

STRUCTURAL CAPITAL AND KNOWLEDGE SHARING BEHAVIOUR

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Abstract: This research study examines the empirical relationship between structural capital and knowledge sharing behaviour in deposit money banks. Through a cross-sectional survey design, the study obtained data from a sample of 194 sample subjects using the questionnaire instrument. The data obtained were descriptively and inferentially analyzed using the Spearman Rank Order Correlation Co-efficient. From the analysed data, it was found that (1) system configuration as a dimension of structural capital relates with knowledge sharing behaviour measured by promptness and hoarding. (ii) Work strategy relates significantly with knowledge sharing behaviour in the studied banks; (iii) strategy focus relates significantly with knowledge sharing behaviour in the studied banks. It was concluded that structural capital correlates with knowledge sharing behaviour of work members in the studied deposit money banks. It was therefore recommended amongst others that organization managers should ensure organic work structure that facilitates knowledge sharing in the organizations.

Keywords: Structural capital, knowledge sharing behaviour, system configuration, work structure, promptness, hoarding.

1. INTRODUCTION

Deliberate organisational effort is channelled at competitiveness therefore has activated more strategic attempts at intangible assets both for operational and administrative responsibilities. Acquiring and sharing knowledge is crucial in today's knowledge economy. Simply put, creation and diffusion of knowledge have become increasingly important for competitiveness; since it is viewed as a valuable resource that cannot be easily copied by others especially in its tacit form. It is hitherto described as a competitive asset that typify and represent organizational uniqueness therefore constitute basis for gaining competitive advantage (Bonti & Fitz-enz, (2002; Taghizadeh & Zeinalzadeh, 2012; Chang & Lee, 2012; Wu, Lee & Wang, 2012). Davenport and Prusak (1998) reiterates collective knowledge asset and its efficient distribution and dissemination amongst work members. According to the author, it is a process that requires qualitative management for the right knowledge to be acquired. All of these developments have created a strong need for deliberate and systematic approach to acquiring and sharing organizational knowledge. Organizational knowledge is not intended at replacing individual knowledge but to enrich it, contextualize it and make it a strategic resource for goal attainment. Knowledge sharing involves organising knowledge that has been created or acquired and applying it in way that allow knowledge to become formalised and accessible to all. The dissemination of knowledge to all work members is strategically conducted to retain its quality and securing its properties that guarantee its value and inimitability (Pablos, 2004; Talebir & Bahanur, 2012). This also requires supportive workplace mechanisms, frameworks and climate that encourages its mobility among members. Parker & Ro (2015) argues that institutionalizing knowledge for organizational purpose requires deliberate institutionalized practices that are encouraging and supporting quick flow of knowledge. Exploiting the knowledge capability and sharing it among work members according to Billow (2016) is owed to organizational philosophies and system which Sveiby (1997) referred as structural capital. Much of the knowledge sharing literature has been largely correlated with behavioural exhibitions of individuals which undermine the macro level domiciliation of knowledge. The need to explore such institutional and philosophical understanding that supports knowledge sharing is key as sharing based on individual employee circumstance and convenience has resulted to knowledge hoarding (Justin, 2015) and ultimately creating resource shortfall amongst work units. The imperativeness of system data bases and work culture

which represents the structural capital desires empirical attention with a view to establishing the link between structural capital and knowledge sharing amongst indigenous work organizations. The obscurity of structural capital as antecedent to work place outcome is reminiscent in its intangibility, which perhaps has earned its less conceptual focus in linking it with strategically desired outcomes therefore this study.

2. LITERATURE REVIEW

Concept of Structural Capital

The concept of structural capital has earned its roots from the intellectual capital discourse. It is an expression of the organization wide and management perspective that serves the essence of goals which can be defined through a range of coded and uncoded knowledge relating to the organization (Maddison, 2010; Bellecombe & Tracy, 2013). Billow and Kerryl (2012) further classified structural capital into organizational, process and innovation capital. Organizational capital includes the organization's philosophy and its systems for exploiting its capabilities. Process capital includes the techniques, procedures and programmes that can be implemented to enhance the delivery of goods and services. While innovation capital includes intellectual property and other intangible assets. Intellectual property involves protected commercial rights such as patents, copyrights and trademarks. Intangible assets include all other expertise and the ideas deployed to manage organizations. The conceptual lens of the concept was further illuminated with Sveiby (1997) works. Structural capital (or internal structure) according to the author includes the range of patents, models, administrative systems and software that are created by employees and owned by the organization. Also, encapsulate organization culture. This generate the dynamic interdependence between human and structural capital. Employee knowledge content, skills and competencies are key in structural capital evolution and sustainability. Chabez (2011) noted that individual employee knowledge is acquired and disseminated for operational utility. The importance of structural capital in organizational value creation underscores the need for erecting work structure that will facilitate the sharing presence of knowledge for all purpose (Sanchez, 2000). Boisot (2002) states that structural capital is where the value added to the company by non-linearities within the knowledge creation process apparently resides. Snell and Meshack (1999) analyse the strategic value of a company's structural capital in terms of two dimensions: idiosyncratic dimension and strategic values. Teece (2000); Varian (2005); Melanyi (2010) related structural capital as the unique knowledge that is required to attain long-term competitiveness. They argued that when it is wholesomely gained, it encourages knowledge dissemination amongst work members thereby activating long term value that serves the organizational intent in relation to vision and mission. This simply means that structural capital formation provide the premise for both internal and external analysis. Kazmi (2003) stressed on the intangibility of structural capital therefore must be managed so as to retain its strategic nature and value for competitiveness.

Knowledge Sharing

Nonaka & Takeuchi (1995), Davenport & Prosak (1998), Ivanov (2000) have all placed premium on knowledge sharing as a major component of the entire knowledge management process. Carlson (2008) strongly noted that, knowledge acquired can only be described as important and strategic only if it has been substantially shared by all work members who rely on it for competence enhancement and undertaking work tasks. Ladoupolous (2013) observed that knowledge sharing requires that knowledge whether tacit or explicit should be conveyed to the extent that it retains its desired content. While recognising the sharing of all knowledge forms, Agar & Schelz (2013) argues that knowledge has inherent values therefore its completeness during sharing is viewed as significant which require that premium be placed on the sharing media and practices. Adrian (2016) reiterates the intricate role of ensuring prompt sharing and this is channelled through the medium and relational climate amongst knowledge holders in the organizations. The medium and behaviour should at the first instant express willingness to ensure functional distribution of knowledge amongst organizational members. Going by the strategic nature of the knowledge resource, the sharing behaviour of the resource whether at the micro or macro levels of the firms, should be sufficiently conducted in a manner that it is seen to be prompt and ensuring firms ability to gain competitive advantage (Chang & Lee, 2012; Rabi, 2016) Patterson (2016) posits that the knowledge sharing behaviour of firms either promotes the essential character of knowledge for overall functioning beyond perceptual status to a more concrete one that engender functionality of work members. The resultant effect is a working organisation that is administratively and operationally effective. On the other hand, Badru and Lamech (2014) had enunciated the phenomenal withdrawal of employees when it relates to sharing implicit knowledge. Simply, this exemplifies knowledge hoarding behaviour. Knowledge hoarding when experienced at the individual level according Gabriel (2012) stifles innovative capability of firms. Hsiu-Fenlin (2017) argues that though knowledge is personal, firms

can only effectively deploy it as a resource for its functionality if employees willingly share it and not hoarded. Infact, Davenport & Prusak (1998) reiterated the willingness of employees cooperating with work members to contribute knowledge therefore should constitute a behaviour amongst members. While extant literature so far reiterates knowledge sharing as fundamental to the entire knowledge management process and showing its antecedents of functional outcomes, Darroch & Mc Naughton (2008) drew attention to facilitating instrument within work organization that helps to acquire and promptly share knowledge across all work members and enhance goal attainment.

Structural Capital and Knowledge Sharing Behaviour

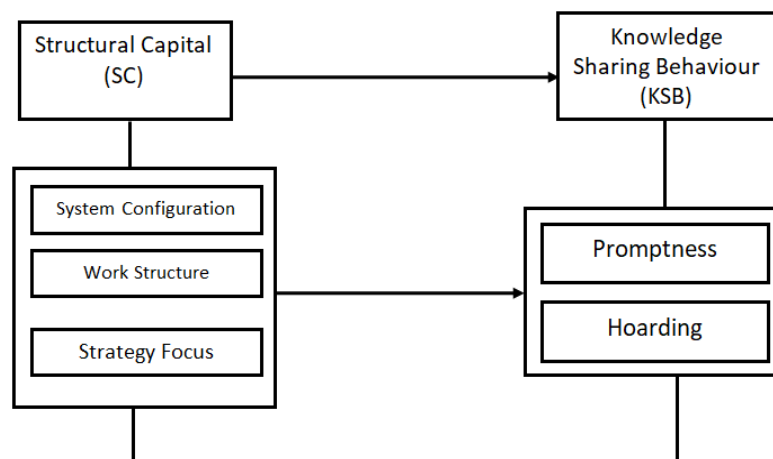
Kadru & Belz (2016) argues that structural capital though intangible, shapen organizational capacity to gain competitive advantage. Its realization provides a synthesis that provide required leverage that coordinates work actions and units towards goals. Structural capital according to Maskano and Leepra (2015) can be formally relied upon in its strict form though abstract, to channel behaviour of and encourage ethical behaviour of work members and encourage ethical and goal oriented dispositions. The true form of structural capital though has been conceptually described as organizational left over as employees go home, it represents an aggregate of all that is required within organization to initiate, process, and undertake work tasks and responsibilities. The common goal in focus in this circumstance is a functional organization that can likely optimize efforts at targeted end points. This simply means that the structural component of intellectual capital like others is distinctively accompanied with positive antecedents. Hebrew, Rio and Kennedy (2016) had examined empirically the influence of structural capital on corporate sustainability in hi-tech firms. Their study has information technology as a mediating variable. The results of their study has empirical assertion on structural capital relationship with sustainability which was measured with corporate resourceful. Kracger and Law (2015), study on structural capital and work performance of employee shows that weak relationship exists between the variables.

The implication of these varied outcomes is the likely limitation on understanding the strategic nature of structural capital on supporting the drive towards gaining competitive advantage especially when viewed against the backdrop of early proponent of the construct as deduced from the intellectual capital discourse. It had stressed that as a component of intellectual component, it correlates positively with performance. However, it must be underscored that most of the early studies had had their focus on macro outcome and behaviour. This requires that structural capital and the individual employee who are equally targeted in terms of behaviour shapening are likely to be influenced especially in the area of knowledge provision which is primarily tacit. How they share knowledge that culminates to positive outcome can result from several discrete components of work Justin (2014) argued. In this light, it is hypothesized thus.

Ho: There is no significant relationship between structural capital and knowledge sharing behaviour.

3. CONCEPTUAL FRAMEWORK

The study primarily investigates the empirical link between structural capital and knowledge sharing behaviour of employees. It examines the theoretical domain of the constructs for the predictor variable, the dimensions are; system configuration, work structure, data network and strategy focus. For the dependent variable, which is knowledge sharing behaviour, the measures are promptness and hoarding. These are diagrammatically expressed thus;



Source: *Researchers Desk (2019)*.

Fig 1.0: Conceptual Framework showing relationship between structural capital and knowledge sharing behaviour

4. METHODOLOGY

The study through a cross-sectional survey design obtained responses from 396 employees of 18 deposit money banks that operates within the metropolis. The participants were sampled through a simple random sampling exercise considering those that have worked in the banks for not less than 5 years. The questionnaire instrument marked SCAKS was served on the participants through appointed research assistants that were appointed and given orientation on service, monitoring and retrieval of the instrument. Phone calls were also made on them to encourage them considering the demanding nature of their jobs. This was done for 3 weeks and this exceedingly enhanced participation and gave a 87% response rate to the instrument.

Measures

Structural capital was measured using Kelvin (2012) 8 items survey instrument. Like other measure it established and validated the extent of structural capital understanding by the deposit money banks. For knowledge sharing, the Gabriels (2012) 13 item scale was adapted. The measures were also validated in Bende (2014). All of these were drawn based 5point Likerts scale that have 5-Strongly Agree to 1= Strongly Disagree.

5. RESULTS

Descriptive Result and Correlation Matrix on Structural Capital and Knowledge Sharing Behaviour in the studied Deposit Money Banks.

	Mean	Std	1	2	3	4	5
System configuration	3.431	1.0561	1.00				
Work Structure	3.818	1.2813	0.338**	1.00			
Strategy focus	3.623	0.9591	0.551**	0.477*	1.00		
Promptness	4.126	1.1772	0.275**	0.269**	0.619*	1.00	
Hoarding	3.662	0.9444	0.214*	0.244*	0.443*	0.523*	1.00

** correlation significant @ 0.01

* correlation a @ 0.05

The correlation results as shown in the table, indicates that the different components of structural capital relates with the measures of knowledge sharing behaviour, which are promptness, and hoarding. The relationship that exist are also significant @ $p \leq 0.01$ and $p \leq 0.05$ respectively

6. DISCUSSION

The study has primarily investigated the empirical relationship between structural capital and knowledge sharing behaviour. It has been conducted based on the dimensions and measures of the independent and dependent variables respectively. The findings of the study have shown strongly the empirical link between structural capital and workplace desired outcomes, which in this instance is the knowledge sharing behaviour of work members. The system configuration components show a strong relationship with prompt knowledge sharing and this was the case with hoarding practice. The findings agree with the earlier results of Carlson (2008) which empirically demonstrated a positive relationship. System configuration stresses common relationship that spans various work units therefore, it is capable of entrenching a relational climate that enhance knowledge sharing across the organization. Hebrew, Ro and Kennedy (2016) also agrees that system configuration is central to the knowledge management discourse therefore should be viewed as facilitating knowledge dissemination across work units. The findings also reinforced the results of the findings of Billow and Kerry (2012). They had investigated structural capital and market sensitivity in the manufacturing sector. The coefficients of correlation of the variables were high and strong for system configuration. The variance of the study outcome in relation to system configuration and its relationship with knowledge sharing lies in the decomposition of the knowledge sharing construct which is not the case with previous studies. The system configuration has a strong positive and significant relationship with knowledge sharing promptness but weak with hoarding behaviour. The second hypotheses results are interestingly assertive on the relationship between work structure component of structural capital and knowledge sharing behaviour. Badru and Lamech (2014) found a relationship between structural capital components and knowledge transfer in the banking sector. The findings of the study are so far in consonance with what extant literature presents. (Parke and Ro, 2015; Maskarano and Leebra, 2015). From the result on work structure, it is descriptively assertive that where a

hierarchical relationship is stressed, it makes it difficult for evenness in knowledge sharing. Melanyi (2010) found a correlation between organic structure and knowledge transfer amongst work units. It can be easily deduced from the results that work organizations willing to gain competitive advantage through shared experiences and knowledge are likely to operate a structural form that permits ease of information flow among members. For the third dimension, which is strategy focus, the results have also emphasized the findings of previous studies. The place of strategy direction in attaining firm goals is also stressed. The study findings indicate a strong positive relationship between strategy focus and knowledge sharing behaviour in the studied banks. This agrees with the work of Tagshir and Jelankin (2009). Their study result on strategy focus and performance showed a positive correlation, which affirms the fact that strategy focus ignites positive work outcomes, which in this case is its ability to influence knowledge sharing behaviour of work members. Strategy as it were, channels organizational action that ensures goal attainment. Strategy focus as a component of structural capital denotes an attempt aimed at ensuring that every action that leverage on capacity to meet desired endpoints are properly embarked upon and coordinated to achieve goals.

7. CONCLUSION/PRACTICAL IMPLICATIONS

The study primarily investigated the influence of structural capital architecture on employee knowledge sharing. The study is imperative considering the apparent need to explore what factors are meaningful to encourage employee knowledge sharing behaviour for achieving organizational goals. The study raised three specific objectives that reflects the dimensions of structural capital and from data generated and analysed, there were clear cut findings that, there is a positive and significant between system configuration, work structure, strategy focus and employee knowledge sharing behaviour. It was therefore concluded that structural capital formation is imperative for employee knowledge sharing behaviour. The implications therefore are managers should ensure that there is an effective system configuration that can enhance knowledge sharing, sharing to remain competitive. The system configuration should sufficiently ensure work interlinks. Managers should ensure that strategy focus are well defined so that employees understand the goals of the organization, the way they seek to achieve them. This study has undoubtedly contributed to expanding knowledge space in strategic management literature. It has facilitated the understanding of the intricate implication of intangible assets in shapening desired organisational end points. This study has equally validated the operationalization of the constructs in terms of their dimensions and measures as used in this study. A properly defined strategy focus is fundamental to the driving of organisational goals. Creating a fit between objectives and strategies crafted has been stressed just as organic structure that encourages idea sharing and attendant innovative practices are emphasised. Organizational managers rely on structural tendencies to ensure proper communication to all worker members, therefore are expected to design structures that supports flow of information across levels and functions of works.

Suggested

It is important from the study results to amplify the influence of intangible assets on workplace-desired outcomes therefore this study can be replicated in the aviation sector which is yet another strategic sector that is relied on to drive the economic growth of Nigeria. It is also necessary to introduce into the model a moderating factor which was not part of this current study.

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