

HUMAN RESOURCES AND KNOWLEDGE MANAGEMENT PRACTICES IN TERTIARY INSTITUTIONS IN NIGERIA - CHALLENGES AND PROSPECTS

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Abstract *Human resources (HR) and knowledge management (KM) practices are inevitable for the performance optimization of organizations. At the same time, successful HR and KM practices can lead to innovation, creativity, organizational learning, productivity and knowledge sharing, among others. In view of this, this paper discusses the impact of HR elements on KM practices in institutions of learning in Nigeria, in line with the challenges militating against successful HR and KM strategies and prospects. It was revealed, in this paper, that institutions of learning in Nigeria are yet to define and streamline the relationship between HR and KM to achieve knowledge sharing, dissemination and distribution across institutions due to some challenges discussed in this paper. In conclusion, based on the challenges militating against successful HR and KM practices in Nigeria's institutions of learning, policy interventions have been suggested for stakeholders in Government and Administrators in these Institutions.*

Keywords: *Human Resources, Knowledge Management, Institutions of Learning, Management, Performance, Human Resources Management Practices*

INTRODUCTION

Educational Institutions are organizations that are manned with experts in various fields who contribute their expertise and experiences in the creation and preservation of knowledge (Pircher & Pausits, 2011). The role of institutions of learning can be seen in their quest for knowledge, which is instrumental to having a knowledgeable workforce with specialized skills in various fields of study in achieving organizational goals and objectives. Institutions of learning contribute knowledge to growing a nation's economy by churning out researches of individuals and groups. Therefore, knowledge creation/generation and dissemination are one of the foremost activities in Higher Institutions of learning, locally and globally. Knowledge in itself is an organizational resource that has succeeded all other resources such as land, labour and capital (Gosh, 1995) due to its continuous use. The use and reuse of knowledge in educational institutions can therefore not be undermined due its enormous contributions to development in all spheres of a nation's economy (Petrides & Nodine, 2003). The management of knowledge in organizations is synonymous to the management of people (Rabiu, 2009). Therefore, knowledge in people's heads and documented knowledge must be adequately

managed to achieve both internal and external growth of an organization.

On this account, human resources management (HRM) practices are essential in institutions of learning due to significant contributions in areas such as recruitment, selection, planning, performance management and compensation, retirement and post retirement of employees, among others (Enyioko, 2012) and lately, knowledge management (KM) practices, a new and fledgling area, are gradually playing a crucial role in Tertiary Institutions in Nigeria in the area of managing knowledge through people in achieving organizational growth, although the linkage between HR and KM practices in most of these institutions of learning is yet to be defined. This is in line with Santo (2005) who claimed that educational institutions are among the last to implement KM principles and practices. Also, Edvardsson (2003) emphasized that appropriate HR strategy will determine successful management of knowledge within organizations. For instance, exploitative HRM stresses on explicit knowledge and impacts positively on KM; whereas explorative HRM strategy place emphasis on tacit knowledge which tends to result in increased knowledge and organizational learning (Edvardson, 2008). Therefore, KM strategies and HRM strategies are linked in an important way (Brewer & Brewer, 2010).

HR and KM practices have been identified as enablers for organizations to achieving the following: competitive edge, performance optimization, productivity of the workforce, innovation, improving effective acquisition, sharing and usage of information within an organization, among others (Enyioko, 2012; Tessama & Soeters, 2006; Quresh, Akbar, Khan, & Hijazi, 2010; Khan, 2010). To a certain extent, HR and KM practices are becoming gradually entrenched in institutions of learning in Nigeria, though at a very slow pace, although their *raison d'être* is to create, disseminate and distribute knowledge within and outside the academic environment. It may be right to say that the full exploitation of HR in the production, sharing and use of these knowledge resources has not been fully realized yet due to several challenges militating against the successful implementation of HR and KM practices in Nigerian Institutions. These challenges which include lack of professionalism leading to non-conformance to best practices, among others, would be unveiled in this research paper. Undoubtedly, HR and KM practices have good prospects for educational institutions if leveraged on professionalism. The recruitment and selection of the right human resource in an organization is a determinant of the quality of knowledge generated for organizational development (Vandna, 2005). Therefore, successful implementation of HR and KM practices should facilitate the alignment of the three core organizational processes - people, technology and knowledge processes for the ease of sharing information and knowledge effectively (Petrides & Nodine, 2003).

In view of this, this paper will examine the impact of the elements of HR on KM practices that are currently applied in Tertiary Institutions in Nigeria, challenges and prospect in the successful implementation of HR; in addition, KM practices in these institutions will be discussed. Based on the above, the layout of this research paper will centre on the concept of HRM and KM practices as it relates to Tertiary Institutions in Nigeria, determining the relationship between HR and KM practices, challenges and prospects in the successful implementation of HR and KM practices in Tertiary Institutions in Nigeria, and lastly, recommendations and conclusion will be made.

HUMAN RESOURCES MANAGEMENT PRACTICES IN HIGHER INSTITUTIONS OF LEARNING IN NIGERIA

HRM practices involve all the activities and decisions that directly influence an organization's human resource (Enyioko, 2012). In another sense, HRM practices can be defined as the policies and procedures needed to carry out on people or human resource aspect of management's position in areas such as selection, job definition, training, performance appraisal, compensation, career planning and

employee participation in decision-making, among others (Enyioko, 2012). Apart from these two definitions, successful HRM practices in this twenty-first century have to recognize the need to improve the knowledge asset of an organization through appropriate training and development, compensation and rewards, appraisal and promotion exercises. Successful HRM practices should most essentially be anchored on professionalism, an important key area in the proper HRM in any organization.

Specifically, some empirical studies have been carried out to ascertain the impact of HRM practices on organizational performance, effectiveness and productivity of workers. For instance, Abdullah, Ahsan and Alam (2009) studied the effect of training and development, team work, compensation, HR planning, performance appraisal and employees' security on business performance in Malaysian private businesses. Results revealed that training and development, teamwork, HR planning and performance appraisal had positive and significant influence on business performance; while on the other hand, compensation and employee security would not influence the overall business performance.

Similarly, Tessema and Soeters (2006) examined the impact of human resources management practice of a University system on its organizational performance in a developing country. In this study, the impact of eight human resource management elements was examined on organizational performance. These are recruitment and selection, placement, training, compensation, employee performance, evaluation, grievance procedure and pension programme. Findings indicated positive impact of these elements on organizational performance.

Enyioko (2012) examined HRM and performance optimization in two Nigerian Universities. Findings from the study revealed a strong positive relationship between the various elements of HRM practices and performance optimization in the university environment. These elements include compensation, promotion, performance evaluation and training/development practices. Khan (2010) also measured five HRM practices in the performance of Oil and Gas industry in Nigeria. These elements include recruitment, selection, training and development, performance appraisal and compensation and reward. Findings from the study indicated a positive and significant relationship between each of these elements and performance optimization of the Oil and Gas industry.

Similarly, Quresh et al. (2010) evaluated the HRM practices such as selection, training, performance appraisal system on the financial performance of banks in Nigeria. Findings indicated a positive relationship between these elements and financial performance of banks. Out of all the elements, performance appraisal system was the least contributor to the performance of banks. Some other studies have determined positive relationships between the various elements of HRM practices and organizational performance (Becker &

Gerhart, 1996; Harley, 2002; Boselin, Dietz & Boon, 2005; Rizou & Croucher, 2009). The literature has revealed a positive relationship between the element of HR practices and organizational performance; therefore, we may infer that the element of HRM practices is likely contributors to optimum performance in Higher Institutions of learning. This depicts that that achievement of organizational goals cannot be achieved without the proper HRM (Banabo et al., 2011). In other words, it is the people that make the institution and not the building, equipment or brand name (Decenzo & Robbins, 1999).

Furthermore, a new and evolving area that is very necessary for the successful implementation of HRM is the integration of KM practices into the HR policy of an organization. KM is the process by which an organization generates wealth from its intellectual or knowledge based assets (Wendi & Ruth, 1999). Therefore, successful HRM practices must incorporate KM strategies in managing the organizational knowledge (explicit and tacit knowledge) respectively.

Knowledge Management Practices and Their Benefits in Higher Institutions of Learning

KM practices can be described as set of practices that helps to improve the use and sharing of data and information in decision-making (Petrides & Nodine, 2003). In other words, KM is a framework that enables people within an organization to collect information and share what they know to impact the organization positively. Some researchers have examined the impact of KM approaches, strategies and practices in Higher Education Institutions in developed countries; and have identified several benefits of KM in Institutions of learning which have positive implications for staff, students and the organization as a whole. According to Fireston (2003), KMS is useful for the arrangement processes (capture, codification, sharing and distribution of knowledge; and also the managing of knowledge processes through creation and knowledge discovery). Other benefits of KMS to Higher Education Institutions have to do with improved performance (Bassi, 1997; Ostro, 1997); effective acquisition, sharing and usage of information within an organization, reducing research cost and delays through collaboration and interaction; becoming an innovative organization and capturing best practices (Cole, 1998). It had been said that Educational Institutions could also use KMS to achieve the following: improve their organizations' missions through the sharing of information across geographical locations, boundaries and time; facilitates improved decision making, enhanced creativity, having stronger links of lateral as well as vertical communication within and outside the academic environment and effective curriculum development (Petrides & Nodine, 2003).

Therefore, looking at it critically, it can be said that few of the benefits of KM have been realized in Higher Institutions of learning in Nigeria. This is due to challenges such as inadequate knowledge on knowledge management practices, lack of KM policies and initiatives to drive the repositioning and re-integration of KM into those institutions. In achieving a successful KM practices in Institutions of learning, individual institutions must align both the technology aspect of the organization and information culture together to manage knowledge efficiently to achieving organizational growth. According to Vandna (2005), it is only those organizations that are able to create a culture of KM that will survive and grow. In this regard, the technology culture brings about the integration of technology into planning, development, operations among others, while the information culture emphasizes on information policies, procedures, knowledge processes and the sharing of information within and across an organization (Petrides & Nodine, 2003). Without any prejudice, KM practices across institutions of learning in Nigeria are prone to problems such as sharing of information and distribution of knowledge due to divergent technologies and lack of information culture. In other words, issues of knowledge development are interwoven with issues of technological development and the effective utilization of technology determines the acquisition of knowledge (Muganda, 2006). It is certain that successful KM strategies and practices in Higher Institutions of learning would boost efficiency, effectiveness and quality of graduates who can satisfy employers' needs in the entry level of employability (Ramakrishnan & Yasin, 2012).

Elements of Knowledge Management Processes

The stages involved in KM processes can be constituted into two: knowledge capture/creation and knowledge sharing/dissemination. Basically in organizations, knowledge creation involves discovery, organization and integration into the main stream of the organization (Dalkir, 2005). Therefore, knowledge at the inception stage has to be captured, codified in such a way that it becomes part of the existing knowledge (Akinniyi, 2013). Knowledge capture and codification becomes useful to an organization when issues of knowledge continuity arise such that critical knowledge will have to be passed from existing employees to their replacements (Akinniyi, 2013). Therefore, knowledge continuity management focuses on communication; in other words, employees that are not knowledgeable on the job need to be informed through the captured and existing knowledge.

A practical application of KM practices in institutions of learning in Nigeria is being reflected in the missions of these institutions to generate different kinds of knowledge

to meeting developmental purposes. For instance, explicit knowledge created is circulated within and outside the institution through various channels as a means of contributing to development. Besides, knowledge capture, an important stage in KM cycle has not been given enough attention by Nigerian Institutions, perhaps, due to lack of knowledge on KM practices and strategies and lack of KM professionals to champion this course. For instance, knowledge acquisition by employees through training and development programs, attendance on various conferences and symposiums are rarely captured to achieve competitive edge for the institution; rather, the materials are usually handed to designated officers for documentation purposes.

The second element in KM processes has to do with knowledge sharing and dissemination. This is usually the most crucial of the KM cycle stages because knowledge at this stage is redefined and enriched (Uriarte, 2008). Knowledge sharing and dissemination can be enhanced through the application of appropriate technologies to facilitate collaboration and interactions within an organization. Most of the times, a rewarding system can be introduced for individuals that share the most knowledge and the individuals that utilize the knowledge that has been shared (Akinniyi, 2013). In relations to institutions of learning in Nigeria, knowledge sharing and dissemination of information are improving gradually within individual institutions due to the application of Information Communication Technologies (ICTs) such as Discussion groups, Email facilities, Internet and Web portals, among others. Knowledge sharing across institutions of learning in Nigeria has not been possible yet due to lack of essential ICT facilities such as video conferencing, teleconferencing and broadband connectivity, and most importantly the lack of funds to procure these facilities. The use of appropriate information communication channels has been identified to accelerate the level of knowledge sharing and distribution in institutions of learning (Muhammad, Dindin & Hilmi, 2012).

Knowledge sharing can be equally accomplished through communities of practice (COPs) in Tertiary Institutions of learning. Adams and Freeman (2000) define a COP as a group of people who come together to make use of shared knowledge in order to enhance learning and create a shared value for the group. COPs, though common in corporate organizations, are also practised in individual institutions where researchers from various fields collaborate and interact to share knowledge and disseminate their research findings through various outlets such as conferences proceedings, local and International Journals, Technical reports among others. COPs across institutions in Nigeria are rarely practised in the sharing and dissemination of knowledge.

Types of Knowledge Shared in Institutions of Learning

Knowledge can be categorized into two types: explicit and tacit knowledge. Explicit knowledge is documented information that can be expressed in formal shared language to facilitate action. Explicit knowledge is packaged easily, codified, communicable and transferable from place to place. Explicit or documented knowledge in institutions of learning is commonly expressed through several avenues such as Journals, Conference proceedings, Dissertations/theses and Inaugural lectures, among others. Explicit/documented knowledge could also be in the form of online products that are in both local and international based journals published by researchers from varying disciplines. Explicit knowledge includes work processes, procedures, databases, reports, manuals and policies that have been documented and used by various institutions of learning

On the other hand, tacit knowledge is knowhow and learning embedded in the minds of the people in an organization. Tacit knowledge involves perception, insight, experiences and craftsmanship. Tacit knowledge is personal, context-specific, difficult to formalize, communicate and transfer (Kidwell, Vander Linde, & Johnson, 2000; Brewer & Brewer, 2010; Akinniyi, 2013). This type of knowledge is embedded in people, but is rarely tapped. However, with effective KM programs, tacit knowledge can be identified and leveraged for organizational performance and effectiveness. New knowledge is borne out of conversion of tacit knowledge into explicit knowledge (Muhammad et al., 2012). Leveraging on tacit knowledge is a big challenge for successful HR and KM practices in institutions of learning in Nigeria.

Table 1: Showing the Differences Between Explicit and Tacit Knowledge

Variable	Explicit Knowledge	Tacit Knowledge
Features	Codified	Personal
	Stored	Context-specific
	Transferrable	Difficult to formulate
	Easily expressed and shared	Difficult to capture communicate, share
Sources	Manuals	Informal business processes & Communications
	Policies, procedures	Personal experiences
	Databases, reports	Historical understanding

Source: Brewer and Brewer (2010)

Relationship Between Human Resources and Knowledge Management Practices

HR are knowledge or intellectual assets of an organization. One then wonders how an organization's HR can contribute

their knowledge to meaningfully achieving performance optimization. This can be achieved by capturing and reusing knowledge to prevent 'reinventing the wheel syndrome' which normally leads to wastage of resources such as high costs, redundancies, duplication of effort among others. Therefore, HRM can be aligned with KM practices based on an organization's strategic plan. For instance, an organization must endeavour to manage its human resources through training and development programs, compensation and rewards, promotion exercises among others to give room for creativity, innovation, knowledge sharing and distribution. In essence, HRM elements such as recruitment and selection; training and development; performance management; reward and recognition; career management, and creating a learning environment (Evans 2003; Scarbrough 2003) are essential for effective KM practices in institutions of learning in Nigeria.

CHALLENGES IN THE APPLICATION OF HUMAN RESOURCES MANAGEMENT AND KNOWLEDGE MANAGEMENT PRACTICES IN INSTITUTIONS OF LEARNING IN NIGERIA

Several challenges are hindering the successful HR and KM practices in institutions of learning in Nigeria. The benefits of HR and KM practices in organizations have been identified in the literature as being responsible for organizational performance in the area of improved decision-making, productivity of the workforce, efficient sharing, usage and dissemination of information among others. In realizing these benefits, the numerous challenges must be identified and addressed by individual institutions in Nigeria.

Firstly, there is lack of professionalism due the non-availability of HR practitioners that are equipped with adequate knowledge on managing HR being the intellectual asset of an organization. Therefore, management of knowledge assets is a critical issue in today's educational institutions. In other words, successful and proper management of intellectual assets of an organization may entail identifying important elements of HRM practices such as training and development, performance appraisal, compensation and rewards that will improve the employees' performance and facilitate adequate knowledge sharing and distribution. In today's knowledge economy, HR practitioners must imbibe KM tools in the continuous performance of its workforce.

Another challenge is that of inadequate workplace learning activities in institutions of learning. Rabi (2009) mentioned that KM practices can be maximized in organizations through the creation of workplace learning activities (WPL). WPL includes training, coaching, mentoring, knowledge sharing, lunch and learning sessions (e.g. Courses, Conferences, and Workshops). Again, appropriate retention strategies

can be designed for retirees in the organization to capture organizational knowledge; and this can be achieved through coaching and mentoring roles assigned to the current employees. In implementing this strategy, retirement forums can be organized to facilitate the transfer of knowledge through face-to-face interaction or virtual means in achieving organizational effectiveness and performance.

Again, an important challenge in implementing successful KM practices in institutions of learning in Nigeria is securing top management commitment to deploy KM tools for knowledge creation/capturing, sharing through appropriate channels, availability and use of similar technologies across institutions to facilitate knowledge sharing and dissemination. Also, the development of KM professional is needed to entrench KM culture in institutions of learning and aligning the technology and information culture of individual institutions. In addition, the challenge of measuring the value of KM as regards return on investment of KM practices to the organization should be considered a priority by top management in institutions of learning to enhance management's commitment.

Lastly, there is the challenge of developing universal policies, practices, principles, guidelines and approaches in the sharing and distribution of knowledge among institutions of learning, government agencies, research communities and the public (Riley, 2003).

PROSPECTS OF HUMAN RESOURCES AND KNOWLEDGE MANAGEMENT PRACTICES IN INSTITUTIONS OF LEARNING IN NIGERIA

The successful implementation of HR and KM practices in institutions of learning opens a lot of opportunities for institutions of learning. Application of KM techniques and technologies in higher institutions of learning would lead to better decision-making, improved capabilities, reduced product development cycle time (Curriculum Development and Research), improved academic and administrative services and reduced costs (Kidwell et al., 2000). KM opportunities will enhance the proper management of HR and knowledge in institutions of learning in Nigeria through several ways such as global networking across institutions within and outside the country. A virtual network of groups can be created to share knowledge, experiences and address issues and challenges peculiar to these institutions by the use of appropriate technologies. Also, online KM groups or forums can be designed to enable institutions of learning to share non-confidential information and best practices across institutions globally. Another effective KM tool is brainstorming and after action review which is designed in getting ideas from members of a working group or project team. This tool enables adequate feedback from members of

the group in the academic community either students/staff forum with a view to improving performance.

Therefore, for performance optimization of these institutions of learning in Nigeria, KM and HRM practices must align in such a way that HRM issues, such as recruitment and selection, education and development, performance management, pay and reward, as well as the creation of a learning culture are vital for managing knowledge within organizations (Evans 2003; Carter and Scarbrough, 2001; Currie and Kerrin, 2003; Hunter et al., 2002). Examples of areas of application of KM and its accrued benefits in institutions of learning include research process, curriculum development process, student and alumni services and administrative services as indicated in the below tables.

Table 2: Applications and Benefits of KM for Research Process

Research interests within an institution or at affiliated institutions (potential).	Increased competitiveness and responsiveness for research grants, contracts, and commercial opportunities.
Research results (where possible) and funding organizations (federal agencies, foundations, and corporations) with easy search capabilities to facilitate interdisciplinary opportunities.	Reduced turnaround time for research.
Commercial opportunities for research results.	Minimized devotion of research resources to administrative tasks.

Table 3: Applications and Benefits of KM for Curriculum Development

Repository of curriculum revision efforts that includes research conducted, effectiveness.	Enhanced quality of curriculum and programs by identifying and leveraging best practices and monitoring outcomes
Repository of content modularized and arranged to facilitate interdisciplinary curriculum design and development	Improved speed of curriculum revision and updating.
Portal of information related to teaching and learning with technology, including faculty development opportunities, outcomes tracking, lessons learned, best practices, technology overviews, and so forth.	Enhanced faculty development efforts, especially for new faculty

Table 4: Applications and Benefits of KM for Students and Alumni Services

Portal for student services for both students and for faculty and staff at the institution so that. Information could include policies and procedures related to admissions, financial aid, registration etc.	Improved services for students.
Portal for career placement services	Improved service capability for Faculty and staff.
Portal for information on outreach constituents to integrate efforts and minimize redundant efforts	To integrate fragmented efforts currently undertaken by faculty, academic support staff and students

Table 5: Applications and Benefits of KM for Financial Services

Portal for financial services (that is, budgeting and accounting) that includes FAQs, best practices, procedures, templates, and communities of interest to share information and serve as impetus for improvement efforts.	Improved effectiveness and efficiency of administrative services.
Portal for procurement (that is, purchasing, accounts payable, receiving, warehousing) that includes FAQs, best practices, procedures, templates, and communities of interest.	Improved compliance with administrative policies such as procurement, preferred vendors, procurement card policies, budgeting procedures, affirmative action guidelines, and so forth.
Portal for human resources (that is, vacancy-to-hire, payroll, affirmative action, and so forth) that includes FAQs, best practices, procedures, templates, and communities of interest to share information and serve as impetus for improvement efforts.	Improved responsiveness and communication capabilities.

Source: Kidwell, Vander & Johnson (2000).

CONCLUSION AND RECOMMENDATIONS

HR and KM strategies are critical to the continuing growth of institutions of learning in Nigeria. In other words, HR and KM best practices should be put in place to improve organizational effectiveness, innovation, creativity, organizational learning and sharing of knowledge within and across institutions. Therefore, for successful HR and KM practices in institutions of learning, the three organizational

core processes: people, technology and processes, should be well integrated to achieve organizational success.

In implementing a successful HR and KM practices in institutions of learning in Nigeria, the following recommendations will drive the initiative and process. Firstly, the current HR and KM practices in institutions of learning in Nigeria should be improved upon by the adoption of a strategic plan, vision and management's commitment. Also, government's intervention is necessary by providing adequate funds for institutions of learning to implement successful HR and KM practices.

Secondly, institution of learning can learn from corporate organization in sustaining KM and HR practices by adopting the initiatives proposed by (Kidwell et al., 2004). Start with a strategy, integrate the organizational infrastructure (human resources, technology and processes), seek for a high-level professional to champion the initiative, select a pilot project for KM, develop a detailed action plan for the project, assess the results and redefine the action plan. By this initiative, the impact of KM and HR practices can be evaluated in line with the organizational goals and mission. By this, institution-wide approach to HR and KM in the sharing and distribution of knowledge across institutions will be made possible.

REFERENCES

- Abdullah, Z., Ahsan, N., & Alam, S. S. (2009). The effect of human resource management practices on business performance among private Universities in Malaysia. *International Journal of Business and Management*, 4(6), 65-72.
- Adams, E., & Freeman, C. (2000). Communities of practice: Bridging technology and knowledge assessment. *Journal of Knowledge Management*, 4(1), 38-44.
- Akinniyi, A. A. (2013). *Knowledge management practices and organizational performance of manufacturing industry in Nigeria*. A pre field seminar presentation for Doctoral Degree, Dept of Library and Archival Studies, University of Ibadan, Ibadan.
- Banabo, E., Ndiomu, K., & Koroye, B. (2011). Human resources management skills required of tertiary institution administrators in the Niger delta states of Nigeria. *Current Research Journal of Social Sciences*, 3(6), 432-444.
- Bassi, L. J. (1997). Harnessing the power of intellectual capital. *Training & Development*, 51(12), 25-30.
- Boselie, P., Dietz, G., & Boon, C. (2005). Commonalities and contradictions in HRM and performance research. *Human Resource Management Journal*, 15(3), 67-94.
- Brewer, P. D., & Brewer, K. L. (2010). Knowledge management, human resources management and higher education: A theoretical model. *Journal of Education for Business*, 85, 330-335.
- Carter, G., & Scarbrough, H. (2001). Towards a second generation of KM? The people management challenge. *Education and Training*, 43(4/5), 215-224.
- Cole, R. (1998). Introduction to knowledge management. *California Management Review*, 40(3), 15-21.
- Currie, G., & Kerrin, M. (2003). Human resource management and knowledge management: Enhancing knowledge sharing in a pharmaceutical company. *International Journal of Human Resource Management*, 14(6), 1027-1045.
- Dalkir, K. (2005). *Knowledge management in theory and practice*. Burlington: Elsevier.
- Decenzo, D. A., & Robbins, S. P. (1999). *Human resources management*. John Wiley and Sons Inc., New York.
- Edvardsson, I. R. (2003). *Knowledge management and creative HRM*. An Occasional Paper. Department of Human Resources Management, University of Strathclyde.
- Edvardsson, I. R. (2008). Human resources management and knowledge management. *Employee Relations*, 30, 553-561.
- Enyioko, N. C. (2012). Human resource management practices and performance optimization in Nigerian Universities (A Synopsis): Medonice management and research consulting limited, Port Harcourt, Rivers State, Nigeria.
- Firestone, M. J. (2003). *The new knowledge management: A paradigm and its problems*. Alexandria Press, USA.
- Gosh, S. (1995). The "Infopreneuer" at work-experiences of information entrepreneurial services in various functional sectors-A Delhi study. In *The New Review of Information and Library Research*, 1.
- Kidwell, J. J., Vander Linde, K. M., & Johnson, S. L. (2000). Applying corporate knowledge management practices in higher education. *Educause Quarterly*, 4, 28-33. Retrieved from <https://net.educause.edu/ir/library/pdf/EQM0044.pdf>
- Khan, M. A. (2010). Effects of human resource management practices on performance optimization - An empirical study of oil and gas industry in Nigeria. *European Journal of Economics, Finance and Administrative Sciences*, 157-175.
- Muganda, C. K (2006). Developing knowledge society in developing communities: Challenges and prospects. *Journal of Issues and Practice in Education*, 1(1), 32
- Muhammad A. R, Dindin, J., & Hilmi, A. (2012). *Knowledge management as the catalyst of human resources development in higher education Institute*. A Paper Presented at International Conference on Islam in Malay World (ICON-IMADII) (6-7), Kuala Lumpur, Malaysia.

- Ostro, N. (1997). The corporate brain. *Chief Executive*, 12(3), 58-62.
- Quresh, T. M., Akbar, A., Khan, M. A., & Hijazi, S. T. (2010). Do human resource management practices have an impact on financial performance of banks?. *African Journal of Business Management*, 4(7), 1281-1288.
- Petrides, A. L., & Nodine, R. T. (2003). *Knowledge management in education: Defining the landscape*. The Institution for the Study of Knowledge Management in Education Press, USA.
- Pircher, R., & Pausits, A. (2011). Information and knowledge management at higher education institutions. *Management Information Systems*, 6(2), 8-16.
- Rabiu, M. (2009). Knowledge management in oil and gas industry: Theoretical frameworks, practical challenges and opportunities. *Petroleum Technology Development Journal*, 1, 1-10. Retrieved from http://ptdjournal.com/2009/Mallam_Musa_Rabiu.pdf
- Ramakrishnan, K., & Yasin, N. M. (2012). *Knowledge management system and higher education institutions*. A Paper Presented at International Conference on Information and Network Technology (ICINT) 37. IACSIT Press, Singapore.
- Riley, T. B. (2003). *Knowledge management and technology*. International Tracking Survey Report Number 2, Public Works and Government Services, Ottawa.
- Rizou, M., & Croucher, R. (2009). Human resource management and performance in European firms. *Cambridge Journal of Economics*, 253-272.
- Santo, S. A. (2005). Knowledge management: An imperative for schools of education. *TechTrends*, 49, 42-49.
- Tessema, M. T., & Soeters, J. L. (2006). Challenges and prospects of HRM in developing countries: Testing the HRM-performance link in the Eritrean civil service. *International Journal of Human Resource Management*, 17(1), 86-105.
- Uriarte, F. A. (2008). *Introduction to knowledge management*. Jakarta: ASEAN Foundation. Retrieved from www.aseanfoundation.org. Accessed 10th April, 2018.
- Vandna, S. (2005). Knowledge management - HR tool to get competitive edge. An empirical study in telecom sector. *Delhi Business Review*, 6(2), 51-60.
- Wendi, R. B., & Ruth, L. W. (1999). *The knowledge management field book* (p. 2). Pearson Education Limited, London.