

## INTERNAL SERVICE QUALITY, EMPLOYEE SATISFACTION AND LOYALTY IN THE NIGERIAN OIL & GAS SECTOR

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### Abstract

This study examined the mediating role of employee satisfaction in the relationship between internal service quality and employee loyalty in the Nigerian oil and gas sector with focus on the Nigerian National Petroleum Company Exploration and Production. The study investigated the effect of internal service quality on employee satisfaction and loyalty as well as the influence of satisfaction on loyalty and the mediating role of satisfaction between these two variables. A cross sectional research design was adopted and executed through a survey. Data were collected through census method with all tenured employees of the organization invited to participate in the study. A total of 357 employees responded to the online survey. The data were analyzed using descriptive analysis and hierarchical regression on the Jamovi platform. The findings indicated that internal service quality had significant influence on both employee satisfaction and loyalty. Also, employee satisfaction played a significant role in fostering loyalty and served as partial mediator between internal service quality and employee loyalty. The study concluded that employees as internal customers contribute to a cycle that ultimately impacts external customer satisfaction and performance. Based on the findings the study recommended implementation of actionable strategies that support internal service quality and consequently contribute to higher employee satisfaction and loyalty. The practical implications are that managers can enhance employee loyalty by upgrading internal service quality through proactive and responsive supervisory support, proven internal communication techniques, provision of adequate work resources, and fair employee recognition practices. Employee satisfaction levels should be periodically measured as a mechanism to help identify service gaps. Appropriate specific interventions that contribute to resolving these gaps and support employee satisfaction and loyalty should be embraced.

**Keywords:** Internal service quality, Employee satisfaction, Employee loyalty, Oil and Gas sector

## 1. Introduction

Across organizations internal service quality is recognized as contributing to shaping desired outcomes like client satisfaction and delight, employee satisfaction and loyalty, as well as corporate competitiveness particularly in service-driven industries (Amerta & Madhavi, 2023; Wu et al., 2021). Basically, internal service quality describes the coordinated effort to meet the requirements and expectations of employees who are viewed as internal customers to improve their work performance (Mawoli, 2012). The internal customer is any employee receiving service or product from other members/departments/units within the organization to perform their jobs (Latif et al., 2016) and is a crucial factor in production outcomes and customer satisfaction (Prentice, 2018; Wu et al. 2021). This is because improved internal customer service quality would contribute to improved quality of external customer service. There is scholarly consensus that better service to internal customers improves employee satisfaction and would contribute to a higher quality of service to the external customers (Bouranta et al., 2005; Al-ababneh et al., 2018)

Over the years there has been extensive organizational effort devoted to external customer delight as they were considered instrumental to the organizational fortunes, managers however are now highly cognizant that delivering superior internal services like prompt responses, efficient communication, proactive and helpful leadership, efficient processes, and well-structured work environments to their employees directly impact employee morale, productivity, and long-term commitment (Maharani et. al., 2020) all of which can either promote or hamper service quality to external customers. Businesses that fail to prioritize on quality will face reduced operational efficiency, poor service, customer dissatisfaction and defects (Adedoyin & Igbinedion, 2024; Chika et. al., 2025) reduced staff engagement, high employee turnover and decreasing loyalty (Maharani et. al., 2020; Sharma et. al., 2016). Managers today aim at building capable and loyal employees in recognition of their strategic capital contributions that are both tangible and intangible, and are highly valuable, rare, and inimitable and support sustainable competitive advantage (Barney, 1991; Adedoyin et. al., 2025).

Loyalty is one desirable attribute that organizations desire from their employees because greater loyalty would ensure corporate survival and well-being. Iqbal, Tufail, and Lodhi (2015) posit that employee loyalty reflects their dedication to corporate success and their steadfast belief that remaining in the organization is the best choice. Tomic, Tesic, Kuzmanovic and Tomic (2018) acknowledged that employees committed to an organization are dedicated to offering excellent service. Internal service quality and employee loyalty have been considered in the literature (Helmi et al. 2022, Nguyen & Ha, 2023) and have been identified as critical drivers of employee loyalty by researchers such as Hallowell, Schlesinger and Zornitsky (1996) and Sharma, Kong and Kingshott (2016). Sharma et al. (2016) emphasized a link between internal service quality and employee organizational commitment, emphasizing that a low level of internal service quality would significantly affect employee's organizational commitment while Jarvi (2012) discovered a link between internal service quality and employee satisfaction, asserting that poor internal service quality leads to low employee satisfaction. These findings

support the Service Profit Chain (SPC) model of Heskett, Jones, Loveman, Sasser, and Schlesinger (1994). The SPC model holds that the effectiveness and efficiency of service given within an organization acts as a link, connecting employee satisfaction, pleasure and loyalty to customer satisfaction, continued patronage and eventual firm growth and profitability. Corporate leaders and researchers have examined employee loyalty and the variables that could affect it. Studies have shown that internal service quality significantly influences employee satisfaction and employee commitment (Maharani et al., 2020; Prakash & Srivastava, 2019; Sharma, et al., 2016; Akroush et al., 2013); and is a key factor influencing employee loyalty, job satisfaction, and retention (Gandhi et al., 2018; Sharma et al., 2016; Khan et al., 2011). These studies show the increasing focus of studies on internal service quality in organizations.

The uniqueness and originality of this study stems from the fact that based our review of literature very few studies have examined the effect of internal service quality on employee loyalty in Nigeria. The related studies identified had been conducted in the banking, education and health sectors, while there appeared to be almost no studies in the oil and gas sector. This study therefore on the Nigerian oil and gas sector is distinct as it provides firsthand empirical results for the energy sector in Nigeria which is currently bedeviled by under capacity utilization and inefficiency. The study contributes theoretically to the literature by its findings on the subject matter and managerially by suggesting useful actionable strategies for the oil and gas sector.

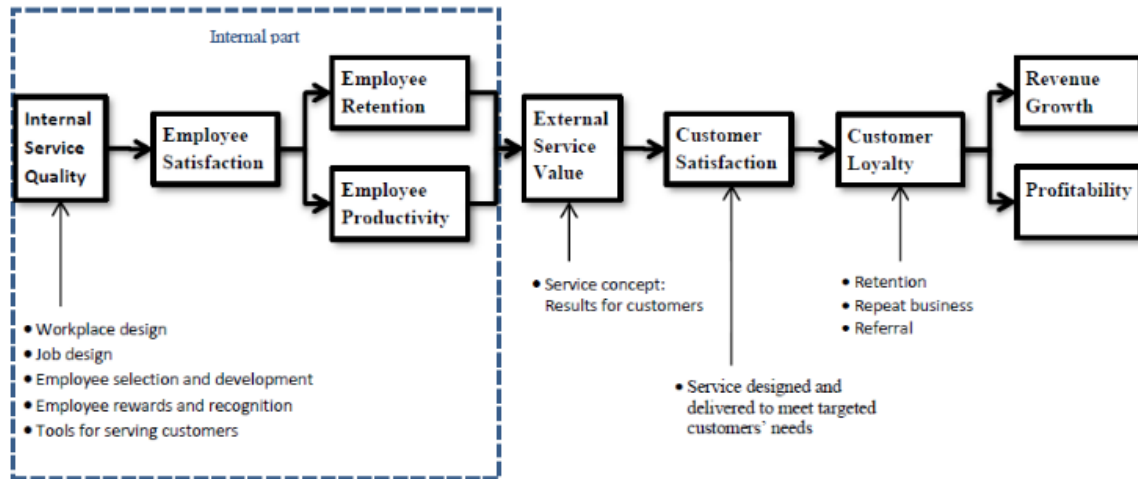
## **2. Literature Review and Theoretical Background**

### ***2.1. The Two-Factor Theory***

This theory as developed by Herzberg and his associates in 1959 propounded that there are distinct sets of mutually exclusive factors in the workplace that cause either job satisfaction (satisfiers) or dissatisfaction (Herzberg, Mausner, & Snyderman, 1959). The satisfiers include achievements, recognition, responsibility, duty, and job progress and were the key determinants of job satisfaction. The other category was called dissatisfiers / hygiene factors (working conditions, compensation or remuneration, interpersonal dynamics or collegial interactions, administrative procedures, employment stability or career assurance) were the main causes of job dissatisfaction when absent or improperly managed.

### ***2.2. Service-Profit Chain Model***

Heskett et al. (1994) is credited with the Service Profit Chain (SPC) model which establishes connections between crucial human resources and organizational outputs like profitability, customer loyalty, employee satisfaction, employee loyalty, and productivity.



**Figure 1:** The Service Profit Chain Model flowchart

**Source:** Khan, Safwan, and Ahmad (2011).

The SPC model's flowchart highlights the fundamental relationships and components that are key to effective delivery systems in service organizations. The internal part shows the link between ISQ and employee job satisfaction and then leads into job retention i.e ISQ results in ES and satisfied employees are productive and exhibit loyalty which in turn assures value creation, customer satisfaction sustained patronage, profitability and eventual all-round organizational improvement. This study examined the workings of the SPC model, the connection between ISQ and ES and the connection between ES and EL. In the model, internal service quality can influence employee satisfaction, and loyalty

### 2.3. Understanding Employee Loyalty

Wu and Norman (2006) view employee loyalty as an employee's relative strength and identification with and involvement in an organization. Zakaria, Mohamad, Abd Majid, Aziz, and Rashid (2019) aver that it is the employee readiness to continue on a job and contribute to the organization for an extended period. Solomon (2012) views employee loyalty as the willingness to remain with the organization. The thrust of the above description is the fidelity of employees to their organization, while some authors stress that emotional attachment as the underlying principle supporting the concept of employee loyalty (Mehta, Singh, Bhakar, & Sinha, 2010). From the works of (Iqbal, Tufail, & Lodhi, 2015; The Loyalty Research Center, 2016), employee loyalty is the employee's commitment to the organization's success and the belief that working for the organization is in their best interest. The preceding definitions support the position of Mehta, et al. (2010) that emotional attachment is fundamental to employee loyalty. Furthermore, Hajdin (2005) stated that loyalty is primarily a passionate disposition. Martensen and Grnholdt (2006) affirmed that a loyal employee creates a strong emotional connection to the organization, and any temporary job discontent may be tolerated.

#### **2.4. Employee Satisfaction**

Employee satisfaction is a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences and is a feeling of contentment or success that employees derive from their jobs (Locke & Henne 1986; Moorhead & Griffin 2008). It is the feeling of contentment or prosperity an employee derives from his employment, whether he enjoys his work and considers it worthwhile, or the amount to which it has an adverse physical or psychological impact on him (Griffin & Moorhead, 2013; Abuhashesh, Aldmour & Ed, 2019; Dramićanin & Pavlović, 2021). Lu, While, and Barriball (2005) identified satisfaction with management, work group, colleagues, the job itself, the physical facilities, rewards, growth and promotion prospects, supervisors, policies and procedures, and communication as factors that influence employee satisfaction. Sturgeon (2006) concurs that training is one of the most significant factors influencing employee satisfaction. Northouse (2016) added competency, collaboration, support, and achievement as factors influencing employee satisfaction while Tarasco and Damato (2006) posit that continued professional development, career progression possibilities, demanding and engaging work, teamwork, recognition of a well-done job, were factors that influenced employee satisfaction and loyalty.

#### **2.5. Internal Service Quality**

Sasser and Arbeit (1976) initially proposed the idea of internal service quality (ISQ) (Al-Ababneh, Masadeh, Al-Shakhsheer, and Ma'moun, 2018). Since its first use, other authors have provided several definitions in the literature. Hammer (2001) cited in Latif and Baloch (2016) defined ISQ as an organized group of connected activities that creates value for consumers. Xie (2005) defines ISQ as employees' perceptions of the quality of service provided or received by co-workers within the same organization or unit. Mawoli, et al. (2013) captured internal service quality as a platform for achieving or exceeding employees' quality standards and criteria to delight external consumers with superior services. Elsamem and Alshurideh (2012) defined internal service quality as the quality of services and products that each employee of an organization receives from other members to perform their duties. Similarly, Jarvi (2012) described internal service quality as the services supplied from one department to another within the same organization. Latif, Baloch, and Rehman (2016) defined ISQ as the quality of services offered to co-workers by different departments within the same organization. Other scholars have contended that internal service quality describes how people feel about their jobs, co-workers, and employers (Heskett, Jones, Loveman, Sasser & Schlesinger, 2008).

In the literature, the Inside-Out-Approach (IOA), which focuses on internal customers or employees within the organization is one of the approaches used to evaluate an organization's service quality. Studies on internal service quality have used several dimensions of service quality. Popular among them are SERVQUAL by Parasuraman, Zeithaml, and Berry (1988), INTSERVQUAL (Paraskevas, 2001), and SERVPERF (Murphy, 1999), adapted from SERVQUAL. The SERVQUAL was an extract from the original work of Parasuraman et al.'s (1985), which espouses ten dimensions of service quality that are universal and applicable to all services: tangibles, dependability, responsiveness, communication, credibility, security, competence, courtesy, customer understanding, and access. Internal Service Quality (ISQ) has

been measured in several institutions around the world, including universities (Dauda, Maishanu, & Mawoli, 2013; Kang, Jame, & Alexandris, 2002; Mawoli 2012); in the healthcare sector (Gunawardane, 2009); in banks (Bellou & Andronikidis, 2008); hospitals (Otabor & Obahiagbon, 2016); hospitality and tourism sector (Amerta & Madhavi 2023; Wu et al. 2021) etc. amongst others.

### ***2.6. Relationship between Internal Service Quality and Employee Satisfaction***

According to Hallowell, Schlesinger and Zornitsky (1996) employee job satisfaction is determined by the quality of internal services provided to employees by the company. Also, employees' perception of internal service quality influences their employee satisfaction (Heskett, Sasser & Schlesinger, 1997). Internal service quality significantly influences employee satisfaction (Wang, 2010; Wang, 2012; Dauda et al., 2013; Syahidul, Achmad & Hudayah, 2020). Several conclusions have been drawn by researchers. Sharma, Kong, and Kingshott (2016) asserted that ISQ is a crucial driver of employee satisfaction and plays a vital role in employee loyalty (Akroush et al., 2013; Prakash & Srivastava, 2019). Sharma, Singh and Nagar (2016) also argued that superior support services and policies contribute to employee satisfaction. Meng-Xia (2003) affirmed that providing high-quality services within an organization increases employee satisfaction.

### ***2.7. Relationship between Internal Service Quality and Employee Loyalty***

Employee satisfaction is directly shaped by the quality of internal services provided within an organization. When internal service quality is inadequate - characterized by poor communication, inefficient processes, lack of managerial support, and limited resources - employees are likely to experience dissatisfaction, reduced morale, and disengagement. Conversely, when organizations invest in excellent internal service quality, ensuring seamless operations, responsive support systems, and a positive work environment, employee satisfaction increases significantly (Jarvi, 2012). Furthermore, Heskett et al. (1994) assert that there is a strong positive correlation between employee loyalty and internal service quality. This suggests that when employees are satisfied with the internal services they receive - such as fair treatment, professional development opportunities, and effective leadership - they are more likely to develop a deep sense of commitment and loyalty to the organization. As a result, fostering high internal service quality not only enhances employee satisfaction but also strengthens long-term employee retention, creating a more dedicated and productive workforce.

### ***2.8. Relationship between Employee Satisfaction and Employee Loyalty***

Studies on employee satisfaction and employee loyalty reveal varied conclusions. Some researchers have demonstrated that satisfied employees are more loyal and productive (Hunter & Tietyen, 1997; Sageer, Rafat & Agarwal, 2012). Jawahar (2006) reported a correlation between employee satisfaction and employee loyalty. According to Zakaria, Mohamad, Abd-Majid, Aziz and Rashid (2019), employee job satisfaction increases employee loyalty. The study by Turkyilmaz, Akman, Ozkan and Pastuszak (2011) conducted in Istanbul turkey, reported a link between job satisfaction and employee loyalty at the Social Security Institution in Turkey.

Similarly, the work by De Sousa Sabbagha, Ledimo, and Martins (2018) found existence of co-relationship linking employee satisfaction to loyalty. Studies show that employee satisfaction is a significant predictor of loyalty (Mak & Sockel, 2001; Martensen & Gronholdt, 2001), supports a positive outlook to work, and creates loyalty to the organization (Wang & Feng, 2003). It influences employee commitment and output (Heskett, 1994); and has a positive relationship with employee retention (Griffeth et al., 2000).

### **2.9. Empirical Review**

Silvestro (2002) investigated firm productivity/profitability and its links with employee satisfaction and loyalty. The findings affirm a correlation that is positive and strong between the studied variables. Muhammad, Nadeem, and Ashfaq (2011) examined the link between internal service quality, employee satisfaction and employee retention using 550 workers in Pakistani banks. Studies affirm that ISQ had considerable positive influence on workers job satisfaction and that workers job satisfaction considerably influenced employee retention positively. In their study of Korean casino employees, Lee and Abbot (2011) examined the relationship between internal service quality, employee satisfaction, self-efficacy, organizational commitment, and self-esteem. Employee satisfaction and self-efficacy is positively affected by the internal quality of services based on the analysis of 328 respondents. Employee satisfaction on its own influenced organizational commitment and self-respect. Pasebani et al. (2012) investigated the relationship between internal service quality and job satisfaction in sports organizations in Iran with three hundred seventy-one managers and sports enthusiasts as respondents. The results established a considerable positive association between the studied variables. Naser, Esmaeil, Masood and Mahmood (2013) investigated the relationship between internal service quality and faculty members' job satisfaction at Islamic Azad University in Iran. The results report a positive link between internal service quality and faculty members' job satisfaction. Nazeer, Zahid and Azeem (2014) in a study with Pakistani universities staff as respondents reported similar findings that internal service quality considerably influenced worker satisfaction.

Sharma, et al. (2016) investigated the role of employee well-being in the link between internal service quality and employee satisfaction, commitment, and performance using 250 employees and 25 supervisors in a China based manufacturing business. The research results showed that ISQ positively affected the level of commitment, satisfaction, and well-being of the sampled workers and their eventual performance. The study by Al-Ababneh et al. (2018) investigated the relationship between internal service quality and job satisfaction among hotel employees in Jordan. Using quantitative data collected through structured questionnaires, the researchers surveyed frontline employees from various hotels to assess how internal factors like communication, support services and interdepartmental cooperation influenced overall job satisfaction. The findings revealed a significant positive relationship between the internal service quality dimensions and job satisfaction emphasizing that when employees perceive internal services as effective and supportive, their motivation and contentment at work increase. The study concludes that enhancing internal service quality can lead to improved employee morale, reduced turnover, and ultimately better external service delivery to customers. The authors advocate for hotel managers to invest in internal service training, streamlined communication systems, and supportive work environments as strategic tools to

improve organizational outcomes. Fitriani and Sintaasih (2019) investigated the influence of internal service quality on job satisfaction and employee performance at the community health centre in the Kuta area of Badung Regency, Indonesia. Their findings affirm that internal service quality had considerable positive effect on workers' satisfaction. Abdullah, Huang, Sarfraz, Ivascu, and Riaz (2020) studied the effect of internal service quality on nurses' job satisfaction, commitment and performance in the healthcare sector in Pakistan with employee well-being as a mediator using PLS-SEM methodology. The study results showed that internal service quality directly affected all the dependent variables studied.

### ***2.9. Research Gaps and Hypotheses Development***

Studies on internal quality service in Nigeria have examined its effect on employee job satisfaction (Dauda, Maishanu & Mawoli, 2013; Mawoli, Yusuf & Idris, 2013; Osahon, & Kingsley, 2016). Few studies however have examined the effect of internal service quality on employee loyalty in Nigeria to the best of awareness of the researchers. It is observable from the review of empirical studies that there are more studies on internal service quality and loyalty of employees in western nations than in developing countries. Moreover, studies in Nigeria were conducted in the education and health sectors, while there appears to be no studies in the oil and gas sector. Based on these gaps, we examined the extent to which internal service quality affects employee satisfaction and loyalty within the oil and gas sector. By investigating these relationships, the study offers clarity into how organizations can enhance their internal service quality frameworks to foster a more engaged, satisfied, and loyal workforce, ultimately improving overall organizational fortunes. Stemming from the review we tested the following hypotheses:

*H01: Internal service quality has positive and significant effect on employee satisfaction*

*H02: Internal service quality has positive and significant effect on employee loyalty*

*H03: Employee satisfaction has significant effect on employee loyalty*

*H04: Employee satisfaction mediates the effect of internal service quality on employee loyalty*

## **3. Materials and Methods**

The study employed a cross-sectional design executed by a survey. This design is vital in describing a specific situation at the exact time of this study. The selected method is relatively quick, simple, and inexpensive to implement. The population of this study consists of 545 tenured staff of the organization as of May 2020 (Source: HR Records, 2020). The entire population was involved, and the census method was employed. This study used primary source for its data collection; the data were gathered from employees of Nigeria National Petroleum Company Exploration & Production. The reason for using the entire population of the tenured staff was to allow all tenured employees participate and indicate their views on the subject matter.

### *Ethics Statement*

Organizational approval was obtained prior to the study. Participation was voluntary, and informed consent was obtained from all respondents. Participants' anonymity and confidentiality were assured, and all data were used exclusively for the stated research purpose.

### *Data Collection Instrument, Operationalization / Measurement of Variables and Distribution of Instrument*

The questionnaire was used as instrument for data collection. Internal service quality described as a pleasant, positive feeling that results from an appreciation of work-related experiences was measured using a 6-item scale developed by Ehrhart, Witt, Schneider and Perry (2011). Employee loyalty, which is an intense desire to stay and work in the company, as well as the willingness of the employee to devote all their efforts to the organization's benefit, was measured using Homburg & Stock, 2004; Homburg & Stock, 2005). Employee satisfaction is internal customer's satisfaction with internal service providers/organization. All variables were captured in the questionnaire prepared on a five-point Likert scale. The questionnaire items were aggregated from research instruments used in previous studies (Homburg & Stock, 2004; Homburg & Stock, 2005; Ehrhart, Witt, Schneider and Perry 2011). The questionnaire had (2) sections. Section 1 had three (3) items addressing the respondents' demographic characteristics while the second section had a total of seventeen (17) items: employee loyalty (6 items), employee satisfaction (5 items), and internal quality service (6 items). The instrument was designed using google forms and distributed electronically to the entire population using their official addresses. This was achieved with the assistance of the Human Resources Department of the organization. From the total 545 tenured employees invited to participate in the study, 357 usable responses were obtained representing a response rate of 65.5%.

### *Validity and Reliability of Instrument*

The items in the various measures used in this study had been subjected to validity tests to ascertain how well they measure what they are intended to measure in previous studies by earlier researchers. The instrument was further subjected to validity by employing the assistance of indigenous seasoned academics and researchers in marketing, human resources and operations management combined with the input of three supervisors and team leaders in the organization. This was done to assure face and content validity. The instruments' reliability was determined by carrying out a pilot study and the various constructs tested with Cronbach's alpha test statistics. All alpha values obtained were within the acceptable threshold.

*Table 1: Reliability Table*

S/N	Variables	Number of Items	Cronbach Alpha
1	Employee Loyalty	06	(0.841)
2	Employee Satisfaction	05	(0.894)
3	Internal Service Quality	06	(0.911)

**Source:** Jamovi Software Output

## 4. Data Analysis

Descriptive statistics were used to describe the variables, while hierarchical regression was employed for research hypotheses testing. Hierarchical regression was employed to test the mediating role of employee satisfaction because the study sought to examine the incremental contribution of variables and determine whether the inclusion of the mediator significantly altered the relationship between internal service quality and employee loyalty. The technique is widely recognized for mediation testing through the sequential entry of predictor and mediator variables, allowing for an easy assessment of direct and indirect effects in a straightforward and interpretable manner. Unlike the SEM / PLS-SEM, which are particularly suitable for analyzing complex models involving multiple latent constructs, numerous mediating or moderating relationships, and simultaneous estimation of measurement and structural models, the hierarchical regression was preferred over SEM/PLS-SEM because the study examined a relatively simple mediation model involving three well-defined constructs and hypotheses. All analyses were done using the Jamovi software.

### 4.1. Findings

This section details a presentation and discussion of the respondents' demographic profile, correlation matrix, then the results of the hypotheses tests and the discussion of the findings are here presented.

*Table 2: Demographic Profile of Respondents*

Variables		Frequency	Percent
Sex	Male	243	68.1
	Female	114	31.9
	Total	357	100.0
Age	31 – 40 years	72	20.2
	41 – 50 years	252	70.6
	51 - 60 years	33	9.2
	Total	357	100.0
Educational Qualification	HND/Bachelor's Degree	144	40.3
	Postgraduate Degree (M.Sc, PhD)	213	59.7
	Total	357	100.0

**Source:** Researcher's Fieldwork

Table 2 contains three (3) items: age, gender, and educational attainment. The gender distribution reported that 61.1% (243) and 31.9% (114) were male and female, respectively. The age distribution reveals that 20.2% (72) of the participants fall between 31- 40 years, whereas 70.6% (252) employees are in the 41-50 years category. The last class, 51-60 years, had 9.2% (33) respondents. The educational qualification of respondents revealed that 30.3% (144) of the participants hold a bachelor's degree or its equivalent qualification, and 59.7% (213) participants have earned a postgraduate degree. Based on the above result, the study concluded that the

organization is dominantly male with a modal age of between 41 to 50 years. The population is highly educated, as most respondents had postgraduate degrees.

### *Hypotheses Testing*

Analyses of the data from the respondents was conducted to determine the presence or otherwise of statistical support for the hypothesized relationships. The following assumptions were tested before carrying out a hierarchical multiple regressions. The tests include sample size adequacy, collinearity, and independent errors assumption. The sample size of 357 was adequate based on Green's (1991) formula:  $N > 50 + 8m$  (where  $m$  is the number of independent variables). There was no multicollinearity (ISQ, Tolerance = .087, VIF = 1.16; TES, Tolerance = .087, VIF = 1.16) and the assumption of independent errors was satisfied with Durbin-Watson = 1.76). Correlation test was conducted to understand the association between the variables under consideration. Table 3 below details the result.

*Table 3: Correlation Matrix*

	ISQ	TES	TELT
ISQ	—		
TES	0.367 ***	—	
TELT	0.531 ***	0.604 ***	—

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

The results show that the variables are significantly correlated. Existing relations between internal service quality (ISQ) and the mediating and dependent variables show a positive and significant correlation; employee satisfaction (TES) ( $r=0.367$ ,  $p=.000$ ), and employee loyalty (TELT) ( $r =0.531$ ,  $p=.000$ ). The mediating variable andthe dependent variable reported a positive and significant correlation ( $r = 0.604$ ,  $p = .000$ ). No multicollinearity was observed in the data.

Furthermore, we conducted a two-stage hierarchical multiple regression to investigate the hypothesis. Internal service quality was entered at stage one of the regression as the main predictor to observe its effects on employee loyalty. In the second stage, employee satisfaction was entered as the predicator. The result is reported in Table 6.

*Table 4: Model Fit*

Variable	B	SE(B)	$\beta$	T	R	R <sup>2</sup>	$\Delta R^2$	p-value
<b>Step 1</b>					.532	.282	.282	.001
ISQ	0.364	0.0301	0.531	11.8***				
<b>Step 2</b>					.690	.476	.473,	.001
ISQ	0.245	0.0283	0.358	8.65***				
TES	0.324	0.0283	0.473	11.44***				

Source: Researcher's Fieldwork

The result of the regression models in Table 4 shows that at stage one, internal service quality (ISQ) contributed significantly to the regression model ( $F(1,355) = 140, p < .001$ ), and the relationship between variables were strong ( $R = .53$ ) and internal service quality (ISQ) accounted for approximately 28.2% ( $\Delta R^2 = 28\%$ ) of the variance in employee loyalty. ISQ had a statistically significant effect,  $\beta = 0.53, t(357) = -11.8, p < .001$ .

In stage 2, internal service quality and employee satisfaction jointly contributed an additional 19.4% ( $\Delta R^2 = 47.3\%$ ) of variation in employee loyalty; this observation gives rise to an indirect effect between these variables. This change in  $R^2$  was significant ( $F(2,354) = 161, p < .001$ ). The relationship between these variables was strong ( $R = .69$ ). Both variables ISQ and TES were significant predictors of employee loyalty ( $\beta = 0.358, t(357) = 8.65, p < .001$ ;  $\beta = 0.473, t(357) = 11.44, p < .001$ ) indicating a partial mediation. Further analyses were carried out, and the path diagram and result is presented below

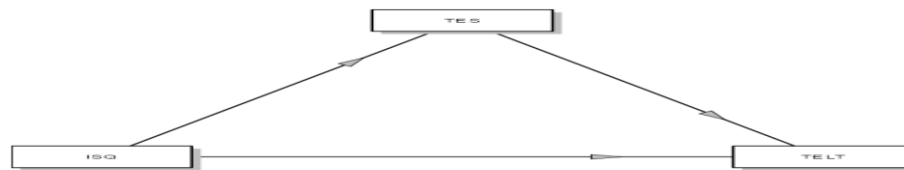


Figure 2: Path Diagram of the Research Variables

Table 5: Indirect and Total Effects

		95% C.I. (a)						
Type	Effect	Estimate	SE	Lower	Upper	B	Z	P
Indirect	ISQ ⇒ TES ⇒	0.119	0.03	0.06	0.19	0.17	3.4	<.0
	TELT		45	34	7	3	4	01
	ISQ ⇒ TES	0.367	0.07	0.21	0.52	0.36	4.6	<.0
			91	61	9	7	4	01
	TES ⇒ TELT	0.324	0.03	0.25	0.39	0.47	9.2	<.0
			52	88	9	3	0	01
Direct	ISQ ⇒ TELT	0.245	0.03	0.15	0.31	0.35	6.2	<.0
			91	87	2	8	8	01
Total	ISQ ⇒ TELT	0.364	0.03	0.30	0.42	0.53	11.	<.0
			08	37	4	1	83	01

Note. Confidence intervals computed with method: Bootstrap percentiles

Note. Betas are completely standardized effect sizes

From the 1000 bootstrapped samples, the indirect effect was significant. It provided statistical support for the argument that mediation is present,  $B = 0.12$ , 95% BCp CI [0.06, 0.20],  $\beta = .17$ . Given that the direct effect of internal service quality on employee loyalty is significant, partial mediation is present.

#### *4.2. Discussion of Findings*

For hypothesis one internal service quality correlates positively with employee loyalty and significantly affects employee loyalty as established by the model. The implications are that the more employees experience high service quality, the higher their loyalty. This finding is consistent with the notion that internal service quality influences employees' loyalty to extant work (Heskett et al., 1994; Mohanty, 2009). Also, internal service quality is a significant determinant of employee loyalty, contributing 28.2% of the variance in the absence of employee satisfaction. This finding further aligns with Khan et al. (2011) report on the correlation between internal service quality and job satisfaction in the Pakistan telecom and IT sector. The practical implication of this finding is that NNPC E & P can improve employee loyalty by strengthening internal service quality through better supervisory support, effective communication, prompt resolution of employee concerns, and adequate provision of work resources. Such improvements would contribute to employee loyalty, retention, reduce turnover costs, and promote a more committed workforce.

For the second hypothesis, the result provides evidence that internal service quality has a significant and positive effect on employee satisfaction. This means that when organizations prioritize efficient internal processes, effective communication, supportive leadership, and a conducive work environment, employees are more likely to feel engaged, motivated, and fulfilled in their roles. These findings are consistent with previous research by Dauda et al. (2013); Syahidul, Achmad, and Hudayah (2020); Wang (2010); and Wang (2012), which emphasize that high-quality internal service contributes to greater job satisfaction by fostering a positive workplace atmosphere, reducing work-related stress, and enhancing overall employee well-being. Organizations that invest in improving the quality of internal service ultimately create a more satisfied and committed workforce, leading to increased employee productivity and retention. This finding from hypothesis two implies that the management of NNPC E & P can contribute to employee satisfaction by upgrading internal service systems like communication flow, supervisor support and timely responsiveness of internal departments, and improvement of general workplace conditions. Strengthening these internal service processes will help employees feel more supported and valued, thereby increasing their motivation, well-being, productivity, and likelihood of remaining with the organization.

Furthermore, with respect to the third hypothesis, the study found evidence that employee satisfaction has a significant and positive impact on employee loyalty. This suggests that when employees feel valued, supported, and fulfilled in their roles, they are more likely to remain committed to the organization. These findings align with previous research by Hunter and Tietjen (1997), Jawahar (2006), and Sageer, Rafat, and Agarwal (2012), which emphasize that job satisfaction is a key driver of employee loyalty. Their studies highlight that satisfied employees exhibit higher levels of commitment, reduced turnover intentions, and a stronger sense of

belonging to the organization, ultimately contributing to long-term organizational success. The result of this hypothesis practically implies that NNPC E & P can strengthen employee loyalty by prioritizing strategies that enhance employee satisfaction, such as fair compensation, recognition of performance, supportive leadership, career development opportunities etc. A consistent improvement of how employees experience their jobs, can reduce turnover intentions and build a more loyal and stable workforce.

For the fourth hypothesis the mediation analysis revealed a statistically significant indirect effect of internal service quality (ISQ) on employee loyalty (TELT) through employee satisfaction (TES), with an estimated effect size of 0.119 (SE = 0.0345, 95% CI [0.0634, 0.197],  $\beta = 0.173$ ,  $Z = 3.44$ ,  $p < .001$ ). This suggests that improvements in the internal service quality contribute to greater employee satisfaction, which in turn enhances employee loyalty. The indirect effect is both statistically and practically significant, as evidenced by the confidence interval not crossing zero and a standardized beta coefficient of 0.173. These findings align with prior literature asserting the mediating role of employee satisfaction in the relationship between internal workplace dynamics and attitudinal outcomes such as loyalty (Mo et al., 2021; Prentice, 2018). Internal service quality - which encompasses responsiveness, support, and internal communication - appears to play a foundational role in shaping employee satisfaction levels. When employees perceive that their internal needs are addressed, they are more likely to develop affective commitment and sustain loyalty to the organization. Furthermore, the significant p-value ( $< .001$ ) reinforces the robustness of this relationship. This supports the Service-Profit Chain theory (Heskett et al., 1994), which posits that internal service quality fosters employee satisfaction, subsequently driving loyalty and overall organizational performance. Overall, the data supports a partial mediation model, emphasizing that organizations aiming to build loyal employees must invest in high-quality internal service practices, particularly those that elevate satisfaction levels. The result of this hypothesis practically implies that NNPC E & P can improve employee loyalty more effectively by first improving internal service quality, since its impact on loyalty is largely transmitted through employee satisfaction. Therefore, management should prioritize strengthening internal support systems, communication, and service responsiveness, as these improvements increase employee satisfaction, which in turn drives stronger loyalty and long-term commitment to the organization.

## 5. Conclusion

The conclusion from this study is that internal service quality significantly correlates with and predicts employee satisfaction and loyalty. These outcomes are immensely desired by organizations. The study also concludes that the internal customers are part of the cycle that ultimately affects external customer satisfaction and contributes to the organization's outcome.

***Managerial recommendations:***

- i). Managers should design and monitor specific key performance indicators for internal service quality assessment with feedback mechanisms, to ensure an enhanced and excellent internal service quality that contributes to employee satisfaction and ultimately create loyal employees.
- ii). Managers should promote human resources practices, procedures, and applications that positively support their internal customers. Developing a digital HR response system for the organization would improve outcomes.
- iii). Given the significance of internal service quality on employee satisfaction, managers and human resources officials should support and institutionalize internal service quality as a dominant company culture. Specific cross-unit service standards should be developed, communicated and monitored to ensure compliance.
- iv). Management should enhance internal service quality practices and prioritize internal communication, timely support, and responsive human resource practices to improve employees' day-to-day experiences, thereby boosting satisfaction and long-term loyalty. The use of employee feedback dashboards across the organization would be beneficial.
- v). Management should implement employee satisfaction monitoring systems through regular assessments of employee satisfaction. Periodic surveys and feedback monitoring arrangements would support this goal. This will help management identify gaps in internal services and address concerns proactively, promoting a loyal and committed workforce.
- vi). Management should engage periodic employee-centered training and development programs that align employee growth with organizational goals as this can reinforce the perception of value and support, strengthening both satisfaction and retention.

***Theoretical contribution***

The study confirms the service profit chain theory (SPC model) and also supports the Hertzberg two factor theory.

**6. Limitations and Suggestions for Further Studies**

There are some limitations with this study. Firstly it was conducted with a limited sample size as only employees from one oil and gas organization were engaged for the study. This portends single-firm sample limitation and cross-sectional causality limitations. Future studies should seek to engage in a multi-sector coverage to include other organizations such as the banking and manufacturing industry of the Nigerian economy. Also engaging in a comparative study across sectors would throw further light on the subject matter and support generalization. A multi-country study too would provide further insights into the subject. With respect to the time scope, conducting a longitudinal study will provide further insights on the subject matter

and strengthen inferences on causal relations. Utilizing other methodologies would provide results that allow for comparative analysis of findings.

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## Appendix: Measurement Items

### *Employee Satisfaction*

1. Overall, I am quite satisfied with my job
2. I do not intend to work for another organization
3. I like my job
4. There are no fundamental things I dislike about my job.
5. I like my job more than many employees of other organizations.
6. I consider this employer as first choice

### *Employee Loyalty*

1. I speak positively about my company when talking to customers
2. I speak positively about my company when talking to friends and relatives
3. I can recommend the products and services of the company to others
4. I would like to stay with this company in the future
5. I would not change immediately to another company if I got a job offer

### *Internal Service Quality*

1. How do you rate the timeliness of responses from other employees and units
2. How do you rate the follow through efforts of other employees and units
3. How do you rate the competence of other employees in the organization
4. How do you rate the job knowledge of other employees and units
5. How do you rate the quality of interactions with other employees and units
6. How do you rate the level of cooperation from other employees in the organizations

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