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Impact of Remote Work on Employee Productivity in the Post-Pandemic Business Environment: Evidence from the Banking Sector in Kaduna State, Nigeria

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Abstract

The rapid adoption of remote work following the COVID-19 pandemic has significantly transformed organizational work structures, raising important questions about its implications for employee productivity. This study examines the impact of remote work on employee productivity in the post-pandemic business environment within the framework of Job Demands–Resources Theory, focusing on the banking sector in Kaduna State, Nigeria. A cross-sectional survey design was adopted, and data were collected from employees of selected commercial banks located in Kaduna metropolis and Zaria. The study population comprised 850 bank employees, from which a sample size of 265 respondents was determined using the Krejcie and Morgan (1970) sample size determination table. Data were collected using a structured questionnaire, and 215 valid responses were obtained for analysis. The study employed proportionate stratified random sampling to ensure adequate representation across the two locations. Linear regression analysis was conducted using SPSS version 31. The findings reveal that remote work has a positive and statistically significant effect on employee productivity ($\beta = 0.719$, $p < 0.001$), explaining 51.6% of the variation in productivity among the respondents. The study concludes that remote work can improve productivity in the banking sector when supported by adequate technological infrastructure and effective organizational support systems. The study recommends that banking institutions strengthen digital infrastructure, provide continuous training, and establish effective communication mechanisms to optimize productivity in remote work environments.

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1 INTRODUCTION

Employee productivity is a central concern in organizational research because it underpins competitiveness, operational efficiency, and long-term sustainability. Productivity reflects the extent to which employees effectively utilize their skills, time, and organizational resources to achieve performance objectives. Changes in work design and employment structures inevitably reshape productivity outcomes, particularly through their effects on communication, coordination, and managerial supervision. Productivity is also highly sensitive to the balance between work demands and available resources, making it a critical variable for understanding organizational performance in the contemporary business environment (Saridakis et al., 2023).

The COVID-19 pandemic fundamentally altered work organization by accelerating the global adoption of remote work. What began as an emergency response to mobility restrictions has evolved into a durable feature of organizational design, supported by digital platforms and virtual collaboration tools (Mariani et al., 2023; Abakpa & Dvouletý, 2024). This transition has transformed how employees interact with tasks, colleagues, and organizational systems, raising important questions about its implications for productivity in the post-pandemic era. Conceptually, remote work may enhance productivity by reducing commuting time and increasing autonomy, yet it may also undermine performance through coordination difficulties, communication delays, and weakened informal learning processes. These opposing mechanisms suggest that the productivity effects of remote work are not uniform but contingent on organizational and environmental conditions (Vartiainen & Vanharanta, 2024).

To explain these dynamics, this study is anchored in the Job Demands–Resources theory (Bakker & Demerouti, 2017). The Job Demands–Resources (JD-R) theory posits that employee performance improves when job resources such as autonomy, supervisory support, and access to digital infrastructure outweigh job demands, including workload pressure, communication overload, and coordination complexity. Conversely, when demands exceed available resources, strain intensifies and productivity declines. Under remote and hybrid work arrangements, this balance becomes particularly salient, as technological mediation can simultaneously expand work flexibility and amplify job demands through constant connectivity and role ambiguity. Thus, productivity under remote work is best understood as an outcome of the dynamic interaction between contextual demands and enabling resources.

While the global literature provides valuable theoretical insights, its applicability to developing economies characterized by infrastructural and institutional constraints remains uncertain. In Nigeria, labor productivity declined by 1.7% in 2022 (National Bureau of Statistics [NBS], 2023), reflecting structural inefficiencies that may interact with evolving work arrangements. In subnational perspectives such as Kaduna State, marked by unstable power supply, limited broadband access, and uneven digital literacy, remote work may introduce additional demands beyond those observed in advanced economies. Reports from Nigerian workplaces indicate persistent challenges, including inadequate internet connectivity, weak supervisory coordination, and declining employee motivation under remote arrangements (Adeniji et al., 2023; Okereke, 2023). Moreover, approximately 45% of Nigerian employees report burnout and reduced efficiency linked to insufficient organizational support while working remotely (PwC Nigeria, 2023). These conditions imply that the demand–resource balance critical to productivity may be particularly fragile in infrastructure-constrained environments.

The banking sector in Kaduna State provides a relevant background for examining these issues. During the pandemic, banks rapidly adopted digital platforms and remote operational systems to sustain service delivery. Although banking operations are technologically driven and potentially adaptable to remote or hybrid arrangements, they also require strict regulatory compliance, real-time coordination, data security, and continuous customer interaction features that may intensify job demands under remote arrangements. Consequently, the productivity implications of remote work within this sector remain uncertain, as flexibility and reduced commuting time may coexist with heightened role strain, monitoring pressures, and technological disruptions.

Despite the growing diffusion of remote work across Nigerian organizations, empirical evidence on their productivity consequences remains limited. Studies from developed countries report mixed outcomes, with positive effects often associated with resource-rich and well-coordinated environments (Gibbs et al., 2023; Bloom et al., 2024). However, environments characterized by infrastructural instability and managerial capacity gaps may yield different results. This lack of context-specific evidence creates a knowledge gap for organizational leaders who continue to implement remote work policies without a clear understanding of their productivity implications in local environments. Guided by the JD-R theory, this study argues that the impact of remote work on employee productivity in Kaduna State's banking sector depends on the relative balance between job demands and job resources embedded in the post-pandemic business environment.

Accordingly, this study investigates the impact of remote work on employee productivity in the post-pandemic business environment using the banking sector in Kaduna State, Nigeria, as a case study. Accordingly, the study advances the following hypothesis.

H1: Remote work has a significant effect on employee productivity in the post-pandemic banking sector in Kaduna State, Nigeria.

2 LITERATURE REVIEW

2.1 Employee Productivity

Employee productivity is a fundamental concept in organizational research because it reflects the efficiency with which employees transform their skills, knowledge, and time into outputs that contribute to organizational goals. Early conceptualizations defined productivity primarily as the ratio of output to input, emphasizing measurable indicators such as the quantity of tasks completed relative to time or resources utilized (Drucker, 1999). While this perspective remains foundational, scholars argue that it is insufficient for modern organizations where value creation increasingly involves intangible outputs such as service quality, innovation, and customer satisfaction (Jankelova & Joniakova, 2021).

Contemporary scholarship, therefore, conceptualizes employee productivity as a multidimensional construct that incorporates efficiency, effectiveness, and consistency in performance. Efficiency refers to completing tasks with minimal time and resources, while effectiveness relates to achieving desired outcomes at acceptable standards of quality (Chidoko et al. 2022). Consistency reflects the ability of employees to sustain performance despite variations in workload or working conditions. In service-oriented sectors such as banking, productivity is not assessed solely by the number of transactions processed but also by accuracy, regulatory compliance, and customer satisfaction (Okoye et al., 2023). These dimensions highlight that productivity involves both the quantity and quality of work delivered.

Recent perspectives further extend the concept to include adaptability and resilience in response to changing work environments. With the rise of digital technologies and flexible work arrangements, productivity increasingly depends on employees' ability to adjust to new tools, communication systems, and evolving organizational structures (Saridakis et al., 2023). In remote and hybrid work contexts, productivity involves maintaining performance while navigating technological mediation, virtual collaboration, and altered work–life boundaries (Bloom et al., 2024). Thus, modern interpretations emphasize productivity as both an outcome-oriented and adaptive capability.

The theoretical explanation for productivity in dynamic work environments is often provided by the JD–R theory. This framework suggests that employee performance depends on the balance between job demands (such as workload, time pressure, and role complexity) and job resources (including autonomy, organizational support, and access to technology) (Bakker & Demerouti, 2017). When resources adequately support employees, engagement and productivity increase; however, when demands exceed available resources, stress and burnout may reduce performance. This model is particularly relevant in remote work environments where technological tools, managerial support, and communication structures significantly influence employees' ability to remain productive.

In the Nigerian setting, employee productivity reflects both global management practices and local structural realities. Studies indicate that productivity in the Nigerian banking sector increasingly depends on service quality, digital service delivery, and adaptability to technological innovations (Adekoya et al.,2022). However, infrastructural limitations such as unreliable electricity supply, unstable internet connectivity, and limited digital literacy often constrain employee performance (Adeniran & Obembe, 2023). These conditions suggest that productivity in Nigeria must be examined through a broader framework that integrates efficiency, quality, and adaptability under infrastructural limitations. For this study, employee productivity is conceptualized following Saridakis et al. (2023) as the ability of employees to achieve organizational objectives consistently by balancing efficiency, quality, and adaptability under varying work conditions. This definition is particularly appropriate for examining productivity within remote work environments in the Nigerian banking sector.

2.2 Remote Work

Remote work has become a prominent feature of contemporary employment arrangements, particularly following the COVID-19 pandemic. Remote work refers to the performance of job tasks outside traditional office environments using information and communication technologies. Early definitions emphasized telecommuting as the substitution of digital communication for physical travel to the workplace (Nilles, 1975). Later conceptualizations describe remote work as a flexible arrangement that allows employees to perform their duties away from centralized offices while maintaining coordination through digital platforms (Gajendran & Harrison, 2007).

More recent studies highlight the evolving nature of remote work in digitally connected economies. Choudhury et al. (2021) conceptualizes remote work as “work-from-anywhere,” where employees can perform their responsibilities across different geographical locations using digital technologies. Similarly, Wells et al. (2023) describe remote work as a flexible arrangement that disconnects employees from fixed office spaces while maintaining organizational interaction through virtual systems. These perspectives suggest that remote work is not merely a relocation of tasks but a transformation in how work is organized, coordinated, and monitored.

Scholars increasingly recognize that remote work influences not only productivity but also organizational culture, communication patterns, and employee well-being. Gibbs et al. (2023) view remote work as a reconfiguration of work structures mediated by digital technologies, while Jab et al. (2024) emphasize its psychosocial implications, including changes in collaboration, work–life boundaries, and job demands. These perspectives demonstrate that remote work involves complex interactions between technology, organizational policies, and employee behaviour.

In Nigeria, remote work has emerged as both an opportunity and a challenge. Studies suggest that it enables organizations to maintain operations despite geographical and infrastructural constraints while providing employees with greater flexibility (Eze et al., 2021). However, the effectiveness of remote work is often limited by structural challenges such as unstable electricity supply, high internet costs, and cybersecurity concerns (Okunogbe & Santoro, 2022; Adeniran & Obembe, 2023). Cultural expectations of physical presence in workplaces also influence managerial attitudes toward remote work adoption (Oruh et al., 2023). These conditions indicate that remote work outcomes in Nigeria may differ from those reported in more technologically advanced environments.

2.3 Remote Work and Employee Productivity

As organizations increasingly adopt flexible work arrangements, scholarly attention has focused on understanding how remote work influences employee productivity across different organizations (Mariani et al., 2023; Saridakis et al., 2023). Emerging evidence suggests that the productivity outcomes of remote work are shaped by several organizational and technological factors, including the availability of digital tools, the effectiveness of communication structures, managerial support, and employees’ ability to balance autonomy with coordination demands (Bakker & Demerouti, 2017; Vartiainen & Vanharanta, 2024). These factors determine whether remote work enhances efficiency through greater flexibility and reduced commuting time or constrains productivity due to coordination difficulties, communication delays, and limited interpersonal interaction (Gibbs et al., 2023; Bloom, et al., 2024).

Empirical research on the relationship between remote work and employee productivity presents varied findings across different economic backgrounds. Studies conducted in developed economies generally report mixed productivity outcomes associated with remote work arrangements. For example, Gibbs et al. (2023) examined remote work adoption within Germany’s information technology sector and found that while remote arrangements increased employee autonomy and scheduling flexibility, extensive reliance on virtual communication reduced task efficiency and slowed coordination processes. Similarly, Bloom et al. (2024), using a randomized controlled trial in the United States, reported that hybrid work arrangements maintained or slightly improved productivity relative to fully remote systems, largely because periodic in-person interaction strengthened collaboration, knowledge sharing, and team coordination. These findings indicate that although remote work enhances flexibility and autonomy, excessive physical separation may weaken coordination mechanisms necessary for sustaining high productivity.

In Nigeria, Okoye and Musa (2022) examined remote work adoption in commercial banks in Abuja and found that remote arrangements improved operational efficiency and employee adaptability. However, these benefits were moderated by infrastructural constraints, particularly unstable internet connectivity and unreliable power supply. Similar patterns were observed by Abakpa and Dvouletý (2024), who reported that remote work among small and medium-sized enterprises in Lagos improved employee satisfaction and retention. In the financial technology sector, Akaegbobi et al. (2025) also found that remote work flexibility, when supported by adequate digital infrastructure and collaboration tools, significantly improved work quality and job satisfaction among employees.

In a recent study, Maganda et al. (2025) reported that digital technology usage and remote training initiatives enhanced employee productivity in Nigeria Breweries Plc, highlighting the role of digital capability development in supporting remote work effectiveness. Similarly, Okpaegbe et al. (2025) found that remote work arrangements combined with strong organizational support systems improved employee well-being in manufacturing firms, although the study did not directly assess productivity outcomes. Complementary studies by Abubakar and Iliyasu (2024) and Adeyinka et al. (2025) also suggest that remote work has considerable potential to enhance productivity in Nigeria; however, the effectiveness of such arrangements varies significantly across organizations due to differences in infrastructural capacity, technological readiness, and managerial practices.

Despite these growing contributions, the literature still reveals some important limitations. Within Nigeria, existing studies on remote work have largely concentrated on sectors such as SMEs, manufacturing firms, or individual organizations, with limited attention devoted to the banking sector. This omission is particularly significant because banking institutions operate in highly regulated environments that require real-time coordination, secure information management, and continuous customer interaction, all of which may shape the productivity implications of remote work arrangements.

Furthermore, many Nigerian studies have focused primarily on outcomes such as employee satisfaction, well-being, or technological adoption rather than directly examining employee productivity as a multidimensional construct involving efficiency, task completion, and work quality. As a result, the understanding of how remote work influences productivity outcomes remains incomplete. In addition, most research on remote work in Nigeria has been concentrated in areas such as Lagos and Abuja, leaving limited empirical evidence from other regions. Kaduna State environments may exhibit distinct infrastructural realities, organizational practices, and workforce characteristics that influence the effectiveness of remote work arrangements.

Addressing these limitations is essential for developing a more contextually grounded understanding of remote work outcomes in Nigeria. Thus, by situating the analysis within the JD–R framework, the study provides empirical insight into how remote work arrangements shape productivity in an infrastructure-constrained environment and contributes to the broader discourse on the sustainability of flexible work systems in emerging economies.

Conceptual and Theoretical Framework

Figure 1: Conceptual Model of Remote Work and Employee Productivity

The conceptual model proposes that remote work influences employee productivity in the post-pandemic business environment. Guided by the JD–R theory, remote work may enhance productivity when job resources such as autonomy and digital infrastructure offset job demand associated with virtual coordination.

The JD-R theory explains how workplace conditions influence employee motivation, well-being, and productivity through the interaction between job demands and job resources (Bakker & Demerouti, 2007; Schaufeli & Taris, 2014). Job demands such as workload pressure, communication demands, and emotional strain can deplete employees' energy and reduce performance, whereas job resources including autonomy, supervisory support, and access to digital tools enhance motivation, engagement, and productivity. The model therefore emphasizes that employee outcomes depend on the balance between demands and resources within the work environment. In remote work settings, the JD-R framework suggests that productivity depends on whether job resources such as flexibility, autonomy, and digital support adequately offset emerging demands including communication overload, coordination difficulties, and blurred work–life boundaries (Toscano & Zappalà, 2020; Chong et al., 2020). Accordingly, productivity in Nigerian banks is likely to improve when organizations provide sufficient technological infrastructure, training, and supervisory support to balance the demands of remote work.

3 RESEARCH METHODOLOGY

This study adopted a cross-sectional survey design. Data were collected in January 2026 from employees of selected commercial banks in Kaduna State, Nigeria. The study population comprised 850 employees working in selected commercial bank branches located in Kaduna metropolis and Zaria. The population figures were obtained from verified staff records provided by the management of the participating banks. The sample size of 265 respondents was determined using the Krejcie and Morgan (1970) sample size determination table. To achieve adequate representation across the study locations, the study employed proportionate stratified random sampling. The population was stratified into two groups based on location: Kaduna metropolis (500 employees) and Zaria (350 employees). Using a sampling fraction of 0.3118, the sample was proportionately allocated as 156 respondents from Kaduna and 109 respondents from Zaria. This method improves sampling accuracy and representativeness when the population is distributed across distinct groups (Kothari, 2004; Sekaran & Bougie, 2011).

3.1 Instruments and Measurement

Data were collected using a structured questionnaire adapted from validated scales in prior studies. The independent variable, Remote Work (RW), was measured using a 12-item scale adapted from Wang et al. (2021), while the dependent variable, Employee Productivity (EP), was measured using 12 items adopted from Koopmans et al. (2014). All items were rated on a five-point Likert scale ranging from Strongly Agree (5) to Strongly Disagree (1). The validity of the measurement instrument was assessed using factor analysis, which ensures that the questionnaire items adequately represent the constructs they are intended to measure (Hair et al., 2019). The reliability analysis produced Cronbach's alpha coefficients of 0.87 for RW and 0.91 for EP, indicating satisfactory internal consistency. A coefficient of 0.70 or higher was considered acceptable (Nunnally & Bernstein, 1994).

The questionnaires were distributed personally by the researcher with the assistance of a trained research aide. This approach facilitated direct access to respondents and improved response rates. Out of 265 questionnaires distributed, 215 were returned and found usable for the analysis. Ethical standards were strictly observed throughout the study. Participation was voluntary, and respondents were informed about the purpose of the research prior to completing the questionnaire. Participants were assured of confidentiality and anonymity. Permission to conduct the study was obtained from the management of the participating banks. The collected data were analyzed using both descriptive and inferential statistics. To test the hypothesized relationship between the variables, simple linear regression analysis was conducted using SPSS version 31, and statistical significance was evaluated at the 0.05 level using the coefficient of determination (R^2), standardized beta coefficients, and p-values.

4 RESULTS AND DISCUSSION

4.1 Presentation of Results

Table 1 Demographic Characteristics of the Respondents (N=215)

Sex	**Frequency**	**Percentage (%)**	**Cumulative %**
Male	132	61.4	61.4
Female	83	38.6	100.0
Total	**215**	**100.0**	
Respondents Age Distribution			
18 - 27 Years	42	19.5	19.5
28 - 37Years	73	34.0	53.5
38 - 47 Years	78	36.3	89.8
48 – 57 Years	17	7.9	97.7
58 Years and Above	5	2.3	100.0

Total	**215**	**100.0**	
Educational Qualification			
Diploma/NCE	13	6.0	6.0
Graduate	126	58.6	64.7
Postgraduate	76	35.4	100.0
Total	**215**	**100.0**	
Respondents Bank Location			
Kaduna Metropolis	112	52.1	52.1
Zaria	103	47.9	100.0
Total	**215**	**100.0**	
Respondents Department			
Administration	47	21.9	21.9
Human Resources	67	31.2	53.0
Customer Relations	38	17.7	70.7
ICT	37	17.2	87.9
Others	26	12.1	100.0
Total	**215**	**100.0**	
Years of Work Experience			
1-10 Years	87	40.5	40.5
11- 20 Years	113	52.6	93.0
21- 30 Years	10	4.7	97.7
31 Years and above	5	2.3	100.0
Total	**215**	**100.0**	

Source: Field Survey, 2026

Table 1 presents the demographic characteristics of the respondents. Most of the respondents were male (61.4%), while females accounted for 38.6%. In terms of age distribution, most respondents were between 38–47 years (36.3%), followed by those aged 28–37 years (34.0%), indicating that the respondents were largely within the active working-age group. Regarding educational qualification, the majority held a graduate degree (58.6%), while 35.4% possessed postgraduate qualifications. Slightly more than half of the respondents were drawn from banks located in Kaduna metropolis (52.1%), while 47.9% were from Zaria. In terms of departmental distribution, the largest proportion worked in Human Resources (31.2%). Furthermore, most respondents had between 11–20 years of work experience (52.6%), suggesting that the sample consisted largely of experienced banking professionals.

Table 2: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.719[a]	.516	.514	.51279	2.343

a. Predictors: (Constant), RW
b. Dependent Variable: EP

Table 2 presents the model summary of the regression analysis. The correlation coefficient (R = 0.719) indicates a strong positive relationship between remote work (RW) and employee productivity (EP). This suggests that improvements in RW practices are associated with higher levels of EP. The coefficient of determination ($R^2 = 0.516$) shows that RW explains approximately 51.6% of the variation in EP among the respondents. The adjusted R^2 value of 0.514, which corrects for sample size and model complexity, indicates that about 51.4% of the changes in EP can be attributed to RW, while the remaining 48.6% may be explained by other factors not included in the model. The standard error of the estimate (0.51279) reflects the average deviation of the observed values from the regression line, indicating a reasonable level of prediction accuracy for the model. Furthermore, the Durbin–Watson statistic of 2.343 is close to the benchmark value of 2, suggesting that there is no significant autocorrelation in the residuals, and thus the regression model satisfies the independence assumption.

Table 3: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	59.786	1	59.786	227.368	<.001b
	Residual	56.008	213	.263		
	Total	115.794	214			

a. Dependent Variable: EP,

b. Predictors: (Constant), RW

Table 3 presents the ANOVA results, indicate that the regression model examining the influence of RW on EP is statistically significant. The model produced an F-value of 227.368 with a significance level of $p < 0.001$, which is well below the conventional threshold of 0.05. This result demonstrates that the regression model provides a significantly better prediction of EP than a model with no predictors. The regression sum of squares (59.786) represents the portion of variation in EP explained by RW, while the residual sum of squares (56.008) represents the unexplained variation. The findings confirm that RW significantly contributes to explaining variations in EP, indicating that the model is appropriate for hypothesis testing.

Table 4: Coefficientsa

Model	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1 (Constant)	.622	.147		4.245	<.001
RW	.768	.051	.719	15.079	<.001

a. Dependent Variable: EP

Table 4 presents the regression coefficients. The results indicate that RW has a positive and statistically significant influence on EP ($\beta = 0.719$, $B = 0.768$, $t = 15.079$, $p < 0.001$). This implies that an improvement in RW practices is associated with a significant increase in EP. The unstandardized coefficient ($B = 0.768$) suggests that a one-unit increase in RW leads to a 0.768 unit increase in EP, holding other factors constant. The standardized beta coefficient ($\beta = 0.719$) further indicates a strong positive effect of RW on productivity. The constant value ($B = 0.622$, $p < 0.001$) represents the baseline level of EP when RW is held constant.

4.2 Discussion of Findings

The findings of this study indicate that remote work has a positive and statistically significant effect on employee productivity in the banking sector in Kaduna State, Nigeria. This finding suggests that flexible work arrangements supported by digital technologies can enhance employees' ability to perform tasks efficiently even outside traditional office environments. In the milieu of the banking sector, remote work may reduce commuting time, increase work autonomy, and enable employees to allocate more time and cognitive resources to job tasks, thereby improving overall productivity.

These findings support the JD-R theory, which posits that employee productivity improves when job resources such as autonomy, flexibility, and technological support outweigh job demands (Bakker & Demerouti, 2017). In remote work settings, these resources enable employees to manage their tasks more efficiently and maintain productivity despite changes in work arrangements. The results are consistent with prior studies in Nigeria which report positive productivity outcomes from remote work. For example, Okoye and Musa (2022) found that remote work improved operational efficiency in Nigerian banks, while Akaegbobi et al. (2025) reported that remote work flexibility enhanced work quality and job satisfaction in financial technology firms. Similarly, Maganda et al. (2025) emphasize that digital technologies and remote training initiatives can strengthen employee productivity in digitally mediated work environments.

However, the current finding differs slightly from findings of Gibbs et al. (2023) who observed that although remote work increased flexibility in Germany's information technology sector, heavy reliance on virtual communication sometimes reduced task efficiency and slowed coordination. Likewise, Bloom et al. (2024) reported that hybrid work arrangements tended to produce better productivity outcomes than fully remote systems due to improved collaboration and knowledge sharing during periodic physical interactions. These differences suggest that while remote work can enhance productivity, its effectiveness depends on the availability of supporting organizational resources and communication structures.

5 CONCLUSIONAND RECOMMENDATION

This study examined the impact of remote work on employee productivity in the post-pandemic banking sector in Kaduna State, Nigeria. The findings reveal that remote work has a positive and statistically significant effect on employee productivity, indicating that flexible work arrangements supported by digital technologies can enhance employees' efficiency and task performance. The results are consistent with the JD–R theory, which suggests that employee productivity improves when job resources such as autonomy, flexibility, and technological support adequately balance job demands. Within the banking sector, remote work appears to function as an enabling resource that allows employees to manage work tasks more efficiently while maintaining organizational performance.

Beyond the empirical findings, this study contributes to the growing literature on flexible work arrangements by providing empirical evidence on the productivity implications of remote work in an infrastructure-constrained environment. By applying the JD-R theory within the Nigerian banking sector, the study extends the theory's applicability to emerging economies where technological and institutional conditions differ significantly from developed economy. The study therefore provides context-specific insights that are valuable for scholars and practitioners seeking to understand how remote work arrangements function in developing economies.

Based on the findings, several practical recommendations are proposed. Banking institutions should strengthen digital infrastructure and technological support systems to ensure employees can effectively perform their duties in remote environments. Organizations should also provide continuous training and technical support to enhance employees' digital competencies and adaptability to remote work systems. In addition, bank management should develop clear communication and coordination mechanisms that facilitate collaboration, supervision, and performance monitoring in remote work settings. Finally, banking institutions should adopt structured remote or hybrid work policies that balance flexibility with operational efficiency to sustain employee productivity in the evolving post-pandemic business environment.

5.1 Limitations and Suggestions for Further Study

Despite the contributions of this study, some limitations should be acknowledged. First, the study focused on selected commercial banks in Kaduna State, which may limit the generalizability of the findings to other sectors or regions in Nigeria. Second, the study adopted a cross-sectional survey design, which captures respondents' perceptions at a single point in time and may not fully reflect changes in productivity associated with remote work overtime. Third, the study relied on self-reported data, which may be subject to response bias or subjective interpretations by respondents. Finally, the analysis examined only remote work as a predictor of employee productivity, while other organizational factors such as leadership style, organizational culture, and technological readiness may also influence productivity outcomes.

Future studies could expand the scope of research by examining remote work and employee productivity across multiple sectors such as telecommunications, education, and public administration to improve generalizability. Longitudinal research designs may also be adopted to assess how remote work influences productivity over time, particularly as organizations continue to adjust to post-pandemic work arrangements. In addition, future research could incorporate additional variables such as organizational support, digital capability, and leadership practices to provide a more comprehensive understanding of the factors shaping productivity in remote work environments. Finally, comparative studies across different regions or countries may provide deeper insights into how infrastructural and institutional conditions influence the effectiveness of remote work.

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