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KNOWLEDGE MANAGEMENT AND ORGANIZATIONAL COMPETITIVENESS OF OIL AND GAS FIRMS IN RIVERS STATE

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ABSTRACT

The study investigated knowledge management and organizational competitiveness of oil and gas firms in Rivers State. Population of the study comprised five oil and gas firms in Rivers State. 133 workers were chosen as sample for the study. Pearson Product Moment Correlation |Coefficient was used to test all the hypotheses. Findings revealed among others that knowledge generation has a positive correlation with organizational competetivess. One of the recommendations put forward is that the management of the oil and gas servicing companies in Rivers State should ensure that they are consistent in their effort to generate or create enough knowledge of how to be innovative among their employees either by sponsoring them to go out learn or bring someone in to teach them.

INTRODUCTION

Today's extremely competitive and uncertain business environments together with the requirements of knowledge based society, the expansion of information technologies and changes in the arrangement of our labour force is a reality which poses new challenges for organization and their management. Organizations can hardly compete without highly skilled workers and without the continual investment in human capital. To have the right people in the right places and in the accurate time is critical for any organization to achieve competitive advantage (Sudoo 2019). Furthermore, the success of any organization depends strongy on having talented individuals in its workforce. Management has to do more in the area of talent management, generation of new ideas, skills, competencies and knowledge. (Sudoo 2019). An organization is said to have a competitive advantages over its rivals when its profitability is greater than the average profitability for all firms in its industry (Wikipedia 2021).

Porter (1980) opines that competition within an industry is defined by five structural parameters: current competition within the industry, bargaining power of suppliers, bargaining power of buyers, threat of new entrants, and threat of substitute products or services. In porter's view, the paths of industry evolution depend (among other things) on firm's strategic choices. Within the view of organizational competitiveness as a driver of this research, the main classification of the sources of an organizational competitiveness distinguishes between internal sources i.e. sources could be classified as tangible and intangible and employee-related and firm related (carter, 2005). Internal intangible firm-related sources mostly include organizational resources, transformational and output-based capabilities (Lado, Boyd & Wright 1992) and the knowledge of the firm as a whole; internal intangible employee- related sources mostly include a firm's strategic, human resources, managerial capabilities and the knowledge of individual; internal tangible firm-related sources include physical and financial resources and input-based and some functional capabilities . Knowledge management practices, denotes a range of strategies and practices used in organizations to identify, create, share, retain, distribute and enable adoption of insights and experiences, embodied in individuals and , embedded in

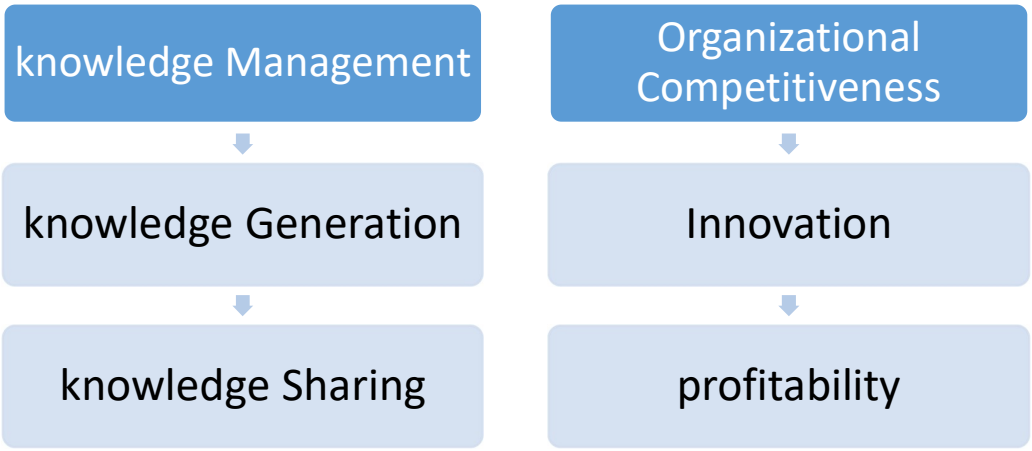
organizational processes or practices (Nonaka &Takeuchi, 1995; Jennex, 2005). Organizations engage in knowledge management to disclose, map and decide on sources of knowledge and organizational activities to enhance its utilization (Jennex, 2005).

Statement of problem

Achieving sustainable competitive advantages in the business world through uninterrupted innovation and client patronage is an ever-abiding face up to many organizations. This concern appears to be more critical to some organizations, as there are dynamic changes in market, which are the result of increasing competition and fast technical progress, encourage organization to actively seek and create knowledge, and to use it in order to increase their innovation disposition. In a competitive environment, innovation arises because of the high competition. In the increasing fierce level of competition and technological advancement that cannot be dammed, company products will grow to a point, where these products will be difficult to distinguish between one another. Organizations are required to excel; one way is to innovate. Innovation will be able to change the organization position in the business world. Innovation is one of the most important factors in gaining a competitive advantages in the global market which in turn will result to profitability. It is an issue when an organization cannot adapt to current changes in the business world or the industry. This would pose threat to many firms, especially those that are in the same line of business (Barney, 2001, Sushil, 2000). Competitiveness can be treated as a criterion/dependent or predictor/independent variable depending on the situation. This is why the study was conducted to investigate the extent of the relationship between knowledge management processes and organizational competitiveness

Conceptual framework for the study

According to Ahiauzu and Asawo (2016) as cited by Sudoo (2019) conceptual framework is a pictorial representation of the assumed relationship among the study variables. It reflects the researcher's perceived understanding of the relationship of the interacting variables, the conceptual framework revealed the relationship between knowledge management processes and organizational competitiveness of oil and gas sector in Rivers



State.

Aim and objectives of study

This study examined the relationship between knowledge management and organizational competiveness and organizational culture as a moderating variable.

Therefore, the study specifically has it objectives as follows;

1. To examine the impact of knowledge generation on innovation of selected oil and gas firms in rivers state.
2. To assess the impact of knowledge sharing on profitability of selected oil and gas firms in Rivers State.

Research Questions

This study was guided by the following research questions:

1. To what extent does knowledge generation influence innovation of selected oil and gas firms in Rivers State?
2. To what extent does knowledge sharing influence profitability of selected oil and gas firms in Rivers State?

Research Hypotheses

This study was guided by the following research hypotheses:

Ho1: There is no significant relationship between knowledge generation and innovation of selected oil and gas firms in Rivers State.

Ho2: There is no significant relationship between knowledge sharing and profitability of selected oil and gas firms in Rivers State.

Literature Review

Concept of knowledge management

Knowledge management systems (KMS) are application of the organization's computer-based communication and information systems (CIS) to support the various knowledge management processes. They are typically distinct from CIS, but involve databases, such as "lesson learned" repositories, direction and networks, such as those designed to put organizational participants in contact with recognized experts in variety of topics areas. A significant difference between many knowledge management systems and the organization's CIS is that KMS may be les automated in that they may require human activity in their operation. While information system typically required that humans make choices in the design phase. For instance, when a sales database is designed, people must decide on its content and structure; in its operational phase, it works automatically. When a "lesson learned" knowledge repository is created, people must make all of the same design choices, but they must also participate in its operational phase since each knowledge unit that is submitted for inclusion is unique and must be assessed for its relevance and importance.

Dimensions of knowledge management

Knowledge Generation

Davenport and prusak (1997) described five modes of knowledge generation: acquisition, dedicated resources, fusion, adaptation and knowledge networking. Acquisition is the knowledge that is imported into the organizations from outside sources, such as buying knowledge, employing individuals with knowledge, acquiring organizations with knowledge. Some rented knowledge comes from consultants. Dedicated resources involve putting up special groups, such as research and development groups, for the purpose of

generating knowledge. Offices of institutional research are by themselves good examples of dedicated resource to the extent that they generally serve specific purposes, which are not duplicated or shared by other departments and offices.

Knowledge Sharing

Knowledge sharing is the process of mutually exchanging knowledge and jointly creating new knowledge (Van Den Hoff De Ridder 2004) as cited in loveday (2019). It is an activity by which knowledge is exchanged among individuals and organizations, and also to collect shared knowledge through information and technology. Van Den Hoffe and De Ridder's (2004), as cited in loveday (2019) conceptualization of knowledge sharing portrays it as a "process where individuals mutually exchange their implicit (tacit) and explicit knowledge to create new knowledge"' this definition implies that every knowledge sharing behaviouur consists of the supply of new knowledge and the demand for new knowledge. In line with Van De Hoffe and De Ridder's stance,de Vrie et al describe two central behavior of sharing as follows: "knowledge donating' as communicating one's personal intellectual capital|" (as cited in Loveday, 2019). Haas & Hansen (2007) as cited in Loveday (2019), claims that knowledge sharing has been shown to improve individuals and organization performance and innovativeness. They add that knowledge sharing is a practice that has become increasingly important to organization as most organizations are now considered to operate in knowledge economy. Knowledge sharing in an organization not only occurs at individual level but also at the collective level. They further stressed that an organization's capacity for knowledge sharing is crucial as factor in the ability to generate new knowledge as well as its ability to utilize the resources and capabilities of its members. Knowledge sharing relate with not only tacit knowledge but all phase of the knowledge creating processes. Taminiau, Smit, De Lange (2017) as cited in Loveday (2019), presented two factors that influence knowledge sharing, for example, Ives, Torrey and Gordon (2003) describe knowledge sharing as a human behavior that should be examined in the context of human performance.

Measures of ORGANISATIONAL Competitiveness

Innovation

Organizational innovativeness is the organization's overall innovative capability of introducing new products to market, or opening up new markets, through combining strategic orientation with innovative behavior and processes (wang & Ahmed, 2004; sudoo 2019). Five main dimensions determine an organization's innovative capacity; product innovativeness refers to the novelty and meaningful of new products introduced to the market in a timely fashion. Market innovativeness refers to the newness of approaches that companies adopt to enter and exploit their targeted market. Process innovativeness refers to the introduction of new production methods, new management approaches and new technology that can be used to improve production.

Gupta (2009) asserted that the impact of knowledge management on performance relates primarily to the organization's ability to innovate either through improved processes or improve products. Organization innovativeness is an immediate outcome of effective knowledge management (Gold, 2001). Darroch (2003) asserted that innovation might be the mediating factor between knowledge management and organization performance

based on the findings of (Han, Kim & Srivastava 1998 as cited by Sudoo 2019). Knowledge management then is viewed as creating organizational competitiveness through organization innovation. Innovation refers to the combination of recent development made by the company over time. Zahra & Das (1993) articulated that measurement does not consider innovation in the other business-related applications, such as information.

Profitability

Profitability is an excess of revenue over associated expenses for an activity over a period of time. Every organization or business is expected to earn a profit, because profit s are the engine drive room for success. The profitability and survival of any business dependence on the profit earn by a firm. Thus, profit should not just be seen as the reward to owners of business rather it should be related with the interest of other segments of the society. Profit is the medium for deciding not just the economic, but the level of managerial efficiency and achievement of society objective as organizational symbols which represent particular values (Pfeffer, 1981). However, their scope of influence is dependent upon the interpretations delivered by participants in the organization. Managers are part of an organizational culture which means that they may be under its influence when they try to manage it.

Relationship Between knowledge management and organizational competitiveness.

Knowledge management practice have become an important antecedent of innovation and organization competitiveness. For instance, responsiveness to knowledge and knowledge dissemination are pivotal for creating strategic positioning such as innovation (Day, 1994; as citied in Sudoo-David, 2019). Jimenez and Sanz-Valle's (2011) study shows the [positive relationship between organizational, innovation, and firm competitiveness. The study concludes that there is a positive relationship of organization innovation capabilities with the organization/firm competitiveness. Therefore, knowledge management is essential for the survival of any business in a competitive business startup as organization are focused to innovate in order to compete with other business in the sector. Organizations should focus on knowledge management to improve competitiveness through innovation and profitability. The findings of this study contribute in literature by providing empirical evidence of the relationship among knowledge management practice, innovation and organizational competitiveness.

Beigzadeh and Ameli (2015) carried out an investigation of knowledge management effect on strategic orientation and organization performance, focusing steel producing companies in Iran. The results of analysis showed that the impact of knowledge management on strategic orientation and organizational performance was positive and significant. The results also portray that significant positive relationship exists between knowledge management and organizational performance. In addition, knowledge management had a significantly positive effect on firm performance indirectly through strategic orientation. In general, the results of this research confirmed that knowledge management has an effect on strategic orientation and organizational performance.

Relationship between Knowledge Generation and Organizational Competitiveness

The sustainability of knowledge-based competitive and advantages depends on the type of knowledge involved and how well the employees have learnt and practices the use of such knowledge. These employees who develop and use the new knowledge that gives the organization a competitive advantage becomes not only competitive resource, but also the only resources for it. Knowledge generation/acquisition is how organization access and put knowledge to use, that is, their ability to assimilate information (Grant, 1996; Grant, 2002). It begins with identifying knowledge in the external environment, and then putting it to use within the firm. Acquisition occurs through the following: external activities, research and development, performance reviews, or analysis of competitors' products or internal activities, such as cross-functional teams, employee suggestions, or task experience. Lin and Lee (2005) found that, knowledge acquisition or generation is positively related to innovative competitive performance.
Pacharapha and Ractham (2012) define knowledge acquisition as the process of development and creation of insights, skills and relationships. Knowledge acquisition activities include conducting an external survey, acquiring a knowledge rich firm, sending employees to external training, hiring an employee, purchasing a data set, monitoring technological advances, purchasing a patented process, and gathering knowledge through competitive intelligence. Knowledge organizations also deploy strategies, tools and method that facilitate acquisition, usage and dissemination (Holsapple & Singh 2001).

Relationship between knowledge Sharing and Organizational Competitiveness
Organizations can effectively manage resources when employees are willing to cooperate with colleagues to contribute knowledge to the organization. Thus, this can generate information for decision making (Kearns, & Lederer, 2013) new knowledge will indirectly be formed when the previous knowledge is shared through discussion, meetings and informal conversation (Ho, 2009). An organization is likely to generate new ideas and develop new business opportunities, thus facilitating innovation activities (Darroch & McNaughton, 2002). Organization knowledge sharing can be the backbone of organizational learning and it brings enormous benefits to an organization (Woerkon & Sandrtes, 200). These practices have a positive relationship with organizational human capital (employee competencies), which contribute to organizational performance (Hsu, 2010). Organizational performance might contribute either to growth, product or services, product quality or organization effectiveness. In designing and clarifying knowledge sharing model in administrative agencies, it can improve performance such as learning, growth, internal process, financial and customer (Martin, Alvani, Janadaghi & Pashazadeh, 2010).

METHODOLOGY
Methodology under which the research was conducted include population of the study, research design, Sample/sampling techniques and instrumentation.

Research design
The research design adopted for this work is survey.

Research population
A population refers to the entire individual persons, groups of person, organization or things of interest that the research wishes to investigate. It is the complete set of case or group members from whom relevant data could be raised. From the data gotten from the

survey from the (24) twenty-four organizations visited in port Harcourt, Rivers State. The target population of this study comprises of five oil and gas servicing firms in Port Harcourt that have a staff strength of fifty and above and that have in operation for a period exceeding 10 years of operations. The study population for which generation comprises of employees in the middle and top level managers from each of the selected firm.

Sample/Sampling techniques

According to Osuala (2001), sampling is the fundamental to the conduct of research, and the interpretation of its result. Sampling therefore means to take any portion of a population or universe about which generalization was made on the basis of the result obtained. To obtain the accurate size for this study, the research applied the Taro Yamene formula as cited in Barridam (1995).

Sample Size

S/N	Companies	Population	Sample Size
1.	ACM OF Nigeria	20	16
2.	Tecon Oil Service	40	32
3.	Floxxies Global Concept	19	15
4.	Sequinne Global Concept Ltd.	27	22
5.	Belema Oil	60	48
	Total	166	133

Therefore, the sample sizes for this study consists of 133 respondents from the selected oil and gas servicing organization ion Port Harcourt, Rivers State

Instrumentation

This study adopted the structured questionnaire as its main tool for the generation of data for the study: the structured questionnaire refers to that form of inquiry which contains a systematically compiled and organized series of questions, indicators or in most cases, empirical referent of other latent constructs that are sent to target individuals, groups, or organizations. This study therefore adopted the self-report structured questionnaire as its instrument in the generation of primary data.

Ho1: There is no significant relationship between knowledge generation and innovation selected oil and gas servicing organization in Rivers State.

Relationship between knowledge Generation and Measures of Organization Competitiveness.

Correlation Matrix for Knowledge Generation and Organizational Competitiveness Measure

			Knowledge Generation	Innovation	Profitability
Spearman'srho	Knowledge Generation	Correlation Coefficient	1.000	.829	.768
	Innovation	Sig. (2-tailed)	.	.000	.000
		N			

	Profitability	Correlation Coefficient	113	113	113
		Sig. (2-tailed)	.829**	1.000	.722**
		N	.000	.	.000
		Correlation Coefficient	113	113	113
		Sig. (2-tailed)	.768**	722**	1.000
		N	.000	.000	.
			113	113	113

Correlation is significant at the 0.01 level (2-tailed)

The correlation coefficient (r) shows that there is a significant and positive relationship between knowledge generation and innovation. The rho value 0.829 indicates this relationship and it is significant at p 0.000<0.05. The correlation coefficient represents a high correlation indicating a strong relationship. Therefore, based on empirical finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between knowledge management and innovation of selected oil and gas servicing companies in Rivers State.

Ho2: There is no significant relationship between knowledge generation and profitability of selected oil and gas servicing companies in Rivers State.

The correlation coefficient (r) shows that there is a significant and positive relationship between knowledge generation and profitability. The rho value 0.768 indicates this relationship and it is significant at p 0.000<0.05. The correlation coefficient represents a high correlation indicating a strong relationship. Therefore, based on empirical findings the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between knowledge generation and profitability of selected oil and gas servicing companies in Rivers State.

Relationship between Knowledge Sharing and Measure of Organizational Competitiveness

Correlation Matrix for knowledge sharing and Sharing and measures of Organizational competitiveness

			Knowledge Sharing	Innovation	Profitability
Spearman'sr ho	Knowledge Generation	Correlation Coefficient	1.000	.829	.768
		Sig. (2-tailed)	.	.000	.000
		N	113	113	113
	Innovation	Correlation Coefficient	.829**	1.000	.722**
	Profitability	Sig. (2-tailed)	.000	.	.000
		N	113	113	113
		Correlation Coefficient	.768**	722**	1.000
		Sig. (2-tailed)			
		N			

			.000 113	.000 113	. 113

Correlation is significant at the 0.01 level (2-tailed)

CONCLUSION

The turbulences and the dynamisms that are experienced in the 21st century poses a lot of challenges and threats for individuals, countries and business. The survival of firms in this era completely depends on the ability of the firm to compete favorably in the market or industry in which they operate. Knowledge management is essential for the survival for any business in a competitive business startup as organizations are focused to innovate in order to compete with other business in the sector. This therefore necessitated this study to examine the relationship between knowledge management processes and organization competitiveness of oil and gas servicing companies in Rivers State. From the data generated analyzed, it was empirically discovered that a strong positive and significant relationship between knowledge management processes and organizational competitiveness of oil and gas servicing companies in Rivers state. Based on result and the findings of the present study, our study revealed that knowledge generation will increase organizational competitiveness of the oil and gas servicing companies in Rivers State. Knowledge sharing also increase organizational competitiveness of the oil and gas servicing companies in rivers state. Our study also revealed that knowledge storage and knowledge transfer increase organizational competitiveness of the oil and gas servicing companies in Rivers state. Organization culture also significantly moderates the relationship between knowledge management processes and organizational competitiveness of the oil and gas servicing companies in Rivers state.

RECOMMENDATIONS

Based on the discussion and conclusion above, the following recommendations are hereby made:

1. The management of the oil and gas servicing companies in Rivers State should ensure that they are consistent in their effort to generate or create enough knowledge of how to be innovative among their employees either by sponsoring them to go out learn or bring someone in to teach them.
2. Knowledge sharing should be highly encouraged both among the employees and from the top leaders to the lower members of the organization so that all will be carried along in the things needed for the growth of the company.

Section B

A. Independent Variable-Knowledge management	**VHE**	**HE**	**M**	**LE**	**VLE**
Knowledge Generation					
1. To what extent does training course and frequently organized for newcomers?					

2. To what extent does personal contact and mentoring are exclusively to top management?					
Knowledge sharing					
1. To what extent are employees fired once they make mistakes during implementation process in your organization?					
2. To what extent is your organization, group discussion or teaching others is encouraged?					
B. DEPENDENT VARIABLE=ORGANIZATIONAL COMPETITIVENESS					
Innovation					
1. To what extent are organizations flexible to their employees?					
2. To what extent does employees have the capacity to generate new idea?					
Profitability					
1. To what extent is your company successful in the industry?					
2. To what extent is your overall profitability standpoint, our new product development program has been successful					

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