

**Organisational and Behavioural indices for knowledge Retention in Quantity Surveying Firms in Abuja
Nigeria**

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In recent time, quantity surveying firms are facing huge knowledge loss on account of layoffs, retirements, and staff turnover. However, this knowledge is tacit in nature in form of experiences that reside in the minds of people and cannot easily be documented, due to diverse nature of Quantity Surveyors functions in every facets of a nation economy. This study therefore aims to assess the organisational and behavioural factors influencing the retention of knowledge in Quantity surveying firms in Abuja with a view to establish the relationship between the behavioural and organisational factors that influence knowledge retention. This research employed quantitative research approach using questionnaire survey to obtain information from practicing quantity surveyors in Abuja. A total of 290 questionnaires were distributed to target respondents practicing in Abuja, and 265 valid responses were received. The results of analysis revealed that workers' low turnover is enhanced by proper motivation, effective trainings, good working environment, improved and effective organisational culture. Therefore, the study concludes that improvement of organisation values, beliefs and standards tend to improve workers behaviour towards achieving the goals of the organisation which encourages proper retention of the knowledge of effective workers which helps to ensure continuity in the flow of knowledge in organisations. It was recommended that employees should be properly trained by knowledgeable workers approaching retirement in order to ensure the continuity of knowledge flow in the organisation. The research contributed towards a comprehensive understanding of the factors that influence tacit knowledge retention.

Keywords: Behavioural indices, knowledge loss, knowledge retention, knowledge sharing, organisational indices

INTRODUCTION

Knowledge is progressively perceived as a vital resource of an organisation and ensured as a wellspring of upper hand (Davis *et al.*, 2007). As highlighted by Davis *et al.* (2007), proficient service areas like Quantity Surveying (QS) are based on knowledge where knowledge is a key component of the surveyor's portfolio and business technique. Knowledge can be viewed as essential to the expert practices in making progress, particularly to Quantity Surveying practices as they are driven by knowledge in nature. Serpell *et al.* (2010) expressed that development industry still cannot seem to use a formal and organised frameworks in catching and reusing knowledge. Subsequently, it is worrisome to oversee knowledge resources (Mohd Nor and Egbu, 2010). Understanding the issue around management of knowledge through retention of knowledge has been made to capture, share, apply, use and perhaps make knowledge available before workers leave the practices, or to on-board new representatives to rapidly get them up (Gonzalez & Martins, 2014). Quantity Surveying profession is confronted with the danger of losing knowledge, which could influence is sustained competitive advantage with other profession in the Nigeria construction industry. Davenport (2000) posited that a portion of

the phenomenal knowledge retention issues that are made in numerous associations through workforce socioeconomics elements are wide divergence of age in the workforce, poor interest in abilities, more aggressive enrolling and a high proportion of the quantity of specialists that must be supplanted in a given day and age to the ordinary number of workers required by the business for ideal execution. Though, Du Plessis (2003) cautioned that if knowledge is not held, associations would not have the capacity to gain from past encounters and should consistently rehash the wheel utilising similar methodologies more than once, except if fitting learning lives inside the association and is effectively open to the ideal individuals to empower them to carry out their occupations.

Retention of knowledge is the action that protects the knowledge and reside it in the framework once presented. It additionally incorporates those exercises that keep up the practicality of information inside the framework. However, knowledge handlers need to comprehend knowledge conduct/behaviour instead of endeavouring to transform it and find new answers for enhancing knowledge specialist adequacy. Du Plessis (2003) have noticed that associations are confronting a

stream of loss of knowledge and wearing down in the couple of long stretches of their foundation and it may influence their business from numerous points of view; particularly their financial development. Numerous Quantity Surveying firm appear to be wilfully ignorant about knowledge loss and the individuals who have premonitions in these firms do not recognise the greatness of risk and effect of lost knowledge (DeLong, 2004). In Nigeria, the issue of retention of knowledge gives off an impression of being influenced by elements, for example, retirement, abdication, conservation, migration (learning exportation), work value, mergers, acquisitions and globalization. In the event that organisations do not truly address the issue of information misfortune and wearing down by executing a viable knowledge maintenance methodology. This could pose serious effect on their business achievement and survival. This suggestion could be connected to considering and understanding knowledge conduct and improving or hindering social factors that could affect retention of knowledge. Concentrating on conduct that could improve retention of knowledge may assist associations with finding answers for retaining knowledge before it really lost from the firm.

KNOWLEDGE RETENTION AND DISTRIBUTION IN CONSTRUCTION INDUSTRY

Gonzalez (2016) argued that knowledge retention and distribution are important sub-disciplines of the Knowledge management (KM) process. Knowledge retention and distribution is important for organizations as lack of it can help reduce their competitive advantage and at the same time could put their organization at risk (Arif *et al.*, 2009; Martins & Meyer, 2012; Jennex, 2014). Jennex and Durcikova (2013) and Jennex (2014) also contend that knowledge loss among the workforce occurs because of their loss, and thus organizational knowledge will continue to be diminished as a result of failure to build a repository of knowledge.

Gonzalez (2016), on the other hand, asserted that in order to have an unambiguous process analysis of developing a knowledge retention, its scope must be defined. This is because knowledge retention is comprised of three activities: knowledge acquisition, storage, and retrieval (Gonzalez and Martins, 2014). However, one of the knowledge management practices is knowledge retention. Knowledge retention is an important aspect of knowledge management (Leibowitz, 2009). According to Newman and Conrad (1999), knowledge retention includes all activities that deal with the preservation of knowledge and storing it in the system once introduced. It also includes processes that aid in the viability of knowledge in the system. When factors such as the age of workers and those who will soon retire change the working

patterns of younger employees, who have fewer chances of staying with the same employer for more than a year, knowledge retention will be more important.

Therefore, it is critical to employ methods that best control the retention of critical knowledge of such employees prior to their departure from the establishment. Furthermore, knowledge retention improves an individual's innovative skills, the growth of an establishment, its effectiveness, worker's development, and the establishment's leverage over others (Leibowitz, 2009). Leibowitz (2009) stated that the purpose of performing knowledge retention is to expand the association's institutional memory. To ensure access to stored knowledge and the ability to access it, organizational memory should be structured in a way that facilitates knowledge retrieval (Gonzalez & Martins, 2014; Gonzalez, 2016).

However, Pathriage *et al.* (2007) discovered that there are a few boundaries that limit the retention of knowledge approach in the construction industry. This is supported by Killingsworth *et al.* (2014), who argue that worker's attitude, natural or trained cognitive abilities, and limited language skills can all have an impact on learning and retention of knowledge of construction industry workers and their training, as well as its effectiveness.

Additionally, Boyas, Wind, and Ruiz (2015) found that both organizational and individual factors had a significant impact on workers' experiences, as well as the ability of the company to retain them. Age and organizational tenure are two of the individual characteristics that influence employee interest. They were discovered to be associated with job stress, burnout, and intent to leave. This study sought to comprehend these attributes and their impact on organisations knowledge retention.

RESEARCH METHODOLOGY

The study was based on the assessment of Organisational and Behavioural enablers to the retention of knowledge in Quantity surveying firms in Abuja-Nigeria. The research population consist of a total of 127 Quantity surveying firms in Abuja obtained from the Nigerian Institute of Quantity Surveyors database. From the population, a total of three respondents per firm was conducted giving a total sample size of 381.

The study adopted simple random sampling technique because it accords each firm equal chances of being selected for the study. Structured questionnaire was used as the instrument for gathering data from the respondents due to its ease of applicability in achievement of the research objective and suitable to address the research question, feasible to the organisation in terms of time, resources and organisational constraint (Brewerton and Millward 2001). The questionnaire

was made up of two sections; The section one showed the general information covering the title of respondents, location of respondent, type of respondent, Academic qualification, professional membership, years of working experience. The section two showed the research questions. The questionnaires were self-administered to Quantity Surveyors working in QS firms in Abuja, some assistance was lent to the respondents by the researcher in situations where the questions are unclear to the respondent.

A total of 381 questionnaires were administered out of which 265 valid responses were retrieved representing approximately 70% response rate of the total number of questionnaire administered. The data were analysed using descriptive and inferential statistical techniques. The mean item score which is a descriptive statistical tool was used for the purpose of ranking and to determine significance of different factors of data that was collected. The basis for making ranking decisions is that the factor with the highest Mean item score is ranked as the first and others follow in subsequent descending order. Also correlation which is an inferential statistical tool was used to measure the degree of relationship between linearly related variables.

RESULTS

Organisational Indices to Knowledge retention

The results of analysis in Table 1 shows the mean item score (MIS) ranking of the Organisational

Factors Influencing Knowledge Retention. Under impact of knowledge on organisational strategy; "capacity to innovate" ranked 1st with MIS of 4.43, followed by "Ability to seek or pursue growth or advancement" ranked 2nd with MIS of 4.30, next is "Reduced efficiency hindering low-cost strategy" ranked 3rd with MIS of 4.07. "Knowledge loss giving competitors an advantage" ranked 4th with MIS of 4.03, followed by "Loss of specific knowledge at the wrong time increasing vulnerability" ranked 5th with MIS of 3.73. Under whose knowledge should be retained; "Best performers" and "Experts" ranked 1st with MIS of 4.30, followed by "Team Leaders" ranked 3rd with MIS of 4.10, next is "Employees approaching retirement" ranked 4th with MIS of 4.00 while "Few key people" ranked 5th with MIS of 3.63. Under type of knowledge to be retained Individual Level; "Tacit knowledge" ranked 1st with MIS of 3.90. Under Group level; "Relationship network knowledge" ranked 1st with MIS of 4.27 while "Collective, social knowledge of individuals" ranked 2nd with MIS of 4.07. Under Organisational level; "Accumulated tacit know-how" ranked 1st with MIS of 4.10 while "Cultural knowledge e.g. values" ranked 2nd with MIS of 3.93. Under Factors affecting type of knowledge to be retained; "Relevance of Knowledge" ranked 1st with MIS of 4.47, followed by "Environmental complexity" and "Maintaining continuity" both ranked 2nd with MIS of 4.10.

Table 1: Organisational Indices to Knowledge Retention

Enablers	MIS	Rank
Impact of knowledge on Organisational strategy		
Capacity to innovate	4.43	1
Ability to pursue growth	4.30	2
Reduced efficiency hindering low-cost strategy	4.07	3
Knowledge loss giving competitors an advantage	4.03	4
Loss of specific knowledge at the wrong time increasing vulnerability	3.73	5
Whose knowledge should be retained		
Best performers	4.30	1
Experts	4.30	1
Team Leaders	4.10	3
Employees approaching retirement	4.00	4
Few key people	3.63	5
The type of knowledge to be retained Individual Level		
Tacit knowledge	3.90	1
Group level		
Relationship network knowledge	4.27	1
Collective, social knowledge of individuals	4.07	2
Organisational level		
Accumulated tacit know-how	4.10	1

Cultural knowledge e.g. values 3.93 2

Factors affecting type of knowledge to be retained

Relevance of Knowledge 4.47 1

Environmental complexity 4.10 2

Maintaining continuity 4.10 2

Behavioural Indices to Knowledge Retention

The Table 2 shows mean item score (MIS) ranking of the Behavioural Factors Influencing Knowledge Retention. Under individual level; “Values and Attitudes” ranked 1st with MIS of 4.38, followed by “Motivation” ranked 2nd with MIS of 4.30, next is “Ability” and “Individual decision” both ranked 3rd with MIS of 4.23. “Personality and Emotions” ranked 5th with MIS of 4.20, followed by

“Perception” ranked 6th with MIS of 3.97. Under Group level; “Communication” ranked 1st with MIS of 4.47, followed by “Work teams” ranked 2nd with MIS of 4.30, next is “Group decision making” ranked 3rd with MIS of 4.00. Under Organisational level; “Organisational culture (Values and Beliefs)” ranked 1st with MIS of 4.23 while “Organisational belief and structure” ranked 2nd with MIS of 4.20.

Table 2: Behavioural Indices to Knowledge Retention

Enablers	MIS	Rank
Individual Level		
Values and Attitudes	4.38	1
Motivation	4.30	2
Ability	4.23	3
Individual decision	4.23	3
Personality and Emotions	4.20	5
Perception	3.97	6
Group level		
Communication	4.47	1
Work teams	4.30	2
Group decision making	4.00	3
Organisational level		
Organisational culture (Values and Beliefs)	4.23	1
Organisational belief and structure	4.20	2

The relationship between the Organisational and Behavioural Indices to Knowledge retention

Correlation analysis was used to establish the relationship between Organisational and Behavioural indices as shown in the Table 3. It was revealed that; Organisational factors and behavioural factors were strongly positively correlated ($r(30) = 0.809$, $p = 0.000$) at a significance level of 0.01. The positive correlation observed between the variables indicates a tendency that an increase in the Organisational enablers will be followed by a corresponding increase in the behavioural enablers and vice versa.

Table 3: Correlation Matrix for the Relationship Between Organisational and Behavioural Indices to Knowledge Retention

		Organisational Indices	Behavioural Indices
Organisational Factors	Pearson Correlation	1	
	Sig. (2-tailed)		
Behavioural Factors	Pearson Correlation	.809**	1
	Sig. (2-tailed)	.000	

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

DISCUSSION

Organisational Indices to Knowledge Retention

The impact of knowledge on organisational strategy according to the results of analysis presented in Table 1 were found to be; Individuals capacity to innovate, Individuals ability to pursue growth, reduced efficiency hindering low-cost strategy, knowledge loss giving competitors an advantage, loss of specific knowledge at the wrong time and increasing vulnerability.

DeLong (2004), posit that Organisations with strategy of innovation should be particularly concerned when losing the experience and expertise associated with the knowledge required to develop new products and services or senior retiring, because these instances could slow down innovation and decrease retention of knowledge. DeLong (2004), suggests further that Organisations following a growth strategy need to figure out how they are going to manage knowledge loss while trying to support growth. Reduced efficiency undermining low-cost strategy was ranked 3rd most significant, Organisations faced with this situation, should identify what knowledge, if it is lost, would undermine their productivity gains and what knowledge should be retained to support continuous performance in the improvement. Loss of knowledge giving competitors and advantage was ranked 4th most significant factor, according to DeLong (2004), organisations needs to identify areas in which it has a competitive advantage because of specialised knowledge and improve more on it. Loss of specific knowledge at the wrong time increasing vulnerability was ranked 5th most significant factor, according to DeLong (2004), the organisations needs to know where that knowledge is in which the awareness will help identify areas in which action could be taken.

Whose knowledge should be retained is another important factor which was considered, therefore, Nonaka and Takeuchi (1995) view everyone in an organisation as a “knowledge worker” who contributes to the creation of knowledge and problem solving. Some of the individuals whose knowledge should be retained includes, Best performers, which was ranked 1st most significant, Seidman and McCauley (2005) suggests that

organisations should identify their best performers with a view to focusing on critical knowledge loss regardless of the employee’s age. Expert’s knowledge have been considered to also retained, which was ranked 2nd most significant, Leonard (2005) refers to the contents in the minds of experts as “deep smarts” that enable them to make swift, wise decisions based on years of experience. Leaders was ranked 3rd most significant, according to Bahra (2001), one of the most significant contributions of leaders is to “create specialist knowledge workers” with a challenge which seems to be finding ways of transferring the experiential knowledge of leaders to the next generation of leaders. Employees approaching retirement was ranked 4th most significant factor, Seidman and McCauley (2005) believe it is not possible to gather the knowledge of everyone approaching retirement, although many organisations have introduced programmes aimed at preserving the essential knowledge of retiring knowledge workers. Few key people was ranked the 5th most significant, according to DeLong (2004), organisations needs to try and identify who these few key people are and attempt to retain their critical knowledge.

What type of knowledge should be retained is also an important factor which was considered, some of the types includes Knowledge at individual level which deals with the tacit knowledge with in individuals, according to Seidman and McCauley (2005), the subconscious or tacit knowledge of retiring workers “is the secret sauce” that really needs protection as opposed to the explicit knowledge gathered by most retiring knowledge workers programmes. Knowledge at group level includes Relationship network which was ranked 1st most significant, knowledge is shared by group members through communities of practice or through relationships with inside and outside the organisation (DeLong,2004).Collective social knowledge of individuals was ranked 2nd most significant, this deals with social interaction and relationship with other people with knowledge which develops over time through social activities in groups as a result of working together (DeLong, 2004). Knowledge at organisational level includes, accumulated tacit know-how was ranked most

significant, Cummings and Worley (2005) however assert that, technical know-how may exist as tacit knowledge in people's mind in the form of skills and intuitions.

Factors affecting type of knowledge to be retained includes, Relevance of the knowledge which was ranked most significant, this was corroborated by Mayo (2003), that lots of knowledge and experience is truly redundant and ways of filtering the relevant from the redundant have to be found. Environmental complexity was ranked 2nd most significant, Wraige (2004) argues that to be of any use, knowledge retention must be long lasting and resilient in this volatile environment. Maintaining continuity been the most significant, it is essential to maintain continuity in identifying and retaining critical knowledge (Mayo, 2003).

Behavioural Indices to Knowledge Retention

Behavioural factors influencing knowledge retention are divided into individual level, organisational level, group level. The individual level includes Values and attitudes which were ranked most significant, this finding is consistent with Szulanski and Cappetta (2003), who asserted that knowledge loss can be caused by certain factors such as resistance to change or hesitance and unwillingness to enact knowledge behaviours. Motivation was ranked 2nd most significant, though Robbins (2005) linked motivation to behaviour since it drives individuals to behave in a way that would lead to desired or expected outcomes. Ability was ranked 3rd most significant. This assertion is corroborated by Robbins (2005) who describes individual's abilities as intellectual and physical abilities which are linked to motivation that drives behaviour. Personality and emotions, according to (Roodt, 2003), individuals are often required to exhibit emotional behaviours that mask their true feelings. Perception, which Cabrera (2004) describe as individuals motivating factor to share knowledge, based on the conviction that, the particular piece of knowledge is worth sharing.

This study further posit that, behavioural factors influencing knowledge retention at group level as; Communication which ranked 1st most significant, according to (Robbins 2005), messages conveyed between group members through communication channels are interpreted by group members and have an impact on their decision making in group. Work Teams was ranked 2nd most significant. However, studies have shown that, members interact to share information and make decisions to help each member perform their responsibility when working as a team (Robbins, 2005). Group decision making was ranked 3rd most significant, this finding is supported by (Robbins 2005), who stressed that groups make greater input in decision making since the resources of several individuals are aggregated at group level.

Behavioural factors influencing knowledge retention at Organisational level includes, Organisational culture which deals with the set of basic assumptions that worked so well in the past that are accepted as valid assumptions in the organisation. Organisational structure and design which deals with defining how job tasks are formally divided, grouped, and coordinated (Robbins 2005).

CONCLUSION AND RECOMMENDATIONS

Considering, the result of the analysis and its discussions this study thus concludes that organisational factors that influence the retention of knowledge in Quantity surveying firms are; the organisation's capacity to innovate, knowledge of best workers, knowledge with great relevance and tacit knowledge embedded in the minds of workers. While the behavioural factors of great influence to the retention of knowledge in Quantity surveying firms are; the values and attitudes of workers, effective communication and effective organisational culture. However, the level at which the behavioural factors increases depends greatly on the increase in organisational factors which influences knowledge retention in Quantity surveying firms. Therefore, the study recommended that knowledge retention models could be created to ensure the continuity and preservation of relevant knowledge of employees approaching retirement ages, few key individuals, including knowledge of best performers, Experts, and leaders. The firms could use its strategy as a baseline to determine what and where the risks of knowledge loss are in terms of growth, innovation, productivity and continuous performance. Finally, it was recommended that young and new employees should be properly trained by knowledgeable workers approaching retirement in order to ensure the continuity of knowledge flow in the organisation before it would be lost at the departure of the employees with relevant knowledge.

References

- Arif, M., Egbu, C., Alom, O. & Khalfan, M. M. A. (2009). Measuring knowledge retention: A case study of a construction consultancy in the UAE. *Engineering, Construction, and Architectural Management*, 16(1), 92–108. doi:10.1108/09699980910927912
- Bahra, N. (2001). *Competitive Knowledge Management*. Springer Publisher
- Brewerton, P & Millward, L. (2001). *Organizational research methods: a guide for Students and researchers*.
- Cummings, T.G & Worley, C.G. (2005). *Organization development and change* (8th Ed.). OH: South-Western Thomson
- Davenport, T.H. & Prusak, L. (2000). *Working knowledge: How organizations manage what*

- they know*. Boston, Mass: Harvard Business School Press.
- Davis, R., Watson, P. and Man, C.L. (2007). *Knowledge Management for the Quantity Surveying Profession*. 1-16.
- DeLong, D. (2004). *Lost knowledge*. New York: Oxford University Press
- Du Plessis, F. (2003). New era organisations: from task-driven to customer-driven and world-class. In A. Moerdyk & C. van Aardt (Eds.), *Organisational development: new methods and models for Southern Africa*. Glosderry, Cape Town: New Africa Books.
- Gonzalez, R. V. D. & Martins, M. F. (2014). Mapping the organizational factors that support knowledge management in the Brazilian automotive industry. *Journal of Knowledge Management*, 18(1), 152–176. doi:10.1108/JKM-08-2013-0300
- Gonzalez, R. V. D. (2016). Knowledge Retention in the Service Industry. *International Journal of Knowledge Management*, 12(1), 45-59.
- Jennex, M. E., & Durcikova, A. (2013). Assessing Knowledge Loss Risk. *Proceedings of the 46th Hawaii International Conference on System Sciences HICSS46*. IEEE Computer Society.
- Jennex, M. E. (2014). A Proposed Method for Assessing Knowledge Loss Risk with Departing Personnel VINE. *The Journal of Information and Knowledge Management Systems*, 44(2), 185–209.
- Killingsworth, J., Terry Stentz, P. D., Moser, A., & Grundman, J. (2014). Effective instructional methods for providing safety training to construction workers. Retrieved from <https://drive.google.com/file/d/0B8DCHmNdpOKtazFrSGM2SGILUGs/view?usp=sharing>.
- Leonard, D. (2005). *How to salvage your company's deep smarts; the approaching exodus of retiring baby boomers will severely erode the knowledge base of many companies*. Harvard Business School Publishing.
- Mayo, A. (2003). *Irretrievable losses*. *Training Journal*, June
- Mohammed Nor, F. & Egbu, C. (2010). An Insight into Knowledge Sharing Practices In Quantity Surveying Firms In Malaysia. *Paper presented at the Proceedings 26th Annual ARCOM Conference*.
- Nonaka, I. & Takeuchi, H. (1995). *The knowledge-creating company: how Japanese companies create the dynamics of innovation*. New York: Oxford University Press
- Robbins, S.P. (2005). *Organizational behaviour* (11th Ed.). Upper Saddle River, NJ: Pearson Prentice-Hall.
- Roodt, G. (2003). *Personality and emotions, in Organisational behaviour: global and Southern African perspectives*, edited by S.P Robbins, A. Odendaal & G. Roodt.
- Seidman, W. & McCauley, M. (2005). Saving retiring knowledge workers “secret source” Performance Improvement.
- Serpell, A.F., Massmann, C. and Ferrada, X. (2010). Knowledge Management Practices in the Construction Industry. *Paper presented at the RICS Construction and Building Research Conference COBRA 2010*.
- Szulanski, G. & Cappetta, R. (2003). Stickiness: conceptualizing, measuring, and predicting difficulties in the transfer of knowledge within organizations. In M Easterby-Smith & M.A Lyles, *the Blackwell handbook of organizational learning and knowledge management*. Malden
- Wraige, H. (2004). The power of knowledge. *Professional Engineering*, 17(17), 36-37.