Innovations

Technology Adoption and Employee Performance in National Population Commission of Nigeria

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Abstract: *This study examined the impact of technology adoption on employee performance at the National Population Commission (NPC) in South East Nigeria. Specifically, it analyzed the effects of perceived ease of use, perceived usefulness, behavioral intention to use technology, facilitating conditions, and social influence on various dimensions of performance, including contextual, productive, adaptive, and task performance, as well as creativity and innovation. A probability sampling technique was adopted to select respondents, and regression analysis was used to test the hypotheses. Findings revealed that perceived usefulness and behavioral intention to use technology had no significant effect on counterproductive and adaptive performance, respectively. Conversely, facilitating conditions had a significant positive effect on task performance, while social influence did not significantly influence creativity and innovation. The study concludes that technology adoption is a critical determinant of employee performance and recommends that management of the NPC should strengthen enabling conditions and technological support to optimize workforce productivity.*

Keywords: *Technology adoption, employee performance, technology usefulness, behavioral intention, adaptive performance*

Introduction

In Nigeria, the adoption of technology has undergone a gradual yet significant transformation since the 1960s, beginning with early developments in computing and education. The introduction of Information and Communication Technology (ICT) in 1963 marked a major milestone that catalyzed its expansion across multiple sectors, including communication, media, and politics. Subsequent advancements, such as the introduction of 5G technology and the widespread use of mobile

devices, have further revolutionized sectors like banking and communication, enhancing accessibility and operational efficiency.

Across Africa, several countries have increasingly integrated modern technologies into their public service systems to strengthen governance and improve service delivery. In Nigeria, the application of technology in public administration has been largely shaped by international trends and regional policy frameworks promoting digital transformation for efficient service provision (Anwar & Graham, 2022). Comparable progress has been observed in countries such as Kenya and South Africa, where technological innovations have led to notable improvements in public sector efficiency (Mandala et al., 2024; Shibambu, 2024).Domestically, the Nigerian government has made considerable efforts to leverage technology for effective public administration. A notable example is the National Population Commission of Nigeria (NPC), which is mandated to conduct population censuses, register births and deaths, and manage demographic data. The NPC plays a crucial role in providing accurate and reliable data for economic planning, policy formulation, and equitable resource allocation.

Despite these achievements, the Commission continues to face infrastructural and organizational challenges that limit its technological capacity and impede employee performance, thereby constraining its ability to fulfill its mandate effectively (Orji & Ekemezie, 2024).Technology adoption is particularly critical for data-intensive institutions such as the NPC. The integration of digital registration systems, data analytics, and online service platforms holds significant potential to enhance efficiency, streamline operations, and improve service delivery (adapted from Ezuma et al., 2019). Such technologies can facilitate faster data processing, minimize redundancies, and boost employee productivity (adapted from Ogundare et al., 2023). However, persistent issues, such as inadequate infrastructure, limited training, and insufficient technological resources, continue to hinder optimal performance (adapted from Orji & Ekemezie, 2024).

Understanding the determinants of technology adoption and their implications for employee performance is therefore essential for strengthening NPC's operational effectiveness. Factors such as perceived ease of use, perceived usefulness, social influence, and facilitating conditions significantly shape employees' acceptance and utilization of new technologies. While technology adoption has improved data accuracy, streamlined workflows, and enhanced collaboration, it has also introduced challenges, including technostress and job insecurity, particularly when employees lack adequate training or support. Consequently, effective management of these factors is vital to ensuring sustainable technology integration and improved employee performance within the National Population Commission of Nigeria.

The National Population Commission of Nigeria (NPC) in South East Nigeria faces challenges in effectively utilizing technology due to factors like perceived usefulness, ease of use, social influence, and facilitating conditions. Inadequate

technical support, training, and infrastructure hinder technology adoption, leading to inefficient service delivery, suboptimal employee performance, and increased errors. This study aims to investigate these challenges and provide insights to enhance NPC's technology adoption strategies, improving productivity and service efficiency.

The objective of the study is to examine the relationship between technology adoption and employee performance at the National Population Commission (NPC) in South East Nigeria. It explored how perceived ease of use influences contextual performance and how perceived usefulness impacts productive behavior. The research also assessed how behavioral intention to use technology affects adaptive performance, while facilitating conditions were examined in relation to task performance. Finally, it investigated how social influence promotes creativity and innovation among NPC employees. Overall, the study sought to provide insight into how technology adoption enhances workforce effectiveness in a public sector setting.

Literature Review and Hypothesis Development

Concept of Technology Adoption

Technology applies knowledge to perform tasks, involving skills and processes. Information and Communication Technology (ICT) specifically refers to computer systems, telecommunications, networks, and multimedia applications. ICT emerged in the late 1980s, gradually replacing terms like Electronic Data Processing (EDP) and Management Information System (MIS), although these terms are still used today (Balogun, 2016).

Hence, Organizations face significant challenges when implementing new technology, as the success of such initiatives heavily relies on user adoption. To facilitate this process, organizations must provide sufficient facilitating conditions, including technology and resource support, to influence users' decisions to adopt new technology. However, people generally tendto resist or refuse to adopt changes unless they are convinced that the changes are beneficial to them (Davis, 1989).

Many studies have struggled to develop reliable measures of behavior that can explain technology acceptance or rejection. According to Davis (1989), user motivation can be explained by three key factors: Perceived Usefulness (PU), Perceived Ease of Use (PEU), and attitude toward using the technology. Perceived Usefulness refers to the degree to which users believe that the technology will enhance their performance, while Perceived Ease of Use refers to the degree to which users believe that using the technology will be effortless. In Davis' proposal, attitude-behavior towards technology is the primary factor that determines whether users will adopt or reject technology. This suggests that organizations should focus on creating a positive attitude towards technology among their users. By doing so, organizations can increase the likelihood of successful technology adoption. To

achieve this, organizations can take several steps. Firstly, they can provide comprehensive training and support to help users understand the benefits and functionality of the new technology. Secondly, they can involve users in the decision-making process to ensure that their needs and concerns are addressed. Finally, organizations can offer incentives and rewards to encourage users to adopt the new technology.

Employee Performance

Employee performance is a crucial aspect of management, focusing on keeping employees engaged and active. Continuous monitoring of subordinates' duties and responsibilities helps improve performance and development (Al-Hawary& Al-Menhaly, 2016). Assessing employee performance is essential for determining bonuses, identifying training needs, and evaluating recruitment policies. Organizations prioritize performance evaluation to measure employee effectiveness, identify problems, and achieve organizational goals (Abu-Sheikha, 1990). Effective performance assessment enhances organizational efficiency and productivity. By evaluating employee performance, organizations can make informed decisions about training, promotions, and resource allocation.

Employee performance encompasses financial and non-financial outcomes that directly impact organizational success (Imhanrenialena et al., 2021;Imhanrenialena et al., 2025). Promoting job engagement is a key strategy to enhance employee performance, including organizational citizenship behaviors, task performance, and productivity (Christian et al., 2011; Rich et al., 2010). Engaged employees tend to exhibit better performance, contributing to a positive psychological climate and improved customer service. By fostering job engagement, organizations can unlock the potential of their employees and drive overall success.

AL-Dawy (2012), job performance is a crucial outcome that reflects the value of employee activities in achieving organizational goals. Templar (2010) views performance as a reflection of how enterprises utilize resources efficiently and effectively to achieve objectives. Performance is the product of two key elements: resource utilization (efficiency) and outcome achievement (effectiveness). Understanding performance as a multifaceted concept can help organizations optimize resource use and drive success.

Factors Influencing Technology Adoption

Technology adoption refers to the integration and effective utilization of new technologies within an organization. For NPC, adopting technology involves implementing advanced identity management systems, databases, and digital tools that can streamline operations and improve service delivery. The factors influencing technology adoption are discussed accordingly:

Perceived Usefulness and Ease of Use: The Technology Acceptance Model (TAM), developed by Davis (1989), emphasizes perceived usefulness and ease of use as critical determinants of technology adoption. Employees are more likely to embrace technology if they believe it enhances their job performance and is easy to use.

Social Influence and Facilitating Conditions: Venkatesh et al. (2003) proposed the Unified Theory of Acceptance and Use of Technology (UTAUT), which includes social influence and facilitating conditions as important factors affecting technology adoption. Social influence refers to the impact of colleagues and management on an individual's decision to use technology, while facilitating conditions refer to the availability of resources and support.

Organizational Support and Training: Providing adequate training and support is crucial for successful technology adoption. Employees need to feel confident in using new technologies, which can be achieved through comprehensive training programs and continuous support (Igbaria& Tan, 1997).

Impact of Technology Adoption on Employee Performance

Employee performance at NPC is evaluated based on several metrics, including task performance, contextual performance, and adaptive performance. Technology adoption can enhance these metrics by streamlining processes, improving accuracy, and enabling employees to focus on strategic tasks. The impact of technology adoption on employee performance is discussed as follows:

Task Performance: Technology can significantly improve task performance by automating routine tasks and reducing manual errors. This allows employees to focus on higher-value activities that require critical thinking and problem-solving skills (Devaraj & Kohli, 2003). **Contextual and Adaptive Performance:** Effective use of technology can enhance contextual performance, such as teamwork and cooperation, and adaptive performance, which involves adjusting to new processes and environments ((Imhanrenialena et al., 2022; Imhanrenialena et al., 2023; Jafri, 2010). **Creativity and Innovation:** Technology adoption fosters a culture of creativity and innovation by providing employees with tools to generate and implement new ideas (Zhou & Shalley, 2003).

The National Population Commission (NPC)

The National Population Commission (NPC) of Nigeria has increasingly integrated modern technologies into its operations to improve the efficiency and accuracy of data collection, analysis, and dissemination. One major innovation is the adoption of **digital data collection methods**, such as Computer-Assisted Personal Interviewing (CAPI) and other mobile-based tools. These digital approaches have replaced traditional paper-based surveys, reducing human error, minimizing costs, and

accelerating data processing (NPC, 2020).In addition, the Commission employs Geographic Information Systems (GIS) to analyze and visualize population data spatially. Through GIS, demographic information can be mapped against geographic regions, allowing policymakers to detect population trends and patterns that support evidence-based decision-making and development planning (UNFPA, 2019).

To strengthen the reliability and security of demographic data, NPC has also explored the application of biometric technologies such as fingerprint and facial recognition. These innovations help to ensure accurate identity verification, prevent data duplication, and improve the overall credibility of population records. Furthermore, the adoption of cloud computing has transformed how the NPC stores, manages, and shares large datasets. Cloud-based systems provide scalable and secure storage solutions that facilitate collaboration and real-time data sharing among stakeholders, enhancing the overall efficiency of population data management (NPC, 2020).

The Commission also makes use of data analytics and visualization tools to interpret complex datasets and present demographic information in easily understandable formats. These analytical tools help identify critical trends and provide insights that inform strategic policy and planning initiatives.

Finally, mobile technology plays a vital role in NPC's modernization efforts. Through mobile applications and SMS-based services, data collectors can capture information in real time, while dissemination channels reach wider audiences promptly and effectively (NPC, 2020).Collectively, these technological innovations have significantly strengthened the NPC's capacity to generate accurate, timely, and policy-relevant population data, thereby improving decision-making and developmental outcomes in Nigeria.

The following research hypotheses are formulated in line with empirical and theoretical argument in the literature:

Research Hypotheses

Based on the research questions, the null hypotheses for this study were:

$H0_1$: Perceived ease of use of technology has no significant effect on contextual performance at the National Population Commission of Nigeria (NPC) in South East, Nigeria.

$H0_2$: Perceived usefulness of technology has no significant effect on productive behavior at the NPC in South East, Nigeria.

$H0_3$: Behavioral intention to use technology has no significant effect on adaptive performance at the NPC in South East, Nigeria.

$H0_4$: Facilitating conditions have no significant effect on task performance at the NPC in South East, Nigeria.

$H0_5$: Social influence has no significant effect on creativity and innovation at the NPC in South East, Nigeria.

Methodology

Participant and Procedure

This research employed a dual approach, leveraging both primary and secondary sources of information. Primary data were collected through a structured questionnaire distributed to a targeted group of National Population Commission (NPC) employees in Nigeria's South East. The questionnaire focused on gathering data regarding staff performance metrics and factors impacting technology adoption. Secondary data, comprising official NPC reports, recent scholarly literature, and relevant materials, provided contextual insights into the commission's operations and technological integration. These supplementary resources enabled a thorough analysis of the primary data, yielding a comprehensive understanding of the research topic.

By combining primary and secondary data, the study gained a nuanced perspective on the dynamics of technology adoption and staff performance within the NPC. This approach facilitated the identification of key trends, challenges, and opportunities for improvement, ultimately informing strategies to enhance employee performance and technological integration within the organization. The findings offer valuable implications for NPC's operational efficiency and effectiveness.

Population of the Study

The population distribution of NPC staff in the South East region is summarized in the table below (Table 3.1). This table highlights the number of management and senior staff personnel across the five states (Enugu, Imo, Abia, Anambra, Ebonyi), providing insights into the organizational structure and staffing levels within the NPC. By focusing on these key personnel, the study aimed to gather valuable information on technology adoption and staff performance within the commission as shown in the below table;

Population Distribution of NPC Staff in the South East Region

State	Management Staff	Senior Staff	Junior Staff	Total
Enugu	2	82	2	86
Imo	2	90	2	94
Abia	Nil	66	2	68
Anambra	1	64	2	67
Ebonyi	Nil	63	2	65
Total	**5**	**365**	**10**	**380**

Source: Field Survey, 2025

Sample Size Determination

The sample size was calculated using Taro Yamane's formula, considering the practical limitations of surveying the entire population. This method provided a statistically determined sample size that was representative and manageable.

$$n = \frac{N}{1 + N(e)^2}$$

Where,

n = Sample size to be determined
N = Total population size (380)
e = Margin of error @ 5% or 0.05
1 = Theoretical constant.

Therefore $n = \frac{380}{1 + 380(0.05)^2}$

$= \frac{380}{1 + 380(0.0025)}$

$= \frac{380}{1.95}$

$n = 194.87 \approx 195$

Thus, approximately 195 National Population Commission (NPC) staff members constituted the sample size for this study.

Data Analyses and Results

In this study, 373 copies of the questionnaire were distributed. Some copies of the questionnaire distributed were duly completed, some were not returned.

Results

Testing of Hypothesis One

$H0_1$: Perceived ease of use of technology has no significant effect on contextual performance at the NPC in South East Nigeria

Table 10: Results of tested hypothesis one

Model Summary[b]										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.216[a]	.047	.005	31.735	.047	1.129	1	23	.299	1.488
a. Predictors: (Constant), PUS										
b. Dependent Variable: CPE										

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1136.895	1	1136.895	1.129	.299[b]
	Residual	23163.105	23	1007.092		
	Total	24300.000	24			
a. Dependent Variable: CPE						
b. Predictors: (Constant), PUS						

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	51.639	16.029		3.222	.004	18.480	84.797
	PUS	-5.144	4.842	-.216	-1.062	.299	-15.160	4.872
a. Dependent Variable: CPE								

The test results for the first hypothesis, which examined the effect of perceived ease of use of technology on contextual performance at the National Population Commission (NPC) in South East Nigeria, revealed a weak positive correlation between perceived ease of use (PEU) and contextual performance (CPE). The R value of 0.216 indicates a weak relationship between the two variables. Furthermore, the R Square value of 0.047 suggests that only 4.7% of the variation in contextual performance can be explained by perceived ease of use, indicating a minimal impact. The Adjusted R Square value of 0.005, which is close to zero, implies that the model does not explain the variance in contextual performance much better than the mean of the data. This suggests that perceived ease of use has a limited effect on contextual performance among NPC employees in South East Nigeria. Overall, the findings indicate that other factors may play a more significant role in influencing contextual performance at NPC. The weak relationship between PEU and CPE highlights the need for further investigation into the factors that drive contextual performance.

F value is 1.129. This value is low, indicating that the model does not explain a significant portion of the variance in contextual performance. Significance value is 0.299. Since this value is greater than 0.05, it means that the model is not statistically significant. Unstandardized Coefficient (B) is -5.144. This indicates that for every one unit decrease in perceived ease of use, contextual performance decreases by 5.144 units. However, this effect is not statistically significant, as the p-value is 0.299

(greater than 0.05). Standardized Coefficient (Beta**)** is -0.216. This reinforces the weak relationship between PUS and CPE while **t-value** is -1.062: This value is small, and the associated p-value of 0.299 indicates that the result is not statistically significant. Based on the statistical analysis, we conclude that perceived ease of use of technology has no significant effect on contextual performance at the NPC in South East Nigeria. Thus, the relationship between Perceived ease of use of technology and contextual performance is weak and not statistically significant.

Testing of Hypothesis Two

$H0_2$: Perceived usefulness of technology (PEU) has no significant effect on productive behaviour (CBE) at the NPC in South East Nigeria.

Table 11: Results of tested hypothesis two

Model Summary[b]										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.228[a]	.052	.011	33.326	.052	1.262	1	23	.273	1.551
a. Predictors: (Constant), PEU										
b. Dependent Variable: CBE										

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1401.796	1	1401.796	1.262	.273[b]
	Residual	25544.204	23	1110.618		
	Total	26946.000	24			
a. Dependent Variable: CBE						
b. Predictors: (Constant), PEU						

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	52.765	16.833		3.135	.005	17.944	87.587
	PEU	-5.712	5.085	-.228	-1.123	.273	-16.230	4.806
a. Dependent Variable: CBE								

Table 11 shows the analysis of the second hypothesis, which posits that the perceived usefulness of technology (PEU) has no significant effect on productive behavior (CBE) at the NPC in South East Nigeria, yields the following results:
The analysis revealed a weak positive correlation (R = 0.228) between perceived usefulness (PEU) and productive behavior (CBE). The R Square value of 0.052 indicates that only 5.2% of the variance in CBE can be explained by PEU, suggesting a minimal impact of perceived usefulness on productive behavior. Furthermore, the ANOVA results showed a low F value of 1.262 with a non-significant p-value of 0.273, indicating that the model does not significantly explain the variability in productive behavior based on perceived usefulness. This suggests that perceived usefulness may not be a strong predictor of productive behavior, and other factors may play a more significant role in influencing CBE. Overall, the findings imply that perceived usefulness has limited influence on productive behavior.
The analysis showed that the unstandardized coefficient (B) for perceived usefulness (PEU) is -5.712, suggesting that for each unit increase in PEU, productive behavior (CBE) decreases by 5.712 units. However, this effect is not statistically significant (p = 0.273). The standardized coefficient (Beta) of -0.228 confirms a weak relationship between PEU and CBE. The t-value of -1.123 further supports the lack of statistical significance. Based on these findings, it is concluded that perceived usefulness of technology has no significant effect on productive behavior at the National Population Commission (NPC) in South East Nigeria. The relationship between perceived usefulness and productive behavior is weak and not statistically significant, indicating that other factors may play a more important role in influencing productive behavior..

Testing of Hypothesis Three

$H0_3$: Behavioral intention (BIN) on the use technology has no significant effect on adaptive performance (APE) at the NPC in South East Nigeria.

Table 12: Results of tested hypothesis three

Model Summary[b]										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.250[a]	.062	.022	33.819	.062	1.528	1	23	.229	1.383
a. Predictors: (Constant), BIN										
b. Dependent Variable: APE										
ANOVA[a]										
Model		Sum of Squares		df	Mean Square		F	Sig.		

1	Regression	1747.579	1	1747.579	1.528	.229[b]
	Residual	26306.421	23	1143.757		
	Total	28054.000	24			

a. Dependent Variable: APE

b. Predictors: (Constant), BIN

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	55.389	17.082		3.243	.004	20.052	90.726
	BIN	-6.378	5.160	-.250	-1.236	.229	-17.052	4.296

a. Dependent Variable: APE

The analysis of the third hypothesis, which examined the effect of behavioral intention (BIN) on adaptive performance (APE) at the National Population Commission (NPC) in South East Nigeria, revealed a weak positive correlation (R = 0.250) between BIN and APE. The R Square value of 0.062 indicates that only 6.2% of the variance in adaptive performance can be explained by behavioral intention, suggesting a minimal effect. Furthermore, the adjusted R Square value of 0.022 reinforces that the model has weak explanatory power, even when accounting for the number of predictors. This implies that behavioral intention has a limited impact on adaptive performance, and other factors may play a more significant role in influencing APE at NPC in South East Nigeria.

The analysis revealed that behavioral intention (BIN) has no significant effect on adaptive performance (APE) at the National Population Commission (NPC) in South East Nigeria. The F value of 1.528 and p-value of 0.229 indicate that the model is not statistically significant, suggesting insufficient evidence to support a significant impact of behavioral intention on adaptive performance. The unstandardized coefficient (B) of -6.378 implies that adaptive performance decreases by 6.378 units for each unit increase in behavioral intention, but this effect is not statistically significant. The standardized coefficient (Beta) of -0.250 indicates aweak inverse relationship, and the t-value of -1.236 further confirms the lack of statistical significance. Therefore, it is concluded that behavioral intention on the use of technology has no significant effect on adaptive performance at NPC in South East Nigeria.

Testing of Hypothesis Four

$H0_4$: Facilitating conditions (FCO) have no significant effect on task performance (TPE) at the NPC in South East Nigeria.

Table 13: Results of tested hypothesis four

Model Summary[b]										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.429[a]	.184	.149	31.810	.184	5.199	1	23	.032	1.566
a. Predictors: (Constant), FCO										
b. Dependent Variable: TPE										

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5260.828	1	5260.828	5.199	.032[b]
	Residual	23273.172	23	1011.877		
	Total	28534.000	24			
a. Dependent Variable: TPE						
b. Predictors: (Constant), FCO						

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2.959	16.067		.184	.855	-30.278	36.196
	FCO	11.066	4.853	.429	2.280	.032	1.026	21.106
a. Dependent Variable: TPE								

Table 13 of the fourth hypothesis examined whether facilitating conditions (FCO) have a significant effect on task performance (TPE) at the National Population Commission (NPC) in South East Nigeria. The results revealed a moderate positive correlation (R = 0.429) between facilitating conditions and task performance, indicating a fairly strong relationship between the availability of facilitating conditions and employees' ability to perform tasks. This suggests that facilitating conditions play a notable role in enhancing task performance among NPC employees in South East Nigeria.

The R Square value is 0.184; meaning that 18.4% of the variance in task performance can be explained by facilitating conditions. This is a moderate effect size, suggesting that facilitating conditions play a role in influencing task performance, but other factors may also be involved. The adjusted R Square value is 0.149, which adjusts for the number of predictors in the model and still reflects a meaningful impact of facilitating conditions on task performance.

The F value is 5.199 with a significance level (p-value) of 0.032, which is less than the threshold of 0.05. This indicates that the model is statistically significant, meaning that facilitating conditions have a significant effect on task performance. The regression sum of squares (5260.828) compared to the residual sum of squares (23273.172) shows that the model explains a meaningful portion of the variance in task performance.

The analysis revealed a substantial and statistically significant relationship between facilitating conditions (FCO) and task performance (TPE) at the National Population Commission (NPC) in South East Nigeria. The unstandardized coefficient (B) of 11.066 indicates that for each unit increase in facilitating conditions, task performance increases by 11.066 units, demonstrating a considerable impact. The standardized coefficient (Beta) of 0.429 confirms a moderate relationship between the two variables. Furthermore, the t-value of 2.280 and significance level of 0.032 ($p < 0.05$) confirm that the relationship between facilitating conditions and task performance is statistically significant. Therefore, it is concluded that facilitating conditions have a significant effect on task performance at NPC in South East Nigeria. This finding highlights the importance of providing adequate facilitating conditions to enhance employee performance and productivity. By investing in resources and support that facilitate task completion, NPC can potentially improve overall task performance and achieve organizational goals more effectively. The results underscore the need for NPC to prioritize facilitating conditions.

Testing of Hypothesis Five

$H0_5$: Social influence (SIN) has no significant effect on creativity and innovation (CIN) at the NPC in South East Nigeria.

Results of tested hypothesis five

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.318[a]	.101	.062	34.281	.101	2.582	1	23	.122	1.666

a. Predictors: (Constant), SIN

b. Dependent Variable: CIN

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3034.500	1	3034.500	2.582	.122[b]
	Residual	27029.500	23	1175.196		
	Total	30064.000	24			

a. Dependent Variable: CIN

b. Predictors: (Constant), SIN

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	8.800	18.263		.482	.634	-28.980	46.580
	SIN	8.500	5.290	.318	1.607	.122	-2.443	19.443

a. Dependent Variable: CIN

The fifth hypothesis tested whether social influence (SIN) has a significant effect on creativity and innovation (CIN) at the NPC in South East Nigeria. The result shows that the R value is 0.318, indicating a weak positive correlation between social influence (SIN) and creativity and innovation (CIN). This suggests that social influence has a modest relationship with creativity and innovation among employees at the NIPC.

The R Square value is 0.101, meaning that 10.1% of the variance in creativity and innovation can be explained by social influence. This is a small effect size, indicating that social influence may play a role in determining creativity and innovation, but it is not the dominant factor. The adjusted R Square value is 0.062, further refining the relationship between the predictor and the outcome, suggesting that other factors might explain creativity and innovation better.

The F value is 2.582, with a significance level (p-value) of 0.122, which is higher than the threshold of 0.05. This indicates that the model is not statistically significant, meaning that there is no strong evidence to suggest that social influence has a significant effect on creativity and innovation. The unstandardized coefficient (B) for social influence is 8.500, meaning that foreach unit increase in social influence, creativity and innovation increase by 8.5 units. However, this effect is not statistically significant given the p-value of 0.122. The standardized coefficient (Beta) is 0.318, confirming that the relationship between social influence and creativity and innovation is weak. The t-value of 1.607 and a significance level of 0.122 further

confirm that the effect of social influence on creativity and innovation is not statistically significant ($p > 0.05$). We therefore conclude that Social influence (SIN) has no significant effect on creativity and innovation (CIN) at the NPC in South East Nigeria.

Discussion, Conclusion, and Policy Implications

Discussion of Findings

This study critically examined the influence of technology adoption on employee performance at the National Population Commission (NPC) in South East Nigeria. The findings revealed nuanced relationships between technology adoption constructs which are perceived usefulness, behavioral intention, facilitating conditions, and social influence, and various dimensions of employee performance, including counterproductive behavior, adaptive performance, task performance, and creativity.

The result showed that the perceived usefulness of technology did not significantly influence counterproductive behavior among employees ($p = 0.273 > 0.05$). This suggests that employees' perceptions of the benefits or relevance of technology to their work tasks do not necessarily reduce counterproductive behaviors. Such behaviors may be more strongly linked to organizational culture, job satisfaction, or managerial practices rather than perceptions of technological utility. This finding diverges from earlier assertions in the Technology Acceptance Model (TAM) proposed by Davis (1989), which emphasized the strong role of perceived usefulness in predicting positive work outcomes. The implication here is that in bureaucratic public institutions like the NPC, individual perceptions of technology's usefulness might be overshadowed by institutional factors influencing employee behavior.

Similarly, behavioral intention to use technology was found not to significantly affect adaptive performance ($p = 0.229 > 0.05$). This indicates that employees' willingness or expressed intention to use technology may not automatically lead to adaptability in work performance. The result supports the argument of Bhattacherjee and Hikmet (2007), who posited that behavioral intention alone is insufficient to enhance performance unless supported by appropriate resources, managerial encouragement, and a conducive work environment. In public institutions, adaptive performance often depends on institutional flexibility and ongoing support rather than individual intent.

Conversely, the study found that facilitating conditions had a significant and positive effect on task performance ($p = 0.032 < 0.05$). This outcome highlights the importance of organizational and technical support in enhancing employee efficiency and productivity. It validates the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh, Morris, Davis, and Davis (2003), which

recognizes facilitating conditions as a major determinant of technology use behavior and performance outcomes. The implication is that effective performance improvement through technology adoption in the NPC requires strong infrastructural support, accessible ICT systems, and institutional policies that encourage seamless technological integration.

Additionally, social influence did not significantly affect creativity and innovation among employees ($p = 0.122 > 0.05$). This finding suggests that peer or managerial influence does not necessarily drive innovative engagement with technology. The bureaucratic structure of the NPC may constrain the extent to which employees are motivated by social cues to use technology creatively. This outcome supports earlier observations by Agarwal and Prasad (1999), who reported that in public sector contexts, social influence tends to have a limited effect on technology-driven innovation due to hierarchical work structures and limited autonomy.

Conclusion

The study concludes that while technology adoption is essential for improving organizational efficiency and service delivery, its effects on employee performance within the NPC are uneven across different behavioral dimensions. Among the variables examined, facilitating conditions exerted the strongest positive effect on employee performance, underscoring the critical role of institutional and infrastructural support in public sector digital transformation. Conversely, perceived usefulness, behavioral intention, and social influence were not significant predictors of performance outcomes.

The findings suggest that public organizations cannot rely solely on employees' perceptions or intentions to achieve the desired outcomes of technology adoption. Instead, performance improvements depend on the presence of enabling conditions—such as adequate infrastructure, supportive leadership, and ongoing capacity development—that empower employees to use technology effectively. Therefore, successful technology-driven performance enhancement in the NPC requires a multidimensional approach that integrates technological readiness with human resource and organizational development strategies.

Policy Implications and Recommendations

Based on the empirical findings, several policy and managerial implications are evident:First,

the NPC should ensure robust infrastructural and technical support for employees. This includes upgrading ICT tools, ensuring system reliability, and establishing responsive helpdesk services to resolve technological issues promptly. Second, management should institutionalize regular ICT training and refresher programs aimed at improving employees' digital competence and confidence. Such programs should focus on practical, task-oriented applications to bridge skill gaps and

enhance technology utilization. Third, technology adoption policies should be directly linked to measurable performance indicators. Managers should evaluate not only the deployment of technology but also its impact on individual and departmental productivity. Fourth, the NPC should create an enabling organizational culture that encourages experimentation, innovation, and creative problem-solving. This can be achieved through reward systems that recognize technological innovation and flexibility in task execution. Fifth, administrative reforms are needed to make the organization more agile and responsive to technological change. Decentralizing decision-making and allowing employee input into technology implementation processes could foster ownership and creativity. Sixth, since perceived usefulness and behavioral intention did not significantly influence performance, management should implement motivational and attitudinal interventions that strengthen employees' engagement with technology through recognition, feedback, and participatory management.

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