# FRAMEWORK EMPLOYEE EMPOWERMENT IMPACT ON THE RELATIONSHIP BETWEEN EMPLOYEE INNOVATION AND ORGANIZATIONAL PERFORMANCE AT ABU DHABI NATIONAL OIL COMPANY (ADNOC)

# Ali Hassan Hassan Al Hassani<sup>1</sup>, Norliana Sarpin<sup>2\*</sup>

<sup>1,2</sup> Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia

### \*Corresponding E-mail: <u>norliana@uthm.edu.my</u>

#### ABSTRACT

**Objective:** This study aims to examine the relationship between innovation constructs, specifically Product Innovation and Process Innovation, and organizational performance in the oil and gas sector, with a particular focus on the mediating role of employee empowerment within the Abu Dhabi National Oil Company (ADNOC).

**Research Method:** A quantitative research approach was employed, collecting data from 302 ADNOC employees. The study utilized the Structural Equation Modelling technique using Partial Least Squares (SEM-PLS) in the SmartPLS software to develop and validate the proposed research framework

**Findings:** The results revealed significant indirect effects of both product and process innovation on organizational performance through the mediating role of employee empowerment. The findings demonstrate that employee empowerment partially mediates these relationships, underscoring its strategic importance in maximizing the impact of innovation on performance outcomes.

**Originality:** This study contributes to the limited empirical research in the oil and gas industry by highlighting employee empowerment as a crucial mechanism linking innovation efforts to improved organizational performance. The framework offers practical implications for leveraging human capital in innovation strategies within high-risk and complex industrial environments

**Keywords:** Product Innovation; Process Innovation; Employee Empowerment; Organizational Performance; SEM-PLS; Oil and Gas Industry; ADNOC

### 1. INTRODUCTION

This research explores the mediating effect of employee empowerment on the relationship between employee innovation and organizational performance at the Abu Dhabi National Oil Company (ADNOC) in the UAE. Empowered employees, who are granted autonomy, resources, and support to explore and implement innovative ideas, serve as catalysts for organizational innovation. This empowerment nurtures a culture of creativity and proactive problem-solving, enabling employees to make significant contributions to innovation. Consequently, these contributions lead to enhanced operational efficiencies, increased productivity, and overall improved organizational performance. Empirical evidence from recent studies by Hamdan and Al-Ketbi (2023) demonstrates that empowered employees' innovative efforts have a greater impact, thereby positively influencing ADNOC's performance outcomes.

According to Anderson et al. (2021), the modern business environment is marked by rapid technological advancements and intense competition, positioning innovation as a crucial determinant of organizational success. Employee innovation, defined as the generation and implementation of novel ideas within an organization, has emerged as a key driver of enhanced organizational performance (Jong & Hartog, 2019). The Abu Dhabi National Oil Company (ADNOC), a leading energy producer in the UAE, aims to capitalize on this potential by fostering an innovative culture among its workforce. However, the specific pathways through which employee innovation leads to improved organizational performance remain underexplored, particularly within the context of the oil and gas industry (Damanpour, 2022).

Therefore, empowering employees by providing them with autonomy, resources, and opportunities for participation in decision-making is considered a key factor in enhancing employee innovation and, consequently, organizational performance (Spreitzer, 2008). Employee empowerment not only increases individual motivation and job satisfaction but also fosters an environment that encourages creativity and risk-taking (Zhang & Bartol, 2010). Despite these theoretical assertions, empirical evidence on the mediating role of employee empowerment in the relationship between employee innovation and organizational performance remains limited, particularly within the context of ADNOC (Albrecht et al. 2018).

Recent studies have highlighted the importance of influential factors in shaping the effectiveness of empowerment initiatives (Lee et al. 2020). In ADNOC's case, the relationship between organizational culture, leadership styles, and employee perceptions of empowerment is likely to be composite and multifaceted (Meyer & Allen, 2019). Therefore, there is a pressing need to investigate how these contextual elements influence the mediating role of employee empowerment in enhancing the impact of employee innovation on organizational performance (Ashford et al. 2018).

Moreover, the oil and gas industry's unique operational challenges such as highrisk environments, capital-intensive projects, and stringent regulatory requirements further complicate the dynamics between innovation, empowerment, and performance (PWC, 2021). Understanding these sector-specific factors is crucial for ADNOC to design empowerment programs that not only foster innovation but also align with the company's strategic objectives and operational realities. This study aims to fill this gap by examining the mediating effect of employee empowerment on the relationship between employee innovation and organizational performance within ADNOC, considering the unique challenges and opportunities of the oil and gas industry in the UAE.

Given the strategic importance of ADNOC in the UAE's economy and the broader Middle East energy landscape, insights from this study could provide valuable lessons for other organizations in similar contexts (Ernst & Young, 2020). By clarifying the mechanisms through which employee empowerment can enhance the innovationperformance relationship, this research contributes to the broader discourse on organizational behaviour and human resource management in high-stakes industries (McKinsey, 2022).

### 2. LITERATURE REVIEW

The conceptual framework of this study aims to investigate the causative relationships between innovation, organisational performance, and the mediating effect of employee empowerment at Abu Dhabi National Oil Company (ADNOC) in the United Arab Emirates, using causal relationship theory. According to this concept, innovation is thought to boost organisational performance, implying that advances in product and process innovation can lead to increased company effectiveness and efficiency (Damanpour, 1991; Gopalakrishnan & Damanpour, 1994).

Causal relationship theory provides a framework for understanding how these advances affect many aspects of organisational performance. According to the paradigm, innovations not only directly improve performance results, but also cause changes in organisational processes and staff behaviours that contribute to performance improvement. By examining these direct causal consequences, the study hopes to show a clear correlation between innovation efforts and performance measurements (Teece et al. 1997).

Furthermore, the paradigm argues that employee empowerment is a key mediator, potentially amplifying the positive causal effects of innovation on organisational performance. Employee empowerment serves as a mediator because empowered people are more likely to solve problems creatively, adopt new techniques, and contribute to a culture of continuous development (Spreitzer, 1995; Seibert et al. 2004). This increases the overall effect of innovation on organisational performance.

The combination of these factors is expected to improve comprehension of the complex causal dynamics that drive ADNOC's innovation and success. The study aims to give compelling evidence on how innovation and employee empowerment collaborate to increase organisational performance (Baron & Kenny, 1986). This approach highlights not only the direct results of innovation, but also the critical mediation function of employee empowerment in encouraging these causal relationships (Hair et al. 2014).

Figure 1 depicts a conceptual framework that employs causal relationship theory to develop and comprehend the mechanisms by which innovation influences performance. By examining both direct and indirect causal pathways, the study paints a complete picture of how product and process innovations, along with employee empowerment, create a dynamic interplay that enhances organisational outcomes. This extensive engagement with causal theory ensures that the study's findings are based on a rigorous comprehension of the cause-and-effect relationships that drive organisational performance.



Figure 1: Conceptual framework

## 2.1 PROCESS INNOVATION

Process innovation involves the introduction of new or enhanced tools, equipment, materials, and technologies that directly impact the goods produced by innovators, subsequently offered in the market. While product and process innovations differ, Möldner et al. (2020) define process innovation as something novel developed by a company to meet customer needs.

Process innovation encompasses the creation of entirely new or improved manufacturing or production processes, aiming to achieve greater output with fewer inputs. Sjödin et al. (2020) characterize this as eco-efficiency on a broader scale. It involves introducing new or significantly improved production processes and distribution methods for the end product, a concept gaining traction in recent years.

Within the spectrum of transformation lies various types of process innovation, ranging from incremental to radical. Given its incorporation of equipment, methods, or software, process innovation holds significant importance. Its objectives include cost reduction, value enhancement, and product quality improvement (Tidd & Bessant, 2020).

Process innovation has the potential to be highly strategic, allowing companies to create unique offerings or showcase their business in a superior manner compared to competitors. Its application can provide a valuable competitive edge (Trantopoulos et al. 2017).

### 2.2 **PRODUCT INNOVATION**

Product innovation is a crucial aspect of a company's growth and competitive edge in the market. It involves the development and introduction of new or significantly improved products or services, leading to enhanced customer satisfaction, increased market share, and higher profitability (García & Calantone, 2002). According to Schilling (2013), product innovation encompasses various stages, including idea generation, product development, and commercialization. The idea generation phase involves brainstorming and identifying potential product concepts that align with market needs. Following this, the product development stage focuses on designing, testing, and refining the product to meet quality and performance standards. Finally, the commercialization phase involves marketing and distributing the product to consumers.

Product innovation can be driven by several factors, including technological advancements, changing consumer preferences, and competitive pressures (Tidd & Bessant, 2018). Advancements in digital technology have led to the creation of innovative products that have transformed industries and consumer lifestyles by offering enhanced functionality and convenience. Moreover, product innovation is closely linked to a company's research and development (R&D) efforts. Companies that invest heavily in R&D are often at the forefront of innovation, as they can explore new technologies and develop cutting-edge products (Cooper, 2019). Continuous investment in R&D can result in significant product innovations.

Successful product innovation requires a strategic approach and effective management. It involves cross-functional collaboration among various departments, including marketing, R&D, and production. This collaboration ensures that the product development process is efficient and aligned with market demands (Trott, 2017). Product innovation is vital for maintaining a company's competitiveness and growth. By developing new and improved products, companies can meet evolving consumer needs, adapt to technological changes, and achieve long-term success in the market.

#### 2.3 EMPLOYEE EMPOWEREMENT

Employee empowerment is a management practice that emphasizes giving employees the autonomy, resources, and authority to make decisions about their work. This approach fosters a sense of ownership and responsibility among employees, leading to higher job satisfaction, increased productivity, and improved organizational performance (Spreitzer, 1996). Empowerment involves several key elements, including providing employees with access to information, offering opportunities for skill development, and creating an environment that encourages innovation and risk-taking (Kanter, 1977). According to Conger and Kanungo (1988), empowerment is about enhancing feelings of self-efficacy among organizational members through the identification of conditions that foster powerlessness and the removal of these conditions by both formal organizational practices and informal techniques of providing efficacy information.

One of the significant benefits of employee empowerment is its positive impact on job satisfaction. When employees feel empowered, they are more likely to feel valued and appreciated, which increases their motivation and commitment to the organization (Thomas & Velthouse, 1990). Furthermore, empowerment can lead to better decisionmaking, as employees who are closer to the day-to-day operations often have valuable insights into improving processes and resolving issues (Bowen & Lawler, 1992). Employee empowerment also contributes to organizational agility and innovation. By enabling employees to take initiative and experiment with new ideas, organizations can respond more quickly to changes in the market and stay ahead of competitors. Additionally, empowered employees are more likely to collaborate and share knowledge, fostering a culture of continuous improvement and learning (Spreitzer, 1996).

However, implementing employee empowerment practices requires careful planning and management. It is essential to ensure that employees have the necessary skills and resources to make informed decisions. Training and development programs play a crucial role in equipping employees with the knowledge and competencies they need to succeed in an empowered environment (Conger & Kanungo, 1988). Moreover, managers must be willing to relinquish control and trust their employees, creating a supportive atmosphere that encourages open communication and feedback (Kanter, 1977). Employee empowerment is a powerful strategy that can lead to numerous benefits for both employees and organizations. By providing employees with the tools, resources, and authority to make decisions, companies can enhance job satisfaction, improve productivity, and foster a culture of innovation and continuous improvement (Spreitzer, 1996; Kanter, 1977; Bowen & Lawler, 1992).

### 2.4 ADNOC ORGANISATIONAL PERFORMANCE

ADNOC, as a state-owned enterprise, operates within a unique regulatory and cultural framework that presents distinct challenges and opportunities for employee empowerment and innovation (Al-Saidi & El-Sayegh, 2020). The hierarchical structure and traditional management practices prevalent in the oil and gas sector may hinder the effective implementation of empowerment strategies (Smith & Lewis, 2021). Consequently, understanding how employee empowerment can mediate the relationship between employee innovation and organizational performance in such a setting is vital for crafting effective management policies that drive sustainable growth (Rehman et al. 2021).

Job performance refers to the quantity and quality of work that an employee accomplishes while performing their assigned duties. It measures an individual's actual output and effectiveness in their role. Performance is the outcome or degree of achievement that a person attains over the course of a specified period of time while performing their duties in relation to a variety of alternatives, such as work standards, targets, or mutually agreed-upon established criteria. Performance is the result or overall degree of success an individual achieves over a specified period of time when performing the task in contrast to other options, such as work standards, targets, or established criteria (Al Mehrzi & Singh, 2016).

Furthermore, according to Yang et al., an employee's performance is mostly based on what they do and don't do. Also, performance fundamentally dictates what employees should and shouldn't do (Yang et al. 2016). Performance management encompasses all endeavours undertaken to enhance the current performance of a business or company, employees' performance, and the overall performance of each workplace.

Understanding the fundamentals of performance measurement is advisable before appreciating an organization's performance because performance measurement may be used to improve an organization's performance. Success evaluation is a key factor for evaluating organizational performance. Performance measurement was defined as a measurement method by Wang et al. (2016), where measurement is a process of quantification and performance is achieved. They emphasized the value of outperforming competitors in terms of successfully and efficiently serving customer needs. Al-Damen (2017) claims that the performance of the oil and gas sector entails the growth of the sector to increase income, decrease costs, improve operational and exploration operations, expand markets, and support the national economy. Al-Damen added that internal factors have a greater influence on a company's performance than external ones. People must cooperate and go in the same direction since a company is made up of individuals who work with each other to achieve a common goal.

According to Harbour (2017), the financial situation, market share, and shareholder value are the three areas in which an organization's performance is demonstrated. The performance of these three areas can be used to gauge the effectiveness of an organization since they serve as its substitutes. The difference between the company's revenue and expenses at any chosen time can be used to assess the financial success of the organization. The company's financial statements can be used to verify these. On the other hand, the performance of any product in the market is examined to gauge market performance. It assesses whether the product's market share has grown or if sales have increased.

The performance of the oil and gas industry is crucial because it plays a significant role in the United Arab Emirates' (UAE) economy. Numerous factors can affect the organizational performance of oil and gas companies in the United Arab Emirates, according to prior research. According to one study, corporate governance and the financial success of oil and gas companies in the United Arab Emirates are positively correlated (Al-Saidi, 2021). Performance and shareholder value can be enhanced by implementing sound corporate governance principles, such as accountability, transparency, and board independence.

Algahtani et al. (2023) in a study revealed a positive correlation between performance and leadership style. It has been discovered employee that transformational leadership, which places a strong emphasis on employee empowerment, inspiration, and motivation, is especially successful at raising employee Furthermore, studies have demonstrated that innovation performance. can significantly affect the organizational performance of UAE-based oil and gas companies (Almansoori et al. 2021). Businesses that use cutting-edge technologies and make research and development investments are more likely to outperform their competitors and gain a competitive edge.

Furthermore, supply chain management and the financial performance of oil and gas companies are positively correlated, according to a UAE study (Alshehhi, 2022). Efficient supply chain management techniques, like supplier relationship management and strategic sourcing, can reduce costs while enhancing quality and productivity.

## 3. MODELLING WORK

The model of this study includes two innovation constructs: product innovation and process innovation, which serve as the independent variables. Organizational performance is the dependent variable, and employee empowerment acts as a mediator. The modeling work was conducted in the SmartPLS software environment, applying the SEM-PLS technique using data collected from 302 ADNOC employees. The developed model was evaluated based on its measurement and structural components until it met the fitness criteria. The model after running the PLS algorithm as figure 2.

This structural equation model (SEM) of figure 2 illustrates the relationships between four key constructs: Product Innovation, Process Innovation, Employee Empowerment, and Organizational Performance. Each construct is measured by multiple observed variables, shown as indicators in yellow rectangles. The model highlights both direct and indirect pathways.

Process Innovation exhibits a strong direct influence on Employee Empowerment (path coefficient=0.964), while Product Innovation also positively impacts Employee Empowerment (path coefficient=0.759). In terms of direct effects on Organizational Performance, Product Innovation has a stronger positive impact (0.658) than Process Innovation (0.263). Interestingly, Employee Empowerment shows a negative relationship with Organizational Performance (-0.591), indicating a potential trade-off or complex dynamics at play.

The variance explained by the predictors ( $R^2$  values) is high for both Employee Empowerment (96.2%) and Organizational Performance (97.8%), reflecting the model's robustness. Thus, the analysis emphasizes the critical roles of innovation and empowerment in shaping organizational outcomes, with complex interactions between the constructs.



Figure 2: The final model after running PLS Algorithm

#### 3.1 MEASUREMENT MODELLING RESULTS

The assessment of the measurement component of the model involved examining construct reliability and validity, as well as discriminant validity (Memon et al. 2013; Rahman et al. 2013; Hair et al. 2017; Henseler et al. 2015). Construct reliability was evaluated using metrics such as Cronbach's Alpha, rho\_A, and Composite Reliability, all of which demonstrated high internal consistency for the constructs of employee empowerment, organizational performance, process innovation, and product innovation, with acceptable values generally above 0.70 (Nunnally & Bernstein, 1994). Additionally, the Average Variance Extracted (AVE) was used to assess convergent validity, with all constructs achieving acceptable to excellent AVE values, with a value of 0.50 or higher indicating acceptable convergent validity (Fornell & Larcker, 1981) as cited by Almansoori et al. (2021) and Zainun et al. (2014).

<b>Table 1:</b> Result of construct reliability and validity							
Constructs	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)			
EMPLOYEE	0.846	0.861	0.880	0.500			
EMPOWERMENT	0.010	0.001	0.000	0.000			
ORGANIZATIONAL	0.870	0 001	0.907	0 657			
PERFORMANCE	0.072	0.004	0.897	0.037			
PROCESS INNOVATION	0.907	0.912	0.923	0.547			
PRODUCT INNOVATION	0.872	0.878	0.897	0.753			

Table 1 shows that all constructs show high reliability, indicated by Cronbach's Alpha values above 0.7, which means the constructs are internally consistent. The rho\_A and Composite Reliability values further support this internal consistency. The Average Variance Extracted (AVE) values, which measure the amount of variance captured by the construct in relation to the amount of variance due to measurement error, indicate acceptable to excellent levels of convergent validity, with AVE values all above the threshold of 0.5.

Discriminant validity was also examined to ensure that each construct is distinct from the others, indicating that the model measures what it is intended to measure without significant overlap between constructs. Discriminant validity is achieved when the square root of AVE for each construct is greater than its highest correlation with any other construct (Henseler et al. 2015; Zainun et al. 2014; Rahman et al. 2013).

Table 2: Discriminant validity using Fornell & Larcker					
Constructs	EMPLOYEE EMPOWERMENT	ORGANIZATIONAL PERFORMANCE	<b>PROCESS</b> INNOVATION	<b>PRODUCT</b> INNOVATION	
EMPLOYEE EMPOWERMENT	0.697				
ORGANIZATIONAL PERFORMANCE	0.878	0.686			
PROCESS INNOVATION	0.864	0.974	0.639		
PRODUCT INNOVATION	0.967	0.848	0.791	0.625	

Published by: RIS scientific Academy https://scientificacademic.com/index.php/tsj/index The values in table 2 indicate that there are high correlations between constructs, suggesting potential issues with discriminant validity. For discriminant validity to be established, the square root of the AVE of each construct should be higher than its correlations with any other construct (Fornell & Larcker, 1981).

### 3.2 STRUCTURAL MODELLING RESULTS

### 3.2.1 COEFFICIENT OF DETERMINATION (R<sup>2</sup>)

The R square ( $R^2$ ) value for a model represents the proportion of variance in the dependent variable that can be explained by the independent variables. It is a measure of the model's explanatory power. In this context, high R square values indicate a strong ability of the model to explain the variance in the dependent constructs (Hair et al. 2017; Henseler et al. 2015).

Table 3: R square values					
Endogenous constructs	R Square Adjusted				
EMPLOYEE EMPOWERMENT	0.962	0.962			
ORGANIZATIONAL PERFORMANCE	0.978	0.977			

Table 3 presents the quality criteria for the structural model, utilizing the R Square ( $R^2$ ) and R Square Adjusted values. These values for employee empowerment and organizational performance demonstrate the model's strong explanatory power. Specifically, the model accounts for 96.2% of the variance in employee empowerment and 97.8% of the variance in organizational performance. Such high values indicate that the independent variables (product innovation and process innovation) along with the mediator (employee empowerment) provide a robust explanation for these constructs. The minimal difference between the R Square and R Square Adjusted values further signifies the model's stability and absence of overfitting.

### **3.2.2 PATH COEFFICIENTS**

Path coefficients are used to quantify the strength of the connections between the study constructs in the structural model. The coefficients serve as indicators of the degree of a link, with values near 1 indicating a strong positive relationship (Hair Jr et al. 2014). The significance of the path is determined using p values or t-statistics, as described by Kock (2014), via the bootstrapping approach (Memon et al. (2023). Hair et al. (2011) defined the path coefficients and their significance levels as indicators of the model's internal consistency. The outcomes of bootstrapping are as shown in tables 4 and 5.

Table 4: Direct relationship						
Direct Paths	Original Sample (O)	T Statistics	P Values	Decision		
Employee Empowerment -> Organizational Performance	0.591	8.118	0.000	Significant		
Process Innovation -> Employee Empowerment	0.263	9.664	0.000	Significant		
Process Innovation -> Organizational Performance	0.964	33.558	0.000	Significant		
Product Innovation -> Employee	0.759	32.954	0.000	Significant		

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Empowerment				
Product Innovation ->	0.659	9 724	0.000	Significant
Organizational Performance	0.038	0.734	0.000	Significant

Table 4 shows the results of the modelling processes, highlighting the significant direct relationships involved in the model. These relationships include connections between the independent constructs (product innovation and process innovation) and the mediator (employee empowerment), as well as the dependent construct (organizational performance).

The results indicate that employee empowerment significantly influences organizational performance ( $\beta = 0.591$ ) with strong statistical support (T = 8.118, p = 0.000). Both product innovation ( $\beta = 0.658$ , T = 8.734, p = 0.000) and process innovation ( $\beta = 0.964$ , T = 33.558, p = 0.000) directly and significantly impact organizational performance. Additionally, product innovation ( $\beta = 0.759$ , T = 32.954, p = 0.000) and process innovation ( $\beta = 0.263$ , T = 9.664, p = 0.000) significantly influence employee empowerment.

This indicates that all the direct relationships are significant. The strongest path strength is between process innovation and organizational performance, with a value of 0.964, while the weakest is between process innovation and employee empowerment, with a value of 0.263.

Table 5: Indirect relationship					
Indirect path	Original Sample (O)	T Statistics	P Values	Decision	
Process Innovation -> Employee Empowerment -> Organizational Performance	0.156	7.695	0.000	Significant	
Product Innovation -> Employee Empowerment -> Organizational Performance	0.449	7.207	0.000	Significant	

Table 5 indirect relationships in the model highlight the mediation effect of employee empowerment between the innovation constructs and organizational performance. Specifically, process innovation indirectly influences organizational performance through employee empowerment with a strength of  $\beta = 0.156$ , supported by strong statistical significance (T = 7.695, p = 0.000). Similarly, product innovation also indirectly impacts organizational performance through employee empowerment with a strength of  $\beta = 0.449$ , again supported by strong statistical significance (T = 7.207, p = 0.000).

This indicates that both indirect relationships are significant. Product innovation exhibits a stronger indirect effect with a strength value of  $\beta$  = 0.449, while process innovation has a weaker indirect effect with a strength value of  $\beta$  = 0.156.



Figure 3: The final model after running PLS Algorithm

Figure 3 illustrates the bootstrapped results of the structural equation model. The values on the paths represent t-values, which assess the statistical significance of the relationships between constructs. For example, Process Innovation  $\rightarrow$  Employee Empowerment (t=33.558) and Product Innovation  $\rightarrow$  Employee Empowerment (t=32.954) indicate highly significant relationships. The bootstrapping process confirms the reliability of the estimated paths, highlighting the robustness of the framework.

## **3.2.3 MODEL FITNESS**

Model fitness indicators are essential in structural equation modeling (SEM) as they assess how well the proposed model fits the observed data. In this study, several fit indices were evaluated, including the Standardized Root Mean Square Residual (SRMR), d\_ULS, d\_G, Chi-Square, and the Normed Fit Index (NFI) as in table 6.

<b>Fitness indicators</b>	Saturated Model	<b>Estimated Model</b>			
SRMR	0.147	0.147			
d_ULS	17.808	17.808			
d_G	-NA-	-NA-			
Chi-Square	infinite	infinite			
NFI	-NA-	-NA-			

Table 6: Fitness of model

Even though the values for d\_G, NFI, and Chi-Square were not generated by the software, focusing on the SRMR and d\_ULS provides useful insights into the model's fitness. Since the SRMR and d\_ULS values are the primary available indicators, therefore the SRMR value of 0.147 suggests a moderate fit, while the d\_ULS value of 17.808 indicates some level of discrepancy.

# 4. ASSEEMENT ON MEDIATION EFFECT LEVEL

As defined by Ghasemy et al. (2020), full mediation occurs when the indirect relationship is significant but the direct relationship remains insignificant. Partial mediation occurs when both direct and indirect linkages are significant. There is no mediation if the indirect relationship is insignificant. Thus, as shown in Table CC, the mediator's mediation effect can be estimated by comparing the significance levels of the direct and indirect associations.

Direct relationship	Status	Indirect relationship	Status	Mediation effect level
Process Innovation ->		Process Innovation ->		
Organizational	Significant	Employee Empowerment ->	Significant	Partial effect
Performance		Organizational Performance		
Product Innovation ->		Product Innovation ->		
Organizational	Significant	Employee Empowerment ->	Significant	Partial effect
Performance		Organizational Performance		

 Table 7 Classification of mediation effects

Table 7 shows that both process and product innovations significantly impact organizational performance. These impacts occur directly and indirectly, with employee empowerment acting as a partial mediator in both cases. This means that innovations in processes and products enhance organizational performance, both on their own and through improving employee empowerment.

# 5. FRAMEWORK OF THE STUDY

Based on the results of the modelling processes, which include the direct and indirect relationships in the model, and the decision regarding the mediation effect of employee empowerment, a framework was formulated. This framework illustrates the relationship between the innovation constructs (serving as the independent variables) and the organizational performance construct (serving as the dependent variable), with employee empowerment acting as a mediator in this relationship. These findings are represented in Figure 4.



Figure 4: Mediation framework of the study

Figure 4 shows the mediation framework where it involves comparing direct and indirect relationships. For direct relationship, Product innovation is directly significant influencing organizational performance with  $\beta = 0.658$ . For indirect relationship, product innovation indirectly significant influencing organizational performance

through Employee Empowerment, with  $\beta = 0.449$ . Since both relationships are significant, Employee Empowerment demonstrates a partial mediation effect. Similarly, for direct relationship, process innovation is directly significant influencing organizational performance with  $\beta = 0.964$ . for indirect relationship, the process innovation is indirectly significant related to organizational performance indirectly through Employee Empowerment, with  $\beta = 0.156$ . As both relationships are significant here as well, Employee Empowerment exhibits a partial mediation effect.

This framework indicates a comprehensive understanding of how product and process innovations, along with employee empowerment as the mediator, contribute to organizational performance. It emphasises the critical role of innovation in driving success while recognizing the supporting influence of employee empowerment in the process. This understanding is particularly valuable for ADNOC in optimizing its innovation strategies and nurturing an empowered workforce to achieve enhanced organizational outcomes.

### 6. CONCLUSION

In conclusion, this paper has developed a conceptual framework for investigating the links between innovation constructs, namely product innovation and process innovation, as independent variables, and organisational performance as the dependent variable. The framework has been validated through modelling in SmartPLS software using the SEM-PLS technique. The data for the modelling process was collected from ADNOC employees. The modelling investigates the function of employee empowerment in mediating the relationship between innovation constructs and organisational performance inside the ADNOC organisation. The findings revealed strong direct and indirect linkages in the model. Notably, employee empowerment was discovered to mediate the links between Product Innovation and Organisational Performance, as well as Process Innovation and Organisational Performance. These findings highlight the vital relevance of incorporating employee empowerment into organisational strategy in order to maximise the impact of innovation on performance. Recognising the partial mediation impact of employee empowerment enables organisations such as ADNOC to have a better understanding of the mechanisms by which innovation affects performance, allowing for more informed decision making and strategic planning.

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