

KNOWLEDGE MANAGEMENT AND PRODUCTIVITY OF FIRST BANK PLC, NIGERIA, ENUGU BRANCH

FIDELIS OTAKA UGWU (PhD)

**Department of Business Administration, Enugu State University of Science and
Technology, Agbani, Nigeria**

Email: fidelis.ugwu@esut.edu.ng

JOSEPHINE IVOMA ORGA (PhD)

**Department of Business Administration, Enugu State University of Science and
Technology, Agbani, Nigeria**

Email: josephine.orga@esut.edu.ng

&

UGWU, FELIX IKECHUKWU (PhD)

**Department of Business Administration, Enugu State University of Science and
Technology, Agbani, Nigeria**

E-mail: felix.ugwu@esut.edu.ng

Abstract

This study examined knowledge management and productivity of first bank plc, Enugu branch. Knowledge is one of the strategic resources an organization can use to have competitive advantage over other firms if managed properly. The specific objectives were to: ascertain the extent to which Knowledge creation affects the efficiency of First Bank Nigeria, Enugu Branch, assess the effect of Knowledge sharing on sales turnover of First Bank Nigeria, Enugu Branch. The researchers used survey research design. The sample size of 63 was determined from population of 76 using Taro Yamani formula. The study found out the following: that knowledge creation had positive and significant role on organizational efficiency of First Bank Nigeria, Enugu Branch. This is confirmed with ($\beta = 0.618$, $t\text{-calc.} = 3.667$, $p = 0.001 < 0.05$). Secondly, Knowledge assessment had positive and significant effect on organizational sales return of First Bank Nigeria, Enugu Branch. This is confirmed with ($\beta = 0.554$, $t\text{-calc.} = 3.827$, $p = 0.000 < 0.05$). These recommendations were made by the researchers: Organizations must have a culture that stimulates employee participation. Also there is need to focus efforts on transforming organizations to learning organizations and to enhance learning culture.

Keywords: knowledge, management, knowledge management, employee, productivity, service organization.

Introduction

Noh, Kim, & Jang, (2021), posit that the success of a firm lies more on its capability to knowledge and learning than in its physical assets." Today, the role of knowledge management and the processes for managing it has become vital for the survival of

organizations and its growth. The twenty first century is the era of knowledge economy, in which most organizations possess knowledge that enables them to improve their growth. By understanding the importance of knowledge management, successful organizations attempt to implement knowledge management systems actively. Boron (2016), believes that the company's ability to dominate the market is subject to organizational knowledge creation as continuous and comprehensive policies. An effective mechanism for employee and organizational performance improvement is designing and establishment of Knowledge Management systems; such a system enables an accurate definition of knowledge and information, knowledge development, and knowledge sharing which brings about improvement of employee performance, (Ciborra & Andreu, 2016).

Jasimuddin, (2018), asserts that knowledge management has been recognized as a major source of competitive advantage. The old establishment of industrialized economies has now moved from natural resources to intellectual resources, (Lee & Choi, 2013). The thinkers and Management Researchers have announced a time of KM in which associations are progressively considering the knowledge as a profitable and vital asset (Teece, 2016). Nonaka and Takeuchi (2015) emphasized on the supportable creativity in associations to accomplish maintainable assertiveness in the Organizational environment through consistent production of new knowledge.

Statement of the Problem

Knowledge is one of the most valuable and strategic resource organizations' have in order to remain competitive. It is evidenced that they do not maximize their tacit and explicit knowledge. One of the greatest challenges of today's organization is how to collect more data and turn them into valuable knowledge for the firm. It is of concern that most organizations are not making use of the knowledge that is repository in the employees through sharing for its growth.

There has been poor Knowledge assessment, Knowledge generation, Knowledge Creation, Knowledge Storage and Knowledge Sharing in many organizations today and any gap in these practices will affect the Organizational productivity. Thus, this study aims to find out the effect of Knowledge Management on the productivity of first Bank Plc, Enugu branch.

Objectives of the Study

The broad objective of this study is to examine knowledge management on the productivity of first Bank plc, while the specific objectives are to:

- i. ascertain the extent to which Knowledge creation affects the efficiency of First Bank.
- ii. assess the effect of Knowledge sharing on sales turnover of First Bank.

Research Questions

The following research questions were formulated:

- i. To what extent does Knowledge creation affect efficiency of First bank plc, Nigeria?
- ii. What is the effect of Knowledge sharing on sales turnover of First Bank Nigeria?

Statement of Hypotheses

The following hypotheses were formulated.

- i. Knowledge creation has significant positive effect on efficiency of First Bank.
- ii. Knowledge sharing has significant positive effect on sales turnover of First Bank.

Review of Related Literature

Knowledge Management

Davenport and Prusak (2016), posit that knowledge as a fluid mix of framed experience, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experience and information. Knowledge often becomes embedded in documents or repositories and in organizational routines, processes, practices, and norms (Kubo & Saka, (2012). Knowledge is also about meaning in the sense that it is context-specific (Huber, 2018). Jennex (2014) extends the concepts of context also to include associated culture that provides frameworks for understanding and using knowledge. Eventually, it can be concluded that knowledge contains information, but information is not necessarily knowledge. (Connelly and Kelloway, 2013)

Knowledge Management Practices

Lee and Yang (2010) have divided Knowledge Management to include: knowledge acquisition, knowledge innovation, knowledge protection, knowledge integration and knowledge dissemination. While Alavi and Leidner (2011) combined knowledge acquisition, knowledge innovation and knowledge integration into knowledge “creation” process, and added knowledge “application”, Knowledge creation is generating new knowledge; it consists of internal creation through accumulating and recombining existing knowledge from scattered sources and external acquisition from outside of the knowledge network. Where these two ways supplement each other; knowledge acquired from external sources create an opportunity for knowledge integration, at the same time; with more knowledge accumulated internally, firms increase their absorptive capability (Li, 2012). It is generating new knowledge through experimentation, lessons learned, creative thinking and innovation (Ranjbarfard, Von-Krogh, Nonaka, & Rechsteiner, 2014). In addition to that, Knowledge acquisition is an ongoing and dynamic process that involves the capability to innovate novel ideas, insights and solutions and incorporate it within the organization (Jayasingam, 2012). Knowledge can be gained through individual learning, scanning of the external and internal environment and hiring new employee (Lim, 2010).

Sharing knowledge allows both parties to expand information through the exchange process. However it provides an opportunity to discuss know-what and know-how practices, to direct the organization towards future development and growth (Azudin, 2017). Knowledge can be shared through personal communication and training (Lim, 2010). It can be shared through broadcasting, searching, teaching and other social activities (Ranjbarfard et al; 2014). Knowledge Application process is a process oriented towards the use of knowledge to adjust strategic direction, solve new problems and improve efficiency (Gold, 2010).

Organizational Productivity

Pitcher Partners Growth (2016) opined that organizational productivity relates to how successful an organized group of people with a particular purpose perform a function. It

comprises the actual output or results of an organization as measured against its intended outputs, objectives, or goals. However, high organizational productivity exists when all the parts of an organization work together to achieve great results. Eyenubo (2013), claimed that productivity is the success of meeting predefined objectives, targets, and goals within a specified time target. Productivity is defined as the record of outcomes produced on a specified job function or activity during a specified period (Obiageli, Uzochukwu, and Ngozi, 2015).

Theoretical Framework

The study is anchored on the following theories;

Intellectual property Theory

Harry Potter's 1988 propounded intellectual property theory and they include: copyright and rights under license for the manufacture and sale of related products, is involved throughout, from the early author/publisher negotiations to the point where a licensed product is sold to a consumer. The rationale behind intellectual capital theory drives the need to account for knowledge, and the need for 'due care' in managing it.

Strategic Management theory

Strategic Management theory determines a second category of theory that is motivating knowledge management. This view regards knowledge as a fundamental resource that enables organizations to compete more effectively in their markets (Earl, 1997). According to this body of theory, there are two key knowledge themes leading to this rationale: competence-based competition and dynamic capability. The knowledge management field is extending these strategy theories to include new concepts like dumbfizing, knowledge alliances, knowledge strategy, knowledge marketplaces, and knowledge capability.

Empirical Review

This section reviewed prior studies on the role of knowledge management on organizational productivity.

Knowledge creation and organizational efficiency

Saif and Ala (2020) examined the impact of knowledge management (KM) on the organizational performance of Safeway Group in Jordan. It adopts an analytical descriptive approach to meet the sought goals. It used a survey. The questionnaire forms were distributed to 172 directors of the departments, deputy directors and heads of the branches of Safeway markets. 157 questionnaire forms were retrieved. Knowledge management dimensions jointly (knowledge creation, knowledge storage, application of knowledge, knowledge sharing) significantly affect –at the significance level of ($\alpha = 0.05$) -the organizational performance. Dimensions jointly (completion of task, quality of work, a quantity of work). The researcher recommends promoting awareness of senior management leaders in Safeway Group about the importance of knowledge management. KM is important for suppliers and customers because they are responsible for providing the latter group with resources that enable the organization to achieve excellence and a sustainable competitive advantage.

Andrea, Filippo, Giulio and Alessio (2020) explored the relationships between knowledge management (KM), performance measurement systems (PMSs), and small and medium enterprises' (SMEs) economic sustainability in knowledge-intensive sectors. The literature demonstrates that SMEs are often characterized by unstructured KM approaches and limited PMS implementation, being at the same time affected by scarce profitability and financial issues. Adopting the knowledge-based view of the firm and the contingency theory of PMSs, we tested the impact of two alternative KM approaches (exploitation and exploration) on SMEs' economic sustainability, measuring the moderating effect of PMS use (diagnostic and interactive). Through an ordinary least squares (OLS) regression of data collected for 219 Italian medium firms operating in knowledge-intensive sectors, this study provides evidence on how a specific KM approach supports the SME economic sustainability and how a consistent implementation and use of PMS amplify the relationship between KM and economic sustainability. Data analysis confirms the relevance of some key concepts of the knowledge-based view of the firm, especially the positive impact of the KM exploration approach on economic sustainability.

Changiz, Javad and Bahare (2021) investigated the mediating role of innovation practices (IP) amidst relations of knowledge management practices (KMP) and sustainable balanced performance (SBP). Furthermore, this research illustrates a comprehensive empirical study in the Iranian knowledge-based industrial companies that are the manufacturers of advanced machineries and equipment. First- and second-order exploratory factor analysis (EFA) was done to confirm constructs validity. Then, relations among variables were studied by applying the partial least squares (PLS) technique to collected data from 104 industrial knowledge-based companies. The results obtained from the analysis supported all the research hypotheses. KPM significantly and strongly affects IP and SBP. Also, IP mediates the relations between KPM and SBP in industrial knowledge-based firms.

Shadi, Ra'ed, Khaled and Ala'aldin (2018) examined the role of knowledge management process and intellectual capital as intermediary variables between knowledge management. This study adopted a positivist philosophy and deductive approach to accomplish the main goal of this research. Moreover, this research employed a quantitative approach since this study is concerned with causal relationship between variables. A questionnaire-based survey was designed to evaluate the research model using a convenience sample of 134 employees from the food industry sector in Jordan. Surveyed data was examined following the structural equation modeling procedures. Results indicated that knowledge management infrastructure had a positive effect on knowledge management process. In addition, knowledge management process impacted positively intellectual capital and organization performance and mediated the relationship between knowledge management infrastructure and intellectual capital. However, knowledge management infrastructure did not positively associate to organization performance.

Methodology

Research Design

This study adopted the descriptive research of the sample survey type. Survey research focuses on people and their perceptions, opinions, beliefs, attitudes, motivations and behaviour (Osuala, 2005). The type of survey research used was "sample survey". Sample

survey gathers data and information from a percentage of the population to represent the entire population (Tull and Albaum, 1973; Uzoagulu, 1998). Survey was adopted because the problem under study demanded the technique of questionnaire as the principal means of collecting data.

Sources of Data

Two sources used for this study are primary and secondary data. This choice of data is logically dictated by the fact that this study is, as earlier stated, a descriptive research of the survey type.

Primary Sources of Data

These are original data collected basically for the purpose of the problem under investigation (Onodugo, Ugwonah, and Ebinne (2010). Primary data mainly comes from direct observation of events, manipulation of variables, and contrivance of research situations including performances of experiments and responses to questionnaires (Asika, 2001).

The primary source of data was obtained from the various manufacturing firms in the South East Nigeria. In collecting primary data for this study, a structured questionnaire and oral interview were used by way of validating and authenticating the data that would be obtained from the secondary sources.

Secondary Sources of Data

The secondary data for this study were sourced from relevant stock of literature on the subject matter of this study. This stock of literature exists in the form of books, government documents, journals, periodicals, mimeographs, reports which are available in various public and private libraries. The researcher would visit these libraries, particularly in the course of the desk research aspect of the study.

Population of the study

The study population was management staff and middle managers of First bank branches in Enugu, Nigeria.

Table 3.1: Population Distribution Health

S/N	First bank	Population
1	Management staff	15
2	Middle managers	61
	Total	76

Source: Field Survey, 2022

Sample Size Determination

In determining the sample size, the researcher used Taro Yamane's Statistical Tool for obtaining the sample size from a given population. It is thus presented as:

$$n = \frac{N}{1+N(e)^2}$$

Where

n = Sample size

N = Population
e = Error of Margin (5% i.e 0.05)

Therefore, the sample size

$$n = \frac{76}{1 + 76(0.05)^2}$$

$$n = \frac{76}{1 + 76(0.0025)}$$

$$n = \frac{76}{1 + 0.19}$$

$$n = \frac{76}{1.19}$$

$$n = 63$$

Therefore the sample size for the study is 63.

Allocation of sample size

Bowley's proportional allocation formula was used to allocate the sample proportionally among the selected sample firms.

The formula is thus:

$$nh = \frac{nN_h}{N}$$

Where nh = sample allocation to homogenous group or level

n = overall sample size

N_h = The stratum population of each homogenous group.

N = The population of the study

Therefore, the sample for each user group becomes

1.	Management	=	$\frac{63 \times 15}{76}$	=	12
2.	Middle managers	=	$\frac{63 \times 61}{76}$	=	51

Table 3.2: Allocation of sample size

S/N	First bank	Sample Size
1	Management	12
2	Middle managers	51
	Total	63

Source: Field Survey, 2022

Data Analysis

The cleaned data was analyzed using descriptive statistics, i.e. measures of central tendency and of variability, and inferential statistics using regression. After analysis, the data was then presented in tables and figures. SPSS version 20 is the statistical software that was used to analyze the data. To analyse the hypotheses, Ordinary Least Square (OLS) of simple regression technique were employed to measure the extent of the effect of independent variable on dependent variable.

Level of Significance

With n-2 degree of freedom and 0.03(3%) level of significance.

Decision Rule: It states that if the computed t-value is greater than the theoretical value also known as critical value, the null hypotheses will be rejected and the alternate accepted,

but if the computed value is less than the theoretical value, the null hypothesis will not be rejected and the alternate hypothesis rejected.

Data Presentation, Analysis and Discussion of Results

This chapter discussed data presentation, analysis and interpretation. Tables and simple percentages were adopted while Hypotheses were tested using regression technique. This section examined and analyzed the data collected from different respondents. Fifty Five (55) questionnaires were distributed to respondents and all were successfully filled and return and thus considered valid and for data analysis.

Data Presentation

Table 4.1.1 Questionnaire Distribution and Response rate

First Bank Nigeria	No. of Questionnaire Distributed	No. of Questionnaire Returned	Percentage of Ques. Returned (%)	Questionnaire not Returned	% not returned
Management	12	8	12.7	4	6.3
Middle managers	51	47	74.6	4	6.3
Total	63	55	87.3	8	12.6

Source:Field survey 2022

Table 4.1.1 above represents the questionnaire distributed and response rate; 63copies of questionnaire were distributed to First Bank Namely; management, and Middle managers respectively. A total number of 12 of the questionnaire were administered to the “Management” after which 8(12.7%) copies of questionnaire were returned and 4(6.3%) of the questionnaire were not returned; 51 copies of questionnaire were administered to Middle managers after which 47(74.6%) of the respondents were returned and 4(6.3%) of the respondents were not returned. Therefore the analysis was based on the 55 copies if questionnaire that were returned.

Test of Research Hypotheses

Hypothesis One

H₁. Knowledge creation has significant role on organizational efficiency of First Bank Nigeria Enugu Branch

Table 4.3.1a

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.450 ^a	.202	.187	1.22876

a. Predictors: (Constant), KNOWLEDGECREATION

4.3.1b ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	20.301	1	20.301	13.445	.001 ^b
Residual	80.023	53	1.510		
Total	100.323	54			

a. Dependent Variable: OEFFIICIENCY

b. Predictors: (Constant), KNOWLEDGECREATION

4.3.1c Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.810	.684		2.646	.011
	KNOWLEDGECREATION	.618	.169	.450	3.667	.001

a. Dependent Variable: OEFFIICIENCY

Source: SPSS output Version 20

i. The R² (Coefficient of determination):

In the above model, R² = .202 adjusted to .187, which implies that approximately 20% of the variation in the dependent variable "OEFFIICIENCY" is caused by the explanatory variable "KNOWLEDGECREATION".

ii. Analysis of Variance (ANOVA)

The F-test, which follows an F-distribution, measures the overall significance of the model. From the above result F-Statistics recorded (13.445; p = 0.000 < 0.05) which implies that Knowledge creation has significant role on organizational efficiency of First Bank Nigeria Enugu Branch.

iii. Student's T-Test:

$$\text{OEFFIICIENCY} = 1.810 + 0.618(\text{KNOWLEDGECREATION}) + \mu.$$

This test was conducted to ascertain the significant status of each of the parameters or variables. In doing this, we employed the two-tail tests which compared the t-calculated for the explanatory variables with the t-tabulated.

The results presented in Table 4.3.1c showed "Training" to be ($\beta = 0.618$, t calc. = 3.667, p = 0.001 < 0.05). From the analysis we now conclude that Knowledge creation has significant role on organizational efficiency of First Bank Nigeria Enugu Branch.

Hypothesis Two

H₂. Knowledge assessment has significant effect on organizational sales return of FirstBank Nigeria Enugu Branch.

Table 4.3.2a Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.465 ^a	.217	.202	1.21779

a. Predictors: (Constant), KNOWLEDGEASSESSMENT

Table 4.3.2b ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.723	1	21.723	14.648	.000 ^b
	Residual	78.600	53	1.483		
	Total	100.323	54			

a. Dependent Variable: SALESRETURN

b. Predictors: (Constant), KNOWLEDGEASSESSMENT

Table 4.3.2c Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.082	.588		3.540	.001
	KNOWLEDGE ASSESSMENT	.554	.145	.465	3.827	.000

a. Dependent Variable: SALESRETURN

Source: SPSS output Version 20

i. The R² (Coefficient of determination):

In the above model, R² = .217 adjusted to .202, which implies that approximately 22% of the variation in the dependent variable "SALESRETURN" is caused by the explanatory variable "KNOWLEDGEASSESSMENT".

ii. Analysis of Variance (ANOVA)

The F-test, which follows an F-distribution, measures the overall significance of the model. From the above result F-Statistics recorded (14.648; p = 0.000 < 0.05) which implies that Knowledge assessment has significant effect on organizational sales return of First Bank Nigeria Enugu Branch.

iii. Student's T-Test:

SALESRETURN = 2.082 + 0.554(KNOWLEDGEASSESSMENT) + μ .

The results presented in Table 4.3.2c showed "Counseling" to be (β = 0.554, t-calc. = 3.827, p = 0.000 < 0.05). From the analysis we now conclude that Knowledge assessment has significant effect on organizational sales return of First Bank Nigeria Enugu Branch.

Discussion of Result

This section discussed the result of the responses on the role of knowledge management in promoting organizational growth.

Knowledge creation has significant role on organizational efficiency of First Bank Nigeria Enugu Branch

From the result of the hypothesis 1 tested, it agreed with the result of Saif and Ala (2020) who examined the impact of knowledge management (KM) on the organizational performance of safeway Group in Jordan. Knowledge management dimensions jointly (knowledge creation, knowledge storage, application of knowledge, knowledge sharing) significantly affect –at the significance level of ($\alpha = 0.05$) -the organizational performance. The researcher recommends promoting awareness of senior management leaders in Safeway Group about the importance of knowledge management. The study also agreed with the work of Changiz, Javad and Bahare (2021) who investigated the mediating role of innovation practices (IP) amidst relations of knowledge management practices (KMP) and sustainable balanced performance (SBP). exploratory factor analysis (EFA) was done to confirm constructs validity. Then, relations among variables were studied by applying the partial least squares (PLS) technique to collected data from 104 industrial knowledge-based companies. The results obtained from the analysis supported all the research hypotheses. KPM significantly and strongly affects IP and SBP. Also, IP mediates the relations between KPM and SBP in industrial knowledge-based firms.

Knowledge assessment has significant effect on organizational sales return of First Bank Nigeria Enugu Branch

From the result of the hypothesis 2 tested, it conforms with the result of Mir, Abdulkarim and Hussein (2016) who explored the impact of knowledge management (KM) on human resource (HR) performance in management of Keshavarzi organization branches in Tehran. In light of the results, KM significantly influenced HR performance as well as all performance components, except for environment. Directions for further research are also proposed. Abdul (2016) who investigated the impact of Knowledge Management on Organizational Performance-An Exploratory Study in Bangladesh With a view to identifying the impact of knowledge management of organizational performance, Knowledge management practices were found to be directly and positively related to organizational performance. Also, the findings demonstrated different effect of Technology, organization and knowledge of diverse dimensions of organizational performance.

Summary of Findings, Conclusion and Recommendations

Summary of Findings

This study was set to examine the role of knowledge management in promoting organizational growth, the following findings were made;

- i. Knowledge creation had positive and significant role on organizational efficiency of First Bank Nigeria Enugu Branch. This is confirmed with ($\beta = 0.618$, t-calc. =3.667, $p = 0.001 < 0.05$).
- ii. Knowledge assessment had positive and significant effect on organizational sales return of First Bank Nigeria Enugu Branch. This is confirmed with ($\beta = 0.554$, t-calc. =3.827, $p = 0.000 < 0.05$).

5.2 Conclusion

This study investigated the role of knowledge management in enhancing the organizational performance in an organizations and addressed its relationship with performance improvement. Also, it measured the level of knowledge management capabilities and addressed the relationship between knowledge management capabilities and organizational performance measures. Results of correlation analysis show significant relationship between knowledge management variables and performance improvement measures, which in turn represented the quality of organizational knowledge that was utilized in a wide variety of decision-makings in the firm. Thus, if the quality of organizational knowledge is good, it can be conclude that management performance improves significantly.

Recommendations

From the findings of the study, the following recommendations were made:

- i. Organizations must have a culture that stimulates employee participation. Knowledge management should be developed along with environmental changes. Useful knowledge should be separated from useless information especially when we are faced with an abundance of information on the Internet.
- ii. There is need to focus effort on transforming organizations to learning organizations and to enhance learning culture. Personal characteristics of organization leaders and the organizational culture are instrumental in determining data gathering, information sharing, and knowledge creation processes

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