IJIRAS/AAUA
https://ijiras.org

E-Recruitment and Organizational Performance in the Nigerian   Brewery Industry

*Olufemi EPEBINU[1], Modupe AJAYI[2], Adeyemi ADEPOJU[3], & Olalekan JESULEYE[4]

[1]Department of Business Administration, Adekunle Ajasin University, Akungba-Akoko Nigeria.
[2,3,4]Department of Project Management, Federal University of Technology, Akure Nigeria.
***Corresponding author:** femiepebinu@gmail.com

Abstract

This study examined the effect of e-recruitment practices on organizational performance among brewery firms in South-western region of Nigeria. The multistage sampling was engaged to arrive at 332 employees using Slovin (1960) sample size determination formulae. Questionnaire was used as research instrument. Partial Least Squares- Structural Equation Modelling (PLS-SEM) was deployed as data analysis tool. The findings revealed that e-recruitment practice is significantly positive on organizational performance within the Nigerian Brewery industry. The policy implication is that the Brewery firms should uphold the e-recruitment indicators and sustain deployment of the four organizational performance measurement indicators used. The firms are to invest more on e-recruitment strategies as a tool to attract and track the right quality employees from the pool of potential ones via the web.

Keywords: E-Recruitment, Organizational Performance, Partial Least Squares-Structural Equation Modelling
JEL-Classification: M1

1.   Introduction

Human Resource Management *(HRM)* has been of significant development in the field of management as one cannot under estimate human beings as resources to organizations. Employees form the human resource component of an organization's asset base and their engagement has a lot to do with the personality and their combination to the organization's performance. The process of engaging the human resources into an organization is referred to as recruitment. The process at which employees are recruited to the organisation has changed drastically in recent years. HRM practices, especially recruitment can now be delivered, not only by specialized human resource professionals, but also increasingly by line managers and digital technology experts. The focus of this work is to assess the delivery processes, which is known as e-recruitment.

Corporate organizations are now deploying electronic recruitment but there is the dearth of empirical evidences to know the effect on organizations in developing countries. Meanwhile, the brewery sector is a lucrative segment of the economy in both developed and developing countries. The sector is huge globally, with revenue potential worth 530billion US dollar in 2016 and projected to grow to approximately 750billion US dollar by 2022. ABInBev and Heineken are presently the top world players with a huge production capacity of 561.4million hectoliters and 241.4million hectoliters respectively in year 2020. The Nigerian

International Journal of Innovative Research in Accounting and Sustainability
ISSN: 2736-1381 (Print), ISSN 2736-1500 (Online)
Vol. 7, No. 2, 2022

IJIRAS/AAUA
https://ijiras.org

brewery sector is next to the South African, which is the largest in Africa, (Shobayo & Elumah, 2018). Beer production in Nigeria grew from 6.8million hectoliters in 2004 to 15.446million hectoliters annually in 2019 and expected to grow beyond this, after the recent production capacity of International Breweries Plc. (Iheagwam & Babatunde, 2021).The industry is dominated by three global players, ABInBev, Heineken and Diageo, through their subsidiaries: International Breweries Plc, Nigerian Breweries Plc and Guinness Nigeria Plc. Nigerian Breweries Plc, dominate the industry with a market share by revenue of 54.3 percent, International Breweries 22.3percent and Guinness 22.1percent.

The rapid growth from this sector necessitates the quest to source for right quality talents, to respond to their human resource challenges. Several studies have attempted to examine e-recruitment as combined component with others within e-HRM but have not considered e-recruitment as an independent component to know its effect on organizational performance. The few attempted studies have been carried out outside Nigeria (Ruel, *et al.,* 2004; Parry, 2011; Fred & Kinange, 2018). In other to establish a nuance, this study helps to address the gaps in previous researches and contribute to dearth of literature and empirical studies on e-recruitment as a stand-alone component. The main objective is to determine the effect of e-recruitment on organizational performance in the Nigerian Brewery Industry with a formulated, Null Hypothesis $H0_1$ stated as; e-recruitment has no significant effect on organizational performance.

2.   Literature Review

2.1   E-Recruitment

E-recruitment is the digitalization of the recruitment exercises within the organization and is a component of e-HRM (Ruel, *et al.,* 2004; Bondarouk & Ruel, 2009). E-recruitment has been described as using digital technology to attract potential employees to an organisation and hire them as employees within the organization (Ghazzawi & Accouweh, 2014; Fred & Kinange, 2018). Portions of researches within the electronic HR field have taken e-recruitment as template that firms deploy using websites or web portals for the tracking of right and quality talents to apply for jobs within a specified organization.

Lakshmi (2017) further explains e-recruitment to be concept that specifies the usage of technological knowledge and web-based tools that is deployed to examine and choose the best candidates, from many potential ones for the job within an organization. This aligns with, Armstrong (2009), who opined that, e-recruitment are being used to advertise or post vacancies, provide information about jobs and the organization.

2.2   Organizational Performance

Organisational performance (OP) is the combined task and output of all departments in a firm within a given period of time and is a dependent output variable of interest for reseachers (Derinney, *et al.,* 2009; Lee &Huang, 2012; Ahmed &Shafig, 2014; Singh, *et al.,* 2016). It has further been described as asset of both financial and non-financial indicators in which organizational objectives are being accomplished (Kaplan &Norton, 1996).

Kurien and Qureshi (2011) provided some indicators for organizational performance measurement which are established from identified variables in literature. They include, Balanced Score Card (BSC), Performance Prism and Performance Pyramid. Balanced Score Card (BSC) is globally accepted in research for organizational performance measurement (Kaplan & Norton, 1996; Ibrahim & Lloyd, 2011; Hofmann, 2014). This indicator reveals a comprehensive business process by using balanced measures from four different

International Journal of Innovative Research in Accounting and Sustainability
ISSN: 2736-1381 (Print), ISSN 2736-1500 (Online)
Vol. 7, No. 2, 2022

IJIRAS/AAUA
https://ijiras.org

perspectives, which are, financial, customers', internal and learning perspectives.

The financial perspective represents the long- term goal of the organizations, to provide superior returns on investments made in the firm. The financial measures, have been the traditional method of measuring organizational success which involves elements as Return on Investment (ROI) (Kaplan & Norton, 1996; Hussain &Farooq, 2011). The customers' perspective represents measures that depends on the kind of customers desired and the value that the organization provides to them (Nalwoga & Dijk, 2016). The internal perspective according to (Kaplan & Norton, 1996) reflects the concentration on elements like, product innovation and development. The learning perspective is the backbone to a successful scorecard because it involves employees' skill and capacity to gain satisfaction within the firm (Kaplan & Norton, 1996)

2.3 Theoretical Review

The theory underpinning is the Technological Acceptance Model *(TAM)*. The theory was proposed in 1985 by Fred Davis in his doctoral thesis in management. System use, is a reaction that can be explained or predicted by user motivation, which in turn is directly influenced by an external stimulus consisting of the actual systems capabilities. It has been described as an influential theory used in research to explain the motivation behind user's technology acceptance or intension for use (Venkatesh & Davis, 2000). TAM explains that perceived usefulness *(PU)* and perceived ease of use *(PEOU)* are important variables that determine the user's attitude toward his or her intention to use information system *(IS)*. PU is explained as the extent to which a person believes that using a particular system would enhance his or her job performance. Perceived usefulness has been subjected to wide use among researchers in investigating technology acceptance among individuals and employees within organizations. PEOU is defined as the extent to which a person believes that using a particular system would be free of effort (Venkatesh & Davies, 2000). Accordingly, these two behavioural beliefs lead to individual behaviour intention (BI) and actual behaviour. Davis, (1989) found that PU was the strongest predictor of an individual's intention to use technology. In literature, many researches have established a strong and positive link existing among perceived ease of use, attitude and e-recruitment use intention. TAM is anchored on organization's quest for technology, which is an intention and a motivating factor underlying the acceptance to leverage on the capacity of using technology in enhancing the recruitment processes within the organization. TAM is represented in Figure1
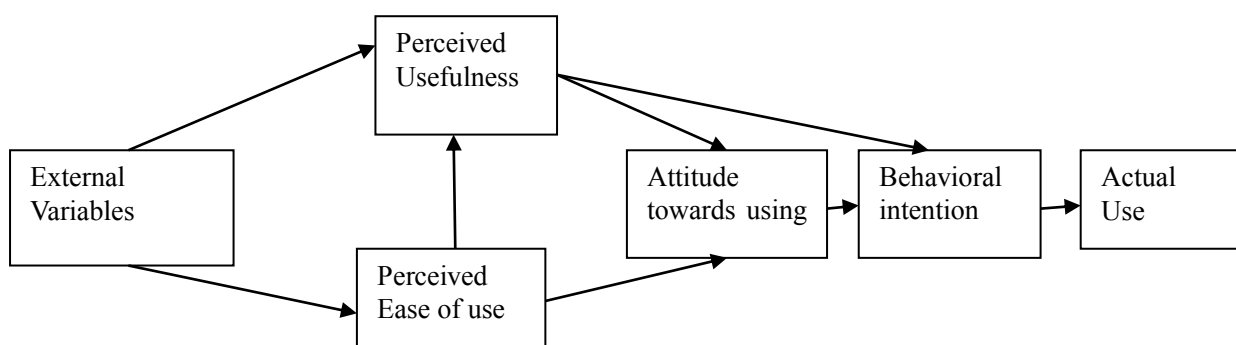

Figure 1: Technology Acceptance Model (TAM)
Source: Venkatesh & Davis (2000). A theoretical extension of the technology acceptance model: four longitudinal field studies. *Management Science 46*(2), 186-204

IJIRAS/AAUA
https://ijiras.org

2.4 Empirical Review

Rakholiya & Gupta (2013) studied the applicant's perception toward the usefulness of e-recruitment websites, processing time and cost of e-recruitment, specific factors while selecting a job via e-recruitment. The study's methodology was descriptive and empirical while the design was qualitative and quantitative, sample size for the research was taken to be 100, and convenience sampling method was used. The study focused on e-recruitment on the individual's perception and satisfaction but has no direct study on organizational performance.

Malik & Razaullah (2013) examined the application of e-recruitment practices as a tool for workforce. The research found how e-recruitment practices are useful in workforce attraction. The study found that there is a relationship between attraction of the employees and e-recruitment practices. This proved the positive impact of e-recruitment on hiring process of employees. Chauhan & Chaturvedi (2013) focused on e-recruitment process and its significance in organization's effectiveness. Sources of data were internet portals, websites, research articles, newspapers, magazine and journals. The result showed a positive significance of e-recruitment on the effectiveness of organizations. Primary source of data and questionnaire as research instrument were not deplored to know whether it has any positive significance effect.

Shahila and Vijaylakshmi (2013) compared the traditional recruitment process with online recruitment (e-recruitment) and also discussed the disadvantages and advantages of e-recruitment to the organization. The research focused on online recruitment process in the company and potentials of e-recruitment. The outcome reflected that adoption of e-recruitment was a right technology. It was about the employment system being capable to attract the right candidate for the right job selection criteria but the direct empirical effect on organizational performance was not examined.

Alabi, *et al.* (2015) conducted research on organizational performance in Nigeria. Result revealed significant influence and went further to reveal that e-recruitment enhances costs reduction on advertising which predicts organizational performance but did not determine the empirical impact through a primary sourced data using questionnaire as research instrument.

3. Methodology

The survey research design was adopted in this study. The population comprised 1,941 skilled employees of Nigerian Breweries Plc. and International Breweries Plc. These firms were purposively selected for this study because they are the two leading quoted brewery firms within the South-west region of Nigeria. They represent the first Brewery firm in Nigeria and the first indigenous brewery firm. The sample size is 332 employees selected using the Slovin, (1960) formula. Data were collected from primary source using questionnaire as an instrument for collection. Organisational performance was measured using BSC performance indicator in four different perspectives (financial, customers, internal and learning perspectives). While e-recruitment was proxied with (applicant tracking and timely access). Data collected were analyzed using both descriptive and inferential statistics. The descriptive was percentages used on the demographic data, while the inferential statistics was Partial Least Squares Structural Equation Modelling (PLS-SEM), used to test the hypothesis.

International Journal of Innovative Research in Accounting and Sustainability
ISSN: 2736-1381 (Print), ISSN 2736-1500 (Online)
Vol. 7, No. 2, 2022

IJIRAS/AAUA
https://ijiras.org

4.   Data Analysis and Discussion of findings

4.1   Socio-demographic information of respondents

The information gathered revealed that 58.0% (164) and 42.0% (119) of respondents were males and females respectively. The result further showed that 4.9% (14) were below 20years, while 39.6% (112) and 41.0% (116) were 20-29 years and 30-39 years respectively. Moreover, 11.0% (31) and 3.5 (10) were 40-49 and 50-above years respectively. These imply 30-39 years were more, while employees above 50years represent 3.5% of the total respondents. The indication of this is that, about 81% (39.6% and 41.0%) are between the working class and youthful age. 33.2% (94) of the employees were single, followed by 65.4% (185) married, 1.1% (3) were divorced, and 4% (1) separated. 7.1% (20) of the employees had WASSCE/GCE as their highest level of education, followed by 16.3% (46) with NCE/OND, 46.6% (132) had HND/BSC, while, 30% (85) had completed their Post Graduate Degree. The results shows that most of the respondnets have first degree and postgraduate degree respectively.

Furthermore, the result showed that 54.8% (155) have been working between 1-5years. 29.3% (83) and 9.9% (28) have been between 6-10 and 11-15 years respectively. While 2.8% (8) and 3.2% (9) had worked in the selected firms between 16-20years and 21years and above respectively. The highest population, which was 54.8% had worked within the selected firms in the last five years.

4.2   Reliability and Validity Tests

To evaluate the PLS-SEM measurement model, there are four stages according to (Hair, Hult, Ringle & Sarstedt, 2017). Stage one is to determine the indicator loadings. Loadings above 0.70 indicates that the constructs explain more than 50% of the indicator's variance, demonstrating that the indicator exhibits a satisfactory degree of reliability. Stage two is the assessment of the internal consistency reliability (Cronbach's Alpha and rho_A), Stage three is the convergent validity (Average Variance Extracted (AVE) and Composite Reliability (CR). Stage four is the discriminant validity. (fornell-Larcker Criterior and Heterotrait-monotrait (HTMT)

In Table 1, the internal consistency is shown. The Cronbach's alpha (CA) ranged from 0.773 to 0.0857, rho_A ranged from 0.784 to 0.864 and Composite reliability ranged from 0.836 to 0.906. All the values exceed the minimum standard level of 0.70. Thus, internal consistency reliability was achieved. The convergent validity is the extent to which the construct converges to explain the variance of its items. The metric used to determine a construct's convergent validity is the average variance extracted (AVE) for all items on each construct. An acceptable AVE is 0.50, indicating at least 50 percent of the variance of its items. From Table 1 and Figure 1, the loadings were all beyond the standard value of 0.7. This implies that the latent variables on average explains more than 50% of the variance in the measured variable.

Discriminant validity was assessed using Fornell-Larcker criterion and Heterotrait-monotrait (HTMT) criterion. The Fornell-Larcker is where the square root of AVE of each of the latent variable is greater than its correlation with another latent variable. This is shown in Table 2. It shows that the square root of AVE of each of the variable is greater than its correlation with other variables.

The HTMT criterion according to (Henseler, Ringle & Sarstedt, 2015), is with a threshold value of 0.90. The result in Table 3 shows that the values are all below 0.90.

IJIRAS/AAUA
https://ijiras.org

Table 1. Results of Internal Consistency and Convergent Validity for Effect of e-Recruitment on Organizational Performance

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
bER	0.757	0.794	0.836	0.512
cCS	0.857	0.864	0.891	0.542
cES	0.778	0.780	0.849	0.530
cFP	0.844	0.845	0.906	0.763
cPI	0.773	0.784	0.846	0.526

Source: Authors' computation (2021)

Table 2. Fornell-Larcker Criterion Test for e-Recruitment

	bER	Ccs	cES	cFP	cOGP	cPI
bER	**0.716**					
cCS	0.474	**0.736**				
cES	0.477	0.533	**0.728**			
cFP	0.419	0.345	0.413	**0.874**		
cOGP	0.595	0.852	0.771	0.636	**0.571**	
cPI	0.417	0.450	0.356	0.357	0.698	**0.725**

Source: Authors' computation (2021)

Table 3. HTMT Criterion test for e-recruitment

	bER	cCS	cES	cFP	cPI
bER					
cCS	0.581				
cES	0.602	0.652			
cFP	0.507	0.406	0.507		
cPI	0.523	0.543	0.455	0.447	0.861

Source: Authors' computation (2021)

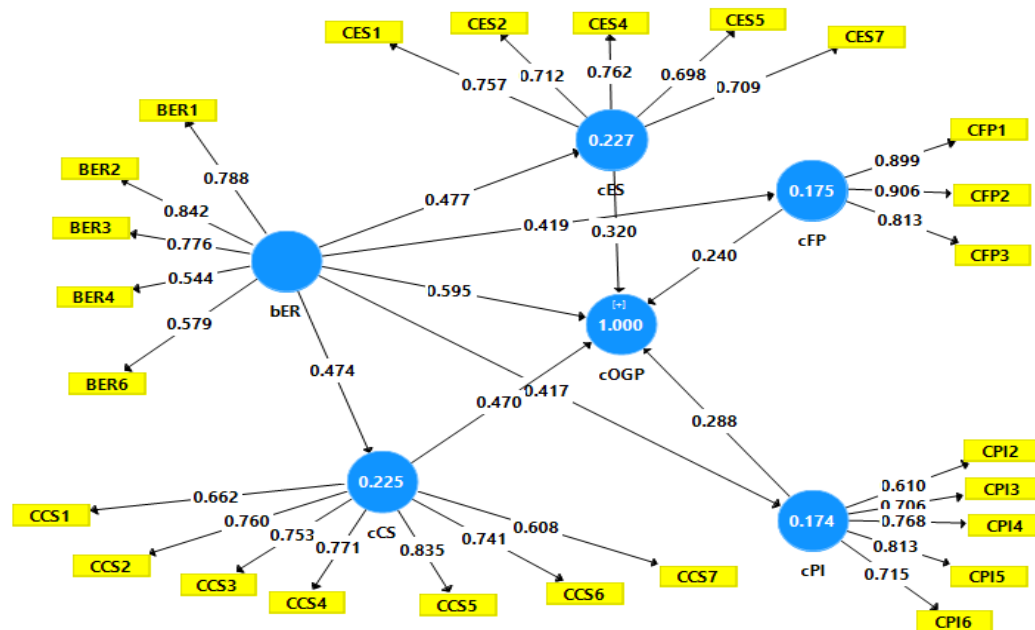IJIRAS/AAUA
https://ijiras.org

Figure 1: Measurement model for e-Recruitment.

Source: Authors' computation (2021)

4.3   Structural Model Assessment

The first step is to check for collinearity issues on the constructs and then on the predictive capabilities, which are, Coefficient of determination (R^2) and the path coefficients. The collinearity was done by examining the VIF values of all the predictor construct which must be below 5 (Hair *et al*, 2017). Table 4 shows the collinearity. The R^2 value, which measures the overall effects size and variance explained in the endogenous construct (dependent variable) by the exogenous construct (independent variable) was examined. Table 6 and figure 2, shows that that the R^2 value is 0.360 for organizational performance (OP) endogenous latent construct. This indicates that the independent construct explains 36% of the variance in OP, meaning that, 36% of the change (variation) in organizational performance was due to the e-Recruitment exercise that took place in the organization. Researchers can also assess how the removal of a certain predictor construct affects an endogenous construct's R^2 value. This metric is the f^2 effect size. Tables 5 and 6 shows the f^2 value of 0.562, which depicts a strong effect.

International Journal of Innovative Research in Accounting and Sustainability
ISSN: 2736-1381 (Print), ISSN 2736-1500 (Online)
Vol. 7, No. 2, 2022

IJIRAS/AAUA
https://ijiras.org

Table 4: Variance Inflation Factor (VIF) For e-Recruitment and Organizational Performance

Outer VIF Values	
	VIF
BER1	1.929
BER2	2.092
BER3	1.549
BER4	1.326
BER6	1.335
cCS	1.586
cES	1.535
cFP	1.292
cPI	1.342

Authors' Computation (2021)

Table 5: Structural Path Coefficient Analysis for e-Recruitment and Oganisational Performance

Hypothesised Path	Path coefficient	t-Value	p-Value	Bias	2.50%	97.5%	f^2
bER -> cOGP	0.600	14.140	0.000	0.008	0.523	0.688	0.562

Authors' computation (2021)

4.4 E-recruitment and Organizational Performance

Findings revealed that e-Recruitment has a significant effect on Organizational Performance (OP) from the model as shown in Table 6, $\beta = 0.600$, t = 14.140, $f^2 = 0.562$, $R^2 = 0.360$ and P < 0.05. The R-square of 0.360 indicates 36% variation in Organizational Performance is explained by e-Recruitment process. A unit increase in e-Recruitment indicators, makes Organizational Performance (OP) increase by 0.360. The null hypothesis (H_{01}) is hereby rejected.

Table 6: Testing of Hypothesis One Results

Null Hypothesis	Beta	Standard Deviation (STDEV)	R Square	F Square	T Statistic	P Value	Decision
H_{01}	0.600	0.042	0.360	0.562	14.140	0.000	Rejected

Authors' computation (2021)

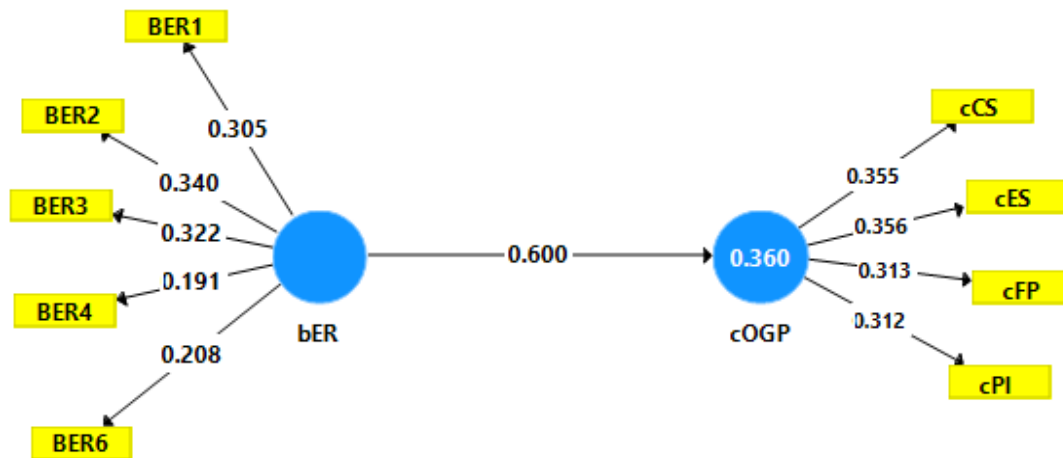IJIRAS/AAUA
https://ijiras.org

Figure 2: Path Coefficient of e-Recruitment on Organizational Performance

Authors' computation (2021)

4.5   Discussion of Findings

In overall, this study found that e-Recruitment process has a positive effect on organizational performance. The indicators of e-Recruitment which includes: organizations use e-application software for all recruitment exercises to track applicant; e-application reduces paper work; e-recruitment enhances human resources services delivery; e-application makes applicant data accessible for recruitment/selection process all have overall significance. This is consistent with findings from previous studies like Ghazzawi & Accoumeh (2014). They recommended that, if organizations adapt new technology system and facilitate internet connection, systems would increase accordingly and thereby lead to organizational performance.

Furthermore, findings conform to Hafeez (2017) who studied e-recruitment in attracting potential candidates: Evidence from fresh graduate job seekers. The author found that e-recruitment is a predictor of cost effectiveness and that cost effectiveness predicts organizational performance. This is also in consonance with the study carried out by (Parry, 2011; Alabi, *et al.,* 2015)

The policy implication is for the brewery firms, to retain and innovate their efforts on the aforementioned e-recruitment indicators. The brewery firms should also invest in e-Recruitment exercises in the firm to access and track quality employees from the pool of potential employees via digital technology in e-Recruitment process. Firms should leverage on the potentials of e-recruitment practices to save cost on advertisement during recruitment exercises. The assessed measurement of performance should be placed as priority indicators to determine organizational performance. The indicators are the financial, customers, internal and learning perspectives as strong indictors to predict performance of organizations.

5.   Conclusion and Recommendations

This study assessed e-recruitment as an HR digital practice and its effect on organizational

performance. A positive effect of e-recruitment on organizational performance was revealed. The industry should develop a strategic policy to sustain the e-recruitment practices being embarked on by the firms to continuously attract the right quality talents via the web. This study revealed that, e-recruitment as a component of e-HRM can stand independently to influence organizational performance. The identified BSC perspectives (financial, customer, internal and learning) have been empirically shown to be effective and sustainable indicators to measure organizational performance.

Meanwhile, future studies could examine other electronic e-HRM practices like e-compensation, e-training to independently examine their effects. Furthermore, other public quoted sector within the Nigerian economy can also be assessed as case study organization.

References

Ahmed, M. & Shafig, S. (2014). The impact of organisational culture on organisational performance: A case study of telecom sector. *Global Journal of Management and Business Research 14*(21-30)

Alabi, E, Afolabi, M, Adeyemo, S (2015) Influence of E-Recruitment on Organisational Performance in Nigeria. *The Academic Conference of African Scholar Publications. 3*(3)

Armstrong, M. (2009). A handbook of Human Resource Management Practices (10th ed) London; Philadelphia: Kogan Page

Bondarouk, T. & Ruel, M. (2009). Electronic human resource management: Challenges in the Digital era. *The International Journal of Human Resource Management, 20*(3*), 505-514

Davis, F. D. (1989) Perceived usefulness, Perceived ease of use and Acceptance of Information Technology. MIS Quarterly: Management Information Systems. https://doi.org/10.2307/249008

Derinney, T., Johnson, G. & Yip, G. (2009). Measuring organisational performance: Towards methodological best practice. *Journal of Management, 35,* 718-804

Hair, J; Hult, G; Ringle, C; Sarstedt, M (2017) A Primer on Partial Least Squares Structural Equation Modelling (PLS-SEM) (2nd edition), *SAGE Publication Inc*. Los Angeles.

Henseler, J; Ringle, C, M & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the Academy of Marketing Science, 43* (1), 115-135

Ghazzawi, K. & Accoumeh, A. (2014). Critical Success factor of the E-recruitment System. *Journal of Human Resource Management and Labour Studies, 2*(2), 159-170

Hofmann C. (2014). Balancing financial and non-financial performance measures. *University of Hanover, Germany.*

Hussain, Z. & Farooq, A. (2011). Balanced Scorecard perspective on change and performance: a study of selected Indian companies. *Procedia social and behavioral sciences, 24*(11), 754-768

Ibrahim, S. & Lloyd, C. (2011). The association between non-financial performance measures in executive compensation contracts and earnings management. *Journal of Accounting and Public Policy, 30*(3), 256-274

Kaplan, R. & Norton, D. (1996) Strategic learning and the balanced scorecard. *Strategy and Leadership, 24*(5), 18-25

Kurien, G. & Qureshi, P. (2011). Study of performance measurement practices in supply chain management. *International Journal of Business, Management and Social Sciences, 2*(4), 19-34

Lakshimi, S. (2017). E-recruitment: A Boom to the organisations in the competitive world. *IOSR Journal of Business and Management*, 25-28

Lee, Y. & Huang C. (2012). The relationship between balanced score card, intellectual capital, organisational commitment and organisational performance: Verifying a mediated

moderation model. *American Journal of Business and Management, 1*(3)

Malik, Z. & Razaullah, (2013). The Role of E-recruitment Towards Attraction of Workforce: A Case of Telecom Sector Organisation. *Abasyn Journal of Social Sciences, 2, 6*(1) 104–115.

Nalwogu, M., & Dijk, M. (2016). Organisational performance measurement models, also for poverty alleviation. *International Journal of Water, 10*(2/3) 122-138

Parry, E. (2011). An examination of e-HRM as a means to increase the value of the HR function. *The International Journal of Human Resource Management, 22*(5) 1146-116

Rakholiya, N., & Gupta, C. (2013). A study on the Applicant's Perception towards E-recruitment. *International Multidisciplinary Journal of Applied Research, 1*(1), 50–53.

Ruel, H., Bondarouk, T. & Looise, J.K. (2004). E-HRM: Innovation or Irritation. An Explorative Empirical Study in Five Large Companies on Web-based HRM. *Management Review*, *15* (4), 364-379.

Shahila, D. & Vijayalakshmi, M. (2013). E-recruitment challenges. *International Journal of Social Science & Interdisciplinary Research, 2(5*), 118–123.

Shobayo, P. & Elumah, L. (2018). Performance Analysis of Nigerian Brewery Industry. *Binus Business Review, 9*(1), 47-53

Slovin, M. (1960). *Sampling in a Nutshell*. Simon & Schuster, New York.

Singh, S., Darwish, T., & Potocnik, K. (2016). Measuring Organisational performance: A case for subjective measures. *British Journal of Management, 27*(1), 214-224

Venkatesh, V., & Davies, F. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science 46* (2), 186-204