UTILIZATION OF ELECTRONIC HUMAN RESOURCE MANAGEMENT AMONG UNIVERSITY ADMINISTRATORS IN RIVERS AND BAYELSA STATES, NIGERIA

Abraham, Lois N.
Department Of Curriculum Studies and Educational Technology,
University of Port Harcourt
E-mail: lois.abraham@uniport.edu.ng

Asuku, Mayomi
Department of Educational Management, University of Port Harcourt
E-mail: mayomiasuku@gmail.com

ABSTRACT: *The study examined the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States, Nigeria. Two research questions and one hypothesis guided the study. The population of the study comprised forty-six (46) Deans in the six (6) public universities in Rivers and Bayelsa States, Nigeria. A sample size of forty-one (41) Deans representing 89% of the entire population using a simple random sampling technique was taken. The study adopted a descriptive survey research design. Instrument titled, "Utilization of Electronic Human Resource Management among University Administrators Scale (UEHRMAUAS) was validated. The reliability coefficient of the instrument was 0.82 using Cronbach Alpha Statistics which guaranteed the use of the instrument for the study. Mean and standard deviation were used to answer the research questions while the hypothesis was tested using z-test statistics at 0.05 alpha level. It was found among others that, utilization of human resource management among university administrators in Rivers and Bayelsa States in Nigeria has improved the administrative process in the universities. Recommendation among others is that the university management should ensure the provision of internet connected computers in all the offices in the universities.*

KEYWORDS: utilization, electronic human resource, management, university administrators.

INTRODUCTION

Every organization, institution and firm, company and so on needs talented, committed, competent and dedicated employees (staff) for effective and efficient achievement of its goals and objectives. Similarly, organizations, industries and educational institutions are faced with competitions to galvanize customers and to outsmart rivals for larger profit making, and expansion. Quality of goods produced and services rendered are the functions of an effective human resource management, meeting the demands of its customers are the prerogative of human resource management. Educational institutions are not left out in this conviction and necessity. More often than not, they are faced with these challenges of meeting up students' aspirations as well as stakeholders. It is therefore incumbent on school administrators, particularly universities, to give

the needed and right education to students so that they can contribute to the overall development and growth of the society.

Human resource management (HRM) remains the critical aspect in any organization, and in order to achieve this, it is charged with the responsibility of managing the affairs of the institutions, the planning, and recruitment process, amongst others. Universities administrators as used in this study include the Deans of Faculties, Heads of Departments, Lecturers, Senior Non-teaching staff, amongst others. He or she is charged with the responsibility of coordinating the activities of its areas in the university institution to a successful end. The university is the highest stage of schooling, and it propels the growth and development of the country. Apparently, human resource management function in any educational organization is to develop, attract, motivate, and train staff (personnel) in order to achieve the school (organizational) goals and objectives. These objectives and goals are stated in the school organizational mission and vision statement. It defines the schools' objectives. However, in the face of these tasks and objectives, school organization in the 21st century has not been able to achieve its full potential, full dimensions of human resource management functions.

The job of human resource management is very tasking, and no organization can achieve its full potentials and goals unilaterally. There must be team work, and there must be a collective effort. Armstrong (2012) opines that human resource management (HRM) is a comprehensive and coherent approach to the employment and development of people. It can be regarded as a philosophy about how people should be managed that is underpinned by a number of theories relating to the behaviour of people and organizations. It is concerned with the contributions that leads to improved organizational effectiveness through people and should be equally concerned with the ethical dimension- how people should be treated in accordance with their moral values. Armstrong also averred that HRM is very critical, and it is the application of policies and practices in the fields of organizational design and development, employee resourcing, learning and development, performance and reward, and the provision of services that enhance the wellbeing of employees.

Electronic human resource management (E-HRM) is an administrative support of the human resource management functions in universities by using internet technology. It is clear from these definitions that e-HRM facilitates the utilization of information technology for HRM purposes.Human beings are managed in an organization to enthusiastically put their efforts to assigned tasks and duties. Bratton and Gold (2012) affirm that human resource management is that part of the management process that specializes in the management of people in the work place. The major critical asset of any organization is its human resources who work for the attainment of the organizational goals and objectives. Bratton and Gold (2012) further state that; human resource management is concerned with satisfying employees' work related needs and dealing with their problems. This shows that a task-oriented human resource management should not only focus on the job, but also on the welfare of the subordinates. Succinctly put, HRM plays a critical role in organizations; it is a distinctive approach to employment management which seeks to achieve competitive advantage through the strategic deployment of a highly committed and capable workforce using an array of cultural, structural, personnel, scientific and technological techniques.

Human resource management (HRM) in education is primarily concerned with the effective utilization of people who are talented, dedicated, committed and energetic in every endeavours to achieve educational goals and objectives and simultaneously making the people to be part and parcel of organization in fulfilling their life goals. It is the systematic utilization of human potential to realize educational objectives and staff contentment. It entails to change people's lives by expanding how they can maximize their group goals and objectives, monitoring them for success, or changing the way people live their lives in the organization through continuous education and training that will allow them to become better individuals, personally and professionally (Robbins & Coulter, 2013). HRM is an important part of organizational strategies. Achieving success through people means managers must change how they think about their employees and how they view the work relationship.

Human resource management is important in varying degree. To corroborate this, Armstrong (2012) identified five goals of Human resource management in an organization. These are:
• Support the organization in achieving its objectives by developing and implementing human resource (HR) strategies that are integrated with the business strategy (strategic HRM);
• contribute to the development of a high-performance culture;
• ensure that the organization has the talented, skilled and engaged people it needs;
• create a positive employment relationship between management and employees and a climate of mutual trust;
• encourage the application of an ethical approach to people management

The level of technological advancement involved in the achievement of school organizational goals cannot be overstressed. As a result, it is now difficult to do business in the public or private sector, and also educational institutions without using technological devices and systems, e-administration. Hence, electronic human resource management is the administrative process based on the potential of the internet and business network to plan, direct, and control the resources and core competence of the school organization and others without borders, in order to achieve the goal. Shuai (2016) is of the belief that electronic human resource management in the education institution is to deliver efficient, fast, and effective service delivery to students, stakeholders, staff, governmental and non-governmental institutions, and their ability to cope with the tremendous development of information systems and the growing technological revolution. Therefore, organizations like the school are obliged to adopt electronic management application in the achievement of functions to serve employees and the beneficiaries of their services alike.

The world has been transformed into a global village. In relation to this, Nasurdin (2012) sees electronic human resource management as the use of ICTs, internet and Intranet in the organization to achieve the administrative work of human resources electronically, to provide services to its customers in the least time, effort, and cost but of high quality. Similarly, in the educational institutions, electronic human resources management in use of these aforementioned is to provide quality services to students, staff and other stakeholders, amongst others. Human resource management that depends on electronic (technology) in their work is considered an important element in enhancing the efficiency and effectiveness of the organization, like the school, in

managing its functions and activities as an outcome of the school organization's excellence. E-HRM in educational institutions basically entails E-Recruitment process in the school organization, E-Training and Development, E-Selection, E-Performance management, and E-Compensation wage administration.

Electronic human resource management helps in the best selection and recruitment of qualified/ competent staff, and then carefully planned and cared for, maintained and developed, and fair payment system of salary and bonus to staff, incentives and the adoption of objectivity in the promotion decisions in accordance with fair consideration and standards that are clear and transparent. E-HRM helps in managing the organization's tangible and intangible assets with high efficiency, and this changes the nature of its work and operations through relying on new technology and electronic applications. E-HRM helps in the management's planning, recruitment, selection, appointment, discipline, reprimanding and dismissal amongst others. Through E-HRM, school administrators can carry out many tasks and responsibilities such as planning process, attracting and training, and establishing a system of wages, rewards and fair incentives and evaluating their performance which is supported electronically.

The goals of e-HRM in relation to educational institutions isa cost reduction and efficiency gain; client improvement (students and stakeholders) better serving internal customers; globalization or standardization; and organizational image on the origin of these goals. E-HRM is the planning, implementation and application of information technology for both networking and supporting organizational functions. E-HRM is in essence the devolution of HR functions to management and employees. These functions are performed typically through internet and intranet and other technological media. To be very apt, e-HRM is seen as offering the potential to improve services of HR department clients such as employees and management, improve efficiency and cost effectiveness within the HR department and allow HR to become a strategic partner in achieving organizational goals.

The goal of every school organization is to provide quality educational services, to pass on good conduct and behaviour to clients-students that will provide essential services to the society. E-HRM helps to reduce cost of governance, brings efficiency and effectiveness in managing school activities, and leads to high students' academic outcomes. Electronic human management (e-HRM) brings about effective and efficient students service delivery in the universities. It enables university administrators to sort and ascertain the actual numbers of students for admission as well as helping administrators to upload students' academic records. It also enables students pay fees without interference or theft among financial officers. E-HRM brings about high students learning outcomes, as administrators uses e-HRM to arrange and conduct appraisal, and store other academic performance information. This is the reason why Okowabor (2014) opined that, students service challenges have reduced tremendously as a result of ICT utilization in various institutions of higher learning. E-HRM in educational institutions is simply the use of web-based technologies to provide services within employing organizations. It embraces e-recruitment and e-learning, the aspect of human resource management to make extensive use of web-based technology. It aims at delivery of virtually all HR policies in the educational institutions. Succinctly put, e-HRM helps to arrange and conduct appraisals, recruitment, planning, training and development, evaluate

labour costs, and examine indicators for turnover and absenteeism. Staff of the school can also use the system of e-HRM to plan their personal development, apply for promotion and new jobs, and access a range of information on HR policy.

More resoundingly, Al-Najar (2008) affirms e-HRM to the following dispositions:
- To improve the strategic direction of human resources;
- Reducing labour cost and administration expenses;
- Gains of human resources;
- Facilitate the performance of the function of HR management;
- Raise the performance and productivity of the organization;
- Development and improvement of labour relations and employees satisfaction;
- Better support for management across the company.

E-HRM is of three types. These are described respectively as Operational, Relational and Transformational. Operational here is related with administrative functions-payroll and employee personal data for instance. Operational type of HRM here provides the choice between requesting employees to place their own personal data up to date through HR website. Relational e-HRM is related to supporting the business process by ways of training, recruitment, performance management, amongst others. In view of its rationality, there is the choice between supporting recruitment and selection through a web-based application or using a paper-based approach through advertisement, paper-based application forms and letters, and so on. Lastly the transformational e-HRM is related with strategic HR activities known as knowledge management, strategic re-orientation. As a transformational HRM, it is possible to create a change-ready workforce through an integrated set of web-based tools that enables the workforce to develop in line with the school strategic choices or to have paper-based materials.

The use of e-HRM technology in schools particularly universities provides a portal which enables administrators, staff and HR professionals to view, extract, or alter information which is necessary for managing the HR of the school organization (Strohmeier, 2007). Additionally, with the use of e-HRM, fewer HR professionals are needed since e-HRM eliminates the "HR middlemen". The rapid development of the internet during the last decade has boosted the implementation and application of electronic human resource management. The utilization of e-HRM provides a more efficient and strategic way of working to reach the goals. It facilitates human resource functions with the chance to create new avenues for committing to school organizational success. E-HRM is an aspect of Human Resource Management information system that is in charge of handling both traditional task of HRM and its strategic task.Utilization of electronic human resource management in universities is the carefully handling of technological devices or systems to make the educational administration function effectively and efficiently. It refers to firm ability of withstanding the unpredictable challenges of the social and educational environments. It is the sustained use of web based technologies for forming, implementing and integrating organization and HRM strategies, policies and practices. E-HRM is a high-tech way of performing HRM at strategic position towards organizational effectiveness, e-HRM can enact as ICT tool to achieve sustainable management. E-HRM can help organizations to enhance their functions pertaining to

HR activities bringing benefits of cost saving, efficiency, flexible services, and employee's participation.

Statement of the Problem

The universities in Rivers and Bayelsa States have direct impact on their societies, and have a great role in providing institutions and sectors of every society with the necessary human resources in all fields. Universities are the leading institutions in adopting modern systems and concepts in various fields to achieve competitive advantage of contemporary developments and are able to contribute to the process of development of human resources and society. The emergence of technology has eroded the traditional system of office management, the emergence of this issue such as e-HRM has led to the changes in strategies employed by the traditional organization such as educational institutions toward the use of newer information system since most organization believe they need to keep the pace with rapid development of today's world, and use the new innovations in the field of IT. Therefore, the use or employment of the new system of e-HRM will result in the optimal performance of tasks of human resources sector in school organizations. Technological advancement has produced increasing benefits to organizations such as the educational institutions amidst meeting the increasing students' population, recruitment, planning, appraisal process, procurement of equipments, and stakeholders' satisfaction amongst others. E-HRM helps the accessibility of comprehensive and applied information about all employees provided by employees themselves and also results to efficiency in the organization.

However, in the face of these advantages on the use of e-HRM in educational institutions particularly Universities in Rivers and Bayelsa States, there has been considerable complaints of inappropriate student enrollment data for researchers, loss of students' academic records, students' personal data, staff data, staff personal file mishandling, administrative challenges, stakeholders distrust, poor networking, application and recruitment system, poor development database information, and so on. If these aforementioned challenges and issues are left unchanged and overlooked; it will create a negative impact on the image of the institutions thereby losing public and students trust, confidence, admiration and likeness. The researchers are therefore bothered about unsatisfactory level of e-HRM in schools and want to examine the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States.

Aim and Objectives of the Study

The aim of the study was to ascertain the extent of administrative improvement in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States. Specifically, the study sought to:

1.   examine the extent of students' service delivery improvement in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States

2.   find out the extent of administrative process improvement in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa State

Research Questions

The following research questions guided the study:

1.   To what extent has students' service delivery improved in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States?
2.   In what ways has administrative process improved in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States?

Hypothesis
This null hypothesis was tested at 0.05 alpha level:
1.   There is no significant difference between mean rating of Deans in Rivers and Bayelsa on the extent students' service delivery has improved in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States.

METHODOLOGY

The study adopted the descriptive survey design. The population of the study comprised all the 46 Faculty Deans in the six (6) public federal and state universities in Rivers and Bayelsa States in Nigeria. A sample size of forty-one (41) Deans was drawn from the six (6) universities using a simple random sampling technique. This represents 89% of the population. A self structured instrument titled, "Utilization of Electronic Human Resource Management among University Administrators Scale (UEHRMUAS)" was validated by experts in Measurement and Evaluation. The reliability index of the scale instrument was 0.82 using Cronbach Alpha Statistics which guaranteed the use of the instrument for the study. The instrument was patterned according to modified four Likert point scale of Strongly Agree 4 points, Agree 3 points, Disagree 2 points and Strongly Disagree I point respectively. The instrument was administered by the researchers and three trained research assistants. Forty-one (41) copies of the instrument were administered and retrieved for data analysis. Mean and standard deviation were used to answer the research questions while z-test statistics was used for testing the hypothesis at 0.05 alphalevel.

Research Question 1: To what extent has students' service delivery improved in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States?

Table 1: Weighted mean and standard deviation on the extent students' service delivery can improve electronic human resource management among university administrators

S/N	Indications for Students Service Delivery	Deans in universities in Rivers State			Deans in universities in Bayelsa State		
		Mean	Std	Decision	Mean	Std	Decision
1.	Utilization of e-HRM enables university administrators to easily sort out students' admission.	2.77	0.67	High extent	2.81	0.51	High extent
2.	Utilization of e-HRM helps administrators to ascertain the real number of students to be admitted.	2.56	0.91	High extent	2.69	0.66	High extent
3.	Utilization of e-HRM brings about high student learning outcomes.	2.90	0.54	High extent	2.70	0.53	High extent
4.	Utilization of e-HRM helps in the arrangement and conduct of students' appraisal.	2.33	1.20	Low extent	2.11	1.09	Low extent
5.	It improves students' academic performance.	2.53	0.92	High extent	2.88	0.40	High extent
6.	The utilization of e-HRM helps the administrators to upload students' academic records.	2.70	0.65	High extent	2.91	0.39	High extent
7.	It ensures the retrieval of student's results and other information.	2.51	0.94	High extent	2.66	0.73	High extent
8.	It ensures the safe storage of student's information.	2.91	0.50	High extent	2.80	0.50	High extent
9.	It enables students to pay their fees without interference or theft among financial officers.	2.11	1.23	Low extent	2.19	1.10	Low extent
10.	It enables the students to get first class information on course registration.	2.86	0.51	High extent	2.73	0.59	High extent
	Grand mean and standard deviation	**2.62**	**0.87**		**2.65**	**0.65**	

Table 1 showed that items with serial numbers 1, 2, 3, 5, 6, 7, 8 and 10 have their various mean values above the criterion mean value of 2.50 and were agreed by the respondents to a high extent to which students' service delivery has improved in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States as determined by the grand mean values of 2.62 and 2.65 respectively. The findings revealed that students' service delivery has improved in the utilization of electronic human resource management among university administrators through: helping university administrators to easily sort out students' admission, helping administrators to ascertain the real number of students to be admitted, bringing about high student learning outcomes, improving student's academic performance, utilization of e-HRM helps the administrators to upload students' academic records, ensuring the retrieval of students' results and other information, ensuring the safe storage of students' information, and enabling the students to get first class information on course registration.

Research Question 2: In what way has administrative process improved in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States?

Table 2: Weighted mean and standard deviation scores on ways administrative process improved in the utilization of electronic human resource management among university administrators

S/N	Indications for Administrative Process Improvement	Mean	Std	Decision
1.	Utilization of e-HRM makes the educational administration function effectively and efficiently.	2.81	0.55	High extent
2.	Utilization of e-HRM helps university management to enhance their functions.	2.99	0.53	High extent
3.	It brings about cost savings for administrators.	1.92	1.56	Low extent
4.	It brings about flexible services.	2.89	0.54	High extent
5.	It handles traditional and strategic tasks.	2.71	0.56	High extent
6.	Utilization of e-HRM provides a more efficient and strategic way of working.	2.65	0.61	High extent
7.	It helps university management in the area of recruitment and selection through web-page application.	2.71	0.56	High extent
8.	It provides a portal which enables administrators alter necessary information vital to them.	2.66	0.60	High extent
9.	It promotes knowledge management.	2.73	0.54	High extent
10.	It brings about strategic re-orientation among administrative staff of the university.	2.55	0.67	High extent
	Grand mean and standard deviation	**2.66**	**0.67**	

Table 2 revealed that items with serial numbers 1, 2, 4, 5, 6, 7, 8, 9 and 10 have their various mean values above the criterion mean value of 2.50 and were agreed by the respondents to a high extent as ways administrative process has improved in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States as determined by the grand mean value of 2.66. The various ways administrative process has improved in the utilization of electronic human resource management among university administrators are that: utilization of e-HRM makes the educational administration function effectively and efficiently, helps university management to enhance their functions, brings about flexible services, handles traditional and strategic tasks, provides a more efficient and strategic way of working, helps university management in the area of recruitment and selection through web-page application, provides a portal which enables administrators alter necessary information vital to them, promotes knowledge management and utilization of e-HRM brings about strategic re-orientation among administrative staff of the university.

Hypothesis 1: There is no significant difference between Deans in Rivers and Bayelsa on the extent students' service delivery has improved in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States.

Table 3: z-test on the mean difference between Deans in universities in Rivers and Beyalsa State on the extent students' service delivery has improved in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States.

Variables	n	Mean	Std	Df	z-cal.	z-crit.	Decision
Dean in universities in Rivers State	19	**2.62**	**0.87**	39	0.13	1.96	Ho is accepted
Deans in universities in Bayelsa State	22	**2.65**	**0.65**				

Table 3 revealed that Deans in universities in Rivers State have mean and standard deviation scores of 2.62 and 0.87 while Deans in universities in Bayelsa State have mean and standard deviation scores of 2.65 and 0.65 respectively. With a degree of freedom of 39, the calculated z-value of 0.13 is less than the critical z-value of 1.96; therefore, the null hypothesis is accepted. By implication, there is no significant difference between Deans in Rivers and Bayelsa on the extent students' service delivery has improved in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States.

SUMMARY OF FINDINGS

The findings of this study are summarized as follows:
1.   The findings revealed that students' service delivery has improved in the utilization of electronic human resource management among university administrators through: helping university administrators to easily sort out student's admission, helping administrators to ascertain the real number of students to be admitted, bringing about high student learning outcomes, improving student's academic performance, utilization of e-HRM helps the administrators to upload student's academic records, ensuring the retrieval of student's results and other information, ensuring the safe storage of student's information and enabling the students to get first class information on course registration.
2.   The various ways administrative process has improved in the utilization of electronic human resource management among university administrators are that: utilization of e-HRM makes the educational administration function effectively and efficiently, helps university management to enhance their functions, brings about flexible services, handles traditional and strategic tasks, provides a more efficient and strategic way of working, helps university management in the area of recruitment and selection through web-page application, provides a portal which enables administrators alter necessary information vital to them, promotes knowledge management and utilization of e-HRM brings about strategic re-orientation among administrative staff of the university.
3.   There is no significant difference between Deans in Rivers and Bayelsa on the extent students' service delivery has improved in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States.

DISCUSSION OF FINDINGS

Students Service Delivery Improvement

Having subjected the data collected to descriptive and inferential statistics, the results of the findings based on the research hypothesis formulated and tested at 0.05 alpha level in the course of this study is discussed below. The research hypothesis shows that there is no significant difference between the mean rating on the opinion of Deans in Rivers and Bayelsa on the extent students' service delivery has improved in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States in Nigeria. Moreso, the calculated z-test value of 0.13 was less than the critical table value of 1.96, therefore the hypothesis is rejected. The research hypothesis shows that is a significant influence in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa States in Nigeria. The findings agrees with the ascertain of Okowabor (2014), that students services challenges have reduced tremendously as a result of ICT utilization in the institutions of higher learning.

Administrative Process Improvement

The study shows that administrative process has improved to a high extent in the utilization of electronic human resource management among university administrators in Rivers and Bayelsa in Nigeria, with the mean and standard deviation values of 2.66 and 0.67 which are high than the criterion mean of 2.50, it implies that utilization of electronic human resource management has helped them to work effectively and efficiently, brings about flexible services, provides a portal which enables them to offer necessary information, etc. This finding agrees with the assertion of Shuai (2016), that electronic human resource management in the education institution is to deliver efficient, fast, and effective service delivery to students, stakeholders, staff, government and non-governmental institutions, and their ability to cope with the tremendous development of information systems and the growing technological revolution.

CONCLUSION

Based on the findings of the study, it was concluded that utilization of electronic human resource management has improved on administrative processes and students' service delivery among university administrators in Rivers and Bayelsa States in Nigeria. Therefore, systematic and persistent utilization of electronic human resource among the university administrators will improve more on both students' services and administrative process delivery in universities in Rivers and Bayelsa States in Nigeria.

Recommendations

Based on the findings and conclusion of the study the following recommendations are made:
1.   University management should ensure that all level of administrators and administrative officers have key to this e-human resource management for administrative process and students service improvement.
2.   University management staff should ensure the provision of computer gadgets in every office of the university.

3.   University management should train and re-train their staff on the utilization of ICT.
4.   Staff of the university should ensure that they have quality training on ICT to enable the ease of computer operation.

References

Al-Najar, F. (2008).E-government between theory and practice, al dar al Jameya, Alexandria, Egypt.

Armstrong, M. (2012).*Armstrong's handbook of human resource management practice*.(364-373) 12^t edition. United Kingdom: Ashford Colour Press.

Asodike, J. D. &Adieme, F. G. (2014).Theories and model of human resource management.In F. N. Obasi& J. D. Asodike (Eds.).*Educational resource management*. Port Harcourt: Pearl.

Bratton, J. & Gold, J. (2012). Human resource management: Theory and practice 5th edition. United Kingdom: Palgrave Macmillan.

Hooi, L. W. (2008). Implementing e-HRM: The readiness of small and medium sized manufacturing companies in Malaysia.*Asia Practice Business Review*, 12, 465 – 485.

Nasurdin, A. & Tan, C. (2011). "Human resource management practices and organizational innovation: Assessing the predicting role of knowledge management effectiveness. *Electronic Journal on Knowledge Management*, 9(2).

Okowabor, S. T. (2014). Students' personnel administration and electronic human resource management in universities in Delta State.Unpublished M.Sc dissertation, University of Port Harcourt.

Robbins, S. R. & Coulter, M. (2013). Management: eleventh Edition. England: Pearson Education.

Shuai, A. (2016). "Electronic and its impact on the development and improvement of job".*Journal of the University of Babylon for Human Sciences* 26(4).

Strohmeier, S. (2007). Research in e-HRM: *Review and Implications. Human Resource Management Review*, 17(1), 19 – 37.