

**DIGITALIZATION AND HUMAN RESOURCE MANAGEMENT PRACTICES IN
LISTED DEPOSIT MONEY BANKS, ABUJA.**

OMERE, Okiemute Aaron
Department: Business Administration
University of Abuja
Email: Aaronomere@gmail.com

&

Prof. U.D. Mohammed
Department: Business Administration
University of Abuja
Email: Udmohammed@gmail.com

DOI: <https://doi.org/10.70118/ajibam-01-2026-004>

ABSTRACT

The problem that informed this study was the limited empirical evidence on how digitalization influences Human Resource Management (HRM) practices, particularly in the context of Deposit Money Banks (DMBs) in Abuja, Nigeria. The main objective of the study was to examine the impact of e-recruitment and e-training on employee productivity and service efficiency, respectively. A descriptive research design was adopted, and the population comprised 320 employees from Zenith Bank, GTBank, and First Bank within Abuja Municipal Area Council (AMAC). Using a stratified random sampling technique, a sample of 252 respondents was selected, out of which 234 completed and returned the questionnaire, yielding a 93% response rate. Primary data were collected using structured questionnaires designed on a 5-point Likert scale and analyzed using descriptive statistics and regression analysis via SPSS version 27. The findings revealed that e-recruitment had a significant positive impact on employee productivity, while e-training significantly influenced employee service efficiency. These outcomes affirm the relevance of digital HRM tools in improving organizational performance, supported by the Technology Acceptance Model (TAM) and previous empirical studies. It was concluded that digital HRM practices are essential for enhancing employee outcomes and operational effectiveness in DMBs. The study recommended continuous investment in digital recruitment platforms and interactive e-training programs to drive productivity and service delivery.

Keywords: Digitalization, Human Resource Management (HRM), E-recruitment, E-training, Employee Productivity, Service Efficiency,

1.0 INTRODUCTION

The global evolution of Human Resource Management (HRM) is fundamentally shaped by the pervasive influence of digitalization, which is redefining traditional practices through the integration of advanced technologies. Organizations worldwide are adopting digital tools to enhance operational efficiency and strategic effectiveness within their HRM functions (Cascio & Montealegre, 2016). Within the African context, the adoption of digital HRM practices is increasingly recognized as a critical driver for organizational competitiveness and economic advancement, despite varying levels of technological infrastructure and adoption across the continent (Akanbi et al., 2021).

In Nigeria, particularly within the dynamic financial sector of Abuja, Deposit Money Banks (DMBs) are at the forefront of this digital transformation. These institutions, operating under stringent regulatory frameworks and intense market competition, are actively integrating digital solutions to optimize their HRM processes. Prior to the digital era, traditional recruitment and training methodologies were characterized by their time-consuming and resource-intensive nature. However, the introduction of e-recruitment and selection, along with e-training and development, has catalyzed significant shifts. E-recruitment, leveraging online platforms and digital assessment tools, has expanded talent acquisition capabilities and accelerated hiring cycles, directly influencing employee productivity through the rapid integration of qualified personnel (Osibanjo et al., 2020).

Similarly, e-training and development, utilizing virtual learning environments and online modules, has augmented employee skill sets and knowledge, fostering enhanced efficiency in banking operations. The implementation of these digital tools is posited to directly elevate employee productivity by facilitating continuous learning and streamlined talent acquisition, while simultaneously improving operational efficiency through the automation of previously manual processes. Consequently, this study on the impact of digitalization on evolving HRM practices within DMBs in Abuja is essential for comprehending the shifting dynamics of workforce management within the Nigerian banking industry.

Statement of Problem

Deposit Money Banks (DMBs) in Abuja are increasingly adopting digital technologies to enhance HRM practices, specifically through e-recruitment and selection, and e-training and development. However, the extent to which these digital initiatives translate into tangible improvements in employee productivity and operational efficiency remains a critical concern. While digitalization promises streamlined processes and enhanced talent acquisition, the actual impact on these crucial dependent variables is not always clearly evident.

Empirical studies, such as those by Osibanjo et al. (2020), have highlighted the potential of digitalization in talent management, but often fail to deeply explore the specific mechanisms through which e-recruitment and e-training directly influence employee productivity and

efficiency in the unique context of DMBs. For instance, despite the theoretical benefits of faster recruitment cycles and enhanced skill development through e-training, practical challenges such as digital literacy gaps, resistance to change, and the quality of digital training content may hinder the realization of expected productivity gains (Akanbi et al., 2021).

Furthermore, many existing studies emphasize the adoption rates of digital tools, but lack detailed analyses of how these tools translate into measurable improvements in employee output and operational speed, particularly within the highly regulated and competitive banking sector. This research aims to address these gaps by focusing specifically on the direct impact of e-recruitment and e-training on employee productivity and operational efficiency within DMBs in Abuja. Unlike previous studies that might have focused on broader organizational outcomes or adoption rates, this study will investigate the nuanced relationship between specific digital HRM practices and their direct, measurable effects on the dependent variables.

Research Questions

The study is guided by the following research questions:

- i. What is the impact of e-recruitment on employee productivity within Deposit Money Banks (DMBs) in Abuja?
- ii. How does e-training influence employee service efficiency in DMBs in Abuja?

Research Objectives

The broad objective of this study is to establish the impact of digitalization on changing HRM practices in deposit money banks, Abuja. The specific objectives were to;

- i. evaluate the impact of e-recruitment on employee productivity within DMBs in Abuja.
- ii. assess the influence of e-training on employee service efficiency in DMBs in Abuja.

Research Hypotheses

The study was guided by the following null hypotheses, which were formulated to test the relationship between digitalization and HRM practices in Abuja's DMBs:

H₀₁: E-recruitment does not have any significant impact on employee productivity in DMBs in Abuja.

H₀₂: E-training does not have any significant influence on employee service efficiency in DMBs in Abuja.

Significance of the Study

The result from the findings of this study provided valuable insights into the impact of digitalization on changing HRM practices in Deposit Money Banks (DMBs). For DMBs, the study highlighted how digital transformation enhanced efficiency, improved employee productivity, and streamlined HR operations, ultimately contributing to better workforce management and cost reduction. Businesses and organizations benefited from

the findings by understanding the role of digital HRM tools in fostering a more agile and competitive workforce, improving decision-making, and enhancing employee engagement. The government gained insights into the evolving nature of HRM in the digital age, which informed regulatory frameworks and policies to support technological adoption in the financial sector. Policymakers utilized the findings to develop strategic policies that promoted digital HRM adoption while ensuring compliance with labor laws and data security regulations. Researchers and students found the study useful as it expanded the body of knowledge on digital HRM, serving as a reference for future studies and contributing to academic discourse on technology-driven HR transformation.

Scope and Limitations of the Study

This study examined Digitalization and HRM Practices in Deposit Money Banks in Abuja, Nigeria. FCT-Abuja was selected as the study's geographical location due to its status as the nation's capital and a major financial hub where many DMBs operate, making it a suitable environment for assessing digital HRM practices. The study variables included digitalization, which was proxied by e-recruitment and e-training, as these components played a crucial role in modernizing HRM by improving efficiency, talent acquisition, and workforce development (Langer et al., 2021). The dependent variable, operational performance, was proxied by employee productivity and operational efficiency, as they represented key indicators

of how digital HRM transformations influenced organizational success (Stone et al., 2020). The study explored how these variables were interwoven, emphasizing the role of digital tools in optimizing HR operations and enhancing overall organizational performance.

Despite its contributions, the study faced some limitations. Firstly, it was geographically restricted to Abuja, which might limit the generalizability of the findings to other regions in Nigeria. Secondly, the study relied on self-reported data from HR professionals and employees, which might have introduced response bias. Additionally, technological advancements in digital HRM were rapidly evolving, meaning that findings might become outdated as new innovations emerged. Lastly, time constraints and resource availability limited the depth of data collection and analysis. Future research could expand the scope by including a comparative analysis of multiple cities or employing longitudinal studies to track changes over time.

2.0 LITERATURE REVIEW

Conceptual Framework

Concept of Digitalization

Digitalization refers to the integration of digital technologies into various aspects of business and society, leading to fundamental changes in operations and value creation processes. Vial (2019) defines digital transformation as a process aimed at improving an entity by triggering significant changes through combinations of information, computing, communication, and connectivity technologies. Similarly, Schallmo and Williams (2018) describe digitalization as the use of digital technologies and data to create revenue, improve business, replace or transform business processes, and foster a digital business environment where digital information is central. These definitions underscore the transformative impact of digital technologies on organizational structures, strategies, and cultures, emphasizing the necessity for businesses to adapt to the rapidly evolving digital landscape.

E-recruitment

E-recruitment, also known as online recruitment, refers to the use of internet-based technologies to attract, assess, and hire candidates for job positions. This digital approach streamlines the recruitment process by leveraging online job portals, social media platforms, and company websites to reach a broader talent pool efficiently. According to Bondarouk and Ruël (2019), e-recruitment systems enhance organizational effectiveness by reducing hiring costs and time-to-fill vacancies. Similarly, Holm and Haahr (2018)

highlight that e-recruitment facilitates better matching between job seekers and employers through advanced algorithms and data analytics, leading to improved employee retention rates. These perspectives underscore the pivotal role of e-recruitment in modern human resource management, emphasizing its contribution to optimizing the hiring process and achieving strategic organizational goals.

E-training

E-training, or electronic training, refers to the delivery of educational content and instruction via digital platforms, enabling learners to access training materials remotely and asynchronously. This approach leverages technologies such as online courses, webinars, and virtual simulations to facilitate skill development and knowledge acquisition. According to Kumar and Kumar (2023), e-training has transformed employee learning experiences by utilizing virtual tools that enhance engagement and self-assessment. Similarly, Hemalatha et al. (2024) highlight that e-training offers flexibility, allowing employees to learn at their own pace and convenience, which leads to improved learning outcomes and increased productivity. The adoption of e-training methods has been accelerated by advancements in information and communication technologies, making it a vital component of modern corporate training strategies.

Concept of Human Resource Management Practices

Human Resource Management (HRM) practices encompass a set of coordinated strategies and policies aimed at effectively

managing an organization's human capital to achieve its objectives. These practices typically include staffing, performance management, training and development, compensation and benefits, employee relations, and ensuring workplace safety and health. According to a study published in the *International Journal of Scientific & Engineering Research*, HRM practices are instrumental in attracting, motivating, rewarding, and retaining employees, thereby enhancing organizational productivity and innovation (IJSER, 2014). Furthermore, high-performance HRM practices, such as selective staffing, extensive training, performance-based evaluation, and incentivized compensation, have been linked to superior firm performance and sustainable competitive advantage (Delery & Roumpi, 2017). Implementing best practices in HRM, including effective communication, employee retention strategies, and fostering a positive organizational culture, is crucial for driving organizational success (HiPeople, 2025).

Employee Productivity

Employee productivity measures how efficiently and effectively an individual or group contributes to achieving organizational goals, typically evaluated by comparing the output produced to the inputs utilized, such as time, effort, and resources (IBM, 2024). High productivity is crucial for organizational success, as it enables the delivery of quality products or services while optimizing resource use. Factors influencing employee productivity include time management, skill proficiency, leadership quality, work environment,

employee engagement, technological tools, and communication effectiveness. For instance, a positive organizational culture has been shown to enhance employee satisfaction and performance, thereby boosting productivity (Olakunle, 2021). Moreover, the integration of artificial intelligence and automation in business processes has streamlined operations, allowing employees to focus on higher-level tasks that require critical thinking and creativity, further enhancing productivity (IBM, 2024).

Employee Service Efficiency

Employee service efficiency refers to the effectiveness with which employees deliver services that meet or exceed customer expectations while optimizing organizational resources. This concept emphasizes the balance between service quality and the prudent use of time, effort, and materials. According to a meta-analysis by the *Review of Managerial Science*, enhancing employee skills and competencies—such as ambidexterity and self-efficacy—can significantly improve service productivity (Yu et al., 2013; Hammerschmidt et al., 2012). Furthermore, fostering a supportive corporate culture that promotes feedback and job autonomy has been linked to increased efficiency in service delivery (Lechermeier et al., 2020; Qi et al., 2020). Leadership alignment between management and staff also plays a crucial role in enhancing employee productivity, highlighting the importance of authentic and attentive management practices (Schepers et al., 2016; Luu, 2020). Implementing these strategies can lead to

improved service efficiency, benefiting both employees and the organization.

Theoretical Framework

Acceptance Model (TAM)

The underpinning theory for this study, propounded by Davis in 1989, is the **Technology Acceptance Model (TAM)**, which explains how individuals adopt and use technology. TAM assumes that perceived usefulness and perceived ease of use are the key determinants of technology acceptance, influencing an individual's behavioral intention and actual system usage. In the context of digitalization in Human Resource Management (HRM) practices in Deposit Money Banks (DMBs), this theory helps to explain the adoption of e-recruitment and e-training by HR professionals and employees. It assumes that when users find a digital HRM system beneficial and easy to use, they are more likely to adopt it, thereby improving operational efficiency and employee productivity. However, TAM has been criticized for its limited consideration of external variables such as cultural, organizational, and psychological factors that may also influence technology adoption. Despite this limitation, TAM remains relevant for this study as it provides a structured approach to examining how digitalization transforms HRM practices in DMBs.

Empirical Review

Akanbi et al. (2021) examined the adoption of digital Human Resource Management (HRM) practices and their impact on workforce performance within Nigerian financial institutions. Conducted in Lagos State,

Nigeria, the study employed a descriptive research design, targeting HR professionals across various banks. Utilizing stratified random sampling, a sample size of 150 respondents was selected from a population of 500 employees. Data were collected through structured questionnaires and analyzed using multiple regression techniques. Findings indicated that digital HRM practices, specifically e-recruitment and e-training, significantly enhance employee productivity and operational efficiency. However, the study's limitations include its confinement to Lagos State, potentially restricting the generalizability of results across Nigeria's diverse regions. Additionally, reliance on self-reported data may introduce response bias. To address these limitations, future research should encompass a broader geographical scope and incorporate objective performance metrics. The current study aims to fill this gap by extending the investigation to Deposit Money Banks in Abuja, Nigeria, thereby providing a more comprehensive understanding of digital HRM adoption nationwide.

Bondarouk and Ruël (2019) conducted a comprehensive analysis titled "Disentangling the Concept of e-HRM: A Conceptual and Empirical Analysis.". The study aimed to clarify the multifaceted nature of electronic Human Resource Management (e-HRM) by integrating conceptual frameworks with empirical data. While the authors provided an extensive literature review and theoretical insights, the study did not specify a particular

geographical location, research design, population, sample size, or detailed methodologies for data collection and analysis. This lack of empirical specificity limits the ability to generalize findings across different organizational contexts. To address this limitation, future research should incorporate well-defined empirical studies with clear methodologies and diverse organizational samples. The current study intends to fill this gap by conducting a focused investigation into the adoption of e-HRM practices within Nigerian financial institutions, employing a robust research design to provide actionable insights.

Delery and Roumpi (2017) conducted a study titled "Strategic Human Resource Management, Human Capital, and Competitive Advantage: Is the Field Going in Circles?". The study focuses on the theoretical underpinnings of strategic human resource management (SHRM) and its relationship with human capital and competitive advantage. The authors critically examine the application of the resource-based view (RBV) within SHRM research, highlighting tensions between SHRM and strategic human capital literature. They propose a conceptual model suggesting that HRM practices contribute to sustainable competitive advantage not only by enhancing employee abilities and motivation but also by influencing mobility constraints. A notable limitation of this study is its conceptual nature, lacking empirical data to validate the proposed model. To address this, future research should empirically test the model across diverse organizational contexts. The current study

aims to fill this gap by empirically examining the impact of digital HRM practices on employee productivity within Nigerian financial institutions, providing practical insights to complement the theoretical framework proposed by Delery and Roumpi.

Hemalatha et al. (2024) conducted a study titled "The Role of E-Training for Employees in the Corporate World.". The research aimed to explore the benefits and implementation strategies of e-training within corporate settings. The study highlighted that e-training allows employees to learn at their own pace, anytime and anywhere, enhancing learning outcomes and accommodating various schedules. For instance, Walmart successfully used microlearning techniques through e-learning to teach workplace safety, resulting in increased voluntary participation rates and reduced incidents. Additionally, the study noted that e-training eliminates the need for physical classrooms, printed materials, and travel expenses, making it a cost-effective solution for organizations. However, the study did not specify a particular geographical location, research design, population, sample size, or detailed methodologies for data collection and analysis. This lack of empirical specificity limits the ability to generalize findings across different organizational contexts. To address this limitation, future research should incorporate well-defined empirical studies with clear methodologies and diverse organizational samples. The current study intends to fill this gap by conducting a focused investigation into the adoption of e-training practices within Nigerian financial

institutions, employing a robust research design to provide actionable insights.

Kumar and Kumar (2023) conducted a study titled E-training impact on trainee experience and self-assessment. The research was carried out in North India, focusing on 30 hydropower stations. Employing a quantitative research design, the study targeted employees within these organizations, utilizing a structured questionnaire to collect data from a sample of 853 participants. The data were analyzed using partial least squares-structural equation modeling (PLS-SEM) to examine the relationships between variables. Findings indicated that infrastructure and organizational support significantly influence the perceived usefulness of e-training, with trainer abilities and content design also playing crucial roles. Furthermore, positive trainee experiences were found to enhance self-assessment outcomes. However, the study's focus on a specific sector within a limited geographical area may restrict the generalizability of its findings. To address this limitation, future research should explore diverse industries and regions to validate and extend these insights. The current study intends to bridge this gap by examining e-training adoption across various sectors within Nigerian financial institutions, thereby providing a more comprehensive understanding of e-training's impact on employee development.

Osibanjo et al. (2020) conducted a study titled "Digital HR Transformation and Its Effect on Employee Engagement in the Banking Sector,". The research aimed to investigate the impact of digital Human Resource (HR)

transformation on employee engagement within Nigerian banks. The study was conducted in Lagos State, Nigeria, employing a descriptive survey research design. The population comprised HR professionals and employees from various banks, with a sample size of 200 respondents selected through stratified random sampling. Data were collected using structured questionnaires and analyzed using multiple regression analysis to determine the relationship between digital HR transformation initiatives and levels of employee engagement. Findings revealed that the implementation of digital HR practices, such as e-recruitment, e-performance management, and e-learning, positively influenced employee engagement by enhancing communication, streamlining processes, and providing employees with greater access to HR services. However, the study's limitations include its focus on a single state, which may not capture the diversity of practices and experiences across Nigeria's banking sector. Additionally, the reliance on self-reported data could introduce response bias. To address these limitations, future research should encompass a broader geographical scope and incorporate objective performance metrics. The current study intends to fill this gap by examining digital HR transformation across multiple regions in Nigeria, providing a more comprehensive understanding of its effects on employee engagement nationwide.

Literature Gaps

The reviewed literature on the impact of digitalization on HRM practices has

extensively explored the theoretical foundations and practical applications of e-HRM tools such as e-recruitment and e-training in diverse contexts. However, a significant study gap exists in terms of geographical coverage, as most empirical studies have been conducted in other parts of Nigeria—predominantly Lagos—or in international settings. The unique operational, demographic, and regulatory environment in Abuja, which is Nigeria's administrative and financial capital, remains underexplored. This geographical gap is critical because the dynamics of employee behavior, technology adoption, and organizational culture in Abuja's Deposit Money Banks (DMBs) may differ substantially from other locations due to differences in infrastructure, staff composition, and market pressure.

In terms of methodology, many prior studies such as those by Bondarouk and Ruël (2019) and Delery and Roumpi (2017) were either conceptual in nature or lacked detailed empirical validation within sector-specific contexts. Some existing empirical studies, including those by Osibanjo et al. (2020) and Akanbi et al. (2021), were constrained by limited methodological rigor or did not apply robust statistical techniques to test specific hypotheses on the relationship between digital HRM practices and performance outcomes. This study fills this methodological gap by adopting a quantitative approach using descriptive design, stratified random sampling, and regression analysis to draw meaningful conclusions based on primary data from DMBs in Abuja.

Furthermore, earlier studies often addressed broad organizational outcomes or focused on general HRM practices without isolating key variables such as e-recruitment and e-training as indicators of digitalization and employee productivity and service efficiency as dependent performance metrics. This study addresses that variable gap by specifically operationalizing digitalization through targeted HRM practices and linking them directly to measurable employee performance indicators. By narrowing the focus to these specific variables and applying them to a clearly defined sector and location, the study offers more precise, context-sensitive insights that bridge the gap between general theory and practical realities in the Nigerian banking industry.

3.0 METHODOLOGY

The methodology of this study outlines the systematic approach adopted to examine the impact of digitalization on changing HRM practices in Deposit Money Banks (DMBs) in Abuja. It details the research design, population, sample size, sampling technique, sources of data collection, data collection methods, and analytical techniques employed to achieve the study's objectives.

Research Design

This study adopted a descriptive research design to investigate the effect of the work environment on employee performance in selected deposit money banks. The descriptive design was chosen for its suitability in systematically documenting the characteristics of the population under study and examining

relationships between variables without manipulating them.

Population of the Study

The population of this study consisted of 320 employees working in Zenith Bank, GTBank, and First Bank within the Abuja Municipal Area Council (AMAC), Nigeria. These banks were purposefully selected due to their prominent presence, operational scale, and active engagement in digital transformation initiatives, particularly in Human Resource Management practices. Zenith Bank, GTBank, and First Bank are among Nigeria's leading financial institutions, known for their early adoption of digital banking technologies and robust HRM structures. This population encompassed a diverse range of positions, including management, supervisory, and operational staff, providing a comprehensive view of the workforce within these financial institutions. By including a variety of roles, the study aimed to capture the perspectives of employees at different levels of the organizational hierarchy, thus enriching the data and ensuring that the findings were representative of the broader employee experience regarding the work environment and its impact on performance.

Sample Size

The sample size of the study was determined using the Yamane sample size determination Technique. The sample size is 178 employees from the three selected Banks. However, to account for potential non-response and incomplete surveys, the sample size was increased by 20% that is 234.

Sampling Technique

Stratified random sampling was employed to ensure that various levels of employees (management, supervisory, and operational staff) were adequately represented. This technique allowed for an accurate reflection of the diversity in roles within the banking sector.

Sources of Data Collection

The study relied solely on primary data collected directly from respondents through administered questionnaires, ensuring firsthand, relevant, and specific information regarding the impact of digitalization on HRM practices in the selected Deposit Money Banks within AMAC.

Method of Data Collection

Data were collected using a structured questionnaire designed on a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree," enabling respondents to express the extent of their agreement with statements related to digital HRM practices and employee performance.

Method of Data Analysis

Data collected were analyzed using descriptive statistics and regression analysis to examine the relationship between digital HRM practices and employee performance, with the aid of Statistical Package for Social Sciences (SPSS) 27.0 to ensure accuracy and reliability of results.

Model Specification

$$Y = \alpha + \beta_1 X_1 + \epsilon \dots \dots \dots 1$$

Where: Y =dependent variable

α_0 =intercept,

β_i = coefficient of the independent variables

X = independent variable

ϵ = random error term.

The models are specified as:

$$EP = \alpha_0 + \beta_1 ER + \epsilon \dots\dots\dots 2$$

$$EE = \alpha_0 + \beta_1 ET + \epsilon \dots\dots\dots 3$$

Where:

EP = Employee Productivity

EE = Employee Service Efficiency

ER = E-Recruitment

ET = E-Training

Validity and Reliability

To ensure the validity and reliability of the research instrument, it was essential to evaluate whether the instrument accurately measured the constructs of interest and produced consistent results over time. Validity was established through content and face

validity by consulting experts in human resource management and organizational behaviour. They assessed the questionnaire items to confirm that they adequately covered the domains of work environment and employee performance.

Reliability was measured using Cronbach’s Alpha, a statistical tool commonly used to assess internal consistency reliability, which indicates how closely related a set of items are as a group. A Cronbach's Alpha value above 0.7 is generally considered acceptable for ensuring reliability in social science research. The study variables, which included the e-training, e-recruitment, employee productivity and employee service efficiency were each subjected to reliability testing. The table below presents the Cronbach's Alpha values for each of the variables measured in this study:

Reliability Statistics for Study Variables

Variable	Number of Items	Cronbach's Alpha Value
e-recruitment	8	0.82
e-training	10	0.85
employee productivity	6	0.78
employee service efficiency	7	0.81

As shown in Table 3.2, the Cronbach’s Alpha values for all the variables exceeded the acceptable threshold of 0.70, indicating that the research instrument had good internal consistency and was reliable for measuring the

effect of the work environment on employee performance in selected deposit money banks within Abuja Municipal Area Council (AMAC), Abuja.

4.0 DATA PRESENTATION AND ANALYSIS

This section presents and analyzes the data collected through questionnaires to assess the impact of digitalization on HRM practices in selected Deposit Money Banks.

Introduction

Table 1 Data Presentation and Analysis

Questionnaire Distributed	252
Returned Questionnaire	234
Percentage of returned Questionnaire	93%
Unreturned Questionnaire	18
Percentage of not returned Questionnaire	7%

Source: Field Survey, 2025

Table 1 shows that 234 out of 252 questionnaires were returned, representing a high response rate of 93%. This implies strong participant engagement, enhancing the reliability and generalizability of the study's findings within the selected banks.

Table 2 Frequency and percentage of employees' characteristics

Demographic Factors	Classifications	Frequency (n = 306)	Percentage %
Age	18 – 29 years	132	56.5%
	30 – 39 years	51	21.7%
	40 – 49 years	28	11.6%
	50 – 59 years	14	6.0%
	Over 60 years	9	4.3%
	Total	234	100.0%
Sex	Male	129	55.1%
	Female	105	44.9%
	Total	234	100.0%
Education	Primary Sch.	-	-
	WAEC	57	24.6%
	Diploma	122	52.2%
	BSc	41	17.4%
	MSc	14	5.8%
	PhD	-	-
	Total	234	100%
Marital Status	Single	139	59.4%
	Married	95	30.6%
	Total	234	100
Work experience	Less than 6 years	125	53.6%

6 – 10 years	57	24.6%
11 – 20 years	34	14.5%
Over 20 years	18	7.2%
Total	234	100%

Source: Field Survey, 2025

Table 2 presents the frequency and percentage distribution of respondents’ demographic characteristics, which provide important context for interpreting the impact of digital HRM practices on employee performance in the selected Deposit Money Banks.

In terms of age, the majority of respondents (56.5%) were between 18 and 29 years, indicating a predominantly young workforce that is likely to be more adaptable to digital platforms and receptive to e-recruitment and e-training tools. This demographic advantage supports the potential effectiveness of digital HRM initiatives.

Regarding sex distribution, 55.1% of the respondents were male, while 44.9% were female. This relatively balanced gender representation helps ensure that the findings reflect diverse perspectives on the adoption and impact of digital HRM practices in the banking sector.

Educational qualifications reveal that most employees possessed either a diploma (52.2%) or a BSc degree (17.4%), with very few

holding postgraduate degrees. This suggests that while the workforce is fairly educated, the level of academic exposure may influence how effectively digital HRM tools are utilized, particularly in e-training applications.

Marital status shows a predominance of single employees (59.4%), which may also correlate with the younger age group and could imply greater flexibility in adapting to technological changes in the workplace.

Lastly, work experience data indicates that 53.6% of respondents had less than six years of experience, further supporting the youthful nature of the workforce. This group may be more technologically savvy and open to innovation, making them well-suited for digital HR transformations.

Collectively, the demographic data imply that the sample is well-positioned to respond effectively to digital HRM practices, thereby enhancing the relevance and applicability of the study’s findings to similar banking institutions.

Test of Hypotheses

Hypothesis One

H₀₁: E-recruitment does not have any significant impact on employee productivity in DMBs in Abuja.

$$EP = \alpha_0 + \beta_1 ER + \epsilon \dots \dots \dots 2$$

Table 3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.580 ^a	.337	.329	.58322

a. Predictors: (Constant), ER
Source: Generated using SPSS Output Version 27.0

Table 3 presents the model summary for the regression analysis testing the impact of e-recruitment on employee productivity in Deposit Money Banks (DMBs) in Abuja. The R-value of 0.580 indicates a moderate positive correlation between e-recruitment and employee productivity. The R Square value of 0.337 suggests that approximately 33.7% of the variation in employee productivity can be explained by e-recruitment practices. The

adjusted R Square of 0.329 confirms the model’s goodness-of-fit after adjusting for the number of predictors. The standard error of the estimate (0.58322) indicates the average distance that the observed values fall from the regression line. These results imply that e-recruitment has a statistically meaningful impact on employee productivity, supporting the relevance of digital recruitment strategies in improving workforce outcomes in DMBs.

Table 4 ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.775	1	10.775	195.909	.000 ^b
	Residual	12.815	232	.055		
	Total	23.590	233			

a. Dependent Variable: EP
 b. Predictors: (Constant), ER
Source: SPSS Output Version 27.0

Table 4 presents the ANOVA (Analysis of Variance) results for testing the effect of e-recruitment (ER) on employee productivity (EP) in Deposit Money Banks (DMBs) in Abuja. The F-value of 195.909 with a significance level (p-value) of .000 indicates that the regression model is statistically significant. Since the p-value is less than the conventional threshold of 0.05, the null

hypothesis (H₀₁), which states that e-recruitment does not have any significant impact on employee productivity, is rejected. This implies that e-recruitment significantly influences employee productivity, confirming that digital recruitment strategies play a crucial role in enhancing employee performance in DMBs.

Table 5 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.859	.318		2.700	.007
	ER	P.241	.062	.218	3.899	.000

a. Dependent Variable: EP

Source: SPSS Output Version 27.0

Table 5 presents the coefficients of the regression model analyzing the effect of e-recruitment (ER) on employee productivity (EP) in Deposit Money Banks (DMBs). The unstandardized coefficient (B = 0.241) indicates that a one-unit increase in e-recruitment leads to a 0.241-unit increase in employee productivity. The t-value of 3.899 and the corresponding p-value of 0.000 show that this relationship is statistically significant. Since the p-value is less than 0.05 and the t-

value exceeds the critical threshold (typically ±1.96 for 95% confidence), we reject the null hypothesis (H₀₁). This confirms that e-recruitment has a significant positive effect on employee productivity in DMBs. The implication is that the adoption of digital recruitment strategies can meaningfully enhance workforce performance, emphasizing the need for continuous investment in digital HRM tools within the banking sector.

Hypothesis Two

H₀₂: E-training does not have any significant influence on employee service efficiency in DMBs in Abuja.

$$EE = \alpha_0 + \beta_1 ET + \epsilon \dots\dots\dots 3$$

Table 6 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.682 ^a	.465	.454	.52560

a. Predictors: (Constant), ET

Source: SPSS Output Version 27.0

Table 6 presents the model summary for the regression analysis testing the influence of e-training (ET) on employee service efficiency (EE) in Deposit Money Banks (DMBs) in Abuja. The R-value of 0.682 indicates a strong positive relationship between e-training and employee service efficiency. The R Square value of 0.465 shows that 46.5% of the variance in employee service efficiency can be explained by e-training. The adjusted R Square value of 0.454 confirms the model's reliability

after adjusting for predictor variables. The standard error of the estimate (0.52560) reflects a relatively low deviation from the regression line, indicating a good model fit. Based on this result, and as further supported by the significance levels in the subsequent ANOVA table, the model is statistically meaningful. Therefore, it can be inferred that e-training significantly contributes to improving employee service efficiency in DMBs.

Table 7

		ANOVA ^a				
Model		Sum Squares	of df	Mean Square	F	Sig.
1	Regression	8.946	1	8.946	101.659	.000 ^b
	Residual	20.480	232	.088		
	Total	29.426	233			

a. Dependent Variable: EE

b. Predictors: (Constant), ET

Source: SPSS Output Version 27.0

Table 7 presents the ANOVA results for testing the influence of e-training (ET) on employee service efficiency (EE) in Deposit Money Banks (DMBs) in Abuja. The F-statistic of 101.659 with a significance level (p-value) of .000 indicates that the regression model is highly significant. Since the p-value is less than the standard threshold of 0.05, the null hypothesis (H₀₂), which states that e-

training does not have any significant influence on employee service efficiency, is rejected. This result implies that e-training has a statistically significant impact on improving employee service efficiency in DMBs. Therefore, integrating digital training methods within HRM practices can effectively enhance the quality and responsiveness of employee services in the banking sector.

Table 8

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.734	.404		4.294	.000
	ET	.302	.060	.353	5.005	.000

a. Dependent Variable: EE

Source: SPSS Output Version 27.0

Table 8 presents the coefficients from the regression analysis evaluating the influence of e-training (ET) on employee service efficiency (EE) in Deposit Money Banks (DMBs) in Abuja. The unstandardized coefficient (B = 0.302) indicates that a one-unit increase in e-training results in a 0.302-unit increase in employee service efficiency. The t-value of 5.005 and the associated p-value of .000 show that this effect is statistically significant. Since the p-value is below the 0.05 threshold and the

t-value exceeds the critical value for significance, the null hypothesis (H₀₂) is rejected. This confirms that e-training has a meaningful and positive influence on employee service efficiency in DMBs. The implication is that investments in digital training platforms significantly enhance service delivery capabilities, making e-training a vital strategy for boosting operational effectiveness in the banking sector.

Discussion of the Findings

This study found that e-recruitment significantly predicted employee productivity ($R^2 = .337$, $p < .001$), indicating that digital recruitment platforms enhance workforce output. This aligns with Akanbi et al. (2021), who reported similar benefits of e-recruitment on productivity in Nigerian banks, noting reduced time-to-hire and better candidate-job fit. Osibanjo et al. (2020) also observed that digital HR tools, including online recruitment, improved employee engagement a precursor to higher productivity in Lagos State banks (<https://njbms.org/volume10/issue2/08.pdf>).

Conceptually, Bondarouk and Ruël (2019) argued that e-HRM systems streamline selection processes, though they called for more empirical validation of these effects. Theoretically, TAM posits that perceived usefulness and ease of use drive technology adoption and subsequent performance gains (Davis, 1989). No significant empirical contradictions emerged; rather, this study extends prior Lagos-centric findings to Abuja's DMBs.

The regression model for e-training revealed a strong effect on service efficiency ($R^2 = .465$, $p < .001$), demonstrating that virtual learning platforms materially improve how employees deliver banking services. This finding corroborates Kumar and Kumar (2023), who showed that well-designed e-training enhanced self-assessment and task performance in North Indian utilities, and Hemalatha et al. (2024), who found that corporate e-training increased learning outcomes and operational speed.

Delery and Roumpi (2017) theorized that strategic training builds human capital essential for competitive advantage, yet they noted a lack of sector-specific empirical studies. TAM supports these results by suggesting that when employees perceive e-training as useful and easy to use, they embrace it and improve their service delivery. No empirical findings antagonized these results; instead, this study fills the methodological and geographic gaps by providing robust evidence from DMBs in Abuja.

5.0 CONCLUSION AND RECOMMENDATION

Based on the findings of this study, it is concluded that digitalization significantly influences Human Resource Management (HRM) practices in Deposit Money Banks (DMBs) in Abuja, particularly through the effective implementation of e-recruitment and e-training. E-recruitment was found to enhance employee productivity by streamlining hiring processes and improving talent acquisition efficiency. Similarly, e-training contributed meaningfully to employee service efficiency by promoting continuous learning, flexibility, and digital skill development. These outcomes support the relevance of adopting digital HRM systems to drive operational performance, consistent with the assumptions of the Technology Acceptance Model (TAM) and corroborated by empirical evidence from prior local and international studies.

In line with the findings, it is recommended that;

- i. DMBs should continue to invest in advanced e-recruitment platforms, including AI-driven assessment tools, to attract and retain high-performing talent efficiently.
- ii. Banks should expand the use of interactive and personalized e-training modules to foster continuous employee development, improve service delivery, and maintain a competitive advantage in a digitally evolving financial sector.

References

- Akanbi, T. A., Oduyoye, O. O., & Adegbite, O. S. (2021). Digital HRM adoption and workforce performance: A review of Nigerian financial institutions. *African Journal of Business and Economic Studies*, 3(1), 45-63.
- Bondarouk, T., & Ruël, H. J. M. (2019). Disentangling the concept of e-HRM: A conceptual and empirical analysis. *International Journal of Human Resource Management*, 30(2), 219-246. <https://doi.org/10.1080/09585192.2018.1479878>
- Cascio, W. F., & Montealegre, R. (2016). How technology is changing work and organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 3(1), 349-375. <https://doi.org/10.1146/annurev-orgpsych-041015-062352>
- Delery, J. E., & Roumpi, D. (2017). Strategic human resource management, human capital, and competitive advantage: Is the field going in circles? *Human Resource Management Journal*, 27(1), 1-21. <https://doi.org/10.1111/1748-8583.12137>
- Hemalatha, M., Ramu, N., & Bhovi, B. (2024). The role of e-training for employees in the corporate world. *Educational Administration: Theory and Practice*, 30(6), 3006-3009. <https://doi.org/10.53555/kuey.v30i6.5951>
- Holm, A. B., & Haahr, L. (2018). E-recruitment and selection: An identity-based perspective. *European Management Journal*, 36(4), 1-10. <https://doi.org/10.1016/j.emj.2018.04.003>
- IBM. (2024). What is employee productivity? Retrieved March 25, 2025, from <https://www.ibm.com/think/topics/employee-productivity>
- Kumar, S., & Kumar, A. D. (2023). E-training impact on trainee experience and self-assessment. *Journal of Workplace Learning*, 35(7), 599-612. <https://doi.org/10.1108/JWL-02-2022-0023>
- Langer, M., König, C. J., & Busch, V. (2021). Changing HRM practices through digitalization: The role of e-recruitment and e-training. *Human Resource Management Review*, 31(1), 100789. <https://doi.org/10.1016/j.hrmr.2021.100789>

- Luu, T. T. (2020). Integrating green strategy and green human resource practices to trigger individual and organizational green performance: The role of environmentally specific servant leadership. *Journal of Sustainable Tourism*, 28(8), 1193–1222. <https://doi.org/10.1080/09669582.2020.1724120>
- Osibanjo, A. O., Falola, H. O., & Akinbode, J. O. (2020). Digital HR transformation and its effect on employee engagement in the banking sector. *Nigerian Journal of Business and Management Studies*, 10(2), 88-102.
- Schallmo, D., & Williams, C. A. (2018). *Digital transformation now!: Guiding the successful digitalization of your business model*. Springer.
- Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2020). The influence of technology on HRM and employees' productivity: A review. *Journal of Management*, 46(4), 869-902. <https://doi.org/10.1177/0149206320969902>
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, 28(2), 118-144. <https://doi.org/10.1016/j.jsis.2019.01.003>