

RESEARCH ARTICLE

IMPACT OF KNOWLEDGE MANAGEMENT ENABLERS AND PROCESSES ON ORGANIZATIONAL PERFORMANCE

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Abstract: This research is conceived to empirically analyse the impact of knowledge management enablers and processes on organizational performance. To identify and assess knowledge management enablers like culture, Structure, People, and Information Technology; and the impact of knowledge creation process like Socialization, Externalization, Combination, and Internalization on improving organizational performance, is the focal objective of this study. Empirical research has explored the relationships between these factors in isolation. This paper develops a research model that interconnects knowledge management enablers and knowledge creation process and performance, to close the existing gap. To establish credibility between knowledge creation and performance, organizational creativity is incorporated into the model. The results from the analyses conducted confirmed that the best path for organizations, in this case, Nigerian Banks to achieve and enhance better organizational performance is through organizational creativity that can be achieved through knowledge creation process that involves knowledge enablers. Since globalization has brought about a new set of challenges and issues that organizations today must deal with, to remain competitive and become successful, organizations need to look outside the box for strategies to cope with such challenges and issues. In the changeable scenario, optimizing human, information technology and intellectual capital is the major challenge for all organizations. If globalization is the business of mindset, equipment, and behavioural change, then the role of knowledge management practices becomes integral to the growth of business.

Keywords: *Knowledge Management, Knowledge creation processes, Knowledge management enablers, Organizational creativity, Organizational performance.*

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INTRODUCTION

Globalization coupled with uncertainty in business environment have brought about with them varying trends and companies have the responsibility to strategically adapt as quickly, easily, and painlessly as they can to survive in the competitive market.

The vital strategic resource today is knowledge both individual and organizational. By realizing the major value of intellectual resources, companies have begun to rationally manage and improve them. Knowledge management (KM) is the

practice of selectively applying knowledge from previous experience to current and future decision-making activities with the express purpose of improving the organization's effectiveness. Jennex M.E. and Wiig K. [1-2] sees knowledge management as broad, multi-dimensional and covers most aspects of the enterprise activities. This explains why some authors focus their definitions on the knowledge management objectives.

This according to Wiig K [3] aims at making an enterprise act as intelligently as possible to

secure its viability and overall success and to realize the best value from its knowledge assets. Therefore, knowledge management aims at creating the conditions under which competitive advantage can be identified, maintained, retained, and exploited to its fullest possible cause.

The recent consolidation and reforms instituted in the banking industry in Nigeria, brought a lot of improvement in the banking industry that led to better banking practices. However, this sector has also been characterized by a lot of challenges that includes; employees turnover and loss of competent professionals through organisation downsizing, weak corporate governance, fraud, poor information technology support, static archives of information in the organisation, inefficient operational policies, pay cut in the salary/wage benefits of the work force, cultural incompatibility as a result of mergers and acquisition, lower morale of employees due to poor training and development programs, use of obsolete technological equipment leading to work frustration, poor deployment of resources and capabilities, weak organizational strategies, poor incentives, rewards or motivational aid to its work forces [4].

Knowledge management awareness has been rife in recent time, despite this little has been reported about its implementation by majority of organizations including the banking sector of the Nigerian economy. Of the few survey studies available and known to the authors, on the relationship between knowledge management and other factors, only few articles empirically investigated the relationship between knowledge management and organisational performances [5-6]. In the light of the above finding and observation, this study attempts to examine the ways organizational performance can be increased through the development of and implementation of knowledge management.

Therefore, this paper surveys the Nigerian banking sector to gauge its' status in knowledge management practices and the implications of this on banks performance. The study particularly investigated five banks-

Access Bank Plc, Guaranty Trust Bank, Sterling Bank plc, UBA plc and Zenith Bank Plc to empirically analyse the link between knowledge management enablers and knowledge creation processes on organizational performance, which has bearing on both financial and nonfinancial institutions.

LITERATURE REVIEW

Organized business since known time, has sought competitive advantage that would enable sustainability and allow it to serve customers as efficiently as possible, maximise profits, develop loyal clientele patronage and keep competition at bay regardless of the type of products or services it produces [7]. This competitive advantage is realized through the full utilization of information and data coupled with the harnessing of people's skills and ideas as well as their commitments and motivations. Knowledge is increasingly being recognized as the new strategic imperative of organisations. The knowledge an organisation can harness forms its distinguishing business success and competitive advantage in the modern economy [8].

Knowledge management is a key and vital concern for organisations as poor management of knowledge can bring about loss of organizational knowledge, expensive duplication of knowledge creation activities, high costs associated with knowledge and skills and reduced organisational competitiveness. Several authors have asserted that effective management of knowledge has consistently resulted in organizations' enjoying higher levels of corporate success and value than others who do not engage in formal Knowledge Management [9-15].

Knowledge management emerged from the fact that the creation and transfer of knowledge has become a critical factor in an organisation's success and competitiveness [16] Knowledge may be viewed from several perspectives. Knowledge can be visualized as:

- A state of mind,
- An object,
- A process,

A condition of having access to information, or A capability.

Knowledge has been described as a state or act of knowing with knowing being a condition of understanding gained through experience or study. It is the sum or range of what has been perceived, discovered, or learned^[17] The perspective on knowledge as a state of mind focuses on enabling individuals to expand their personal knowledge and apply it to the organization's needs.

Another perspective of knowledge talks about knowledge as an object [18-20] Yet another perspective of knowledge posits that knowledge can be viewed as a thing to be stored and manipulated (an object). Alternatively, knowledge can be viewed as a process of simultaneously knowing and acting. The process perspective focuses on applying expertise [18]. Further another perspective of knowledge views knowledge as a condition of access to information [19] According to this view, organizational knowledge must be organized to facilitate access to and retrieval of content. Finally, knowledge can be seen as a capability with the potential for influencing future actions [20].

Watson R.T [21] builds upon the capability view by suggesting that knowledge is not so much a capability for specific action, but the capacity to use information, learning and experience to interpret information and to ascertain what information is necessary for decision making. Organisations now are becoming aware that knowledge is the primary economic unit of business in this century.

The need for knowledge has sharply accelerated since in the 1980s to such an extent that there is now almost a unanimous recognition of the essential role of the creation and circulation of information and knowledge as a factor determining the competitive capacity of firms, the performance of economic systems and thus the rate and direction of economic growth. Effectively implementing a sound knowledge management strategy, a knowledge-based

company is seen as a mandatory condition of success for organisations as they enter the era of the knowledge economy [22,11,23,24].

Knowledge Category Exploration and Exploitation within the Organization

A major component of knowledge management is the category in which it is identified. There are those that are concerned with creating the stock of knowledge available to the organisation, this is known as Knowledge Generation/Exploration. There are those that are concerned with the application of the organization's knowledge which is known as Knowledge Application/Exploitation [25-26]. The best developed and most widely applied techniques of knowledge management have focuses on techniques of knowledge management application and exploitation.

Knowledge Generation: In this area it is possible to distinguish between the internal creation of knowledge (knowledge Creation) and the search to identify and absorb existing knowledge from outside the organisation (Knowledge Acquisition). The mechanism through which knowledge is acquired from outside the organisation is typically well known; hiring skilled employees, acquiring companies or their knowledge resources, benchmarking companies that are recognised as "best- in- class" for certain practices and learning through alliances and joint ventures.

Knowledge Integration: This represents one of the greatest challenges to any company. Ultimately, producing a good or service requires bringing together the knowledge of many people and establishing organisational processes that allow this to be achieved efficiently through the task of strategic planning system that is seen as a vehicle for integrating the different knowledge bases of managers at different levels of the organisation and from different function to create the best strategy for the company. Similarly, with new product development the key is to integrate the knowledge of many technical experts and across a range of functions.

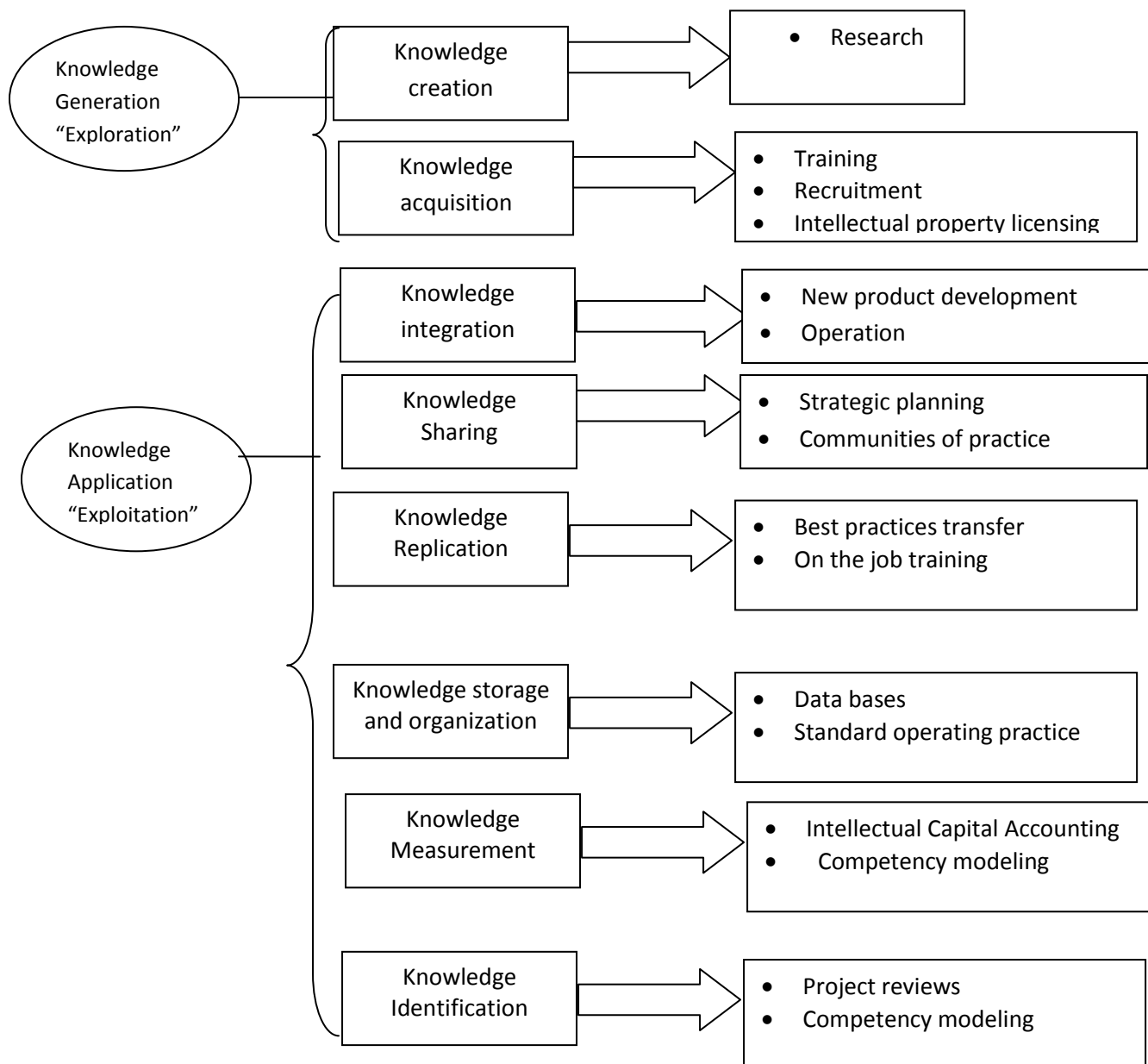


Figure 1: Knowledge Application/Acquisition

Source: Adopted from [26] and [25] Knowledge category- acquisition/application within the organization

Knowledge sharing and Replication:

This involves the transfer of knowledge from one part of the organization (or from one person) to be replicated in another part (or by another individual). A central function of IT-based knowledge management systems is achieved through replicating tacit knowledge embodied within individuals by using apprenticeship and on-the-job training.

Recently, organizations have discovered the important role played by informal networks in transferring experiential knowledge; these self-organizing communities of

practice are increasingly being deliberately established and managed as a means of facilitating knowledge sharing and group learning. Replicating capabilities poses an even greater challenge. Szulanski G. [27] shows that transferring best practices within companies is not simply about creating appropriate incentives; it is the complexity of the knowledge involved that constitute the most significant barrier.

Knowledge Storage: For knowledge to be efficiently utilised within the organisation, knowledge storage is critical. The key contribution of information technology to

knowledge has been in creating databases for storing information, organizing, accessing, and communicating information to facilitate the transfer of and access to knowledge.

Knowledge Measurement: involves the difficult task of applying metric to the organization's stock of knowledge and utilisation. The pioneer of measurement has been Skandia, the Swedish insurance company with its systems of intellectual capital accounting and Dow Chemical system of intellectual capital management which relies on quantitative tools to link intellectual property portfolio to the shareholder value using a balanced scorecard approach.

Knowledge Identification: In the area of knowledge identification companies are increasingly systematizing information on their knowledge assets. These include assessment and reviews of patent portfolio and providing personal data that allows each employee to identify the skills and experience of other employees in the organisation. A key aspect of such knowledge identification is the recognition of knowledge that is being generated within the organisation so that it can subsequently be stored for future use. This is especially important in project-based organisations to ensure that knowledge developed through lesson-learned in one project is not lost to the organisation [28].

KNOWLEDGE MANAGEMENT IN THE BANKING INDUSTRY

Knowledge management practices are favourably associated with gaining competitive advantages and achieving higher innovation that result in higher organizational performance [6]. Organizational performances are linked to both financial and non-financial indicators.

The financial indicators are measured in terms of Return on Investment (ROI) [29], Return on Assets or Equity [18]. Benchmarking another tool used in measuring the contributions of knowledge management to organisational performances takes into consideration many of the qualitative limitations of Return on

Investment (ROI) by using company or industry-wide best practices as a basis for comparison [7].

The Balance score card is also considered as a better tool for measuring the contributions of knowledge management to organisational performance by providing a condensed view of qualitative and quantitative objectives, metric, indicators, and communication tools that management can use to establish the value of knowledge management initiatives to the corporation.

To understand the practices of knowledge management and its contribution to the performance of organisations in Nigeria, the banking industry is considered for this study because of its strategic link to the economic development of a nation. The relevance of banks in an economy of any nation cannot be overemphasized because they are the corner stone of the economy of a country.

The economies of all market-oriented nations depend on the efficient operation of complex and delicate balance system of money and credit. Banks are an indispensable element in these systems for they provide the bulk of money supply as well as the primary means of facilitating the flow of credit.

Consequently, it is submitted that the economic wellbeing of a nation is a function of advancement and development in her banking industry. Annual reports and statements from the five banks under survey captured the banks return on assets and equity, one-five years banks market share, growth rate and financial performance.

Research model adapted from Lee & Choi, (2003) and modified by the researcher to include Lee, Kim, and Kim, (2012) and APQC, (1999) model.

KNOWLEDGE MANAGEMENT ENABLERS

Knowledge Management Enablers (KME) or influencing factors are organisational mechanism for intentionally and consistently fostering knowledge.

identified organisational culture, structure, people, and informational technology as key critical factors in knowledge management of which this study have adopted in appraising knowledge management performance.

Knowledge Creation Processes

Knowledge creation is a continuous process whereby individuals and groups within a firm and between firms share tacit and explicit knowledge [30-31]. To describe the knowledge creation process systematically,

this paper adopts the work by [15]. Nonaka I. and Takeuchi H. proposed the SECI modes which explores knowledge creation through conversion between tacit and explicit knowledge.

The SECI modes consist of socialization (S), externalization (E), combination (C), and internalization (I). Socialization converts new tacit knowledge such as shared mental models, technical skills, and shared experience from one member to another. Externalization transfers

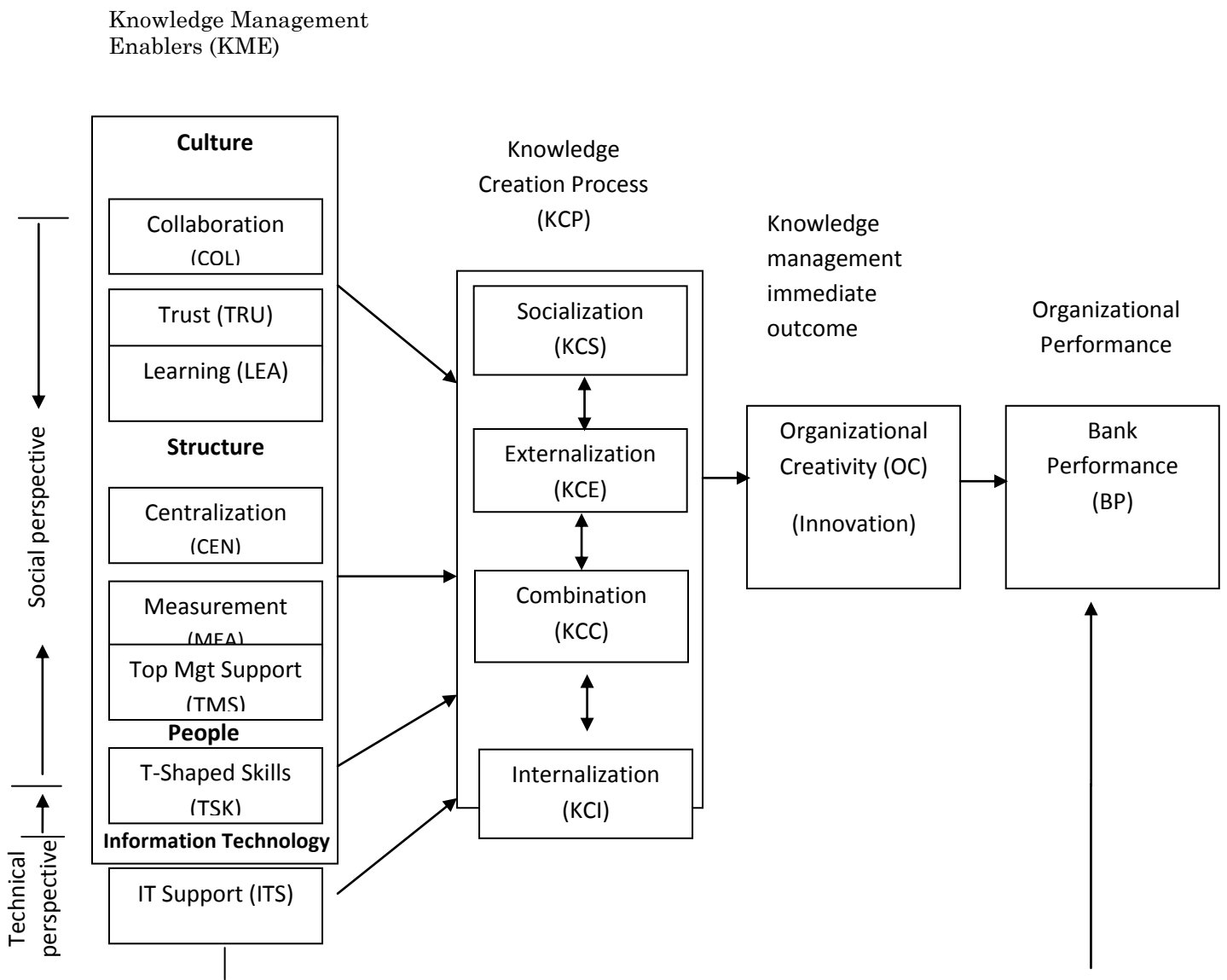


Figure 2: Integrative conceptual framework for knowledge management

tacit knowledge into explicit concepts, through the process of concept creation triggered by dialogue or collective reflection. Combination converts explicit knowledge into more systematic sets. Internalization

embodies explicit knowledge into tacit knowledge. Explicit knowledge can be internalized into individuals' tacit knowledge.

ORGANIZATIONAL PERFORMANCE

Organizations that operate based on the successes of manufacturing-based, capital-intensive industrial economy of the past risk falling out of the alignment with the evolutionary direction of the future [32]. Knowledge by itself does not produce value. For it to furnish a sustainable competitive advantage, an organisation must have some form of exclusive or near exclusive ability to explore it [33].

This exclusivity may arise from exclusive possession of the knowledge itself or the means to apply the knowledge. If there is no exclusivity, the competitive advantage is not sustainable, because other organizations will easily be able to enter the market and competition will eradicate profits. Therefore, organisations in their various sizes and status invest in KM practices to achieve productivity, profitability, and market share, sales growth, innovativeness, cost performance, competitiveness and improve organisational performance.

METHODOLOGY

The response sample included 147 respondents of the selected banks surveyed. The structural relations among variables were tested using Regression Analysis, Product Moment Correlation and ANOVA. The study also used the secondary sources to extract data from the Annual Reports of the selected banks for a period of five (5) years (2008-2012) and analysed using Ordinary Least Square Method.

From the five hypotheses that were tested; Hypothesis 1 revealed that the calculated (t = 297.95, r = 0.267, p <0.05) signified that there is a positive significant relationship between knowledge management enablers and bank performance. Hypothesis 2 showed that the calculated; (r 0.46, p < 0.05) has a

positive and significant relationship between knowledge creation process and bank performance.

Hypothesis 3 result revealed that the calculated t-statistics (t=304.90, r = 0.49 p< 0.05) signified that there is a positive relationship that existed between knowledge enablers and knowledge creation process. Hypothesis 4 which appraise the impact of knowledge management enablers and knowledge creation process on organizational creativity showed that the calculated (t =5.23, p <0.05 and 4.19, p<0.05) is greater than the critical (t= 1.66, p < 0.05). This implies that knowledge enablers and knowledge creation process significantly contributed to organizational creativity. Hypothesis 5 which measures the effect of organizational creativity on bank performance showed that the calculated (t =61.34, r = 0.51 p< 0.05) had a positive relationship.

Hypotheses, Models Specification and Results

The following hypotheses and models were formulated to consider the empirical investigation carried out on this study and the results are equally presented:

Hypothesis One

There are no significant differences between the knowledge management enablers on bank performance.

$$KME = \alpha + \beta_1COL + \beta_2TRU + \beta_3LEA + \beta_4CEN + \beta_5MEA + \beta_6TMS + \beta_7TSK + \beta_8ITS + \epsilon$$

$$KME = \alpha + \beta_1BP + \epsilon$$

In order to test the above hypothesis, t-test statistics was employed using related items in the questionnaire. The statistics is presented in the table below.

Table 1: T-test of knowledge management enablers and bank performance

Variable	N	Mean	St.dev	t	df	Sig. P
Management Enabler	147	170.97	5.81			
Bank Performance	147	29.37	0.77	297.95*	146	0.00

*Sig p < 0.05

The statistics above reveals that the calculated t of 297.95* is significant at 5% (p

= 0.00). This implies that most respondents agreed that there is a significance difference

between knowledge enablers and bank performance. The null hypothesis stated is therefore rejected. In order to test the

coefficient of correlation among the variable, r statistics was employed using related items in the questionnaire.

Table 2: Correlation between Knowledge Management Enabler and Organizational (Bank) Performance

Variable Remark	N	Mean	St.dev	r	Sig. P
Knowledge Enablers	147	170.97	5.81		
Bank Performance	147	29.87	0.77	0.267	0.02 Significant

*sig p < 0.05

The statistics above reveals that the mean score of knowledge enablers is 170.97, while Bank performance is 29.87. Further statistics shows the calculated r of 0.267 is significant at 5% level (p = 0.02).

This indicate that a positive and significant relationship exist between the knowledge management enabler and bank performance. The alternate hypothesis is therefore accepted.

Hypothesis Two

There is no significant difference between knowledge creation processes and banks performance. The regression model to test this hypothesis is formulated thus:

$$KCP = \alpha + \beta_1 KCS + \beta_2 KCE + \beta_3 KCC + \beta_4 KCI + \epsilon$$

$$KCP = \alpha + \beta_1 BP + \epsilon$$

Table 3: Correlation between knowledge creation process and bank performance

Variable	N	Mean	St.dev	r	Sig. P	Remark
Knowledge Process	147	72.71	2.39			
Bank Performance	147	29.87	0.77	0.46	0.00	Significant

*sig p < 0.05

The statistics above reveals that the mean score of knowledge process is 72.71, while that of bank performance is 29.87. The statistic also shows that the calculated r of 0.464 is significant at 5% level (p = 0.00).

This shows that there is a positive and significant relationship between knowledge process and bank performance. Thus, the alternate hypothesis is therefore accepted. The finding sharpens the previous research results.

HYPOTHESIS THREE

There is no significant relationship between knowledge management enablers and knowledge creation process.

The regression model to test this hypothesis is formulated thus:

$$KCP = \alpha + \beta_1 COL + \beta_2 TRU + \beta_3 LEA + \beta_4 STR + \beta_5 MEA + \beta_6 TMS + \beta_7 TSK + \beta_8 ITS + \epsilon$$

$$KCP = \alpha + \beta_1 KME + \epsilon$$

Table 4: T-test of knowledge management enablers and knowledge creation process

Group	N	Mean	St.dev	t	df	Sig. P
Knowledge Management Enabler	147	170.97	5.81			
Knowledge Creation Process	147	21.25	1.58	304.90*	146	0.00

*Sig. P < 0.05

A cursory look at table 3 reveals that the t calculated of 304.90* is significant at 5% (p = 0.05). This implies most of the respondents were in agreement that significant difference exists between knowledge management enablers and knowledge creation process. The alternate hypothesis is therefore accepted.

Table 5: Correlation between of knowledge management enablers and knowledge creation process

Variable Remark	N	Mean	St.dev	r	Sig. P
Knowledge Management Enabler	147	170.97	5.81		
Knowledge Creation Process	147	72.71	2.39	0.49	0.00 Significant

*Sig. P< 0.05

The statistics above reveals that the mean score of knowledge enablers is 170.97, while knowledge process is 72.71, with a calculated r of 0.491 is significant at 5% level (p = 0.00).

This indicate that a positive and significant relationship exist between the knowledge enablers and creation process. The alternate hypothesis is accepted.

HYPOTHESIS FOUR

There is no relationship between knowledge management enablers, knowledge creation process on organizational creativity.

$$OC= \alpha + \beta_1KCP + \beta_2KME + \epsilon$$

In order to test the above hypothesis, regression analysis was employed. The statistics is presented in table below,

Table 6: Summary regression of knowledge management enabler and knowledge process on organizational creativity

Model	Sum of Squares	df	Mean Square	f	Sig. P
Regression	2.345	2	1.172	12.005*	0.01
Residual	84.200	144	0.585		
Total	86.544	146			
	B	Std. Error	Beta	t	Sig. P
Constant	25.820	2.027		2.739	0.12
Knowledge Enablers	12.019	0.011	1.146	11.771	* 0.01
Knowledge Process	10.035	0.040	3.072	18.880	* 0.02

r² = 0.68*Sig. P < 0.05

The table shows that a significance difference exists among the independent variables. This means that the variable explained by the model is not due to chance. Further statistics also shows that the calculated t for knowledge management enabler (t = 11.77*, p = 0.01) and for knowledge process (t =

18.88*, P = 0.02) implies that knowledge management enablers and knowledge creation processes contribute significantly to organizational creativity. Thus, the alternate hypothesis is therefore accepted. This implies that there is a significant relationship between management enabler and knowledge process in organizational productivity.

Table 7: Analysis of Variance (ANOVA) between knowledge management enablers and knowledge creation process on organizational creativity

Dependent	Independent	r ²	Adj	Beta	t	f
Orgnal Creativity	Knowledge Enablers	0.255	0.21	2.001	5.23*	32.55*
	Knowledge Process			1.023	4.19*	
	Constant			21.264	3.966	

*Sig. P < 0.05

In order to determine the significance of coefficient of independent variable in the model the t-statistic is computed.

The calculated t for Knowledge Enablers of 5.23* and t of Knowledge Process of 4.19* is greater than critical t of 1.66*.

This is significant at 95% confidence interval. This implies that knowledge enablers and knowledge process contributed significantly to organizational creativity.

To determine the degree of association between the dependent variable and independent variables, the R square is computed, and the result shown that ($r^2 = 0.255$). This implies that about 25% of organizational creativity is traceable to knowledge enablers and knowledge processes. To determine if a significant relationship exist between the dependent variable and independent variable the F-

statistics is computed. The model calculated $F = 32.55^*$ is greater than critical F of 3.99^* . Thus, significant differences exist between knowledge enabler and knowledge process. This implies that knowledge enablers and knowledge process contributed significantly to organizational creativity. The alternate hypothesis is therefore accepted.

Hypothesis Five

That organizational creativity does not significantly influence banks performance.

$$BP = \alpha + \beta_1 OC + \epsilon$$

Table 8: T-test of organizational creativity and bank performance

Group	N	Mean	St.dev	t	df	Sig. P	r
Organizational Creativity	147	21.25		1.58			
Bank Performance	147	29.87	0.79	61.34*	146	0.00	0.56

*sig p < 0.05

The statistics above reveals that the calculated t of 61.34^* is significant at 5% ($P= 0.00$). This implies that most of the respondents agreed that organizational creativity will significantly influence bank

performance. The alternate hypothesis is therefore accepted. In addition, the $r = 0.56$ indicate a positive and significant relationship between organizational creativity and bank performance.

Table 9: Correlation between organizational creativity and bank performance

Variable	N	Mean	St.dev	r	Sig. P	Remark
Organizational Creativity	147	21.24	1.58			
Bank Performance	147	29.87	0.79	0.51	0.00	Significant

*sig p < 0.05

The statistics above reveals that the calculated r of 0.51 is significant at 5% ($P= 0.00$). This implies that most of the respondents agreed that organizational creativity will significantly influence bank performance. The alternate hypothesis is therefore accepted. In addition, this indicates a positive and significant relationship between organizational creativity and bank performance.

It also shows slight increases in its profit before tax and profit after tax, net equity and shareholders’ fund. This section presents the empirical results of the analysis beginning with the time series properties of the variables used for the estimation.

This is meant to ascertain the relationship that exist between total asset, total liabilities, net equity, shareholders fund and earnings per share with profit after tax of the five banks selected for the study.

HYPOTHESIS, MODEL SPECIFICATION AND RESULT OF FINANCIALS OF THE FIVE BANK REVIEWED

The summary the five banks reviewed shows a yearly increase in their financial assets and liabilities, gross earning showing that there is a growth in performance of the banks.

The descriptive summary statistics of the variables in the models are presented in table 6. Given the time scope of the study (2008-2012) and the frequency of the data, all variables have 25 observations for the selected banks.

REGRESSION MODEL USING E-VIEW

$$PAT = \alpha + \beta_1 EPS + \beta_2 GRE + \beta_3 NET + \beta_4 EQU + \beta_5 TOA + \beta_6 TOL + \epsilon$$

$$PAT = \alpha + \beta_1 BP + \epsilon$$

Where:

PAT = Profit after Tax; EPS = Earnings per Share; GRE = Gross Earnings; NET = Net Equity

EQU = Shareholders Funds; TOA = Total Asset; TOL = Total Liabilities; BP = Bank Profitability

Table 10: Summary statistics of the variables of the five banks surveyed

	EPS	GROSS_EARNIN	NET	PAT	EQU	TOA	TOL
Mean	1.254400	42813209	44834992	13025763	76962766	5.32E+08	4.68E+08
Median	1.020000	30386957	4042152.	4178493.	6281545.	2.37E+08	2.33E+08
Maximum	3.830000	2.08E+08	2.41E+08	87295957	2.82E+08	1.75E+09	1.50E+09
Minimum	0.030000	1121.000	147345.0	-6660406.	122658.0	1548281.	1320828.
Std. Dev.	1.073542	51563011	74794551	21826429	96594321	6.31E+08	5.29E+08
Skewness	0.965784	1.531053	1.520354	1.950135	0.646902	0.837036	0.823258
Kurtosis	2.978342	5.371942	3.713452	6.545622	1.800960	2.243131	2.338666
Jarque-Bera	3.886898	15.62771	10.16137	28.94119	3.241278	3.516006	3.279560
Probability	0.143209	0.000404	0.006216	0.000001	0.197772	0.172389	0.194023
Sum	31.36000	1.07E+09	1.12E+09	3.26E+08	1.92E+09	1.33E+10	1.17E+10
Sum Sq. Dev.	27.65982	6.38E+16	1.34E+17	1.14E+16	2.24E+17	9.56E+18	6.73E+18
Observations	25	25	25	25	25	25	25

Table 11: Regression Result: The result obtained using the Ordinary Least Square (OLS) estimation technique

Dependent Variable: PAT				
Method: Least Squares				
Date: 04/16/14 Time: 02:08				
Sample: 2008-2012				
Included observations: 25				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
EPS	1364969.	1232654.	1.107342	0.2827
GROSS_EARNIN	0.420434	0.113622	3.700297	0.0016
NE	-0.291546	0.053021	-5.498744	0.0000
EQU	0.158562	0.033748	4.698418	0.0002
TOA	0.019686	0.011356	1.733521	0.1001
TOL	-0.027162	0.017808	-1.525275	0.1446
C	-3571558.	2207930.	-1.617605	0.1231
R-squared	0.944719	Mean dependent var		13025763
Adjusted R-squared	0.926293	S.D. dependent var		21826429
S.E. of regression	5925682.	Akaike info criterion		34.25899
Sum squared resid	6.32E+14	Schwarz criterion		34.60027
Log likelihood	-421.2373	Hannan-Quinn criter.		34.35364
F-statistic	51.26860	Durbin-Watson stat		1.711335
Prob(F-statistic)	0.000000			

PAT = 1364969 EPS + 0.420434 Gross Earning - 0.291 NE + 0.158 Shareholder fund + 0.019TA - 0.0271 TL - 351558 R²= 0.944719, Adjusted R² = 0.926293, F= 52.27*, DW statistic = 1.71, T-values are in parenthesis * significant at 5%. To determine the significance of coefficient of independent variable in econometric model the t-statistics

is computed. Evidence from the regression indicates that the calculated t for gross earnings (3.70*), net equity (5.498*) and shareholders fund (4.698*) is significant at 5% level of significance. This implies that gross earning; net equity and shareholder funds contribute significantly to profit after tax of the selected banks during the period

under consideration. On the other hand, the t calculated for earning per shares (1.107*), total asset (1.733*) and total liabilities (1.525*) is not significant at 5% ($p > 0.05$). This indicates that earning per share; total asset and total liabilities do not contribute significantly to profit after tax of the banks during the period under consideration.

To determine the degree of association between the dependent variable and independent variables, the R square is computed, and the result shown that ($r^2 = 0.944719$). This implies that about 94.47% of the profit after tax of the banks was traceable to market total asset, total liabilities, net equity, shareholders fund and earnings per share during the period under consideration.

In determining the existence of autocorrelation (a relationship between values separated from each other by a given time lag) in the residual (prediction errors) from a regression analysis in our model, the Durbin Watson statistics was computed. The Durbin-Watson test statistic tests the null hypothesis that the residuals from an ordinary least-squares regression are not autocorrelated against the alternative that the residuals follow an AR1 process.

The Durbin-Watson statistic ranges in value from 0 to 4. A value near 2 indicates non-autocorrelation; a value toward 0 indicates positive autocorrelation; a value toward 4 indicates negative autocorrelation. In the model above computation, $D-W = 1.711335$. The indication of this is that there is no auto correlation in the model hence the model is conclusive.

To determine if a significant relationship exist between the dependent variable and independent variables the F -statistics was computed. The model calculated $F=51.26860^*$ is significant at 5% thus a significance difference dependent variables on the predictors. This implies that the independent variables selected have contributed significantly to the profit after tax of the banks during the period under consideration. Hence profit maximization of the banks had led to growth in performance of the five banks.

This can be attributable to contribution of financial measures such as intellectual capital (Best Practices), Tangible benefits (Assets, Liabilities, Income) Intangible benefits (Goodwill, Trade secret, Trademark) and operational measures such as Information Technology, Innovation and Customer's satisfaction. This proves that the banks can achieve performance through strategic knowledge management.

DISCUSSION OF RESULTS OF THE FIVE BANKS UNDER REVIEW

The summary of the five banks under review shows a yearly increase in the financial assets and liabilities, gross earning showing that there is a growth in performance of the banks. It also shows slight increases in its profit before tax and profit after tax, net equity and shareholders' fund. This section presents the empirical results of the analysis beginning with the time series properties of the variables used for the estimation.

This is meant to ascertain the relationship that exist between total asset, total liabilities, net equity, shareholders fund and earnings per share with profit after tax of the five banks selected for the study. The descriptive summary statistics of the variables in the models are as presented in table 6. Given the time scope of the study (2008-2012) and the frequency of the data, all variables have 25 observations for the selected banks.

CONCLUSION AND RECOMMENDATIONS

In today's present world of changes in the business environment characterized by globalization, advancement in technology, changing managerial practices, mergers and acquisition, changing customers' needs and requirements, rapid market and informational technological changes and operational efficiency, business organizations are relying on knowledge management and its ability to obtain and transfer new knowledge and skills in order to increase its performance and gain competitive advantage.

The study has provided knowledge managers and practitioners with guidelines and

implementation strategies for knowledge management by examining cultural, structural management and Information Technology (IT) related factors.

The accumulation of knowledge is inseparable from companies' activities; products and services provided by companies are dependent upon the unique method that combines companies' tangible resources with the role of knowledge management. The relationship among knowledge enablers, knowledge creation process, organizational creativity and organizational performance has provided clue to how firms can adjust knowledge creation processes to sustain their performance.

Furthermore, firms may not be able to manage all modes of knowledge creation, they therefore need more related information that assist management in selecting, comparing and coming up with more effective strategies to gain the utmost benefits.

This study proffers the following recommendations anchored on its findings. Knowledge Management leads to the attraction of skilled manpower which enhances the wealth of intellectual capital resident within the organisation for better performance and to have an edge over competitors. By having access to their employees' knowledge organisations make better decisions, streamlines processes, reduce re-work, has higher- data integrity and greater collaboration.

Knowledge management increases the financial values of the organisation when the organisation treats peoples (employees) knowledge as assets similar to traditional assets with capital facilities. Knowledge management has been confirmed to provide an employee with opportunity to acquire better skills and experiences on the job, hence organizations should invest in it for this will in turn lead to personal performance.

Knowledge sharing among employees will lead to personal, group performance, motivation and in turn, tremendously improve the competence profile of the employees in respect to skills and knowledge

levels. This demands firms' commitment. Organizations should periodically update the skill and knowledge of their staff which will prevent redundancy, employee turnover and reduced job dissatisfaction. In addition, there is need to ensure that employees in other organizations pay adequate attention to knowledge management practices. This can be achieved by the introduction of a good organizational learning culture, top management support, efficient employee training skills and effective application of information technology tools.

REFERENCES

1. M. E. Jennex, Knowledge management in modern organizations (San Diego University, USA: Idea Group Publishing, 2007)
2. K. Wiig, Knowledge management, where did it come from and where will it go? Expert Systems with Applications, 13(1), 1999 pp1-14.
3. K. Wiig (1997) Knowledge management: an introduction and perspective. Journal of Knowledge Management, 1(1):6-14.
4. A. Akinniyi, Knowledge management practices and organisational performance of manufacturing industry in Nigeria Ph. D. Dissertation, Library, Archival & Information Department, University of Ibadan 2013 (Unpublished).
5. S. Lee, B. Kim, and H. Kim (2012) An integrated view of knowledge management for performance. Journal of Knowledge Management, 16(2):183-203.
6. H. Lee and B. Choi, Knowledge management enablers, processes, and organizational performance: An integrative view and empirical examination. Journal of Management Information Systems, 20(1), 2003,179-228.
7. B. Bergeron, Essentials of knowledge management. (New Jersey: John Wiley & Sons, Inc, 2003)
8. D. Carlucci and G. Schiuma, (2006) Knowledge value spiral: linking knowledge assets to company performance. Knowledge and Process Management, 13(1):22-39.

9. H. Takeuchi and I. Nonaka, Hitotsubashi on knowledge management (Singapore: John Wiley & Sons, 2004)
10. A. Hariharan, (2002) Knowledge management: A strategic tool, *Journal of Knowledge Management Practice*, 3(3):50-59.
11. T. Davenport and J. Beck, (2002) The strategy and structure of firms in the attention economy. *Ivey Business Journal*, 66(4):48-54.
12. B. Martin, B (2000) Knowledge management within the context of management: An evolving relationship. *Singapore Management Review*, 22(2):17-36.
13. K. Stewart, R. Baskerville and C. Long (2000) Confronting the assumptions underlying the management of knowledge: An agenda for understanding and investigating knowledge management. *The DATABASE for Advances in Information Systems*, 31(4): 41-53.
14. R. Chase (1997) The knowledge-based organisation: An international survey. *Journal of Knowledge Management*, 1(1):38-49.
15. I. Nonaka and H. Takeuchi, *The knowledge creating company* (New York: Oxford University Press, 1995)
16. D. Chawla and H. Joshi, Knowledge management practices in Indian industries-a comparative study. *Journal of Knowledge Management*, 14(5):708-725.
17. P. Schubert, D. Lincke and B Schmid, B. A global knowledge medium as avirtual community: The Net Academy concept. In proceedings of the Fourth American Conference on information systems, E. Hoadley and I. Benbasat (eds), Baltimore, MD. 2005, 618-20.
18. M. Zack, (1999) Developing a knowledge strategy. *California Management Review*, 41(3):125-45.
19. R. McQueen, Four views of knowledge, In proceedings of the fourth American Conference on information systems, E. Hoadely and I. Benbasat, (eds), 1998, 609-611.
20. S. Carlsson, and D. El Sawy, Gaining competitive advantage through shared knowledge creation: In search of a new design theory for strategic information systems. In: *Proceedings of the Fourth European Conference on Information Systems*, Lisbon, 1996
21. R.T Watson, *Data management: databases and organizations 2ed.* (John Wiley, New York, 1999).
22. C. Moroni, O. Smestad and Kinshuk, Improving discursive negotiation in web discussion forum, CELDA 2006, International Conference on Cognition and Exploratory Learning in Digital Age.
23. S. Groves (2002) Knowledge wins in the new economy. *Information Management Journal*, 36(2).
24. G. P. Levett and M. D. Guenor, M.D A methodology for knowledge management implementation. *Journal of Knowledge Management*, 4(3), 2000, Retrieved on 20/02/2023. from www.emeraldinsight.com.
25. J.G March, (1999) Exploration and exploitation in organizational learning. *Organizational Science*, 2 (1):71-87.
26. J. Spencer, Limits to learning from West, *The international executives* 34: 389-410. In Grant, R.M. (2003) *Contemporary strategy analysis: concepts, techniques, application* 4th Edition (Blackwell publishing, 1992)
27. G. Szulanski, (1996) Exploring internal stickiness: Impediments to the transfer of best practicewithin the firm. *Strategic management journal* 17:27-43.
28. R. Grant, *Contemporary strategy analysis, concept: Techniques, applications*, 4th edition, (Blackwell Publishing, 2003, 177-183)
29. B. Choi and H. Lee, An investigation of KM styles and their effect on corporate performance. *Journal of Management & Information System*, 40, 2003, 403-417.
30. J. M. Bloodgood and W. D Salisbury, (2001) Understanding the influence of organizational change strategies on information technology and knowledge

- management strategies. *Decision Support Systems*, 31:55–69.
31. R. Bohn, (1994) Measuring and managing technological knowledge. *Sloan Management Review*, Fall, 61-73.
 32. S. Z. Shariq, (1997) Knowledge management: an emerging discipline. *Journal of Knowledge Management*, 1(1):75-82. Retrieved on 05/03/2023 from www.emeraldinsight.com
 33. A. J. Beckett, C. E. R. Wainwright and D. Bance, Implementing an industrial continuous improvement system: a knowledge management case study. *Industrial Management & Data Systems*, 100, 2000, 330-338. Retrieved on 20/02/2023 from www.emeraldinsight.com/journal.htm.