# Assessment of Knowledge Management Practices in Quantity Surveying Firms in Lagos and Abuja, Nigeria

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#### Abstract

In Global Construction Industry, Quantity Surveying (QS) profession has been identified as a knowledge intensive profession i.e. a profession broad in scope and provides expert advice and professional knowledge to clients. The study is aimed at assessing Knowledge Management (KM) practices in QS firms with a view to establishing the state of art of KM practice in QS firms in Lagos and Abuja.Well-structured questionnaire and Interview was used as the data collection instrument. Data collected were analysed using Mean score and Spearman rank correlation. The findings affirm that QS firms in Lagos and Abuja are aware of KM. In addition, all KM activities occur regularly in QS firms except knowledge maintenance. The study further reveals that knowledge acquisition has a positive influence on knowledge creation, storage, sharing, utilisation and maintaining. The study concludes that quantity surveying firms have a high level of awareness of KM and out of all KM activities that are regularly undertaken in QS firms, knowledge maintenance was still lacking. The study recommends that QS firms should develop and implement proper knowledge policy that will act as a guide for the organisations to direct its staff in managing knowledge and their application for effective practices. **Keywords**: Knowledge management, Quantity surveying firms, Nigeria.

## 1. Introduction

KM is what needs to be done to accomplish our goals faster and more effectively by delivering the right knowledge to the right person at the right time and in the right context (Ugwu and Ezema 2010). However, it is now being recognised that the management of project knowledge especially within the construction industry where projects are implemented by temporary virtual organisations is open to considerable improvement, both within construction organisations, and between firms in the supply chain (Egbu, Sturgesand and Bates, 1999). The construction supply chain involves the contractors, suppliers, consultants, clients etc. The consultants include the Quantity Surveyor, Architect, Engineer etc. The consultant play the advisory role to the client within the construction industry supply chain and this role is knowledge intensive. To discharge their professional duties, QS have to apply their knowledge and expertise to provide objective advice and analyses to clients. The quality of their decisions depends on their expert discretion and professional judgment in relation to cost control and contract administration for construction projects. When clients' needs are well communicated between clients' representatives and QS in advance, clients generally receive an excellent professional service from QS (Fong and Choi, 2009). As a cost expert, the QS is vast in cost control of projects from inception to completion which involves a detailed knowledge of contractor's prices, experience and ability to foresee possible effect of economic trends (Wills and Trench, 1999).

KM is a core business concern, especially in emerging economy, where the know-how of a company is becoming more important than the traditional sources (capital, land, etc) as stated by Drucker (1993). It is increasingly being acknowledged that KM can bring about the much needed innovation and improved business performance the industry requires (Egbu *et al*, 1999). Failure to capture and transfer knowledge generated from one project, which is usually buried, or lost because people move on, leads to wasted activity and impaired project performance (Carrillo, Anumba and Kamara, 2000).

Quantity Surveying firms are knowledge-intensive organisations that provide expert advice and professional knowledge to clients (Løwendahl, 2000) and the ability of QS to meet changing client needs and grow the market for professional services depends on the knowledge base of the profession (Babalola, Ojo, Bello, Adafin and Musa, 2011).Knowledge is the main contributor to the surveyor's portfolio. As a result, effective KM skills can help to improve their expertise (Davis, Watson and Man, 2007). To survive and grow in the future, the QS profession must respond quickly and creatively to the challenges of accelerating social, technological, economical and environmental change (Davis *et al*, 2007). Lack of knowledge sharing has proved to be a major barrier to the effective management of knowledge in organizations (Davenport and Prusak, 1998). Based on this reason, knowledge sharing is viewed as a main driver for QS firms to be competitive (Nor and Egbu, 2010). The need to consciously manage knowledge in an organizational setting is now recognized as important to improving innovation, business performance and client satisfaction. It is to this end that the research seeks to appraise KM practices in QS firms. This paper thus aims at assessing KM practices in QS firms with a view to establishing the state of art of KM practice in QS firms in Lagos and Abuja being the location of most head offices. This aim will be achieved by assessing the level of awareness of knowledge management in quantity surveying firms in Nigeria and investigating the knowledge management activities generally undertaken in quantity surveying firms

in Nigeria.

## 2. Literature Review

#### 2.1 Knowledge management

The efficient management of knowledge is very important in achieving the organizational aims and objectives. This is because in the present global economy, the resources are mainly confined in the human capital where potential talents are resident. Thus, Shanhong (2000) and Dimitriades (2005) contend that, what places a particular organization above the other is the quality of the knowledge base (staff). This perhaps is why many organizations are focusing essentially on vocational training and lifelong education, as a mechanism of adding value to the quality of their knowledge assets represented in the staff.

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Many researchers have classified KM processes into various forms (Goldoni and Oliveira, 2006). Darroch (2003) and Tiwana (2002) divide the KM process in three parts: acquisition, dissemination, and utilization of knowledge. The knowledge acquisition includes the development process and the making of insights and relations. Dissemination consists on sharing acquired knowledge. Utilization is regarded as the capacity of the organization in applying knowledge generated in new situations. Chen and Chen (2005) suggest four stages for the process from a bibliographical research on KM processes. The first is knowledge creation, knowledge circulation and knowledge application. The KM processes proposed by Choi (2005) will be adopted in this study. They are knowledge acquisition, knowledge creation, knowledge use and knowledge maintenance. This is because two or more researchers have mentioned all other knowledge processes except knowledge maintenance which only Choi (2005) mentioned to be the last process of KM. This is considered valuable because when knowledge is not maintained, the knowledge acquired or created will not be easily retrieved as people are required to spend extra time in digging up the relevant, updated and accurate knowledge.

There are various terms used in describing types of knowledge but the two most familiar are the tacit knowledge and the explicit knowledge. Tacit knowledge is defined as action-based and considered to be the fundamental type of knowledge on which organizational knowledge is built (Bouthillier and Shearer, 2002). According to Oakes (2003) the tacit knowledge is said to be hidden and cannot be easily expressed in papers and hard to share with people. It dwells in the human mind, behavior and perception. It is a kind of knowledge the person in possession of it gains overtime from experiences and exposures which include insights and the sensation of the way things are done. On the other hand, explicit knowledge is defined as knowledge that can be codified and therefore more easily communicated and shared (Boutherillier and Shearer, 2002). It is referred to as the things an individual knows and can be easily written down; a documented and public; structured and fixed content. Explicit knowledge refers to knowledge which is transmittable in formal and systematic language (Nonaka and Takeuchi, 1995). Here learning is done by observing, reading or discussing.

## 2.2 *Knowledge management strategy*

A strategy to knowledge management involves actively managing knowledge. Zack (1999) describes knowledge strategy as the overall approach an organization intends to take to alignet knowledge resources and compatibilities to intellectual requirements of its strategy, thus reducing the knowledge gap that exists between what a company must know to perform its strategy and what it does know. In such an instance, individuals strive try to explicitly encode their knowledge into shared knowledge repository, such as database, as well as retrieving knowledge they need that other individuals have provided to the storage means. This is also commonly known as codification approach to knowledge management. According to Meronon, Lopez and Sabater (2004), Codification strategy is characterized by the use of groupware tools such as document repositories (manuals, lessons learned, best practices or shared data) knowledge maps, books or journals, work flow tools. Other groupware instrument such as video conferencing, email, discussion forums, make interaction possible, thus being personalization–oriented practices.

## 2.3 *Quantity surveying firms in Lagos and Abuja*

Lagos is regarded as the economic and financial capital of Nigeria while Abuja is the administrative capital. Quantity surveying firms in Lagos and Abuja have benefited well from the economic advantage of the state. The economic influence of Lagos has imparted positively on QS firms therein. This influence manifests both quality of service and quantity of firms located there. QS Firms in Lagos and Abuja boasts of employing the highest number of consulting quantity surveyors in Nigeria. This is in addition to Fagbemi (2008) who affirms that 75% of quantity surveying firms are either located there or have their head offices in Lagos. The actions of quantity surveying firms are governed by the rules and regulation enacted by actors in the quantity surveying practice. The Nigeria Institute of Quantity Surveyors (NIQS) and Quantity Surveying Registration Board of Nigeria (QSRBN) regulates the professional and legal aspects of the professional knowledge to clients. There are

four essential characteristics of quantity surveying firms; they are knowledge intensive nature, advisory nature, competence governed by institutions, and code of conduct (Fong and Choi, 2009). Quantity surveying is very much a client led profession in that the professional quantity surveyors respond to client needs and must continue to develop more on their own initiatives Institution of Chartered Surveyors, 2008). According to Pathirage and Amarathunga (2006), since the needs and expectations of the clients are ever changing facts, in order to compete and to excel in the profession, quantity surveyors have to acquire and operate wide range of diverse skills outside the normal traditional quantity surveying.

Quantity surveying profession has been acknowledged to be crucial to achieving a better society because the role of the quantity surveyor is directly linked to the provision of basic human needs (Badu and Amoah, 2000).

## 3. Research Methodology

Questionnaires and interviews were used as the research instruments for the study. Primary source of data collection was employed through well-structured interview and questionnaires administered to appropriate quantity surveyors in quantity surveying firms in Lagos and Abuja. This is because Lagos is the commercial capital where most registered QS firms have their head offices (Fagbemi, 2008) and Abuja the administrative capital. Since Head offices influence the pattern of operation in other branches of an organization, Lagos and Abuja are the most appropriate for this study. Using this approach, questions on the level of awareness of KM in quantity surveying firms were designed from the literature. The levels of measure were from 1 = 'unaware' to 5 ='strongly aware'. Questions on KM activities undertaken in quantity surveying firms (knowledge acquisition, knowledge creation, knowledge storage, knowledge sharing, knowledge use and knowledge maintenance) as used by Choi 2005 were designed from the literature with the level of measure from 1= strongly disagree to 5= strongly agree. The questionnaire employed is a multiple choice type using 5point likert scale with 5 being the highest and 1 the lowest. This is chosen for ease of uniformity of the responses and it gives a manageable sensitivity to the respondents as regards choices. Interview has strong capability of describing a pattern of interaction and undesirably but crucial effects makes it important (Choi, 2005). Questions were asked on the level of awareness, KM activities undertaken in the firms. The interviewees were quantity surveyors in quantity surveying firms in Lagos and Abuja. This research used the convenience sampling techniques. Convenience sampling was used because it involves drawing samples that are both easily accessible and willing to participate in a study. Questionnaires and interview were administered to one quantity surveyor per firm who was accessible and willing to participate.

The accessible population for the study is from the list of registered quantity surveying firms from the Nigeria Institute of Quantity Surveyors (NIQS) which indicates that 74 quantity surveying firms are registered in Lagos as at January 2012 while 52 are registered in Abuja as at June 2012 having a total of 126 firms where questionnaires was administered to one quantity surveyor per firm. The interview was carried out personally with some quantity surveyors in QS firms in Lagos and Abuja who were willing to participate. Of the 126 questionnaires administered, 68 questionnaires were completed and returned by the respondents representing 53.97% return rate This is considered sufficient for the study considering thatSaunders, Lewis and Thornhill (1997) considers the interval of 30-50 per cent to be a reasonable response rate for delivery and collection of questionnaires. 55.88% of respondents were from Lagos while 44.12% were from Abuja. A total of 13 interviewees responded to the interview. Computer aided statistical analysis was deployed in the data analysis process. All data collected by the questionnaires were input into SPSS 17 (Statistical Package for the Social Sciences) in defined format. This program allows great flexibility and versatility in data processing and is widely adopted in statistical researches. This was used for finding the mean item score and the rankings of the factors. The formulated hypothesis was also tested using Spearman's Rank Correlation. Spearman's Rank Correlation is a technique used to show whether any one set of numbers has any relationship with another set of numbers. This was carried out to check the influence of firm size and experience of quantity surveyors on knowledge management activities. The Cronbach's alpha was used to test the reliability of the questionnaire. The cronbach's alpha values for scales of measures of the research instrument ranged from 0.860 to 0.894. Since the degree of reliability of the instrument is more perfect as the value tends towards 1.0 (Moser and Kalton, 1999), it can then be concluded that the instruments used for this research are significantly reliable.

# 4. Findings and Recommendation of Value Management Team

## 4.1 Level of awareness of knowledge management in Quantity surveying firms

Respondents were asked to rank the level of awareness of their firm to KM.A rank is the degree to which something is of high quality. It means arranged according to performance. This is used to rank and determine the significance of the collected data. The premise of decision for the ranking is that the level of awareness with the highest mean score will be ranked highest and others in such subsequent descending order. Table 1 shows that respondents where strongly aware that KM involved activities such as acquisition, creation, storage, sharing,

Table 1: Level of awareness

utilisation and maintenance of knowledge ranking it as first. KM reduces problem solving time within the firm was ranked second. From the table, it was deduced that the respondents were not aware of having a unit /officer in charge of KM in their firm and also not so aware that KM occurs within their firms ranking the least. In all, the level of awareness had an overall mean of 3.98. A threshold is set at point 3 (somewhat agree) which means there is little awareness. This is used to determine the existence of awareness. In other words, the level of awareness with an overall mean value above the threshold is taken to exist in their workplace and vice versa. This shows that QS firms are aware of KM.

Level of awareness	Mean	Rank	Group Mean
KM involves activities such as creation, storage, dissemination, utilisation	4.56	1	
and maintenance of knowledge			
KM reduces problem solving time	4.41	2	
KM reduces risk in a firm	4.19	3	
Efficient KM is essential in achieving the aim and objectives of a firm	4.18	4	
KM obstructs the flow of knowledge	4.15	5	
KM better prepares for and anticipate the future	4.12	6	
KM helps improve the effectiveness and sustained viability of the firm	4.10	7	
KM increases the revenue of a firm	4.08	8	
Lack of sharing knowledge leads to waste of resources	4.07	9	
KM occurs within the firm	3.46	10	
The firm has a unit/officer in charge of KM	2.47	11	3.98

## 4.2 Knowledge Management activities undertaken in quantity surveying firms

Table 2 indicates the response of the respondents on the KM activities undertaken in QS firms. It shows that experienced staff supervise new staff in the firm was the most knowledge acquisition while firm places emphasis on lessons learned was ranked next. It was observed that firms do not only recruit experienced staff as it was ranked least. This implies that respondents do not agree with the fact that experienced staffs only are recruited in their firm; they were of the opinion that some staffs are employed fresh from school with little or no experience. Also long serving staff of the firm are not invited to record their knowledge and experience as it had a mean score below the threshold. The overall mean for knowledge acquisition show that knowledge acquisition occurs within QS firms as a threshold is set at 3 to mean there is little agreement. However, since the group mean tends more towards 4, it can be said that all QS firms agree that knowledge acquisition occur in their firms.

Knowledge creation was also found to occur in QS firms. Table 2 shows that work related ideas are encouraged in QS firms ranking highest.

Knowledge storage had an overall mean above the threshold. It was observed that data and information were selected and organised before being stored. This is consistent with the preposition of Lee and Yang (2000) that knowledge is meaningful only if it is stored in a way that makes sense to the nature of business. Knowledge resides in human memory was ranked least as a means of storage of knowledge in QS firms. This is in line with findings of Choi (2005) that relatively small majority of knowledge resides in human memory.

Knowledge sharing was observed to occur in QS firms. The table showed that experienced staffs are encouraged to mentor new staff in QS firms while staffs who share knowledge receive reward/recognition in QS firms ranked the least.Birkinshaw (2001) is of the opinion that a soft form of incentive, typically a section of the annual performance review in which an individual's contribution to the company's knowledge is recorded and evaluated. This ensures that individuals are reminded of the importance of KM on a regular basis, while avoiding the problem of specifying too narrowly what the appropriate knowledge-sharing behaviours are. Knowledge sharing as a measure of performance was also ranked low, which mean that quantity surveyors disagree that knowledge sharing is a measure of performance in QS firms.

Knowledge utilisation ranked the highest among all KM activities. It was observed that staff within the firm is encouraged to refer to knowledge/experience learned from previous project to subsequent project. This is consistent with the proposition by Yau and Yang (1998) that in construction industry, knowledge and assessments of previous experience are critical to resolving problems and the essence of knowledge to making judgements is also raised by Gupta, Sharma and Hsu (2004). Application of knowledge in developing new product/services ranked least

Knowledge maintenance ranked the least in KM activities undertaken in QS firms. Based on the 3point threshold, it is deduced that quantity surveyors disagree that knowledge maintenance occur in QS firms. This implies that there is no specific staff assigned to deal with knowledge needs, maintaining and updating of knowledge into the database/library in QS firms.

# Table 2: Knowledge management activities

V	Maar	Dank	Group
Knowledge Acquisition	Mean	Капк	Wiean
Experienced staff supervises new staffs within the firm	ΛΛΛ	1	
Firm places emphasis on lesson learnt on projects	4.44	2	
Periodic meetings are held within the firm	4.01	2	
Employee engage in peer tutoring/discussion	3.82		
Lob rotation is encouraged within the firm	3.64	+ 5	
Firm organises internal job/on job training	3.13	5	
Long serving staff record their knowledge and experience	2.85	7	
Even and experienced staff only are recruited within the firm	2.85	/ 8	3 55
Experienced start only are recruited within the firm	2.41	0	5.55
Work related ideas and suggestions are encouraged	4.12	1	[
Existing knowledge is used to develop new knowledge	4.12 2.04	2	
Best practice are identified for future use	3.94	2	
Magningful ideas brought by staff are implemented	2.56	3	2.92
Weamingful ideas of ought by start are implemented	5.30	4	3.83
Knowledge Storage	2.00	1	
Data and Info. are selected and organised before stored	3.99	1	
Knowledge is kept in external storage device	3.96	2	
Knowledge is stored in form of documentation	3.73	3	
Knowledge is stored through electronic means	3.72	4	
Knowledge resides in my organisations routine/procedure	3.53	5	
Confidential information has restricted access	3.38	6	
Knowledge is kept in personal reference file	3.02	7	2.42
Knowledge is stored in human memory	2.13	8	3.43
Knowledge sharing	1.2.1		
Experienced staff mentor new staff	4.34	1	
Knowledge gained from previous projects are accessible to all	4.00	2	
Knowledge is shared by daily interaction	3.63	3	
Cross project learning is used to transfer knowledge	3.55	4	
Knowledge is transferred through electronic means	3.54	5	
Office layout encourage knowledge sharing	3.41	6	
Knowledge is transferred through documentation	3.26	7	
Knowledge is shard through face to face means	3.21	8	
Knowledge sharing is a measure of performance	2.78	9	
Staff that share knowledge receive reward/recognition	1.91	10	3.36
Knowledge Utilization		1	
Am encouraged to refer experience to subsequent project	4.46	1	
I utilise knowledge to solve most problem i encounter	4.09	2	
I apply knowledge in developing new service	3.85	3	4.13
Knowledge Maintenance		1	<b>-</b>
Specific staff is responsible for regular update of knowledge	2.7	1	
Specific staff is responsible for maintaining the applicability of knw.	2.58	2	
Specific staff is assigned to deal with knowledge needs	2.51	3	2.59

From Table 3, knowledge utilisation was shown to be applied mostly in QS firms followed by knowledge creation. This is consistent with the proposition of Hussein and Wahba (2003) that value can only be created when knowledge is used. Knowledge maintenance was ranked the least in terms of its application in QS firms and this is consistent with the findings in the study that knowledge maintenance does occur in QS firms.

I able 3: Knowledge management occurrence in quantity surveying fire	Table 3:	e 3: Knowledge managemen	t occurrence in	quantity sur	veying firn
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Knowledge Management activities	<b>Group Mean</b>	Rank
Knowledge Acquisition	3.54	4
Knowledge Creation	3.74	2
Knowledge Storage	3.56	3
Knowledge Sharing	3.49	5
Knowledge Use	3.96	1
Knowledge Maintenance	3.15	6

Hypothesis 1: Relationship between the underlying scopes of knowledge management activities undertaken in quantity surveying firms

Table 4 illustrates the result of the correlation analysis between the underlying scopes of activities undertaken in QS firms. The table reveals that one or more of the scope of KM activities have a relationship with one another. The underlying scopes of KM activities in QS firms are not all positively correlated as revealed on Table 4. The table also reveals that some had positive significance while others had no significant relationship between each other with  $r \le 0.339 \ge -0.055$ . Knowledge acquisition has a more positively significant relationship with knowledge use at r = 0.339, p < 0.01 while Knowledge use had a positive significant relationship between knowledge maintenance at r = 0.301, p < 0.01. There is also a positive significant relationship between knowledge maintenance at r = 0.150, p < 0.01, while Knowledge storage has a low positive significant relationship with knowledge use at r = 0.055, p < 0.01 and between knowledge storage and knowledge maintenance r = -0.055, p < 0.01 and between knowledge sharing and knowledge maintenance at r = -0.063, p < 0.01. This inferred that knowledge storage and sharing has no effect on knowledge maintenance.

Table 4 shows that a positive significant relationship exists between knowledge acquisition and other KM activities in QS firms. This means that knowledge acquisition has a positive influence on knowledge creation, storage, sharing, utilization and maintaining so if knowledge is not acquired, it cannot be created, stored, shared, used or maintained. This infers that the more the knowledge acquired, the more all other KM activities occur in QS firms. Also, knowledge creation has a positive significant relationship with knowledge sharing and knowledge maintenance while no significant relationship exists with knowledge storage and use. Knowledge storage has a positive significant relationship with knowledge use and maintenance. Knowledge sharing had no significant relationship with both knowledge use and maintenance while knowledge use has a positive significant relationship with knowledge maintenance. This is in line with Choi (2005) who asserts that knowledge that is not properly maintained will be difficult to use because people are required to spend extra time digging up the relevant, updated and accurate knowledge.

				0 0		
	Acquisition	Creation	Storage	Sharing	Use	Maintain
Acquisition	1.000					
Creation	.207**	1.000				
Storage	.240**	.106	1.000			
Sharing	.143**	.171**	.186**	1.000		
Use	.339**	.042	.150*	.124	1.000	
Maintain	.308**	.197**	055	063	.321**	1.000
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\*Correlation is significant at the 0.01 level (2-tailed)

\*Correlation is significant at the 0.05 level (2-tailed)

## 4.3 Questionnaire and Interview Analysis

From the survey method, both the questionnaire and interview respondents had above 6years experience in QS practice while the number of employee in the firms they represent were also above 6. The analysis of both the questionnaire and interview showed that QS firms are aware of KM as the response of the questionnaire has a mean above the threshold point and most of the interviewees acknowledge their awareness too. They both reveal that QS firms do not have a unit or officer in charge of KM.

Most interviewees established that all KM activities occur in their firms which were contrary to the findings of the questionnaire which showed that knowledge maintenance does not occur in QS firms as it has a mean score below the threshold. Though other interviewees mentioned that not all KM activities take place in their firms, they mention creating, storing and use but none of them mentioned knowledge maintenance as a KM activity that occurs in their firms. Both the interview and questionnaire findings reveal that KM occurs regularly in their various firms.

## 5. Discussion of Findings

## 5.1 Level of awareness

Based on the level of awareness of KM in QS firms, the findings revealed that QS firms are aware of KM and its activities. It was observed that quantity surveyors in QS firms are strongly aware that KM involves activities such as acquisition, creation, storage, sharing, utilization and maintenance of knowledge. This in line with Oke, Ogunsemi and Adeeko (2013) in their study also revealed that all Construction professionals have heard of knowledge management at one time or the other and have it in place in their organizations. Also, quantity surveyors were aware of the benefits of KM as they all were above the threshold point.

However, the findings revealed that quantity surveyors in QS firms in Lagos and Abuja are not aware of the existence of KM within their firms and there is no officer or unit in charge of KM in their various firms as these ranked the least.

## 5.2 Knowledge management activities undertaken in quantity surveying firms

The study revealed that all KM activities are current in QS firms except knowledge maintenance. Knowledge utilization was found to dominate followed by knowledge creation in the firms. This is in line with Hussien and Wahba (2003) that value can only be created when knowledge is used. The findings show that in acquiring knowledge, the firms places emphasis on lessons learned on previous works and experienced staffs are encouraged to supervise new staff within the firm also the firm encouraged work related suggestions and ideas as a means of knowledge creation. It was observed that data and information are selected and organized before being stored. This is in agreement with Choi (2005) who submitted that speedy and reliable knowledge retrieval system may help an organizations competitive strength. Knowledge is found to be stored in form of documentation and in external storage device. However, Mentoring and interaction ranked highest among the various methods of knowledge transfer and knowledge was said not to reside in human memory within the firm. Although knowledge gained from various projects are accessible to all staff, staff who share knowledge do not receive recognition and knowledge sharing is not a measure of performance in the firm. This concurred with Birkinshaw (2001) that KM is part of the incentive system of an organization.

However, the study shows that there is a positive significant relationship between some of the underlying scope of knowledge management activities in QS firms. Knowledge acquisition also has a positive influence on knowledge creation, storage, sharing, utilization and maintaining while some of the underlying knowledge management activities have no significant relationship.

## 6. Conclusion and Recommendation

This research sort to assess KM practices in QS firms with a view to establishing the state of art of KM practice in QS firms in Lagos and Abuja being the past and present state capitals of Nigeria, this is important because most head offices are located there. The study has been able to reveal that quantity surveying firms have a high level of awareness of KM, although some firms disagree that KM do occur in their firm, majority of the firms asserts that they did not have a unit/officer in charge of KM in their firm. In addition it was disclosed that out of all KM activities that are regularly undertaken in QS firms, knowledge maintenance was still lacking because it ranked the least in both cases. It was further revealed that Knowledge activities had significant effect on QS firms as its acquisition was found to have a positive significant relationship with knowledge creation, knowledge storage, knowledge sharing, and knowledge use and knowledge maintenance.

Based on the above conclusion, the following recommendations are proposed;

There should be continuous and effective acquisition, creation, storage, sharing, use and maintenance of knowledge for effective Practices. Also, quantity surveying firms should implement a knowledge policy to act as a guide enabling the organization direct its staff in managing knowledge and their application to real practice. Employees within the firms should be encouraged to see maintenance as a vital issue in KM so as to ensure continuous update of knowledge to remain effective in practice.

## 7. Limitation and Area for Further Research

The findings of the research work indicates that there is a high level of awareness of knowledge management in quantity surveying firms in Nigeria based mainly on the perception of quantity surveyors. The financial investment on knowledge management is still not known, this should be further studied along with the benefits of knowledge management practices. Similar study can be carried out in other professional firms in the Nigeria Construction Industry. Managing knowledge should become ingrained in every staff member of quantity surveying firms so as to allow them get or become more actively involved in knowledge processes. Further studies should be devoted to an exploration of how the involvement of human beings in managing knowledge can be improved with the aim of enhancing knowledge flow in quantity surveying firms.

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