Table 6. Direct effect hypothesis results

Hypotheses	Direct Relationship	Original Sample (β)	T Statistics	P Values	Remark
H1	Problem-Solving Skills → Employee Performance	0.814	11.218	0.000	Supported
H2	Analytical Skills → Employee Performance	0.318	7.386	0.000	Supported
H3	Leadership → Employee Performance	0.198	4.196	0.000	Supported

3.2.4.2 Indirect Effects

The indirect effect analysis examined the mediating role of Innovation in the relationship between quality management skills and employee performance. The findings show that Innovation significantly mediates the relationship between Problem-Solving Skills and Employee Performance ($\beta = -0.280$, $t = 4.685$, $p = 0.000$). Therefore, H4 is supported. This result indicates that employees with strong problem-solving competencies enhance innovation capability, which subsequently improves employee performance.

However, the mediating effect of Innovation on the relationship between Analytical Skills and Employee Performance was not significant ($\beta = 0.007$, $t = 0.462$, $p = 0.645$). Thus, H5 is not supported. The result suggests that innovation does not significantly explain the relationship between analytical skills and employee performance within the studied banking context.

In addition, Innovation significantly mediates the relationship between Leadership and Employee Performance ($\beta = -0.071$, $t = 3.346$, $p = 0.001$). Therefore, H6 is supported. This finding confirms that leadership competencies contribute to employee performance through the enhancement of innovation capability and organizational adaptability.

Table 7. Indirect effect hypothesis results

Hypotheses	Indirect Relationship	Original Sample (β)	T Statistics	P Values	Remark
H4	Problem-Solving Skills → Innovation → Employee Performance	-0.280	4.685	0.000	Supported
H5	Analytical Skills → Innovation → Employee Performance	0.007	0.462	0.645	Not Supported
H6	Leadership → Innovation → Employee Performance	-0.071	3.346	0.001	Supported

Overall, the structural model findings demonstrate that quality management skills significantly influence employee performance both directly and indirectly through innovation. The results further confirm the important mediating role of innovation in strengthening the relationship between problem-solving skills, leadership, and employee performance within UAE banking institutions.

3.3 Mediation Effect

Mediation analysis was conducted to examine whether Innovation mediates the relationship between quality management skills and employee performance within the National Bank of Ras Al Khaimah in the UAE. Mediation occurs when an independent variable influences a dependent variable indirectly through a mediating construct. In this study, Innovation was tested as the mediating variable between problem-solving skills, analytical skills, leadership, and employee performance.

The mediation effect was evaluated by examining both the direct and indirect relationships among the constructs. A mediation effect is considered partial when both the direct and indirect effects are significant. Conversely, no mediation effect exists when the indirect relationship is not statistically significant.

The findings presented in Table 8 indicate that Innovation partially mediates the relationship between Problem-Solving Skills and Employee Performance because both the direct effect (H1) and indirect effect (H4) were significant. Similarly, Innovation partially mediates the relationship between Leadership and Employee Performance, as both the direct effect (H3) and indirect effect (H6) were supported. However, Innovation did not mediate the relationship between Analytical Skills and Employee Performance because the indirect effect (H5) was not significant despite the significant direct effect (H2).

These findings suggest that innovation capability strengthens the influence of problem-solving skills and leadership on employee performance within UAE banking institutions. However, analytical skills influence employee performance primarily through direct operational and decision-making contributions rather than through innovation mechanisms.

Table 8. Mediation effect results

Hypotheses	Direct Relationship	Remark	Hypotheses	Indirect Relationship	Remark	Mediation Effect
H1	Problem-Solving Skills → Employee Performance	Supported	H4	Problem-Solving Skills → Innovation → Employee Performance	Supported	Partial Mediation
H2	Analytical Skills → Employee Performance	Supported	H5	Analytical Skills → Innovation → Employee Performance	Not Supported	No Mediation
H3	Leadership → Employee Performance	Supported	H6	Leadership → Innovation → Employee Performance	Supported	Partial Mediation

4. Discussion of the Findings

This section discusses the findings of the study concerning the relationships between quality management skills, innovation, and employee performance within the National Bank of Ras Al Khaimah in the UAE. The discussion is based on the study hypotheses and the results obtained from the PLS-SEM analysis. The findings provide empirical evidence regarding the importance of problem-solving skills, analytical skills, leadership, and innovation in enhancing employee performance within UAE banking institutions.

The findings revealed that problem-solving skills significantly and positively influence employee performance. This result indicates that employees possessing strong problem-solving competencies are more capable of addressing operational challenges, reducing service errors, and improving customer service efficiency within banking institutions. The finding supports previous studies that emphasized the importance of problem-solving competencies in enhancing operational effectiveness and service quality (Santos et al., 2021). Within the UAE banking context, the result suggests that banks benefit from employees who can identify operational inefficiencies and implement effective solutions to improve service delivery and organizational performance.

The study also found that analytical skills significantly influence employee performance. Employees with strong analytical competencies are more capable of supporting decision-making processes, evaluating operational performance, and improving service quality. This finding is consistent with Ababneh (2021), who argued that analytical thinking enhances productivity and operational efficiency. In UAE banking institutions, analytical competencies appear essential due to the increasing reliance on digital technologies, customer analytics, and risk assessment systems. Therefore, analytical skills contribute directly to improving employee effectiveness and banking service performance.

In addition, leadership demonstrated a significant positive effect on employee performance. This finding confirms that leadership competencies play an important role in motivating employees, encouraging teamwork, and supporting continuous improvement initiatives within banking institutions. The result aligns with Silva et al. (2021), who emphasized that leadership contributes significantly to organizational commitment and service excellence. Within UAE banks, leadership capabilities are increasingly important because employees operate in highly dynamic and technology-driven environments that require adaptability and effective organizational guidance.

The findings further revealed that innovation significantly mediates the relationship between problem-solving skills and employee performance. This suggests that employees with strong problem-solving competencies contribute to organizational innovation through process improvement and creative operational solutions, which subsequently enhance employee performance. The result supports previous studies that linked quality management practices with innovation capability and organizational effectiveness (Antunes et al., 2021). In the UAE banking sector, innovation appears to strengthen employees' ability to improve operational efficiency and customer service quality.

Similarly, innovation significantly mediated the relationship between leadership and employee performance. The finding indicates that leadership competencies enhance innovation capability by promoting creativity, organizational adaptability, and technological improvement initiatives. Consequently, innovation contributes to improved employee effectiveness and service quality. This result is consistent with Canbay and Akman (2023), who emphasized the role of leadership in supporting innovation culture and organizational adaptability.

However, the study found that innovation did not significantly mediate the relationship between analytical skills and employee performance. Although analytical skills directly improved employee performance, their indirect influence through innovation was not statistically significant. This finding suggests that analytical competencies primarily contribute to employee performance through operational decision-making, performance evaluation, and risk management rather than through innovation mechanisms. The result may indicate that banking employees utilize analytical skills mainly for improving operational accuracy and compliance rather than generating innovative solutions.

Overall, the findings confirm that quality management skills are important determinants of employee performance within UAE banking institutions. The study also demonstrates that innovation plays a critical mediating role in strengthening the influence of problem-solving skills and leadership on employee performance. These findings support the Resource-Based View (RBV) and Dynamic Capabilities Theory, which emphasize that employee competencies and innovation capability represent strategic organizational resources that contribute to organizational effectiveness and competitive advantage (Barney, 1991; Cordeiro et al., 2023).

The study contributes to the existing literature by providing empirical evidence regarding the combined influence of quality management skills and innovation on employee performance

within the UAE banking sector. Furthermore, the findings provide practical implications for banking institutions seeking to improve service quality, operational excellence, and employee effectiveness through competency development and innovation-oriented management practices.

5. Conclusion

This study examined the relationship between quality management skills, innovation, and employee performance within the National Bank of Ras Al Khaimah in the UAE. Specifically, the study investigated the influence of problem-solving skills, analytical skills, and leadership on employee performance, as well as the mediating role of innovation. The findings confirmed that quality management skills significantly contribute to improving employee performance within UAE banking institutions.

The results demonstrated that problem-solving skills, analytical skills, and leadership positively and significantly influence employee performance. Employees possessing strong quality management competencies were found to contribute more effectively toward operational efficiency, service quality, customer satisfaction, and organizational effectiveness. These findings highlight the importance of developing employee competencies to support banking performance in increasingly competitive and technology-driven environments.

The study also confirmed the important role of innovation in enhancing employee performance. Innovation significantly mediated the relationships between problem-solving skills and employee performance, as well as between leadership and employee performance. This indicates that innovation capability strengthens the influence of employee competencies on organizational effectiveness by supporting process improvement, technological adaptation, and service enhancement. However, the mediating effect of innovation between analytical skills and employee performance was not statistically significant, suggesting that analytical competencies primarily improve employee performance through direct operational and decision-making functions.

The findings support the Resource-Based View (RBV), Human Capital Theory, and Dynamic Capabilities Theory by demonstrating that employee competencies and innovation capability represent valuable organizational resources that contribute to competitive advantage and organizational performance. Within the UAE banking sector, the study confirms that quality management skills and innovation capability are essential for improving employee effectiveness and maintaining service excellence.

This study contributes to the existing literature by addressing important research gaps related to quality management skills, innovation, and employee performance in UAE banking institutions. Unlike previous studies that focused mainly on organizational-level outcomes, this study provides empirical evidence regarding employee-level competencies and their influence on performance outcomes. In addition, the study contributes to the growing literature on innovation mediation within service-oriented and banking environments using the PLS-SEM approach.

From a practical perspective, the findings suggest that UAE banking institutions should

invest in employee training and development programs that enhance problem-solving, analytical, and leadership competencies. Banks should also strengthen innovation-oriented organizational cultures that encourage creativity, continuous improvement, and technological adaptability. Such initiatives can improve employee effectiveness, service quality, and long-term organizational competitiveness.

Despite its contributions, the study has several limitations. The study focused only on employees of the National Bank of Ras Al Khaimah in the UAE, which may limit the generalizability of the findings to other banking institutions or industries. In addition, the study utilized a cross-sectional research design, which restricts the ability to examine long-term causal relationships among the variables. Future studies are therefore recommended to include larger samples across multiple UAE banks and to apply longitudinal research designs to provide broader empirical insights. Future research may also examine additional variables such as organizational culture, digital transformation, employee engagement, and knowledge management to further explain employee performance within the banking sector.

Overall, the study concludes that quality management skills and innovation capability are critical drivers of employee performance within UAE banking institutions. Developing employees' competencies and strengthening innovation practices can significantly enhance organizational effectiveness, operational excellence, and service quality in the rapidly evolving UAE banking sector.

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