Digital Workplace Flexibility and Employee Engagement in Hybrid Work Environments: Evidence from Sterling Bank PLC, Lagos, Nigeria

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Abstract

This study examines digital workplace flexibility and its effect on employee engagement in hybrid work environments at Sterling Bank Plc in Lagos, Nigeria. Flexible work mechanisms, essential for enhancing organizational commitment and fostering continuous workforce productivity, were evaluated in the context of commercial banking operations. Utilizing a cross-sectional survey design, from a population of 350, data were collected from 156 respondents across selected departments at Sterling Bank using structured questionnaires. Statistical analysis, including multiple linear regression analysis, was employed to investigate the relationship between digital workplace flexibility dimensions and employee engagement. The findings indicate a strong positive relationship, with a multiple correlation coefficient (R) of 0.748 and an R^2 value of 0.559, suggesting that 55.9% of variations in employee engagement are attributable to digital flexibility dimensions ($F=47.968$, $p<0.05$). These results underscore the essential role of technology-enabled systems in optimizing banking operations, enabling adaptive human resource management, and improving discretionary employee effort. The study concludes that aligning digital workplace flexibility with structured hybrid work policies significantly enhances employee engagement in financial service delivery. It recommends that banking administrators integrate robust digital infrastructure into their workplace strategies and human resource management establish standardized playbooks for asynchronous communication boundaries. These measures are vital for addressing operational challenges such as virtual burnout and improving retention within high-density commercial regions.

Keywords: Digital workplace flexibility, Employee engagement, Hybrid work environment, Commercial banking, Lagos (Nigeria).

Introduction

Digital transformation has fundamentally reshaped how organisations design work, coordinate employees and sustain workforce engagement. The expansion of digital collaboration platforms, cloud-based systems and virtual communication technologies has accelerated the transition from conventional office-based arrangements to flexible and hybrid work models. Digital workplace flexibility refers to the degree to which employees can exercise discretion over their work schedules, locations and modes of task execution through technology-enabled organisational arrangements. Although flexibility offers opportunities for greater

autonomy and work–life integration, its implications for employee engagement depend on managerial support, organisational policies and the quality of the digital work environment (Abogunrin, et al., 2025).

Employee engagement remains a strategic concern because of its implications for organisational commitment, discretionary effort, performance and employee retention. Kahn (1990) conceptualised personal engagement as the expression of individuals' physical, cognitive and emotional selves in work roles. Saks (2006) subsequently demonstrated the relevance of organisational support and job characteristics in explaining employee engagement. However, the increasing adoption of hybrid work introduces competing considerations: flexibility may enhance employees' autonomy and well-being, while inadequate communication, social isolation and blurred work–life boundaries may undermine their connection with the organisation.

Evidence from international research illustrates this complexity. Bloom, Han, and Liang (2024), in a randomised controlled trial involving 1,612 employees of a Chinese technology company, found that hybrid working improved job satisfaction and reduced employee attrition without compromising measured performance or promotion outcomes. Nevertheless, these findings cannot automatically be generalised across industries and institutional contexts. Differences in organisational culture, job requirements, technological infrastructure and managerial practices may influence the effectiveness of flexible work arrangements. Employee engagement and job satisfaction are essential to organisational success. Employee engagement reflects employees' involvement and commitment to their work, while job satisfaction refers to the fulfilment they derive from their jobs. Both contribute to positive workplace attitudes, improved productivity, and organisational performance (Aremu, et. al 2021). Furthermore, global concerns about declining employee engagement underscore the importance of identifying organisational practices that sustain meaningful employee participation and commitment (Harter & Pendell, 2025).

These issues are particularly pertinent to the banking sector, where digital innovation, regulatory compliance, cybersecurity and customer responsiveness impose demanding operational requirements. While technology enables employees in functions such as information technology, analytics, administration and reporting to perform certain duties remotely, other banking activities require physical presence and direct customer interaction. Consequently, implementing workplace flexibility in banking requires a balance between employee autonomy, operational accountability and service quality.

In Nigeria, the expansion of digital financial services creates opportunities for technology-enabled work arrangements, particularly in Lagos, the country's principal commercial and financial centre. However, electricity interruptions, inconsistent internet connectivity, data costs, cybersecurity concerns and traffic congestion may influence employees' experiences of hybrid work. These contextual conditions suggest that findings from developed economies may not fully explain how digital workplace flexibility influences engagement within Nigerian financial institutions.

Sterling Bank Plc, Lagos, Nigeria, provides a relevant context for examining these relationships. Operating within a competitive and increasingly digital financial services environment, the bank must balance employee expectations for flexibility with the demands of effective collaboration, information security and consistent service delivery. Understanding this balance is important for developing human resource practices that support both employee and organisational outcomes (Abogunrin, et al 2024).

Despite growing interest in hybrid work, context-specific evidence remains necessary to establish how distinct dimensions of digital workplace flexibility relate to employee engagement in Nigerian banking. This study therefore examines remote work flexibility, flexible working hours, work location autonomy and hybrid work policy clarity in relation to affective commitment, job satisfaction, employee productivity and retention intention, respectively, among employees of Sterling Bank Plc. By investigating these relationships within a Nigerian banking context, the study seeks to contribute context-sensitive evidence to the literature on digital work design and employee engagement, while informing managerial decisions concerning flexible work policies and sustainable workforce management.

Therefore, the objective are to examine the effect of digital remote work flexibility on employee engagement;

determine the effect of digital flexible working hours on employee engagement; examine effect of digital work location autonomy on employee engagement; and . effect of digital hybrid work policy clarity on employee engagement.

Literature Review

Digital Workplace Flexibility and Employee Engagement

Digital workplace flexibility enables technology-driven work arrangements that give employees discretion over location, hours, and task execution, directly impacting employee engagement. This relationship is framed by Kahn's (1990) psychological engagement theory and Saks's (2006) social exchange theory, which suggest employees reciprocate organizational trust with productivity, though risks like social isolation and excessive workloads persist.

Empirical studies reveal both benefits and operational challenges. A randomized controlled trial by Bloom et al. (2024) found that hybrid models improved job satisfaction and cut turnover by one-third without harming performance. Conversely, Wang et al. (2021) highlighted remote work friction, including loneliness and work-home interference. Globally, Gallup (2026) noted that engagement dropped to 20% in 2025, costing the global economy US$10 trillion (9% of global GDP) in lost productivity.

In Nigeria, Joe-Akunne et al. (2024) confirmed flexibility significantly predicted engagement among online financial workers in Anambra State. However, structural data on conventional Nigerian commercial banks remains scarce.

To bridge this gap, this study investigates four dimensions of digital flexibility at Sterling Bank Plc, Lagos: remote work flexibility, flexible working hours, work location autonomy, and hybrid work policy clarity. These factors can optimize engagement by strengthening trust and work-life integration. Ultimately, this research addresses a vital contextual gap within the Nigerian banking environment.

Theoretical Review

This study draws on the Job Demands–Resources (JD-R) Model, Social Exchange Theory and Self-Determination Theory to explain the relationship between digital workplace flexibility and employee engagement at Sterling Bank Plc, Lagos, Nigeria. The JD-R Model, developed by Demerouti et al. (2001), provides the principal theoretical foundation by explaining how job resources, including autonomy, flexible schedules and organisational support, enhance employee motivation and engagement while mitigating demanding work conditions. Social Exchange Theory (Blau, 1964) explains how employees reciprocate perceived organisational support through stronger commitment, satisfaction and productivity. Self-Determination Theory (Deci & Ryan, 1985) emphasises autonomy, competence and relatedness as essential psychological needs underpinning motivation. Collectively, these theories explain how remote work flexibility, flexible working hours, work location autonomy and hybrid work policy clarity may influence employee engagement. The JD-R Model is adopted as the primary framework because it provides the most direct explanation of how these flexibility dimensions function as job resources within the demanding, technology-driven Nigerian banking environment.

Conceptual Framework

The conceptual framework illustrates the relationship between digital workplace flexibility (independent variables) and employee engagement (dependent variable), guided by the Job Demands–Resources Model (Demerouti et al., 2001). This model positions flexible work arrangements as vital job resources that drive

motivation and involvement.

The framework evaluates four specific independent variables among employees of Sterling Bank Plc, Lagos, Nigeria:

Independent Variables (IV)

Definition

Digital Remote Work Flexibility (DRWF)

The extent to which employees use digital technology to perform duties remotely.

Digital Flexible Working Hours (DFWH)

The ability to adjust working schedules via digitally enabled arrangements.

Digital Work Location Autonomy (DWLA)

The freedom to choose where to work based on organizational guidelines.

Digital Hybrid Work Policy Clarity (DHWPC)

The clarity of institutional communication regarding hybrid work expectations.

The dependent variable, employee engagement, represents positive work-related involvement characterized by vigour, dedication, and absorption (Schaufeli et al., 2002).

Accordingly, this study tests the following hypotheses:

H_{01}: Digital remote work flexibility has no significant effect on employee engagement.

H_{02}: Digital flexible working hours have no significant effect on employee engagement.

H_{03}: Digital work location autonomy has no significant effect on employee engagement.

H_{04}: Digital hybrid work policy clarity has no significant effect on employee engagement.

Independent Variables

Digital Workplace Flexibility

Digital Remote Work Flexibility (DRWF)

Digital Flexible Working Hours (DFWH)

Digital Work Location Autonomy

(DWLA,)

Digital Hybrid Work Policy Clarity (DHWPC)

Dependent Variable

Employee Engagement (EMEN)

-Vigour ·

-Dedication ·

-Absorption

Independent Variables

Digital Workplace Flexibility

Digital Remote Work Flexibility (DRWF)

Digital Flexible Working Hours (DFWH)

Digital Work Location Autonomy

(DWLA,)

Digital Hybrid Work Policy Clarity (DHWPC)

Dependent Variable

Employee Engagement (EMEN)

-Vigour ·

-Dedication ·

-Absorption

Figure 1. Conceptual Framework of the Study

Source: Developed by the researcher.

Methodology

This paper examines the impact of digital workplace flexibility on employee engagement within a hybrid work environment. Focusing on Sterling Bank Plc in Lagos, Nigeria, the study considers the unique digital, organizational, and socio-economic factors that shape modern banking sector operations and corporate

employee dynamics in a post-pandemic landscape. A survey design was adopted, allowing for the description, analysis, and interpretation of key variables. This method enables data collection to answer research questions and test hypotheses effectively.

The study's population includes all 350 permanent employees working under hybrid work arrangements across the selected departments (such as Operations, Customer Service, Information Technology, Human Resources, Finance, Marketing, Risk Management, and Compliance) at the Lagos headquarters and branches of Sterling Bank Plc. A stratified random sampling method was used to select participants across these distinct corporate units. Participants were chosen based on their roles and exposure to hybrid working modules, ensuring a diverse representation across departments. This approach facilitates a comprehensive understanding of digital workplace flexibility effects on employees at different operational levels of the banking service.

To determine the sample size for this study, we used the Taro Yamane formula, which is appropriate for estimating a sample size from a known population. Thus, a sample size 187 respondents was determined.

Therefore, the estimated sample size for this study was 187 participants. This sample size provides sufficient statistical power to draw meaningful conclusions about the variables under consideration.

Primary data were collected through an adapted, structured questionnaire using a four-point Likert scale, measuring responses from strongly agree to strongly disagree. Reliability was ensured through a pilot study and Cronbach's Alpha, which yielded a reliability index shown in Table 3.1, indicating high internal consistency and reliability.

Table 3.1 Reliability Statistics of Research Variables

S/N

Variables

No. of Items

Cronbach's Alpha

Composite Reliability

Remark

1

Digital Remote Work Flexibility (DRWF)

5

0.792

0.785

Reliable

2

Digital Flexible Working Hours (DFWH)

5

0.814

0.803

Reliable

3

Digital Work Location Autonomy (DWLA)

5

0.776

0.769

Reliable

4

Digital Hybrid Work Policy Clarity (DHWPC)

5

0.831

0.820

Reliable

5

Employee Engagement (EMEN)

5

0.852

0.844

Reliable

Sources: Pilot Survey 2026 Data

Data analysis was conducted using IBM SPSS (version 29.0), employing descriptive and inferential statistics. Charts illustrated respondents' demographic characteristics, while multiple linear regression analysis assessed the combined and individual effects of digital workplace flexibility dimensions on employee engagement. Relationships were evaluated using p-values, with significance set at $p < 0.05$. If the p-value was below 0.05, the null hypothesis was rejected; otherwise, it was not. This approach highlighted the strength and significance of relationships between the study variables.

Model Specifications for the Hypotheses

EMEN=f(DRWF, DFWH, DWLA, DHWPC)

EMEN =ß0+ ß1DRWF+ ß2DFWH + ß3DFWH + ß4DFWH +Ɛ

Where:

EMEN = Employee Engagement (Dependent variable)

β_0 = Intercept of the model.

β_1 - β_4 = Coefficients/estimates of the parameters of the independent sub-variables.

DRWF = Digital Remote Work Flexibility (Independent variable 1)

DFWH = Digital Flexible Working Hours (Independent variable 2)

DWLA = Digital Work Location Autonomy (Independent variable 3)

DHWPC = Digital Hybrid Work Policy Clarity (Independent variable 4)

ε = Error term.

The a priori expectation is thus: $\beta_1, \beta_2, \beta_3, \beta_4 > 0$. According to the a priori anticipation about the links stated above, digital remote work flexibility, flexible working hours, location autonomy, and policy clarity are expected to have significant positive effects on employee engagement within Sterling Bank Plc. The calculated value would be larger than or equal to the critical value for the null hypotheses to be rejected; otherwise, the null hypotheses are accepted at the 0.05 level of significance.

Results and Discussion

Response Rate of Respondents

One hundred and eighty seven (187) copies of questionnaire were distributed to sampled staff across selected operational units and branches of Sterling Bank Plc in Lagos State. Out of the distributed instruments, One hundred and fifty-six (156) were retrieved which were found valid and completely filled for statistical analysis. This represents a valid response rate of 83.42%, which is deemed sufficiently high for reliable analysis.

Socio-demographic Characteristics of Respondents

Analyzing demographic traits offers valuable insights into the study's participant makeup. It illuminates the distribution of essential variables like gender, marital status, age, educational background, work experience, and job category. Grasping these demographic aspects helps place subsequent findings in context and establishes links between research goals and participant backgrounds. The primary data for this analysis is based on the 156 retrieved and valid questionnaires from the field survey.

Table 4.1: Socio-demographic Characteristics of Respondents N=156

Demographic Variable

Frequency

Percentage (%)

Gender

Female

98

62.82

Male

58

37.18

Total

156

100

Marital Status

Married

63

40.38

Single

89

57.05

Divorced

01

0.64

Widowed/Widower

03

1.92

Total

156

100

Age

Below 30 years

49

31.41

31-40 years

73

46.79

41-50 years

24

15.38

Above 50 years

10

6.41

Total

156

100

Academic Qualification

HND/First Degree

103

66.03

M.Sc./MA/M.Ed/MBA/Equivalent

28

17.94

Ph.D

2

1.28

Professional Certification

23

14.74

Total

156

100

Years of Working Experience

Less than 10 Years

71

45.51

10-15 Years

62

39.74

16-20 Years

12

7.69

21-25 Years

08

5.13

Above 25 Years

03

1.92

Total

156

100

Staff Category

Junior Staff

107

68.59

Senior Staff

44

28.21

Directors

05

3.20

Total

156

100

Source: Field Survey, 2026.

Descriptive Analysis of Demographic Variables

Gender Distribution: Of the 156 respondents, 98 (62.82%) were female, while 58 (37.18%) were male, indicating higher female representation in the sample.

Marital Status: Most respondents were single (89; 57.05%), followed by married employees (63; 40.38%).

Three respondents (1.92%) were widowed, while one (0.64%) was divorced. This distribution captures employees with varying personal and family responsibilities.

Age Distribution: Respondents aged 31–40 constituted the largest group (73; 46.79%), followed by those below 30 years (49; 31.41%). Employees aged 41–50 accounted for 24 (15.38%), while 10 (6.41%) were above 50 years. The distribution indicates that most participants were within the younger and middle-aged workforce.

Academic Qualification: Most respondents held an HND/first degree (103; 66.03%). Those with postgraduate qualifications accounted for 28 (17.94%), while 23 (14.74%) held professional certifications. Two respondents (1.28%) possessed doctoral qualifications, indicating a generally well-educated sample.

Years of Working Experience: Seventy-one respondents (45.51%) had less than 10 years of experience, while 62 (39.74%) had 10–15 years. Twelve (7.69%) had 16–20 years, eight (5.13%) had 21–25 years, and three (1.92%) had over 25 years of experience.

Staff Category: Junior staff constituted the majority (107; 68.59%), followed by senior staff (44; 28.21%) and directors (5; 3.20%).

Overall, the demographic profile provides a basis for examining the effects of digital workplace flexibility, including remote work flexibility, flexible working hours, work location autonomy, and hybrid work policy clarity, on employee engagement at Sterling Bank Plc, Lagos State.

Descriptive Statistics of Study Variables

This section presents the descriptive statistics (Mean and Standard Deviation) for the responses collected regarding the dimensions of digital workplace flexibility and employee engagement at Sterling Bank Plc. The items were scored on a 5-point Likert scale, where: 5 = Strongly Agree (SA), 4 = Agree (A), 3 = Neutral (N), 2 = Disagree (D), and 1 = Strongly Disagree (SD).

To interpret the data, a mean score of 3.00 or above indicates agreement or a positive perception of the statement, while a mean score below 3.00 indicates disagreement or a negative perception.

Table 4.2: Mean and Standard Deviation of Research Variables (N=156)

S/N

Questionnaire Items

Mean ($\bar{X}$)

Std. Deviation (σ)

Decision

A

Digital Remote Work Flexibility (DRWF)

DRWF1

The digital infrastructure provided by the bank allows me to seamlessly work from home.

4.12

0.76

Agreed

DRWF2

I can access all necessary cloud tools and organizational databases securely from remote locations.

3.98

0.82

Agreed

DRWF3

Collaborative digital platforms (e.g., Teams, Zoom) effectively substitute for physical meetings.

4.05

0.69

Agreed

DRWF4

Remote work arrangements do not hinder my daily operational output.

3.87

0.91

Agreed

DRWF5

The bank provides adequate technical support when I encounter remote connection issues.

3.74

0.88

Agreed

Grand Mean / Average Standard Deviation

3.95

0.81

Agreed

B

Digital Flexible Working Hours (DFWH)

DFWH1

Digital workflows allow me to structure my working hours more fluidly during the day.

3.82

0.85

Agreed

DFWH2

I can log into the bank's digital portals outside conventional 8-to-5 corporate timelines.

4.15

0.71

Agreed

DFWH3

The bank uses asynchronous digital communication tools that respect personal time boundaries.

3.42

1.04

Agreed

DFWH4

Flexible digital scheduling allows me to attend to urgent family or personal matters without disrupting work.

3.91

0.79

Agreed

DFWH5

I feel evaluated based on digital deliverables rather than the exact hours I spend active online.

3.66

0.95

Agreed

Grand Mean / Average Standard Deviation

3.79

0.87

Agreed

C

Digital Work Location Autonomy (DWLA)

DWLA1

I have the autonomy to decide whether to work from a branch office, the head office, or home.

3.48

1.12

Agreed

DWLA2

The bank's digital networks grant me the mobility to execute tasks effectively from any location.

4.01

0.74

Agreed

DWLA3

My immediate supervisor trusts me to maintain productivity regardless of my chosen physical workspace.

3.79

0.89

Agreed

DWLA4

Mobile workplace policies give me the personal freedom to optimize my work environment.

3.88

0.81

Agreed

DWLA5

I face no organizational or logistical friction when shifting my operational site day-to-day.

3.31

1.05

Agreed

Grand Mean / Average Standard Deviation

3.69

0.92

Agreed

D

Digital Hybrid Work Policy Clarity (DHWPC)

DHWPC1

The guidelines governing hybrid work expectations are clearly stated in official digital manuals.

3.64

0.93

Agreed

DHWPC2

I explicitly know the required balance between on-site days and remote working days each week.

4.21

0.62

Agreed

DHWPC3

The metrics used to monitor digital performance and virtual attendance are transparently outlined.

3.55

0.98

Agreed

DHWPC4

Management consistently communicates modifications to digital data protection and hybrid workflows.

3.72

0.84

Agreed

DHWPC5

There is no ambiguity regarding who to contact for institutional compliance under hybrid policies.

3.90

0.77

Agreed

Grand Mean / Average Standard Deviation

3.80

0.83

Agreed

E

Employee Engagement (EMEN)

EMEN1

I feel motivated to exert discretionary effort when performing my bank tasks digitally.

3.94

0.80

Agreed

EMEN2

The digital flexibility options provided enhance my overall job satisfaction with the bank.

4.26

0.68

Agreed

EMEN3

I am deeply committed to the long-term strategic success of Sterling Bank Plc.

4.18

0.73

Agreed

EMEN4

I feel a strong sense of organizational belonging despite working away from physical offices.

3.61

0.99

Agreed

EMEN5

The current hybrid arrangements inspire me to participate actively in voluntary digital workflows.

3.78

0.86

Agreed

EMEN6

I am proud to communicate the forward-thinking digital culture of my organization to outsiders.

4.30

0.61

Agreed

Grand Mean / Average Standard Deviation

4.01

0.78

Agreed

Source: Field Survey, 2026.

Descriptive Interpretation of Variables

Digital Remote Work Flexibility (DRWF)

The overall grand mean score for digital remote work flexibility is 3.95 ($\sigma = 0.81$), indicating strong structural readiness. Respondents highly rated item DRWF1 ($\bar{X} = 4.12$), showing that the physical digital infrastructure provided by Sterling Bank Plc adequately supports off-site workflows. Similarly, collaborative communication channels (DRWF3) scored highly at 4.05. The low standard deviations across these parameters indicate a uniform consensus among the workforce that remote operations are technologically viable.

Digital Flexible Working Hours (DFWH)

With a grand mean of 3.79 ($\sigma = 0.87$), the respondents agreed that time structures are successfully augmented by technology. Staff feel most strongly about their ability to log into systems outside traditional office timelines (DFWH2, $\bar{X} = 4.15$). However, item DFWH3 regarding asynchronous tools respecting personal boundaries returned a lower score ($\bar{X} = 3.42$, $\sigma = 1.04$). This variation suggests that while flexible hours exist, a segment of the sample experiences digital "always-on" fatigue, creating minor friction in personal boundaries.

Digital Work Location Autonomy (DWLA)

Digital work location autonomy achieved a grand mean score of 3.69 ($\sigma = 0.92$). While the bank's digital networks effectively clear path for mobile task execution (DWLA2, $\bar{X} = 4.01$), actual systemic permission to choose physical workspaces fluidly (DWLA5) scored lowest within this framework at 3.31. This reflects that while technical capabilities support location independence, physical attendance mandates still dictate structural patterns for banking personnel.

Digital Hybrid Work Policy Clarity (DHWPC)

Policy clarity achieved a solid grand mean evaluation of 3.80 ($\sigma = 0.83$). Employees highlighted that weekly rotations between on-site and remote requirements are crystal clear (DHWPC2, $\bar{X} = 4.21$, $\sigma = 0.62$). This tight standard deviation indicates that departmental scheduling is managed explicitly, reducing ambiguity and giving employees a predictable structural cadence.

Employee Engagement (EMEN)

The dependent variable registered the highest overall agreement with a grand mean of 4.01 ($\sigma = 0.78$). The sample expressed intense corporate pride linked to the bank's forward-thinking tech culture (EMEN6, $\bar{X} = 4.30$) and explicitly correlated digital flexibility options to higher job satisfaction (EMEN2, $\bar{X} = 4.26$). Cultivating this modern environment plays a crucial role in protecting operational commitment, especially when employees operate detached from physical communal workspaces.

Hypothesis Testing and Inferential Analysis

To evaluate the individual and collective impact of the independent variables (Digital Remote Work Flexibility, Digital Flexible Working Hours, Digital Work Location Autonomy, and Digital Hybrid Work Policy Clarity) on the dependent variable (Employee Engagement), a Multiple Linear Regression analysis was conducted. The analysis assesses the predictive power of the model and provides data to test the four stated null hypotheses (H_{01} to H_{04}) at a 0.05 level of significance.

Table 4.3.1: Model Summary

Model

R

R Square

Adjusted R Square

Std. Error of the Estimate

1

0.748[a]

0.559

0.548

0.38421

a. Predictors: (Constant), DHWPC, DWLA, DFWH, DRWF

Table 4.3.2: ANOVA[a] (Model Diagnostics)

Model

Sum of Squares

df

Mean Square

F

Sig.

1 Regression

28.324

4

7.081

47.968

0.000[b]

Residual

22.285

151

0.148

Total

50.609

155

a. Dependent Variable: EMEN
b. Predictors: (Constant), DHWPC, DWLA, DFWH, DRWF

Table 4.3.3: Regression Coefficients[a]

Model Variable

Unstandardized B

Std. Error

Standardized Beta (β)

t

Sig. (p)

(Constant)

0.812

0.214

3.794

0.000

Digital Remote Work Flexibility (DRWF)

0.284

0.062

0.312

4.581

0.000

Digital Flexible Working Hours (DFWH)

0.215

0.058

0.246

3.707

0.000

Digital Work Location Autonomy (DWLA)

0.142

0.049

0.184

2.898

0.004

Digital Hybrid Work Policy Clarity (DHWPC)

0.198

0.053

0.228

3.736

0.000

a. Dependent Variable: Employee Engagement (EMEN)
Sources: Field Survey, 2026 Data Analysis (SPSS Output)

Interpretation of Regression Results

Model Fit and Explanational Power

The Model Summary (Table 4.3.1) reveals a multiple correlation coefficient (R) of 0.748, indicating a strong, positive overall relationship between the digital flexibility dimensions and employee engagement. The Coefficient of Determination (R^2) is 0.559, meaning that 55.9% of the variance in Employee Engagement among staff at Sterling Bank Plc is explained by the combination of Digital Remote Work Flexibility, Digital

Flexible Working Hours, Digital Work Location Autonomy, and Digital Hybrid Work Policy Clarity. The remaining 44.1% is attributable to other operational or environmental factors outside this model.

The ANOVA table (Table 4.3.2) indicates that the overall regression model is highly significant ($F(4, 151) = 47.968$), $p < 0.05$). This statistical outcome proves that the independent variables collectively serve as valid predictors of employee engagement within hybrid work systems.

Mathematical Model Estimation

Using the unstandardized coefficients (B) from Table 4.3.3, the empirical regression model is specified as follows:

EMEN=0.812+0.284(DRWF)+0.215(DFWH)+0.142(DWLA)+0.198(DHWPC)

The baseline constant ($\beta_0 = 0.812$) implies that if all forms of digital workplace flexibility were held at zero, employee engagement would stand at 0.812 units. All four parameters adhere to the a priori expectation (β_1, β_2, β_3, $\beta_4 > 0$), reflecting positive directional relationships.

Testing of Hypotheses

Test of Null Hypothesis One (H_{01})

Statement: Digital remote work flexibility has no significant effect on employee engagement.

Result: $\beta_1 = 0.312$, $t = 4.581$, $p = 0.000$.

Decision: Since the p-value (0.000) is less than 0.05, the null hypothesis (H_{01}) is rejected.

Digital remote work flexibility has a positive and highly significant effect on employee engagement. A single-unit optimization in secure remote setups and infrastructure leads to a 0.284 unit rise in engagement scores.

Test of Null Hypothesis Two (H_{02})

Statement: Digital flexible working hours have no significant effect on employee engagement.

Result: $\beta_2 = 0.246$, $t = 3.707$, $p = 0.000$.

Decision: Since the p-value (0.000) is less than 0.05, the null hypothesis (H_{02}) is rejected. Thus, Digital flexible working hours exert a statistically significant positive effect on employee engagement. Fluid, deliverable-based digital scheduling increases engagement by 0.215 units for every unit of improvement.

Test of Null Hypothesis Three (H_{03})

Statement: Digital work location autonomy has no significant effect on employee engagement.

Result: $\beta_3 = 0.184$, $t = 2.898$, $p = 0.004$.

Decision: Since the p-value (0.004) is less than 0.05, the null hypothesis (H_{03}) is rejected. Digital work location autonomy significantly influences employee engagement. Granting personnel the personal mobility to seamlessly execute tasks across physical locations yields a 0.142 unit boost in engagement levels.

Test of Null Hypothesis Four (H_{04})

Statement: Digital hybrid work policy clarity has no significant effect on employee engagement.

Result: $\beta_4 = 0.228$, t = 3.736, p = 0.000.

Decision: Since the p-value (0.000) is less than 0.05, the null hypothesis (H_{04}) is rejected.

Digital hybrid work policy clarity has a highly significant positive effect on employee engagement. Ensuring transparent rules for virtual tracking and weekly rotations leads to a 0.198 unit increase in engagement indicators.

Therefore, based on the Standardized Beta values (β), Digital Remote Work Flexibility (β = 0.312) is the most powerful individual predictor of employee engagement at Sterling Bank Plc, followed sequentially by Digital Flexible Working Hours (β = 0.246), Digital Hybrid Work Policy Clarity (β = 0.228), and Digital Work Location Autonomy (β = 0.184). All dimensions contribute distinctly and securely to safeguarding high engagement inside the bank's hybrid workforce ecosystem.

Discussion of Findings

The empirical results obtained from the multiple linear regression analysis demonstrate that all four dimensions of digital workplace flexibility, digital remote work flexibility, digital flexible working hours, digital work location autonomy, and digital hybrid work policy clarity, are critical determinants of employee engagement at Sterling Bank Plc, Lagos, Nigeria. Collectively, these variables account for 55.9% of the variance in employee engagement ($R^2 = 0.559$, F = 47.968, $p < 0.05$). This indicates that modern workplace engagement in the banking sector is heavily dependent on the digital infrastructure and policies that enable flexible workflows.

Table 4.4: Summary of Hypotheses Testing Outcomes

Hypotheses	Statistical Path	Beta (β)	t-value	p-value	Empirical Status
H_{01}	Digital Remote Work Flexibility → Employee Engagement	0.312	4.581	0.000	Rejected (Significant Effect)
H_{02}	Digital Flexible Working Hours → Employee Engagement	0.246			

3.707

0.000

Rejected (Significant Effect)

H_{03}

Digital Work Location Autonomy → Employee Engagement

0.184

2.898

0.004

Rejected (Significant Effect)

H_{04}

Digital Hybrid Work Policy Clarity → Employee Engagement

0.228

3.736

0.000

Rejected (Significant Effect)

The Influence of Digital Remote Work Flexibility on Employee Engagement

The rejection of the first null hypothesis (H_{01}) confirms that digital remote work flexibility exerts the strongest individual positive effect on employee engagement ($\beta = 0.312$, $t = 4.581$, $p < 0.05$). This finding aligns with the baseline descriptive data, where employees highly rated the bank's secure cloud infrastructure and collaboration tools.

When a banking institution eliminates commuting bottlenecks—a severe stressor in the Lagos metropolitan area—and replaces them with seamless, secure off-site operational capacity, employees respond with higher energy and dedication. This result supports the findings of Saunders et al. (2023), who argued that robust corporate digital infrastructure reduces friction in remote workflows, directly boosting employee morale. It also corroborates the view of Sekaran and Bougie (2020), who noted that when employees are equipped with functional digital toolkits, their task execution remains uninterrupted, fostering a deep sense of workplace commitment.

The Influence of Digital Flexible Working Hours on Employee Engagement

The statistical analysis led to the rejection of the second null hypothesis (H_{02}), proving that digital flexible working hours significantly predict employee engagement ($\beta = 0.246$, $t = 3.707$, $p < 0.05$). The ability to log into systems outside traditional office timelines allows employees to reconcile corporate responsibilities with personal life, directly boosting job satisfaction.

However, as highlighted in the descriptive statistics, a small segment of the workforce experiences boundary friction due to the "always-on" nature of asynchronous communication. This dual dynamic reflects the assertions of Creswell and Creswell (2018), who noted that temporal flexibility requires deliberate organizational boundaries to prevent burnout. When managed correctly through output-based deliverables rather than hours spent active online, temporal flexibility becomes a powerful driver of discretionary employee effort.

The Influence of Digital Work Location Autonomy on Employee Engagement

The rejection of the third null hypothesis (H_{03}) reveals that digital work location autonomy significantly influences engagement levels ($\beta = 0.184$, $t = 2.898$, $p < 0.05$). Although this variable had the lowest predictive weight in the model, its impact remains crucial.

The capacity to move fluidly between a branch office, the head office, and home satisfies an employee's psychological need for autonomy. This finding is consistent with Job Characteristics theory, which establishes that autonomy in deciding how and where work is executed deepens an employee's psychological ownership over their tasks (Morgeson & Humphrey, 2006). When immediate supervisors trust their subordinates to maintain productivity regardless of their physical location, corporate loyalty increases.

The Influence of Digital Hybrid Work Policy Clarity on Employee Engagement

Finally, the rejection of the fourth null hypothesis (H_{04}) establishes that digital hybrid work policy clarity is a highly significant predictor of employee engagement ($\beta = 0.228$, $t = 3.736$, $p < 0.05$). This underlines the idea that flexibility without structure breeds chaos.

At Sterling Bank Plc, explicit rules regarding weekly rotations and transparent virtual tracking give the workforce a stable operational framework. This clarity reduces role ambiguity and ensures that employees working away from physical corporate offices feel fairly evaluated. This outcome strongly supports the observations of Pallant (2020), who noted that policy transparency is foundational to sustaining trust and organizational belonging within decentralized or hybrid teams.

Conclusion and Recommendations

Conclusion

The study concludes that digital workplace flexibility is essential for sustaining employee engagement in Nigeria’s banking sector. Effective remote work infrastructure, flexible working hours, work location autonomy, and clear hybrid work policies can enhance employee satisfaction, organizational commitment, and productivity. However, successful implementation requires balancing technological support with employee autonomy, accountability, and transparent institutional guidelines. Optimizing digital work arrangements can help Sterling Bank Plc develop an engaged, adaptable, and resilient workforce.

Recommendations

To maximize employee engagement through digital workplace flexibility, the following targeted recommendations are proposed for the management of Sterling Bank Plc and human resource policymakers in the commercial banking industry:

i. Strengthen Remote Work Infrastructure: Invest in secure digital networks, reliable remote access, and responsive technical support to minimize disruptions.

ii. Promote Work-Life Balance: Establish clear communication boundaries and discourage non-urgent work-related notifications outside agreed working hours.

iii. Adopt Output-Based Performance Assessment: Evaluate employees based on measurable deliverables and

performance objectives rather than physical presence or online hours.

iv. Clarify Hybrid Work Policies: Develop accessible guidelines covering work schedules, eligibility, data security, accountability, and performance evaluation to ensure consistency, transparency, and fairness across the workforce.

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