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KNOWLEDGE MANAGEMENT SYSTEMS AND ORGANIZATIONAL COMPETITIVENESS OF MANUFACTURING FIRMS IN RIVERS STATE

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ABSTRACT

This work examined knowledge management systems and organizational competitiveness of manufacturing firms in Rivers State. The study adopted exploratory survey research design. The population of this study consist five hundred and fifty (550) staff in the selected twenty-two (22) Manufacturing firms in Port Harcourt, Nigeria. The population of this study stated above was adopted the work of Opara (2018) whose population data was from Manufacturers' Association of Nigeria, Rivers State Chapter, Port Harcourt. The study adopted the taro yamen sampling formula to arrive at a size of 232 top and middle level management staff. After validation by one expert in Office and Information Management and two experts in Measurement and Evaluation, a structured questionnaire titled "Knowledge Management Practices and Organizational Competitiveness Questionnaire" (KMPOCQ) was used as instrument for the collection of primary data. The instrument was constructed using a 4 point likert scale of Very Great Extent (VGE) 4; Great Extent (GE) 3; Moderate Extent (ME) 2; and Low Extent (LE) 1. Crombach alpha was used to ascertain the reliability of the instrument with the least Crombach alpha coefficient at 0.74. Out of 232 copies of the questionnaire distributed, 181 copies were retrieved. The test of hypotheses was done using Correlational Spearman Rank Order Correlation. Based on the analyses of data, the following findings were made: corporate intranet has a significant positive impact on the market share of manufacturing firms in Port Harcourt; corporate intranet has a significant positive impact on the profitability of manufacturing firms in Port Harcourt. The study concluded that innovative knowledge management systems usage enhances the organizational competitiveness of manufacturing firms in Port Harcourt in terms of market share, profitability, and strong brand reputation. The study recommended among other things that manufacturing firms should procure or upgrade their internal electronic communication infrastructures to promote easy sharing and access to relevant information and knowledge across departments and workers.

Keywords: Knowledge management system, corporate intranet, decision support system, organizational competitiveness, market share, profitability, and strong brand reputation.

INTRODUCTION

Knowledge management (KM) is the process through which organizational performance is improved through better management of knowledge resources. Its goal is to improve the management of internal knowledge processes so that all information required to improve operations as well as business intelligence is readily available and accessible. Competitive intelligence (CI) is a process for gathering usable knowledge about the external business environment and turning it into intelligence required for tactical or strategic intelligence. Knowledge management and competitive intelligence systems are designed to enhance the information resources of an enterprise, but often target different information types and sources. While competitiveness is concerned with gathering information from the external environment to enable the company to gain competitive advantage (Williams, 2002), most investigation into knowledge management have focused on capturing the knowledge stored within the minds of individual employees. The combination of effective knowledge management and appropriate competitive intelligence (CI) provide the mix of the right information to

the right decision maker at the right time. Certainly, these two fields are starting to blend into the same melting pot. However, each field has some unique qualities that differentiate it from the other. The concept of competitive advantage has a long tradition in the strategic management literature. Ansoft (1965) cited in Michael (2017) defined it as the characteristics of unique opportunities within the field by the product market scope and the growth vector. This is the scope and the growth vector. It seeks to identify particular properties of individual product market which will give the firm a strong competitive position".

Porter (1985) states "competitive advantage grows fundamentally out of value a firm is able o create for its buyers that exceeds the firm's cost of creating it." He argued that a firm's ability to outperform its competitors lay in its ability to translate its competitive strategy into a competitive advantage. Competitive strategy entails positioning the firm favourably in an industry relative to competitors.

Knowledge management systems (KMS) are applications of the organizations computer based communications and information systems (CIS) to support the various Knowledge management processes (Chen and Xii, 2010). They are typically not technologically distinct from the CIS, but involves data bases, such as "lessons learned" repositories, and directive and networks, such as those designed to put organizational participants in contact with recognized experts in a variety of topical areas. A significant difference between many knowledge management systems and competitive intelligence system (CIS) is that the knowledge management system (KMS) may be less automated in that they may requires human activity in their operation. For instance, when a sales database is designed, people must decide on its content and structure in its operational phase. When a "lessons learned" knowledge repository is created, people must make all of the same design choices, but they must also participate in its operational phase since the knowledge unit submitted for inclusion is unique and must be assessed for its relevance and importance.

Statement of the Problem

Manufacturing firms in Nigeria and Rivers State in particular are experiencing downsizing performance as they have continued to record low profit margins and low patronage. Supporting the above fact, Nwabali (2018) identified low sales, fluctuating market share, low profit margin, and low goodwill (poor brand reputation) as some of the major problems faced by the manufacturing sector in Rivers State. Thus, the competitiveness of manufacturing firms in Rivers State is quite low.

The researchers have also observed that manufacturing firms in Nigeria and Rivers State in particular are yet to adequately embrace innovative knowledge management practices such as the use of intranet and decision support system. This negligence has made it difficult for these organizations to fully harnessed and share the information and knowledge resources inherent in their workers. This has not only affected decision making but is also capable of making them perform less competitively in the market.

In spite of the fact that knowledge management and organizational competitiveness have been objects of research interest in recent times, the relationship between knowledge management practices and organizational competitiveness of manufacturing firms in Rivers State has been grossly understudied. Previous researchers have dwelt on knowledge management and organizational performance (Gold, Malhotra, & Segars, 2001; Lee & Choi, 2003; Mohamad, Mehrdad, Salman, & Ali, 2013; Mukhtar, 2015); knowledge management adoption in Nigeria (Nathaniel, 2015); factors influencing organizational performance (Ramlah, Mohamad, & Nor, 2008; Power, 2013; Harit & Chetioui, 2017). None of these studies provided empirical evidence about the relationship between knowledge management practices and organizational competitiveness of manufacturing firms in Rivers State. This is the knowledge gap which the present study sought to fill which gives credence to this research effort.

Theoretical Framework

This work was anchored on the socio-technical theory. The socio-technical theory is attributable to Eric Trist, Ken Bamforth and Fred Emery, during the World War II era, based on their work with workers in English coal mines at the Tavistock Institute in London (https://en.wikipedia.org/wiki/Socio technical system, 2017). The theory is made up of two main constructs joined together: socio has to do with people and society while 'technical' has to do with machines and technology. The term "socio-technical" refers to the interrelatedness of social and technical aspects of an organization. The socio-technical theory holds that business organizations are made up of human beings working together in social groups using equipment, tools, methodologies and knowledge to achieve desirable changes in the system and to bring about the achievement of corporate goals as well as outperforming competitors (Walker, Spear, Gould, and Lee, 2016). This theory holds that changes in organizations and the capacity of organizations to compete favourably in the market are influenced by demands from the external environment which impacts information systems changes in an organization. The socio-technical theory describes how societal changes provoke or necessitates changes in the techniques, procedures, infrastructure and technologies used in organizations (Norris and Moon, 2005). Manufacturing firms more than ever before are facing serious competition from sister organizations and as a way of coping and outperforming their competitors, individual manufacturing firms have to adopt electronic knowledge management systems such as intranet, document management system, and decision support system to harness and maximize the information and knowledge resources (especially explicit knowledge) to gain competitive advantage in terms of high market share, high net profit, and strong brand reputation.

The socio-technical theory is founded on two cardinal assumptions:

i) "The interaction of social and technical factors creates the conditions for successful (or unsuccessful) system performance" (Walker, et al., 2016). These interactions are comprised partly of linear 'cause and effect' relationships, the relationships that are normally 'designed', and partly from 'non-linear', complex, even unpredictable relationships, which are those that are often unexpected.

ii) The second major principle of socio-technical theory is that "optimization of either socio, or far more commonly the technical, tends to increase not only the quantity of unpredictable, 'un-designed', non-linear relationships, but those relationships that are actually injurious to the system's performance" (Walker, et al., 2016). Thus, second principle of sociotechnical theory hinges on joint optimisation. This second principle holds that improving only one aspect of the organization (e.g. workforce) and abandoning the other element (technical computer systems, and other knowledge management infrastructure) will be detrimental to the system. Both the human and technological resources of an organization must be optimized simultaneously for expected results to be achieved. The implication of the joint optimization principle of socio-technical theory in the manufacturing sector is that continuous capacity building to increase workers' awareness of how to use knowledge management tools may not lead to competitive advantage except it is matched with an upgrade of knowledge management systems such as intranet, document management system and decision support systems. In this jet age, where knowledge is the life blood of any organization; an organization may not be able to outperform its competitors if its knowledge resources are not properly harnessed and shared within the organization.

The justification of the socio-technical theory as the theoretical foundation of this study is based on the fact that the theory talks about how the interaction between people and information technology affects organizational competitiveness. It is therefore reasonable to adopt a theory such as this since the work is aimed at getting empirical evidence on how knowledge management interacts with organizational competitiveness.

Concept of Knowledge Management System

Many of the principles of knowledge management have historical roots in a variety of disciplines. Similar ideas with different names have evolved in all these disciplines that are contributing to knowledge management. Knowledge management is thus a cross-disciplinary domain and draws from a wide range of disciplines and technologies (Barclay & Murray, 2017). Knowledge management (KM) is the explicit and systematic management of vital knowledge and its associated processes of creating, gathering, organizing, diffusing, using and exploitation. It requires turning personal knowledge into organizational knowledge that can be shared widely throughout an organization and applied appropriately (Demarest, 2016). It is the processes of capturing, distributing and effectively using knowledge (Davenport, 2007).

Also, knowledge management is referred to as the management process of ensuring that the organization's knowledge needs are met and exploiting the organization's existing knowledge assets (Taylor, 2016). Knowledge management is the conceptualizing of an organization as an integrated knowledge system, and the management of the organization for effective use of that knowledge. Where knowledge refers to human cognitive and innovative processes and the artifacts that support them (Quinn, 2012). Knowledge management systems are the mechanism for the organization to develop its knowledge and also stimulate the creation of knowledge within the organization as well as the sharing and protection of it. Studies have considered structure, culture, technology, and human knowledge as knowledge management infrastructure capabilities (Gold, Malhotra, & Segar, 2001; Lee & Choi, 2003).

Dimensions of Knowledge Management Systems

Corporate Intranet

Corporate intranet has been conceptualized as an internal or private network of an organization based on internet technology (such as hypertext and TCP/IP protocols) and accessed over the internet (Nathaniel, 2015). An intranet is meant for the exclusive use of the organization and its associates (customers, employees, members, suppliers, etc.) and is protected from unauthorized access with security systems such as firewalls. Intranets provide services such as email, data storage, and search and retrieval functions, and are employed in disseminating policy manuals and internal directories for the employees, price and product information for the customers, and requirements and specifications for the suppliers (Mohamad, Mehrdad, Salman, & Ali, 2013).

Decision Support System

A Decision Support System (DSS) is an interactive, flexible, and adaptable computer based information system that utilizes decision rules, models, and model base coupled with a comprehensive database and the decision maker's own insights, leading to specific, implementable decisions in solving problems that would not be amenable to management science models (Power, 2013). Thus, a DSS supports complex decision making and increases its effectiveness.

According to Bhatt and Zaveri (2002), decision support system is computer software that facilitates and accepts inputs of a large number of facts and methods to convert them into meaningful comparisons, graphs, and trends that can facilitate and enhance decision makers' decision-making abilities to solve unstructured problems. However, Nathaniel (2015) maintains that decision support systems can range in level of sophistication from a simple spreadsheet to sophisticated data warehousing and mining applications, knowledge management systems, or modeling systems.

Concept of Organizational Competitiveness

Competitiveness is a multidimensional concept. It can be looked at from three different levels: country, industry, and organization level. Competitiveness originated from the Latin word, competer, which means involvement in a business rivalry for markets. It has become common to describe economic strength of an entity with respect to its competitors in the global market

economy in which goods, services, people, skills, and ideas move freely across geographical borders (Murths, 2010). Organization level competitiveness can be defined as the ability of an organization to design, produce and or market products superior to those offered by competitors, considering the price and non-price qualities (D'Cruz, 2012). Organizational competitiveness happens through the instrumentality of what is known as competitive processes.
Competitiveness processes are those processes, which help identify the importance and current performance of core processes such as strategic management processes, human resources processes, operations management processes and technology management processes. The competitiveness process can be viewed as a balancing process that complements traditional functional processes such as operations management and human resources management. It enhances the ability of an organization to compete more effectively.

Measures of Organizational Competitiveness

High Market Share

High market share refers to the high percentage of a market (defined in terms of either units or revenue) accounted for by a specific entity. Marketers need to be able to translate and incorporate sales targets into market share because this will demonstrate whether forecasts are to be attained by growing with the market or by capturing share from competitors. The latter will almost always be more difficult to achieve. Market share is closely monitored for signs of change in the competitive landscape, and it frequently drives strategic or tactical action (Farris, Neil, Phillip and David, 2010). Out of total purchases of a customer of a product or service, what percentage goes to a company defines its market share. Market share is said to be a key indicator of market competitiveness that is, how well a firm is doing against its competitors (Aziaka, 2017). Market share is a measure of the consumer's preference for a product over other similar products. A higher market share usually means grater sales, lesser effort to sell more and a strong barrier to entry for other competitors.

Profitability

Profitability is conceptualized as the increase in the percentage of revenue remaining after all operating expenses, interest, taxes and preferred stock dividends (but not common stock dividends) have been deducted from a company's total revenue. One of the most essential aspects of launching and operating a business is selling enough goods or services to pay for the company's costs. If a company cannot earn enough to cover its cost, it loses money, which may eventually force owners to shut the company down. Net profit margin or net profit ratio is values that measure a company's profitability, which can help managers analyze company performance. Net profit margin is the percentage by which a company's total sales or revenues exceeds or is less than the sum of its expenses (Haitham, 2015). If a company has a positive net profit margin during a certain period of time, it means the company made more money during that period than it spent whereas a negative net profit margin means the company spent more money than it made. Net profit margin is calculated by subtracting total cost from total sales and its total cost equal its net profit margin. Net profit margin essentially measures the amount of each dollar of sales that a company has left over it pays all of its expenses.

Strong Brand Reputation

The reputation of a brand's name has been described as an extrinsic cue that is an attribute related to the product but not of the physical composition of the product. Brand reputation evolves all the time, and it is mainly created by the flow of information from one user to another (Herbig & Milewicz, 2013). Reputation embodies the general estimation in which a company is held by employees, customers, suppliers, distributors, competitors, and the public (Fombrun & Shanley, 1990). Thus, firms compete for brand reputation knowing that those with a strong reputation across their products can assume highest sales prices, thereby being more powerful than another

competitor (Loureiro & Kaufmann, 2016). The term brand reputation also refers to the same thing as corporate reputation (Harit & Chetioui, 2017). James (2013) defines strong brand reputation as an intangible asset representing non-physical assets, such as brand name and reputation, and shows up on the asset side of a company's balance sheet. He also pointed out that: "a company often acquires brand reputation by purchasing another company.

Methods

The research design for this study was the exploratory survey research design. The population of this study consist five hundred and fifty (550) staff in the selected twenty-two (22) Manufacturing firms in Port Harcourt, Nigeria. The population of this study stated above was adopted the work of Opara (2018) whose population data was from Manufacturers' Association of Nigeria, Rivers State Chapter, Port Harcourt. The Krejcie and Morgan Sample Size Determination Table of 1970 was used to obtain a size of 232 top and middle level management staff. The work was predicated on the conceptual framework presented below:

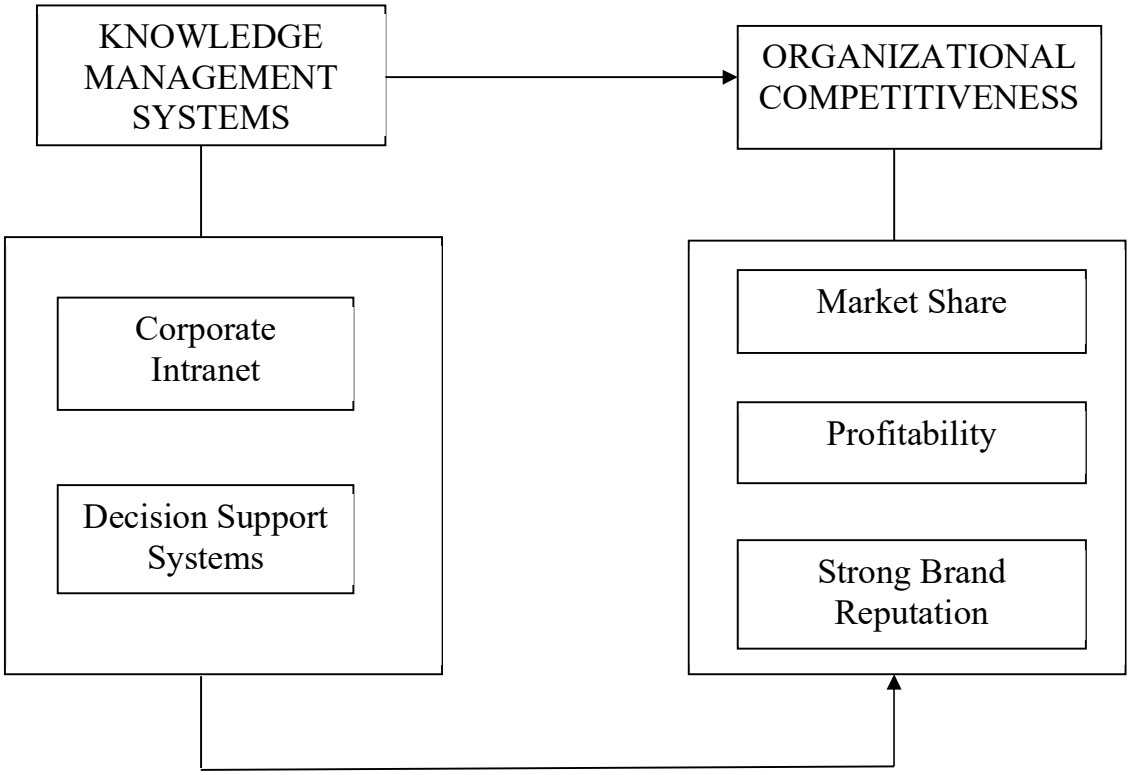

Fig. 1.1: Conceptual Framework Showing Relationship between Knowledge Management Systems and Organizational Competitiveness

Source: Researchers' Conceptualization, 2019.

In order to establish the empirical relationship between knowledge management system and organizational competitiveness, the following six (6) null hypotheses were tested:

Ho_1: Corporate intranet does not have any significant impact on the market share of manufacturing firms in Port Harcourt.

Ho_2: Corporate intranet does not have any significant impact on the profitability of manufacturing firms in Port Harcourt.

Ho_3: Corporate intranet does not have any significant impact on the strong brand reputation of manufacturing firms in Port Harcourt.

Ho_4: Decision support system does not have any significant impact on the profitability of manufacturing firms in Port Harcourt.
Ho_5: Decision support system does not have any significant impact the market share of manufacturing firms in Port Harcourt.
Ho_6: Decision support system does not have any significant impact on the strong brand reputation of manufacturing firms in Port Harcourt.

After validation by one expert in Office and Information Management and two experts in Measurement and Evaluation, a structured questionnaire titled "Knowledge Management Practices and Organizational Competitiveness Questionnaire" (KMPOCQ) was used as instrument for the collection of primary data. The instrument was constructed using a 4 point likert scale of Very Great Extent (VGE) 4; Great Extent (GE) 3; Moderate Extent (ME) 2; and Low Extent (LE) 1. Crombach alpha was used to ascertain the reliability of the instrument with the least Crombach alpha coefficient at 0.74. Out of 232 copies of the questionnaire distributed, 181 copies were retrieved. The test of hypotheses was done using Correlational Spearman Rank Order Correlation. The formula is stated thus:
The formula is presented below:

$$r = 1 - \frac{6\sum d^2}{n(n^2 - 1)}$$

Where:
n = number of pairs of data
d = difference between the ranking in each set of data.
∑ = Summation.
Decision Rule: The tests of hypotheses will be considered two tailed and is carried out at a 95% confidence interval.

Results

Bivariate Analysis

Corporate Intranet and Organizational Competitiveness

Ho_1: Corporate intranet does not have any significant impact on the market share of manufacturing firms in Port Harcourt.
Ho_2: Corporate intranet does not have any significant impact on the profitability of manufacturing firms in Port Harcourt.
Ho_3: Corporate intranet does not have any significant impact on the strong brand reputation of manufacturing firms in Port Harcourt.

Table 1: Correlations of Corporate Intranet and Organizational Competitiveness

			Corporate Intranet	Market Share	Profitability	Strong Brand Reputation
Spearman's rho	Corporate Intranet	Correlation Coefficient	1.000	.684**	.713**	.633**
		Sig. (2-tailed)	.	.000	.000	.000
		N	181	181	181	181
	Market Share	Correlation Coefficient	**.684****	1.000	.745**	.712**
		Sig. (2-tailed)	.000	.	.000	.000
		N	250	250	250	250
	Strong Brand Reputation	Correlation Coefficient	**.713****	.745**	1.000	.638**
		Sig. (2-tailed)	.000	.000	.	.000
		N	181	181	181	181
	Profitability	Correlation Coefficient	**.633****	.712**	.638**	1.000
		Sig. (2-tailed)	.000	.000	.000	.

		N	181	181	181	181

****. Correlation is significant at the 0.01 level (2-tailed).**
Source: SPSS Output.

Column two of table 1 above reveals r value of 0.684** at a significance level of 0.00 which is less than the chosen alpha level of 0.05 for the hypothesis relating corporate intranet and market share. Since the significance value 0.00 is less than the alpha level of 0.05, the null hypothesis (Ho_1) which states that corporate intranet does not have any significant impact on the market share of manufacturing firms in Port Harcourt was rejected. This implies that corporate intranet has significant positive impact on the market share of manufacturing firms in Port Harcourt.
Column three of table 1 above reveals r value 0.713** at a significance level of 0.00 which is less than the chosen alpha level of 0.05 for the hypothesis relating corporate intranet and profitability. Since the significance value is less than the alpha level of 0.05, it is factually right to reject the null hypothesis (Ho_2) which states that corporate intranet does not have any significant impact on the profitability of manufacturing firms in Port Harcourt was rejected. This implies that corporate intranet has significant positive impact on the profitability of manufacturing firms in Port Harcourt.
Column four of table 1 above indicates r value of 0.633** at a significance level of 0.00 which is less than the chosen alpha level of 0.05 for the hypothesis relating corporate intranet and strong brand reputation. In line with the decision rule, since the significance value 0.00 is less than the alpha level of 0.05, the null hypothesis (Ho_3) which states that corporate intranet does not have any significant impact on the strong brand reputation of manufacturing firms in Port Harcourt rejected. This implies that corporate intranet has significant positive impact on the strong brand reputation of manufacturing firms in Port Harcourt.
These results show that the more manufacturing firms in Port Harcourt used corporate intranet as a knowledge management tool, the better they perform in terms of market share, profitability, and strong brand reputation.

Decision Support System and Organizational Competitiveness

Ho_4: Decision support system does not have any significant impact on the profitability of manufacturing firms in Port Harcourt.
Ho_5: Decision support system does not have any significant impact the market share of manufacturing firms in Port Harcourt.
Ho_6: Decision support system does not have any significant impact on the strong brand reputation of manufacturing firms in Port Harcourt.

Table 2: Correlations of Decision Support System and Organizational Competitiveness

			Decision Support System	Market Share	Profitability	Strong Brand Reputation
Spearman's rho	Decision Support System	Correlation Coefficient	1.000	.472**	.725**	.627**
		Sig. (2-tailed)	.	.000	.000	.000
		N	181	181	181	181
	Market Share	Correlation Coefficient	**.472****	1.000	.745**	.712**
		Sig. (2-tailed)	.000	.	.000	.000
		N	181	181	181	181
	Strong Brand Reputation	Correlation Coefficient	**.725****	.745**	1.000	.638**
		Sig. (2-tailed)	.000	.000	.	.000
		N	181	181	181	181
	Profitability	Correlation Coefficient	**.627****	.712**	.638**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	181	181	181	181

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

Source: SPSS Output.

Column two of table 2 above reveals r value of 0.472** at a significance level of 0.00 which is less than the chosen alpha level of 0.05 for the hypothesis relating decision support system and market share. Since the significance value 0.00 is less than the alpha level of 0.05, the null hypothesis (Ho_4) which states that decision support system does not have any significant impact on the market share of manufacturing firms in Port Harcourt was rejected. This implies that decision support system has significant positive impact on the market share of manufacturing firms in Port Harcourt.

Column three of table 2 above reveals r value 0.725** at a significance level of 0.00 which is less than the chosen alpha level of 0.05 for the hypothesis relating decision support system and profitability. Since the significance value is less than the alpha level of 0.05, it is factually right to reject the null hypothesis (Ho_5) which states that decision support system does not have any significant impact on the profitability of manufacturing firms in Port Harcourt was rejected. This implies that decision support system has significant positive impact on the profitability of manufacturing firms in Port Harcourt.

Column four of table 4.10 above indicates r value of 0.627** at a significance level of 0.00 which is less than the chosen alpha level of 0.05 for the hypothesis relating decision support system and strong brand reputation. In line with the decision rule, since the significance value 0.00 is less than the alpha level of 0.05, the null hypothesis (Ho_6) which states that decision support system does not have any significant impact on the strong brand reputation of manufacturing firms in Port Harcourt rejected. This implies that document management practices have significant positive impact on the strong brand reputation of manufacturing firms in Port Harcourt.

These results show that the more manufacturing firms in Port Harcourt utilize decision support system, the better they perform in terms of market share, profitability, and strong brand reputation.

Discussion of Findings

The test of hypotheses one, two, and three revealed that corporate intranet has significantly enhanced the corporate performance of manufacturing firms in Port Harcourt in terms of market share, profitability, and strong brand reputation. This implies that the more manufacturing firms invest in and use intranet for the exchange of timely information and knowledge across departments and various units and locations of their organization, the better they perform in terms of market share, profitability, and strong brand reputation. Conversely, this implies that playing down on the use of corporate intranet is capable of jeopardizing the organizational performance of manufacturing firms in Port Harcourt. This finding is agreement with the findings of Bright (2016) that the use of intranet in business organization does not only enhance knowledge sharing both also improves organizational performance in terms of market expansion and customer loyalty. Corporate intranet makes it possible for workers and managers in different departments, units, and locations of a manufacturing firm to remain connected and capable of sharing and gaining access to necessary information and knowledge as and when due. When this happens, the organization becomes more efficient and effective in production, marketing, and management of customer relations which opens up more market and customers (Angel, Pedro, and Carolina, 2008). The more customers manufacturing firms attract and retain, the higher their sales volume which can lead to more profit owing to high turnover rate. Thus, the use of intranet brings about smooth sharing and accessing of relevant information and knowledge resources which translates to efficiency and achievement of corporate targets such as increase in market share and profitability. A study conducted that Bansler et al. (2000) found that the use of intranet enhances service delivery and indirectly earns an organization a strong reputation among customers and the general public.

However, this finding is in sharp contrast with the finding of Ameh (2017) that cost of installing and maintaining internal computer-mediated communication systems in organizations drains their

financial resources. This suggests that the use of functional intranet is capital intensive and capable of constituting financial burden to the organization if not properly managed.

The test of hypotheses four, five, and six revealed that decision support system has significantly enhanced the corporate performance of manufacturing firms in Port Harcourt in terms of market share, profitability, and strong brand reputation. This finding implies that the more manufacturing firms in Port Harcourt used decision support system to aid managerial decisional functions, the more the firms are able to record higher profitability, market share, and strong brand reputation. This finding is in line with the findings of Richard (2017) that decision support system improves the quality of managerial decisions made in Oil and Gas industries in Nigeria and also brings about market expansion and higher profitability. Decision support system makes it possible for managers and other key decision makers are duly informed about operational and market realities. This helps to improve the quality of decisions they make and in turn brings about improvement in the overall performance of the organization.

CONCLUSIONS

Based on the analyses of data and discussion of findings, the study concluded that innovative knowledge management systems usage enhances the organizational competitiveness of manufacturing firms in Port Harcourt in terms of market share, profitability, and strong brand reputation. The study also concluded neglect of knowledge management practices such as corporate intranet and decision support system jeopardizes the competitiveness of manufacturing firms in terms of market share, profitability, and strong brand reputation. It was also concluded that the more information and knowledge sharing is encouraged in manufacturing firms, the higher their competitive advantage and vice versa.

RECOMMENDATIONS

Based on the findings and conclusions, the following recommendations were made:

1. Manufacturing firms should procure or upgrade their internal electronic communication infrastructures to promote easy sharing and access to relevant information and knowledge across departments and workers.
2. Managers, supervisors, and workers should not hoard relevant experience and knowledge from other to promote quality service delivery which will bring about higher profitability, expanded market share, and stronger brand reputation.
3. Manufacturing firms should upgrade their document management system to latest cloud technology services to enhance access to knowledge.
4. The offices of managers and supervisors should be equipped with digital devices and platforms that will provide them with latest update to aid better decision making and strategies which will enable the organization to perform optimally in all ramifications.

REFERENCES

Aziaka, A.M. (2017). Leadership development and organizational performance in manufacturing firms in Port Harcourt. Unpublished Master Degree, Ignatius Ajuru University of Education.

Barclay, R.O. & Murray, P. (2017). What is knowledge management? Knowledge Praxis. Http://www.media-access.com/what.

Bhatt, G.D. & Zaveri, J. (2002). The enabling role of decision support systems in organizational learning. *Decision Support Systems*, *32*(3), 297-309.

Chen, C. & Huang, J. (2007). How organizational climate and structure affect knowledge management - The social interaction perspective. *International Journal of Information Management*, 27(2): 104-118.

D'Cruz, J. & Rugman, A. (2012). New concepts for Canadian competitiveness. Kodak.

Davenport, T.H., & Prusak, L. (2007). Working knowledge: how organizations manage what they know. Boston: Harvard Business School Press.

Demarest, M. (2016). Understanding knowledge management. *Long Range Planning,* 30(3), 374-384.

Farris, R., Neil, W., Phillip, G., & David, C. (2010). Decision support systems and its impact on organization empowerment: Field study at Jordanian Universities*. Information and Knowledge Management,* 2 (4), 30-45.

Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems,* 18(1), 185-214.

Haitham, H.A. (2015) Investigating decision support system (DSS) Success: A partial least squares structural equation modeling approach. *Journal of Business Studies Quarterly, 6*(4,) 56-77.

Harit, S. & Chetioui, Y. (2017). Does goodwill improve firm performance? Evidence from the Mena Region. *Risk Governance and Control: Financial Markets and Institutions*, 7 (2), 108-115.

https://en.wikipedia.org/wiki/Socio technical system.

Lee, H. & Choi, B. (2003). Knowledge management enablers, processes, and organizational performance: An integrative view and empirical examination. *Journal of Management Information Systems*, 20(1): 179-228.

Mohamad H.G., Mehrdad N.A., Salman, S., & Ali, N. (2013). Investigating the influence of knowledge management practices on organizational performance: An Empirical Study. *Acta Polytechnica Hungarica,* 10 (2), 205-216.

Mukhtar, S.A. (2015). Influence of knowledge management on performance in small manufacturing firms in Nigeria. *International Journal of Business, Economics and Law,* 2(12), 63-65.

Murths, T.P. (2010). Country capabilities and the strategic state: How National political institutions affect MNC strategies. *Strategic Management Journal*, 15, 113–129.

Nathaniel, C.O. (2015). Knowledge management implementation in the Nigerian hospitality industry. *Review of Public Administration and Management*, 3(1), 1-7.

Norris, J. & Moon, E. (2005). Information and school administrators' effectiveness in Gombe. *International Journal of Education,* 7(9), 113-119.

Nwabali, I.G. (2018). Executive development and organizational performance of manufacturing firms in Rivers State. Unpublished PhD Seminar Presented to the Department of Management, Rivers State University.

Porter, M. (1985). *The competitive advantage of nations.* Free Press.

Power, D. (2013). A can DSS improve strategic planning. http://dssresources. com/faq/index.php?action=artikel&id=108.

Ramlah H., Mohamad, N.M., & Nor, S.A.K. (2008). The utilization and effectiveness of intranet: A case study at selected Malaysian organizations. *Communications of the IBIMA*, 4, 200-206.

Taylor, R.M. (2016). Knowledge management activities. http://ourworld. compuserve.com.homepages

Walker, A., Spear, I., Gould, B. & Lee, K. (2016). Evaluation of the Implementation Use and Effects of Computerized Management Information Systems in English Secondary Schools. *British Journal of Educational Technology*, 34 (3), 357-366.