

## IMPACT OF SOCIAL FACTORS ON TACIT KNOWLEDGE SHARING BEHAVIOR AMONG QUANTITY SURVEYORS IN CONSTRUCTION COMPANIES

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### **ABSTRACT**

*This paper explores key social factors that impact tacit knowledge sharing among quantity surveyors in the North Western Nigeria. Purposive sampling technique was used to select the respondents. Questionnaire was designed and administered to management and senior quantity surveyors in construction companies within North Western Nigeria. Descriptive statistics was used in the analysis. Results show that site meeting, seminars and workshops and internal training as the suitable methods of sharing tacit knowledge among quantity surveyors in North Western Nigeria. For factors influencing tacit knowledge sharing behavior the results show creativity, trust and motivation as the key major factors. It is concluded that the greatest challenge is that construction knowledge, often being tacit, retained by the individuals and organisations, finally disappears once the project is completed. It is therefore recommended among others that construction organisations should consider the three major critical factors: creativity, trust and motivation in their organizations for smooth tacit knowledge sharing practices.*

**Keywords:** Social factors, knowledge sharing behaviour, tacit knowledge, Quantity Surveyor

### **1. INTRODUCTION**

Knowledge sharing is a set of commitments that involves the exchange of information and knowledge among the other employees in an organisation, between employees and departments (Zahidul, 2011). It leads to effective management of knowledge, increases the resources of an organization and decreases time wasted in trial-and error (Lim et al., 2006). On the other hand, knowledge is one of an organization's only resources that increases in value, which sets it apart from other company resources that depreciate over time. It is categorised as explicit and tacit knowledge (Chan & Ford, 2003)

Tacit knowledge which is mainly about the sharing of experiences through the process of socialization such that the knowledge embodied within a technology/task is passed between individuals, interactive learning between organizations, personal experiences, beliefs, values and body language which cannot be easily passed on to others, from individuals to the organization It brings competence, skills and requires close physical proximity while the work is being done to the individuals and thus to the organisation as a whole (Jawahar, 2005). There is a need to become more aware of the importance of tacit knowledge sharing and its impact on organizational performance in the construction industry (Ankrah & Langford 2015).

However, Fadhilah and Charles (2010) found that among the challenges organizations faces sharing their knowledge assets are influenced by the culture of the sub-unit and or by the culture of the organization and is the most frequently cited barrier to leveraging organizational knowledge. This led to increasing recognition that the key to successfully sharing knowledge requires focus on organizational culture and how it may be impacting knowledge in sharing organization (Nonaka, 1991). Thus, what specific organizational cultural factors impact knowledge sharing in quantity surveying firms? Barrett et al., (2001) identified limitations that impede the sharing of tacit knowledge among individuals and organisations in construction companies. Construction knowledge resides in the minds of the individuals working within a particular project, the motive behind decisions is often not recorded or documented and lessons learned are not organised well and it is difficult to capture and transfer useful knowledge to other projects. This shows that tacit knowledge is hard to formalize, difficult to communicate or share with others because it is bound to the senses, personal experiences, beliefs, values and body language which cannot be easily passed on to others.

Available research on knowledge management in Nigeria construction industry focused on collection and identification practices (kassim et al., 2013). While, the issue of sharing knowledge especially tacit have been over look despite its importance. As a result of this problem the study wants to investigate how quantity surveying firms share tacit knowledge in their organization. Therefore, the research tends to investigate the impact of social on factors influencing tacit knowledge sharing behavior in quantity surveying firms.

The research will provide greater understanding of tacit knowledge among professional's especially quantity surveyors that could accelerate and bring knowledge sharing in quantity surveying profession. The paper is aim at investigating the social factors that impact tacit knowledge sharing

among quantity surveyors in construction companies by concentrating on identifying gaps from previous studies. The intention is to add to knowledge and the provision of an improved understanding of the tacit knowledge sharing issues. Section 2 consists of literature review. Section 3 consists of research methodology. Section 4 describes findings and discussion of the results.

## **2. LITERATURE REVIEW**

According to Grant (1996) knowledge sharing is a key to the success of knowledge management (KM) both in theories and practice. Jashapara (2004) asserted that sharing knowledge sharing is a set of commitments that involves the exchange of information and knowledge among the other employees in an organisation. Dixon (2000) stressed that knowledge sharing is a means of sharing or disseminating knowledge from one person, group, or organization to another. In additional knowledge sharing in construction firms is vital resources that contribute to knowledge application, innovation and construction firm's competitive advantages (Van Donk, 2005).

Knowledge sharing is a relationship between two or more parties, in which one most possesses the knowledge and the others require knowledge, and as a result effective's communication becomes necessary in the process of sharing knowledge. These were expanded further by Song (2001) that effective knowledge sharing in the construction organization improves efficiency, reduce training cost and reduce risk due to uncertainty. Similarly Ruska (2005) highlighted the two types of challenges in knowledge sharing in construction organizations as: prevent the reinvention of the wheel by sharing knowledge accumulated in the past projects with other employees. Second enhance communication among employees in construction organizations to achieve the project's goals.

To survive and grow in the future, the quantity surveying (QS) profession must respond quickly and creatively to the challenges of accelerating social, technological, economic and environmental change. An essential element in the future success is the skill and knowledge base at the core of professional practice (RICS, 1992). It is believed that knowledge management is a relatively quicker; however, most QS firms face a problem in that they are losing knowledge due to the retirement or resignation of key personnel. DeLong (2005) asserts that 'losing knowledge may have impacts that are very tangible and financially quantifiable, or impacts can be intangible and hard to measure'. According to Liebowitz (2000) the benefits of adopting KM include: improved service quality, rapid and effective in enterprise-wide problem solving, improved decision-making, and increased revenue, business growth increased innovation.

The basic elements of organisational culture (such as shared values, beliefs and behaviours) influence knowledge productivity in many ways, but significantly in two ways (Martins and Terblanche, 2000). First, through socialization processes in organisations, individuals learn what behaviour is acceptable and how activities should function. Second, the basic values, assumptions and beliefs become enacted in established forms of behaviours and activity and are reflected as structures, policy, practices, and procedures. This indicates that organisational structure, socialisation, policy and procedures largely influence the knowledge sharing behavior among employees. The organisational structure should be flexible enough for the employees to socialise among themselves and have inherited the characteristics of autonomy, empowerment, participation in decision-making, and group interactions if knowledge sharing is to be successful (Ives et al., 2000). According to Kurul et al., (2003), a flat structure, autonomy and work teams promote knowledge productivity, whereas, specialisation, formalisation, standardization, and centralization will inhibit knowledge productivity. Examples of flexibility in organisations are job rotations and to discard formal and rigid job descriptions. Some of the critical construction employee behaviours that influence tacit knowledge sharing include: trust, creativity, motivation, ability, and learning (Tsui, 2002).

## **3. RESEARCH METHODOLOGY**

This study focuses at two groups; organizational leaders and key employees (change agents). The first group consists of senior management such as (Director, Assistant Director and Deputy Directors). The second group can be described as the organizations change example agents the employees who are on the cutting edge of product development and acceptance including Senior Quantity surveyors and Project Managers who have at least 10 years working experience.

The population of the study included one hundred to Senior Managers in Quantity Surveying organisation and fifty Project Managers or Senior Quantity Surveyors drawn from state capitals in the North Western Nigeria (Birnin-kebbi, Dutse, Gusau, Katsina, Kaduna, Kano and Sokoto). Purposive sampling technique was used in selecting respondents because it is a deliberate choice of respondents due to the qualities the respondents possess such as knowledge and experience (Umar, 2015). Data were collected through a structured questionnaire, designed using an adopted Likert-type 4-point

scales. The “mean score” method was used for the data analysis. The “mean score” is mathematically represented as:  $MS = \Sigma (F * X) / N$ . ( $1 \leq MS \leq 4$ )

Where “X” is the score or weight given to each variable by the respondents and ranges from 1 to 4 where; “n1” is the number of respondents for ‘very important’; “n2” is the number of respondents for ‘important’; “n3” is the number of respondents for ‘fairly important’; “n4” is the number of respondents for ‘not important’; “F” is the frequency of responses to each rating (1-4), and “N” is the total number of respondents. Standard deviation (SD) was used to measure the variability or dispersion of the responses in a situation where there is a tie in the means (where the two means are the same or have equal score).

**4. RESULT AND DISCUSSION**

The results obtained from the descriptive statistic on the mode of tacit knowledge sharing among quantity surveyors in Nigeria were presented in Table 1.

Table 1 frequent tacit knowledge sharing mode among quantity surveyors

S/N	Mode	Management (N = 50)			Senior quantity surveyors (N = 100)			Average of mean score	
		Mean	Std. Dev	Rank	Mean	Std. dev	Rank	Mean	Overall Rank
1	Face to face interactions	2.478	0.450	6	2.901	0.525	5	2.689	5
2	Site meeting	3.086	0.108	2	3.010	0.377	4	3.048	1
3	Project briefing and interviewing	2.608	0.151	5	3.010	0.753	3	2.809	4
4	Internal training	2.652	0.130	4	3.340	0.170	2	2.996	3
5	seminars/workshop	2.652	0.255	3	3.384	0.330	1	3.018	2
6	Monitoring of past projects	3.173	0.282	1	1.362	0.434	6	2.267	6

Source; Field Survey, 2016

Table 1 show that management ranked monitoring as the most suitable method of sharing tacit knowledge among professionals in the construction industry, followed by site meetings and the seminars. Similarly senior quantity surveyors ranked seminars as first, internal training as second and project briefing as third.

The overall ranking indicates that site meeting was ranked first with a mean value of 3.048. This showed that site meeting was the best method of sharing tacit knowledge among quantity surveyors in North western Nigeria. This coincides with the findings of kassim et al., (2013) that knowledge is shared during the discussion in the site meeting, especially when the problems of the construction project are reviewed because tacit knowledge is describe by unstructured and hidden knowledge which is acquired over a period of time through experiences, reflection and perception. This is followed by seminars and workshops with a mean value of 3.018. Internal training was ranked third with a mean value of 3.305. Similarly, seminars and workshops and internal training are the other major means used by employees of construction companies to share best practice, knowledge and experience.

Table; 2 Factors that influences tacit knowledge sharing

S/N	Social factors	Management (N = 50)			Senior quantity surveyors (N = 100)			Average of mean score	
		Mean	Std. Dev	Rank	Mean	Std. dev	Rank	Mean	Overall Rank
1	Trust	3.086	0.170	4	3.560	0.939	1	3.323	2
2	Creativity	3.347	0.281	1	3.483	0.210	3	3.415	1
3	Motivation	3.304	0.231	2	3.505	0.984	2	3.305	3
4	Ability	3.130	0.320	3	3.395	0.128	5	3.262	4
5	Leaning	2.826	0.221	8	3.472	0.561	4	3.149	6
6	Org. policy	3.040	0.222	5	3.362	0.289	6	3.201	5
7	Socialisation	2.478	0.330	12	3.324	0.187	9	2.901	10
8	Policy	2.913	0.350	6	3.340	0.315	7	3.126	7
9	Procedure	2.780	0.862	9	3.336	0.122	8	3.058	8
10	Work practices	2.565	0.403	11	2.876	0.254	12	2.721	12
11	Collaboration	2.826	0.320	7	2.874	0.249	14	2.902	9
12	Politics	2.652	0.275	10	2.901	0.850	11	2.776	11
13	Power	2.477	0.329	13	2.875	0.250	13	2.720	13
14	Autonomy	2.476	0.328	14	2.978	0.145	10	2.719	14

Source; Field Survey, 2016

Table 2 shows the critical factors influencing tacit knowledge sharing in environmental and social context. From perspective of the management staff, creativity was ranked first with a mean value of 3.347, and then, ability, (3.130). Similarly, Senior Quantity Surveyors ranked trust first with a 3.560, motivation (3.505) and creativity (3.483) among the factors influencing tacit knowledge sharing.

From the overall mean, creativity was ranked first with a mean value of 3.414. Creativity is one of the prerequisites for efficient practice of tacit knowledge as it focuses on the nature of the thought process and intellectual activity, which generate new insights or solutions to problems. Some of the practices that help achieve creativity among individuals include brainstorming, employee participation in decision making and empowerment (Jawahar, 2005).

Followed by trust with a mean value of 3.323. This agrees with the findings of Jawahar (2005) that employee behaviour is a complex issue influenced by many factors. It involves trust as well as the capabilities and motivation that give rise to performance behaviour. Trust reduces risk and uncertainty through better communication and the ability to work in teams are seen as the basis for trust building. It is a very important approach in construction industry, where information may be incomplete at the time of contract and changes often arise as a project progresses. Some of the methods (work practices), as identified by Jawahar (2005) that improve trust between individuals include: face to face interaction; external meeting places; long term relationships; experience (working together); problem solving; shared goals; and reciprocity.

Motivation with a mean value of 3.305 ranked as the third factor. This concur with findings of Gordon, (2000) that motivation is a vital behaviour in bringing about the effective utilization and sharing of knowledge. Motivating people to become more knowledge competent does require understandings of care individuals with a supportive work environment (Ives et al., 2000). Successful motivation depends on situational factors. To achieve success, the situation should be analysed and an appropriate strategy be adopted to motivate individuals in that particular situation. Some of the practices that help motivate individuals include care, job design, open communication, effective rewarding system. This suggests that both organisational and individual factors influence the sharing of tacit knowledge while organisational behaviours cannot be dissociated from individual behaviours.

## 5. CONCLUSION

The greatest challenge is that construction knowledge, often being tacit, retained by the individuals and organisations, finally disappears once the project is completed. Organisation must find ways of sharing the knowledge (tacit) to avoid miss- match between knowledge share and individual knowledge need. The purpose of the study was to investigate the impact of social factors on tactical knowledge sharing practices among quantity surveyors in the North Western Nigeria. A questionnaire survey was conducted to achieve this. From the results the study identifies three major critical factors that influence employees' knowledge sharing behavior in construction namely creativity, trust and motivation. The study has its limitation on the method of data collection used, questionnaire survey which has its own limitations such as representativeness and bias.

From the finding of the study the following recommendations are made:

1. Tacit knowledge sharing emanates from organizational culture to work practices and employee behavior therefore, construction organisations should consider the three major critical factors namely, creativity, trust and motivation in their organization for smooth tacit knowledge sharing practices.
2. The use of site meeting, seminars and internal training should be encouraged by both the management and professionals in sharing tacit knowledge among Quantity Surveyors in order to bring competence and skills to the individuals.
3. Management and professionals should build trust among their employees by organising internal training in order to allow senior members to share tacit knowledge efficiently with their subordinates in the organisation.

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