# KNOWLEDGE MANAGEMENT AND EMPLOYEES PERFORMANCE: A STUDY OF EMPLOYEES' OF NATIONAL OPEN UNIVERSITY OF **NIGERIA**

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#### **ABSTRACT**

The study assessed the impact of knowledge management (KM) on performance of employees at the National Open University of Nigeria (NOUN). KM was decomposed into knowledge acquisition, knowledge conversion, and knowledge protection while performance was used as a one-dimension variable. Primary data was used for this study. Data was gathered through the use of a Google Form questionnaire. The online survey was administered via the official University electronic mail of the senior staff of NOUN. The target population was divided into two major strata; Academic and Non-Academic staff. The descriptive analysis technique was used to analyze the data. Results show that the majority of the respondents (46%) strongly agreed and (34%) agreed that knowledge acquired through the use of (ICT) has a positive impact on the performance of employees in NOUN. Also, the majority of the respondents (53%) agreed and (27%) strongly agreed that knowledge conversion help to enhance the performance of employees, while the majority of the respondents (39%) agreed and (25%) of the respondents strongly agreed that knowledge protection help protects the institution's core competency and increase the competitive advantage of the University. Based on the results the study recommends that policymakers should effectively build, acquire, convert, and protect relevant knowledge that could enhance the performance of their employees which may, in turn, translate to increased service delivery and enhance the overall performance of NOUN.

Keywords: Employee performance, knowledge management, knowledge acquisition, knowledge conversion, knowledge protection

## INTRODUCTION

The pace of globalization, increase in technological development, structural changes and the advent of the COVID-19 pandemic has increased the consciousness of individuals, firms, public institution and non-governmental organisations germaneness of knowledge management (KM) to sustaining improved performance and competitive advantage of firms in a highly competitive environment (Kulkarni & St. Louis, 2003; De Long & Fahey, 2000). Studies linked effective KM to improved competitive advantage and enhanced organisational performance (Ohiorenoya, 2010; Chang & Lee, 2007; Chin-Loy & Mujtaba 2007; Khalifa & Liu 2003; Davidson & Voss, 2002). KM empowers people, groups, and whole organizations as well as networks, regions, and countries to efficiently make, share, and apply information to accomplish strategic and operational objectives (North & Kumta, 2018). Bataineh (2017) and Anitha (2013) reports that performance of individuals and organizations rely heavily on organizational policies, KM practices and employee commitment.

The National Open University of Nigeria (NOUN) is one of the leading open and distance learning institutions in the continent of Africa with an estimated student population of about five hundred thousand, across the 103 study centres in Nigeria. The university offers students the opportunity to work and study at the same pace without barriers brought about by conventional systems of learning. The open and distance learning (ODL) system use virtual learning environment (VLE) where information and communication technology (ICT) gadgets like tablets, laptops, and mobile phones are used to deliver content to students.

Hence, ODL is considered a non-conventional system of learning that is gradually receiving global acceptance. It is a method that shifts from the conventional physical learning environment (PLE) where learners and teachers converge in a physical environment to interact, using instructional materials. The advent of COVID-19 accentuated the significance of open and distance learning modes of higher education across the globe, especially in most developing countries. The use of ICT to transfer learning content from lecturer to students through a VLE has been observed to be a core competency and a competitive advantage of universities operate open and distance learning systems (Tuffaha, 2020)

Core competency is a strategic advantage, value, or ability an individual, group or organization has and uses to outperform competitors in a highly competitive environment. The COVID-19 pandemic amplified the use of ICT in open and distance learning systems as the core competency in modeling and visualizing higher education across the globe (Tuffaha, 2020). In view of the above, academic and non-academic staff of NOUN are expected to take advantage of these recent structural changes to further strengthen their relevance and enhance their competitive advantage, and increase their efficiency, student enrollment and service delivery; which may, in turn, increase overall performance of the institution.

This paper contributes to existing literature by examining the effect of KM on employee performance in an open and distance learning institution in Nigeria. The study opts to highlight how KM improves employee performance at the NOUN. The paper is organized as follows: apart from the introductory aspect in section 1, section 2 provides a review of the literature on the relationship between knowledge management and the performance of university employees. Section 3 discusses the methodology; section 4 discusses the results; while section 5 concludes the paper.

## LITERATURE REVIEW

#### **Knowledge Management Conceptualized**

Businesses that must survive and remain competitive must become information-based and transform themselves into knowledge specialist organisation (Drucker, 1998, as cited in Ateke & Didia, 2017). This because knowledge has become a prime catalyst for differentiating a firm's work from its competitors (Ateke & Didia, 2017; Stewart, 2001); and Intellectual assets have become more important than every other because resources. This is even as globalization has instigated rapid advances in ICT and structural change, which has challenged firm to seek newer ways of earning competitive advantage.

Today's organizations are moving fast from labor and capital-intensive techniques to information and knowledge-intensive activities, implying that organizations progressively sell information, knowledge, or intelligent products. Work and capital are currently supplanted by knowledge as an asset (North & Kumta, 2018). For this reason, any organisations or institutions that want to maintain their level of development must be fully aware of the recent trend called the "knowledge economy." Organizations that have been able to take effective advantage of the knowledge economy have been linked to enhancing organisational performance and overall economic development of a country (Lee & Lan, 2011; Liu & Deng, 2015). In this way, an association really must foster a progression of cycles or systems to more readily deal with their insight resources (OuYang, 2014).

KM is inherently multidimensional. In this study, we view KM through the lenses of knowledge acquisition, knowledge conversion and knowledge protection. Knowledge acquisition according to Cho and Korte (2014), is the process by which organisation invent or create knowledge resources across functional areas of engagement. They described it as a process of gathering ideas, and knowledge required for business growth. Business processes are made available to employee to increase both theirs, and organisational performance. Acquiring timely, accurate, and needed information and knowledge lead to innovation and efficiency and improve overall performance of the organisation (Nazeem, 2015).

Knowledge conversion involves the ability of a firm to share, convert, and distribute vital resources across functional areas of business endeavor. It enable organisations to enhance their competency and efficiency by transforming knowledge acquired, into meaningful and acceptable organisational resource and distributing the knowledge to where it would be needed (Yusoff & Daudi 2010; Bhatt, 2001; Gold et al., 2001).

Knowledge protection on the other hand, involves security-oriented mechanisms developed to protect knowledge resources in an organization from unwanted or illegal use, abuse, or theft of intellectual property (Gold et al., 2001). Knowledge has been generally categorized as an asset. Hence, there is need to protect it adequately, by keeping it updated through contributions from people working within the organization, especially as the world is moving swiftly towards a knowledge-based economy. When this is achieved organizations can leverage their core competency and use them to compete favorably in the business environment.

The essence of knowledge-oriented management is to produce knowledge from information and convert this knowledge into a reasonable competitive advantage (North & Kumta, 2018). Thus, effective and efficient KM through knowledge acquisition, knowledge conversion, and knowledge protection may bestow sustainable competitive advantage that could be used to outperform competitors. This study therefore, wants to examine the relationship between KM and performance of employees of NOUN. The study decomposes KM into knowledge acquisition, knowledge conversion, and knowledge protection; and treats employees' performance as a one-dimensional variable.

#### **Employee Performance**

Okochi and Ateke (2020) views employee performance as a measure of the quality of output of employees and their effective efficiency in reaching stated performance goals. To Shields (2016), employee performance is the degree to which employees execute their duties and responsibilities while Cardy and Leonard (2004) conceive employee performance as outcomes, results and accomplishments emanating from employees. Employee performance also relates to the collective efforts and behaviours of workers, which are relevant to set organizational goals, which are controlled by employees themselves (Lepak et al., 2007). Studies show that employee performance plays important role in influencing opportunities of career growth and promoting competitiveness of firms (Richardson & Beckham, 2015).

Ability and motivation are the primary anchors of employee performance. Cummings and Schwab (1973, as cited in Okochi & Ateke, 2020) assert that employee performance results from motivation and ability to perform. They maintain that in the absence of motivation and ability, employees cannot post successful job performance. This imply that some amount of motivation is needed for employees to perform their tasks successfully, irrespective of their ability. Again, employee's cognitive abilities and learning perspective along with their values and attitudes affect their job performance (Bergh & Theron, 1999 as cited in Okochi & Ateke, 2020). Thus, employees' effort or ability needs to be stimulated to achieve desired performance.

## **Knowledge Management and Employee Performance**

There are triple models for performance evaluation, these are innovation, competitive advantage, and growth. Organisational benefits have been observed to include innovation, competitive advantage, and growth; a significant area of strength between organizational advantages and successful knowledge management has been established (Jaw Loy & Mujtaba, 2007). With respect to the canonical relationship, there are useful results on innovations, as it concerns knowledge storage, acquisition, choice, and dissemination. That is, information storing, securing, choice, and dissemination insistently influence innovation (Chang & Lee, 2003).

KM affects business performance as it tends to improve competitive edges (Chang & Lee, 2007). There are adequately valuable outcomes of KM on work/staff (Kremp & Mairesse, 2003). It is also argued that KM foundation and cycles essentially affect the outcome of KM. This shows that information technology's impact on KM is not linear. Similarly, leadership, culture, and strategy have been found to positively influence some constructs of KM (Khalifa & Vanessa, 2003). The advancement of KM depends on knowledge sharing, knowledge creation, and knowledge transfer (Keramati & Azudeh, 2007).

Previous studies have linked KM to performance. Masa'deh et al. (2017) examined the relationship between KM process and job performance of lecturers of Jordan University, and found that KM process positively affects job performance of lecturers. Turyasingura (2011) observed that KM improves organizational learning. Similarly, Rasula et al. (2012) examined KM practices through IT, and organisational performance in Slovenia and Croatia. The study reported that KM heavily relies on technology, and requires trust and other supportive organisations elements.

Also, Omerzel et al. (2011) examined the relationship between organizational culture and KM. The study's results showed a statistically significant correlation between different types of organizational culture and KM processes; while Zwain et al. (2012) examined the relationship between KM and academic performance in Iraq using correlation and regression analysis and found that that KM tools are useful for quality of education.

Similarly, Ramachandran et al. (2010) examined KM in relation to education in Malaysia, and found a significant difference in KM processes with respect to public and private Universities in Malaysia. Zaied et al. (2012) examined KM infrastructure and organisational performance in Egypt using correlation and regression analysis. The study shows that if the quality of knowledge is good, management performance improves significantly.

In addition, Ohiorenoya and Ebreime, (2014) assessed KM practices and performance of Nigerian Universities. The study found that variations in KM practices result to differences in organisational performance. In the same vein, Nnabuife et al. (2015) examine the impact of KM and organisational performance of selected commercial banks in Nigeria, and found that knowledge acquisition has a positive effect on organisational performance.

Based on the forgoing, we hypothesize as follows:

Ho<sub>1</sub>: Knowledge acquisition does not have significant effect on employee performance.

Ho<sub>2</sub>: Knowledge conversion does not have significant effect on employee performance. Ho<sub>3</sub>: Knowledge protection does not have significant effect on employee performance.



Fig. 1: Conceptual framework of the study Adapted and Re-Modified from North and Kumta (2018).

## **METHODOLOGY**

This study used a questionnaire as the main instrument for data collection. The questionnaire was designed to examine the impact of KM on the performance of employees at National Open University of Nigeria. The target population of the study consists all senior staff (academics and non-academics) of NOUN. An online Google Form questionnaire was sent to respondents via the University's electronic mail @noun.edu.ng to enable the collection of primary data from respondents. The population of senior academic and non-academic staff was about 2000 employees. 10% of the population was expected to respond to the Google form questionnaire which is about 200 respondents.

Furthermore, a sample size calculator was used to determine the sample size using the total population of 2000 employees at a 5% level of significance and confidence interval of 6.5% which gives 204 as the sample size for the study. From the sample size above, 100 employees responded to the survey which shows a response rate of 49%. On the ratio of respondents, 62 of them were non-academic staff while 38 were academic staff. For an online survey, a 50% response rate has been observed to be an excellent response rate, while a minimum acceptable survey response rate has been estimated to be about 25%. Google forms had been observed to be one of the most acceptable ways of data collection by researchers across the globe (Raju & Harinarayana, 2016).

The choice of Google Forms questionnaire was based on free availability of the tool and the automatic recording of user responses in its internet user base. The questionnaire was divided into three parts. Section A asked questions about the demographic information of respondents, and Section B focused on KM which was divided into knowledge acquisition, knowledge conversion, and knowledge protection, three questions each were asked on each construct of KM. Section C asked questions on the performance of employees of NOUN. KM and employee performance were measured using a Likert scale of five-point ranging from 1 to 5 strongly agree, agree, moderate, disagree, and strongly disagree (Mujtaba, 2007; Nomaka, & Tawchi, 1995). These responses were analyzed using a descriptive method to make inferences about the attitude and opinions of the respondents. Data analyses was done using descriptive statistical tools.

## RESULTS AND DISCUSSION

# **Demographic Characteristics of Respondents**

A total of 100 employees responded to the online survey, among which the percentage of males and females were 74% and 26% respectively. Regarding their marital status, the majority of respondents about 74% were married, while 26% of the respondents were single. This implies that we have large numbers of mature minds among the respondents who were able to provide timely and accurate responses. The composition of how long the employees had been working with the institution was 3 years and above (41%), 4 years-7 years (21%), 8 years-11 years (19%), and 12 years and above (19%) respectively. Furthermore, on the job description of the respondents, a larger percentage of the respondents were non-academic staff (62%) while 38% of the respondents were academic staff.

# **Effect of Knowledge Acquisition on Employee Performance**

Fig. 2 shows that the majority of the respondents about 46% strongly agreed that knowledge management through the use of ICT has increased the performance of employees in NOUN, which had translated to improved service delivery and enhanced the productivity of the institution. Also, 34% of the respondents equally agreed that KM through ICT improves the existing overall performance in NOUN, especially during the COVID-19 era. About 15% of the respondents are indifferent as to whether KM through ICT could improve the performance of an organization.

The advent of the COVID-19 crisis had further shown the importance of the Open and Distance Learning (ODL) system, this is because during this period while many conventional universities in Nigeria and across the world were under the key and lock, NOUN as an open and distance institution was able to conduct most of its academic activities; students' matriculation, examinations, and convocation were virtually conducted in the year 2020 at the peak of the pandemic.

Also, Senate board meetings, University council meetings, various departmental meetings and student online facilitation, PhD applicants' interviews, and PhD seminars were conducted with the help of information communication and technology. Hence, this has also shown that the use of ICT gadgets in the VLE is the core competency of NOUN as an open and distance learning institution. Moreover, this core competency if properly managed could help improve the standard of education and deliver higher education to the nook and cranny of Nigeria and the entire continent of Africa. The finding of this study supports the work of (Mckeen et al., 2006; Asoh et al., 2007; Lia & Wu, 2009).

KM through effective (ICT) improves existing performance in my institution during the covid-19 era 100 responses

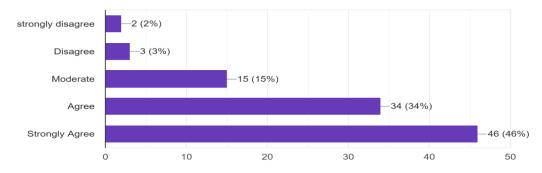


Fig. 2. Effect of knowledge acquisition on Performance (n = 100).

## **Knowledge Conversion on Employee Performance**

Figure 2 shows that the majority of the respondents (53%) agreed that knowledge and experiences are shared through interaction with clients (Students) and other members of the University community, while 27% of the respondents strongly agreed that knowledge conversion positively enhanced the performance of employees in an organization. About 16% of the respondents are indifferent as to whether or not knowledge conversion could improve performance, while 4% of the respondents disagree that knowledge conversion does not have any impact on organizational performance.

Knowledge and experiences are shared through interaction with clients 100 responses

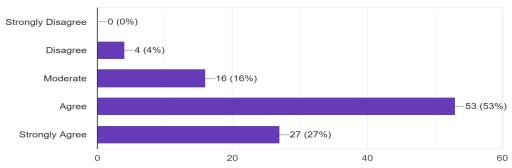


Fig. 3: Effect of knowledge conversion on performance (n = 100).

## **Knowledge Protection and Employee Performance**

Figure 3 below shows that the majority of the respondents (39%) agreed that knowledge acquired within the university is adequately protected while about 25% of the respondents strongly agreed that knowledge acquired within the institution is effectively utilized, protected, and shared among various conventional universities on how to develop effective open and distance learning education through the VLE. This was done through a Memorandum of Action (MoA) between the management of NOUN and some conventional universities in Nigeria. The essence of knowledge protection at this point is to further protect the core competency of NOUN and to better enhance the competitive advantage of the institution. Effective knowledge protection has been observed to help out-performed other competitors in the highly volatile business environment. This finding supports the work of (Udih, 2017; Anantatamula, 2007; Chin-Loy & Mujtaba, 2007).

KM acquired through (ICT) training, workshop is effectively utilized and protected 100 responses

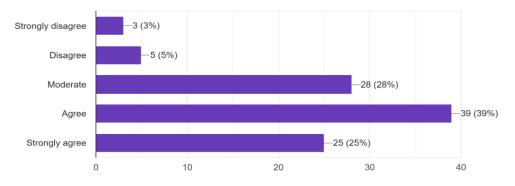


Fig. 4: Effect of Knowledge Protection on Performance (n = 100).

# CONCLUSION AND RECOMMENDATIONS

This study investigated the impact of KM (knowledge acquisition, knowledge conversion, and knowledge protection) on performance of employees of NOUN. The study was done by surveying a cross-section of respondents via the University's electronic mail. The study concludes that all three components of KM (knowledge acquisition, knowledge conversion, and knowledge protection) have significant impact on

performance of employees in NOUN, which has translated to improved service delivery, increased productivity, and increased student enrollment, especially during the post-COVID-19 era.

Effective KM has been identified as a means of enhancing innovation, improving service delivery, and increasing the productivity of employees. To achieve this, adequate and timely training of employees is highly recommended within the institution for both academic and non-academic staff. Also, knowledge acquired should be adequately protected and shared among other institutions and agencies of government, as the world is fast moving towards the knowledge economy, all the knowledge acquired should be effectively managed and utilized. Important policy implication that emanated from this study shows that effective KM could help increase the competitive advantage and core competency of NOUN as a leading institution that provide ODL education in Nigeria and in the continent of Africa.

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