



Research Paper

Electronic Human Resource Management Practices: Implications on the Performance of Banks in Ondo State, Nigeria.

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ABSTRACT

In today's information technology based economy, the necessity for Electronic Human Resource Management (E-HRM) system has become vital in order to meet up with the human resource challenges of the 21st century. There is the need for Human Resource professionals to react fast to increasing competition for experts in the sector to advance in human resource technology. The study therefore examined the effect of electronic human resource management practices on the performance of selected banks in Ondo State, Nigeria. The population of the study consisted of 280 permanent employees of 16 selected money deposit banks in Ondo State, Nigeria, which were listed on the Nigerian Stock Exchange. A total of 280 copies of questionnaire were administered on the respondents from the 16 selected banks based on the population of staff in each bank; out of which 258, representing 92.14% were returned and analysed. The results of the multiple regression analysis revealed that: (i) there existed a significant relationship between factors influencing the adoption of E-HRM practices and performance of Employees in the selected banks in Ondo state, Nigeria ($R^2 = 0.787$, $F = (4, 275) = 253.585$, $P < 0.01$.), (ii) E-HRM practices significantly affected the performance of employees in the selected banks and (iii) E-HRM has no significant effect on the mode of service delivery in the selected banks. The study concluded that a significant positive relationship existed between factors influencing the adoption of E-HRM practices and performance of employees among the selected banks in Ondo state, Nigeria. It recommended that banks and other corporate world should adopt the use of e-recruitment, e-performance, e-communication, e-compensation and e-training in their human resource management practices in order to improve general human resource performance.

KEYWORDS: Electronic Human Resource Management; E-Recruitment; E-Performance; E-Communication; E-Compensation, E-Training

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I. INTRODUCTION

Electronic Human Resource Management (EHRM) is a set of Information Technology (IT) applications that encompasses all possible integration mechanisms and contents between human resource management (HRM) and information technology (IT) departments with the sole aim of creating value within and across organizations for targeted employees and management (Aysar & Haroun, 2015).

The application of information and communication technologies in human resource management services has become a significant phenomenon for an organization to attain a high level of competitive advantage (Stanton & Coovert, 2004). The need for EHRM in today's IT based economy can not be overemphasised. It is imperative that banks incorporate electronic human resources management (E-HRM) in their human resource processes and strategies in order to improve general human resource performance.

The introduction of technology based HRM to replace the initial paper based human resource systems came into limeline in the last decade due to the speedy development of the internet, which has enhanced the operation of electronic Human Resource Management. The internet has taken over majority of the functions of

human resource practices in an organization globally. Consequently, organizations have started migrating from paper based human resource management to electronic human resource management practices in order to minimize cost and improve efficiency (Sylvester, Banidele & Olayemi, 2015).

In order for banks to operate in a global, highly competitive environment and utilise technological processes to drive improved efficiency, it is imperative that the traditional human resource management (HRM) processes are replaced with technology based electronic human resource management (E-HRM). Human Resource professionals in the banking industry need to rise to meet the increasing competition for experts in mobile talents, change in the composition, attitudes of personnel, change in employee/employer relationship as well as swift advances in human resource technology.

Skilled human resource experts in technological know-how capabilities, who are flexible and ready to compete in the fast and ever changing global technological workplace needed to be incorporated into the banking sector of the Nigerian economy. This would give rise to a new kind of business that would be based on diverse systems which would bring together the contributions of independent experts in a socially workable way.

In today's Information Technology based economy, therefore, there is the need for banks to embrace the application of electronic human resource management practices in their operations. This is essential to meet up with the human resource challenges of the 21st century. This study therefore, examined the impact of the application of electronic human resource management practices on the performance of banks in Ondo State, Nigeria.

II. LITERATURE REVIEW

Electronic Human Resource Management

Kettley and Reilly (2003) defined electronic human resource management as the application of conventional, web and voice technologies to enhance the administration, transactions, process and performance of human resources. Electronic human resource management has also been defined as the administrative support of the human resource function in organizations by using internet technology (Voermans & Veldhoven (2007). Strohmeier (2007) sees electronic human resources management as the planning, implementation and application of data technology for both the networking and supporting of a minimum of two individuals in their collective performance of human resource activities.

Electronic human resource management has also been viewed as an umbrella term that covers all likely integrating mechanisms between human resource management and technological know-how which aim at creating value within and across organizations for targeted employees and management (Bondarouk, Ruël & Van der Heijden 2009).

Marler and Fisher (2010) sees electronic human resource management as the process of implementing human resource management strategies, policies and practices in organizations through the conscious use of channels supported by web technology. In general, electronic human resource management refers to an internet based tool used to systematize and sustain human resource processes.

E- Recruitment and E-Selection

Galanaki (2002) defined E-recruitment as the publication of vacancies on a company's website or an online seller of employment website which permits job seekers to send their curriculum vitae electronically through e-mails or any other means of electronic form. This process includes an active internet search of CVs locations. It is a potential way of seeking applicants online.

The advantages of online recruitment are that it saves time and costs while searching the pool of applicants for quality of responses. The application of technology to recruitment can also be used to improve candidates' screening and communication.

E- Performance

Human resources performance can be evaluated online using the corporate network. The implication of this is that the directors and staff members provide performance information to human resources department electronically. The advantage of this practice is that it reduces the use of paper works and hence, minimizes time and cost of conducting recruitments. It also assists managers to instantly compute the results of employees' performance appraisal, employees' performance goals, results and performance planning on their personal human resource pages (Ball, 2001).

E- Communication

This is the process of sending information through electronic mails. E-communication is a data communication through wire and wireless devices or systems. It includes e-mails, text messages, faxes and social networking. The advantage of this e-communication is that it offers secure conversations anytime, anywhere and is practically free.

E-Compensations

E-compensation involves the use of web-based technology to plan employees; compensations (Bondarouk, Schilling & Ruel, 2016). E-compensation allows employees to submit their preferences in terms of chosen interest electronically. Bondarouk, *et al* (2016) opined that compensation planning ensures that managers administer salary increment equally across the firm while still operating within the budget guidelines. The employment of web and technology for compensation planning is referred to as E-Compensation management. In today's business, the application of e-compensation is very important because it encourages the performance of employees, recongnizes efficiency and effectiveness, strengthens organizational culture and enhances equitable and objective compensation (Townsend & Bennett, 2003).

E-Training

This refers to the use of the internet in training and development of employees. It is a vital aspect of electronic human resource management. It employs the internet to access training and e-learning activities in the pure areas and career management (Sambrook, 2003). The employment of e-forms on an organization's website, is limited to collecting information for training needs assessment, which resulted in many advantages such as reduction in paperwork, reduction in the cost of administration, time savings and increased response rate (Strohmeier, 2007).

Electronic learning includes any learning activities with the support of information and communication technology. This could be either through local intranet (delivered through a network of linked computers), or through accessing the internet and the world wide web (ww) links to diverse sites and resources, as well as download video clips communications systems (Sambrook, 2003).

Theoretical Framework

This study was premised on the universalistic theory which was proposed by Pfeffer (1994). The theory emphasised that some Human Resource Management practices are appropriate and applicable to all firms irrespective of its size, organizational setting, industry or business strategy. The theory posited that certain human resource practices have a direct and positive impact on organizational performance irrespective of the size, setting and industry or business strategy.

In other words, the theory argues that some set of human resource management are always superior to others and firms ought to embrace these practices to improve their performance. Best practices are appropriate for all organizations regardless of size, industry, or business strategy. According to the theory, human resource management practices assist a firm develop its human resources cost benefits, encourage operating efficiency, boost innovation and enhance organizational performance (Marler, 2009).

Empirical Review

Iyiola and Osibanjo (2014) examined the consequences of e-human resource management (with emphasis on e-recruitment, e-performance management; e-appraisal and e-training) on organizational performance using Guaranty Trust Bank as a case study. 232 copies of a well structured questionnaire were distributed on the respondents. The result found a strong positive relationship amongst E-HRM variables and organizational performance.

Similarly, the study by Masum, Kabir and Chowdhury (2015) investigated the factors that determined the adoption of E-HRM among firms in Bangladesh. The study found that top level management backing, the individual attributes of employees, and system complication, IT set-up, and industry pressure were the most important factors that influenced the adoption of E-HRM in large scale private sector organizations.

Furthermore, Ayser & Haroun (2015) identified the impact of electronic human resource management practices (e-selection, e-recruitment, e-training, e-communications e-performance appraisal, and e-compensation) on operational in the Jordanian telecommunications industry. The study population was 3 selected companies with a sample size of 178 employees. The study also made use of stratified random sampling and descriptive analytical methods. Data analysis was conducted using SPSS statistical software. Findings of the study revealed that there was a positive significant effect of EHRM on operational performance.

In a related development, Yas and Mona (2015) evaluated the factors that affect the intention and attitude of using e-recruitment. The research instrument employed was a questionnaire which was structured in order to study the intention of a sample size of 356 applicants who made use of e-recruitment portals. The results of the study showed that the ease and usefulness of e-recruitment significantly correlated with attitude while attitude on the other hand, correlated with the intention to use.

Hosain (2017) examined the relationship between e-communication, e-performance management, e-compensation and benefits, e-application tracking, e-personal profile, e-selection, e-leave and e-learning and

organizational performance. The research made use of a sample size of 299 middle and top level managers selected from 8 service sectors of Bangladesh. The made use of convenience sampling technique and a well structured questionnaire was used to obtain responses from the respondents. The results of the study revealed that a positive significant relationship exists between e-communication, e-performance management, e-compensation and benefits, e-application tracking, e-personal profile, e-selection, e-leave and e-learning with organizational performance. However, classical and virtual learning, e-advertising, e-grievance tracking, e-recruitment and green HRM exhibited a negative relationship with organizational performance.

Finally, Sylvester, *et al* (2015) identified the challenges and prospects of implementing Electronic Human Resource Management (E-HRM) system in developing countries. The study concluded that the drivers of investment in information technology include the potentials of gaining quality and efficiency. The barriers to such gains are the complexity and costs of implementing IT facilities which usually leads to cultural changes and substantial work process.

Research Gap

In today’s Information Technology based economy, there is the need for banks to embrace the application of electronic human resource management practices in their operations. Studies have been carried out to investigate the effect of EHRM on organizational performance in service and telecommunication sectors of the economy. However, no study has been done to examine the effect of electronic human resource management practices among money deposit banks in Ondo State, Nigeria. The present study addressed this gap in literature.

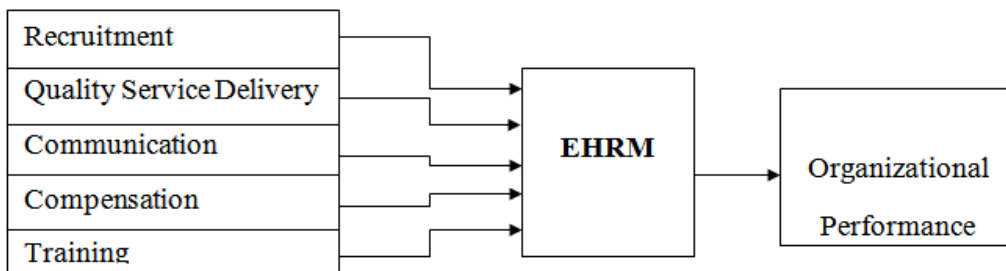


FIGURE 1: Input – Output Relationship of EHRM

Source: Researcher’s Conceptualization (2020)

III. METHODOLOGY

The population of this study consisted of 280 permanent employees of 16 selected commercial banks that are listed on the Nigerian Stock Exchange with at least a branch operating in Akure metropolis, Ondo State, Nigeria. A total of 280 copies of questionnaire were designed and administered on the respondents from the 16 selected banks in the proportion of the population in each bank. Out of this, only 258, representing 92.14% were returned and analysed.

The questionnaire was designed in such a way as to obtain information relating to E- Human Resource Management practices and the performance of the selected banks in Ondo State Nigeria. The questionnaire consisted of four sections (A, B, C and D). Section A addressed questions on the socio-demographic characteristics of the respondents. Section B was made up of questions pertaining to the E-HRM practices and performance of the selected banks using a 5-point Likert scale of agreement. Section C consisted of questions based on the factors that determine the adoption of E-HRM practices among the selected banks in Ondo State while section D dealt with questions relating to the effect and extent of adoption of E-HRM in the selected banks.

Descriptive statistics in the form of frequencies, percentages, mean, and standard deviation were employed to present the tables for data analysis while inferential statistics in the form of multiple regression model and correlation coefficients were used to test the hypotheses in order to establish the relationship between EHRM practices and the performance of the selected banks in Akure, Ondo State, Nigeria.

Models for the study were estimated using regression analysis. In a general term, let E-HRM and Employee performance of the bank be denoted by:

- EMP=f(EHRM)..... 3.1
- EMP = F (E-Recruitment, E-Performance, E-Communication, E-Compensation, E-Training)
- EMP = $\alpha_0 + \beta_1$ TMS + β_2 ITN + β_3 OP + β_4 COM + ϵ 3.2
- EMP= $\alpha_0 + \beta_1$ ER + β_2 EP+ β_3 EC+ β_4 ECP+ β_5 ET + ϵ 3.3
- SD = $\alpha_0 + \beta_1$ ER + β_2 EP+ β_3 EC+ β_4 ECP+ β_5 ET + ϵ 3.4

Where:

EMP = Employee Performance

α = Constant

β_1, \dots, β_n = Co-efficient of the independent variables (ER,EP,EC,ECP,ET)

Where,

ER = E-Recruitment

EP= E-performance

EC= E-Communication

ECP= E- compensation

ET = E Training

TMS = Top management awareness or support

ITN = IT infrastructure

OP = Overall operational practices

COM = Compatibility

Analysis and Discussion of Findings

Table 1: Multiple Regression Analysis for the Relationship between Factors Influencing the Adoption of E-HRM Practices and Employees' Performance

Analysis of Variance					
	Sum of Squares	Df	Mean Square	F	Significance
Regression	543.391	4	135.848	253.585	0.000 ^b
Residual	147.320	275	0.536		
Total	690.711	279			
Coefficients					
Independent variables	Beta	T	Significance	Tolerance	VIF
TMS	0.334	3.994	0.000	0.111	9.019
ITN	0.339	6.030	0.000	0.245	4.077
OP	0.297	4.015	0.000	0.141	7.069
COM	-0.054	-1.157	0.248	0.359	2.782
Correlational Statistics					
Dependent variable	Multiple R	R ²	Adjusted R ²	S.E of Estimate	Durbin Watson
EMP	0.887 ^a	0.787	0.784	0.73192	0.217

Source: Researcher's Computation, 2020

The analysis in Table 1 shows a multiple linear regression to establish the relationship between all the influencing factors and banks' performance. Banks' performance was significantly predicted at $R^2 = 0.787$, $F = (4, 275) = 253.585$, $P < 0.01$. The model explains 78.7% of the variance in employee performance. The multiple coefficient of variation (R) of 0.887 depicted a strong and positive relationship between the influencing factors and employees' performance.

Furthermore, the F ratio of 253.585 was statistically significant at 0.01. The beta weights (β) showed that availability of IT infrastructure (ITN) has the strongest influence of 33.9%, followed by Top management awareness (TMS) with 33.4% influence, and overall operational practices (OP) with 29.7% influence. The least contribution came from compatibility with existing practices (COM) with negative influence of -0.054%. The Durbin Watson statistic was used in discovering an evidence of serial correlation. A Durbin Watson value of less than 1.5 is an indication of serial correlation. A value greater than 1 or less than 2 was recommended (Field, 2009). The multiple linear regression assumptions for the model were checked for autocorrelation and multicollinearity. The result of the Durbin Watson (DW) was 0.217 indicating autocorrelation between the residuals from the regression model.

The multicollinearity of the model was further verified by Tolerance (Tol.) which showed satisfactory values for all variables (all greater than 0.10) and outcome of the Variance Inflation Factor (VIF) which was less than 10 for all variables. Thus, it was concluded that, all the stated influencing factors significantly affected banks' performance except "compatible with existing practices". However, this negative effect does not count on the aggregate.

Table 2: Multiple Regression Analysis for the Effects of E-Recruitment, E-Performance, E-Communication, E-Compensation and E-Training on Performance

Analysis of Variance					
	Sum of Squares	Df	Mean Square	F	Significance
Regression	637.941	5	127.588	662.487	0.000 ^b
Residual	52.770	274	0.193		
Total	690.711	279			

Coefficients					
Independent variables	Beta	T	Significance	Tolerance	VIF
ER	-0.143	-3.492	0.001	0.166	6.040
EP	0.521	10.727	0.000	0.118	8.474
EC	-0.423	-4.855	0.000	0.037	27.217
ECP	0.774	13.336	0.000	0.083	12.085
ET	0.219	3.000	0.003	0.052	19.091
Correlational Statistics					
Dependent variable	Multiple R	R ²	Adjusted R ²	S.E of Estimate	Durbin Watson
EMP	0.961 ^a	0.924	0.922	0.43885	0.324

Source: Researcher’s Computation, 2020

The analysis in Table 2 revealed a multiple linear regression of the relationships between the selected independent variables and banks’ performance. The performance was significantly predicted at $R^2 = 0.924$, $F = (5, 274) = 662.487$, $P < 0.01$. The model explained 92.4% variation in employee’s performance. The multiple linear regression assumptions for the model were checked for multicollinearity and autocorrelation. The result of the Durbin Watson (DW) (0.3.24) found that there was an autocorrelation between the residuals from the regression model. The multicollinearity of the model was verified by Tolerance (Tol.) which showed satisfactory values for e-recruitment (0.166), e-performance (0.118); all values were greater than 0.10 except e-communication (0.037), E-compensation (0.083), and e-training (0.052) and outcome of the Variance Inflation Factor (VIF) which was less than 10 for e-recruitment and e-performance while all other variables are far higher than 10.

The multiple coefficient of variation (R) of 0.961 found a positive relationship between the selected independent variables and employees’ performance. Further, the beta weights (β), showed that e-recruitment (ER) and e-communication (EC) have no significant effect on employee’s performance of banks in Ondo State. E-performance (EP) has a positive effect (52.1%) on employee’s performance, and e-compensation (ECP) has the highest effect (77.4%), while e-training (ET) has the least effect (21.9%). Evidently, on the aggregate, the positive coefficients outweighed the negatives in both e-recruitment and e communication. Consequently, it was concluded that there was a significant effect of E-HRM practices on the performance of banks in Ondo state, Nigeria.

Table 3: Multiple Regression Model for the Effect of E-HRM Practices on Service Delivery

Analysis of Variance					
	Sum of Squares	Df	Mean Square	F	Significance
Regression	1012.132	5	202.426	1013.774	0.000 ^b
Residual	54.711	274	0.200		
Total	1066.843	279			
Coefficients					
Independent variables	Beta	T	Significance	Tolerance	VIF
ER	-0.182	-5.425	0.000	0.166	6.040
EP	0.296	7.439	0.000	0.118	8.474
EC	-0.175	-2.455	0.015	0.037	27.217
ECP	1.114	23.429	0.000	0.083	12.085
ET	-0.174	-2.911	0.004	0.052	19.091
Correlational Statistics					
Dependent variable	Multiple R	R ²	Adjusted R ²	S.E of Estimate	Durbin Watson
SD	0.974 ^a	0.949	0.948	0.44685	0.304

Source: Researcher’s Computation, 2020

The factors considered in Table 3 were e-recruitment, e-performance, e-communication, e-compensation, and e-training while the dependent variable was the efficiency of the bank services. The service delivery was significantly predicted at $R^2 = 0.949$, $F = (5, 274) = 1013.774$, $P < 0.01$. The model explains 94.9% variation in service delivery of banks in Ondo State.

The multiple coefficient of variation (R) of 0.974 depicted a very strong relationship between E-HRM and service. In addition, the F ratio of 1013.774 was statistically significant at 0.01 levels. However, the beta weights (β) showed that E-Recruitment (ER), E-Communication (EC), and E-Training (ET) have a negative significant effect on service delivery while E-performance (EP) and E-compensation (ECP) have a strong and positive significant effect on E-HRM.

Furthermore, the coefficients of the regression for E-HRM practices were not a good predictor of service delivery of banks in Ondo State. Therefore, based on these results (that is, three out of five predictors) it

was concluded that there was no significant relationship between E-HRM practices and service delivery among the selected banks in Ondo state, Nigeria.

IV. CONCLUSION

Findings from this study have provided insight into the E-HRM practices among banks in Ondo State, Nigeria. Specifically, the study investigated the extent of the effect of e-recruitment, e-performance, e-compensation, e-communication and e-training on the adoption of E-HRM practices among selected banks in Ondo State. The outcome of the data analysed revealed that all the identified factors played a significant role in influencing the performance of the selected banks.

The study therefore, concluded that there existed a positive significant relationship between factors influencing the adoption of E-HRM practices and the performance of banks in Ondo state, Nigeria. The study also concluded that E-HRM practices have no statistical significant effect on service delivery of the banks in Ondo state, Nigeria.

V. RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations are germane: (i). That banks in Ondo State and other corporate world should adopt the use of e-recruitment, e-performance, e-communication and e-training in their human resource management practices so as to improve general human resource performance.

(ii). That the negative Beta (β) of electronic training, recruitment, and communication in relation to service delivery suggests that too much emphasis was placed on the adoption of e-learning without considering the existing structure in relation to human-nature. Thus, change should be gradual and not spontaneous.

(iii). That the positive relationship between factors influencing the adoption of E-HRM and performance re-emphasized the importance of E-HRM in the 21st century corporate world. E-HRM should be integrated into all departments of the banks in Ondo State, Nigeria in order to remain competitive and relevant in the present dispensation.

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