

# ***THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT***

## **An Evaluation of Contribution of Knowledge Transfer Structures on the Strategic Thinking Competence of the Managers in Kenya's Ministry of Education**

**Samuel Gitonga Bengi**

Doctoral Student, Department of Business Management, Open University of Tanzania, Tanzania

**Jan-Erik Jaensson**

Associate Professor, Department of Marketing, The Open University of Tanzania, Tanzania

### ***Abstract:***

*The 21<sup>st</sup> century African public service has to be a knowledge based organisation in which people at all levels individually and collectively are increasing their capacity to produce results through the acquisition, transfer and utilisation of the knowledge; developing a new way of thinking; culminating in a collective vision, new ways of doing business and continuously solving problems (Ondari - Okemwa and Smith, 2009).*

*The research sought to evaluate the contribution of knowledge transfer structures on strategic thinking competence of managers in the public sector. The study sampled managers of education in 15 counties out of 47 counties in Kenya; a total of 104 respondents drawn from different departments in the counties were targeted. Questionnaire was the main instrument for data collection. The study used descriptive statistics to find the effect of the various variables on strategic thinking. Regression analysis to find out the effect of the knowledge structure factors on the strategic thinking competence.*

*The study found that the strategic thinking competence of the managers was affected by the knowledge transfer structures. The study recommends that the public-sector institutions should set appropriate knowledge reservoirs and knowledge transfer structures to ensure that the managers of the devolved levels have the appropriate knowledge resources at their disposal.*

**Keywords:** *Strategic thinking competence, knowledge, knowledge transfer, public sector*

### **1. General Overview**

Strategic thinking competence is the ability of the managers to visualise and formulate the long-term direction to an organisation to ensure its sustainability (Mintzberg, 2004). It is seen as an antecedent to strategic planning (Garratt, 2004). Bonn (2001), postulates that effective strategic thinking is holistic understanding of the organisation and its environment, recognizing the linkages and complexity of the various structures and its relationships. Bonn (2005) posits that individual managers' strategic thinking competence is measured by possession of the following attributes; systems thinking, creativity and the vision that the organisation envisages. Strategic thinking competence therefore refers to a managerial competence of being able to conceptualise the complex mix of diverse issues in the organisation not only to make sense of the organisation but also to chart the clear path for the organisation. The strategic thinking ability is demonstrated by the managers' ability to exhibit strategic thinking dimensions that enable them to solve problems and make decisions creatively.

Having key Knowledge at disposal plays a key role in ensuring that managers have a thorough understanding of key dimensions facing the organisation. For a manager to have strategic thinking ability, possession of knowledge becomes a key determinant (Kaulkarni and Freeze, 2006).

The focus of the 21<sup>st</sup> century organisations and countries has shifted from the era of technology and labour as the main means of productivity to that of knowledge as the most important factor of production in organisations (Wiig, 1997) the key focus being on knowledge identification and generation as well as transfer and exploitation for the benefit of the organisation. This has resulted in knowledge based organisations and knowledge economy where intellectual capital (workers knowledge). Availability of the appropriate knowledge to the managers in the organisations enables them to create strategies; in effect, the knowledge enables creation of strategic thinking competence in them.

According to Ondari - Okemwa and smith (2009) the 21<sup>st</sup> century African public service has to be a knowledge based organisation in which people at all levels individually and collectively are increasing their capacity to produce results through the acquisition, transfer and utilisation of the knowledge; where organisations encourage a new way of thinking; Culminating in a collective vision, new ways of doing business and continuously solving problems. This is consistent with Fairholm and Card, (2009) who argue that strategic thinking competence is holistically focused looking to ensure that the meaning and purpose are diffused throughout the whole organisation, so that appropriate goals and tactics are developed to meet the needs of the organisation. This is line with the arguments

of McEvoy et.al (2015) that all public-sector organisations are knowledge intensive organisations whose core competence is knowledge. Today's organisations success depends on knowledge. The organisations need to structure knowledge in such a way that it effectively manages it appropriately. This implies that organisations have to re-arrange knowledge networks as the environment for breeding ideas.

Ondari-Okemwa and Smith (2009) sees successful public service managers requiring the capacity to think strategically. They argue that effective knowledge management contributes to good governance, effective performance and superior service delivery. They argue that Kenya had not effectively integrated knowledge management into public service. They found that that the country did not face a major challenge in knowledge creation but in ensuring that the knowledge available is leveraged effectively to achieve the desired results. This resonates with a study by Buckova (2015) on knowledge management in public administration institutions which found that knowledge management was ineffective, as a result of knowledge non-supportive organisation culture, knowledge organisation structure and poor application of technology infrastructure in knowledge management.

Bou-Llusar and Seggara-Cippres (2006) argue that the internal transfer of strategic knowledge generates competitive advantage. This arising from not only the importance of that knowledge itself, but also the knowledge transfer process, in creating the value of that competitive advantage. The traditional organisations public sector has the top-level management at the ministerial and departmental level to give broad frameworks of strategy to give direction within the policy framework of the organisation. The decentralised managerial levels (sections, counties and districts) are often seen as if their main role is to support the top-level management with minimal policy formulation and strategy direction orientation. This in effect implies that the strategic thinking competence is mostly a reserve of the top-level management which the decentralised units do not need. However, Garratt (2004) contradicts this view. He argues that these devolved units must live at the interface of policy (strategic direction) and operations. This implies that the devolved levels should fully embrace and be concerned with strategy and strategic thinking. This is because the process of traditional top to bottom strategy formulation is not considered out of sync with the modern approach of participative strategy formulation and design (Mintzberg 2004). This implies that the knowledge that facilitates strategic thinking competence is not only generated and originates at the top of the organisation (explicit knowledge) but needs all the different levels to share and harness the tacit knowledge available in their employees. Draganidis and Mentzas (2006) strongly suggest that the public-sector organisations which are decentralised like MOE needed to focus on developing the right competencies in the managers in decentralised units. This has to be built by ensuring that it successfully ensures access to the right knowledge resources to the decentralised levels.

### *1.1. State of Knowledge Transfer and Strategic Thinking in the Ministry of Education in Kenya*

The Ministry of Education (MOE) in Kenya on the county managers of education has been undergoing a lot of transformation since the promulgation of a new Kenya constitution in 2010. The implementation of the constitution created new decentralised county system of governance. In the ministry of education, the new county education management level was created as a bridge to cascade down the policies of the central government to the lower levels for implementation. In addition, it also served an important role of initiation of national policy as well as performing some key delegated functions the in counties. The county level had a more proactive role than the previous decentralisation system. Thus, the county management level plays a more strategic role in achieving the national goals of education at the county level. Among the strategic roles the county education management is expected to play as stipulated in the basic education act(GOK,2013) are; to interpret national policies in education based on the county's needs, Initiate proposals for policy reforms, to plan, promote, develop, and coordinate education, training and research in the county in accordance with the provisions of the national education policy and the laws and policies of the county government and put measures in place to ensure all children and youth of school going age within the county attend and stay in to complete basic education.

Decentralised units in the Ministry of Education face many knowledge capacity challenges that need to be addressed. The Kenya Education Management Capacity Assessment (KEMACA) carried out noted that the managers at the decentralised units had capacity challenges; the biggest challenge was noted to be knowledge and skills gap. There is no doubt that the Ministry of Education has immense wealth of knowledge at the ministry headquarters, which can be harnessed for competence building in its employees at the decentralised units. However, this was not always the case. Knowledge at the top that was relevant to their needs being transferred to the lower levels to facilitate decision making and implementing the policies of the ministry of education. (MOE, 2008) Themain concern is that, however much the top ministerial level invests in creation of knowledge in form of creation of new procedures, new cutting-edgetechnology, if the same does not get effectively transferred to the decentralised units where it is expected to create value and create impact, then that knowledge does not serve the intended purpose. On the other hand, is the tacit knowledge in the minds of the managers; the experiences and soft skills of the managers that need to be harnessed to not only create value for themselves and their operations but also increase repertoire of knowledge available in the ministry of education.

Effective knowledge management in the ministry of education will culminate in a framework to provide the managers at the county level with the strategic thinking skills, by; combining the existing national level knowledge and new knowledge created and availed at the counties by the virtue of their new roles. This is expected to culminate in new knowledge structures. The study applies Nonaka (2014), Nonaka and Toyama (2003) and Nonaka and Takeuchi (1995) theoretical framework of knowledge creation and transfer to seek to map out the knowledge creation and transfer in county education management. This is in line with (Stary, 2014) who argues that new structures in organisations have a role have to take advantage of new opportunities to create new strategic direction.

## 2. Review of Theoretical Literature

### 2.1. The Concept of Knowledge

According to Nonaka (2014) knowledge refers to the dynamic social process of justifying personal belief towards the truth. Knowledge is therefore seen as a process; according to Nonaka (2014) knowledge has meaning when it is used in a particular situation in a particular context. Knowledge is thus subjective, process- relational, aesthetic, and created through practice (Nonaka, 2014). Knowledge can be seen as a meta-resource that centres strategic significance to all the other organisation resources. (Van den Berg, 2013). Davenport and Prusak (1998) defines knowledge as fluid mix of framed experiences, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information. Tuomi (1999) sees knowledge as an accumulated resource that underlies certain specific individual capabilities within an organisation. Knowledge makes certain types of performance possible. He also argues that knowledge is a product that is capable of being utilised for action leading to development.

Knowledge can be seen from two main perspectives: ontogenic knowledge and phylogenetic knowledge, ontogenic knowledge has its source in the development of the knowing entity. It is something that the entity learns based on its experience. Phylogenetic knowledge has its source in the inherited structures. It cannot be attributed to any one specific individual entity instead it is trans-generational or collective as it is by nature adaptational or evolutionary. (Tuomi, 1999)

Knowledge can also be defined by distinguishing it from knowledge, information, and data (Liyange, et.al, 2009). Data is raw numbers and facts, information is processed data, and knowledge is authenticated information. Figure 1 shows the relationship above.

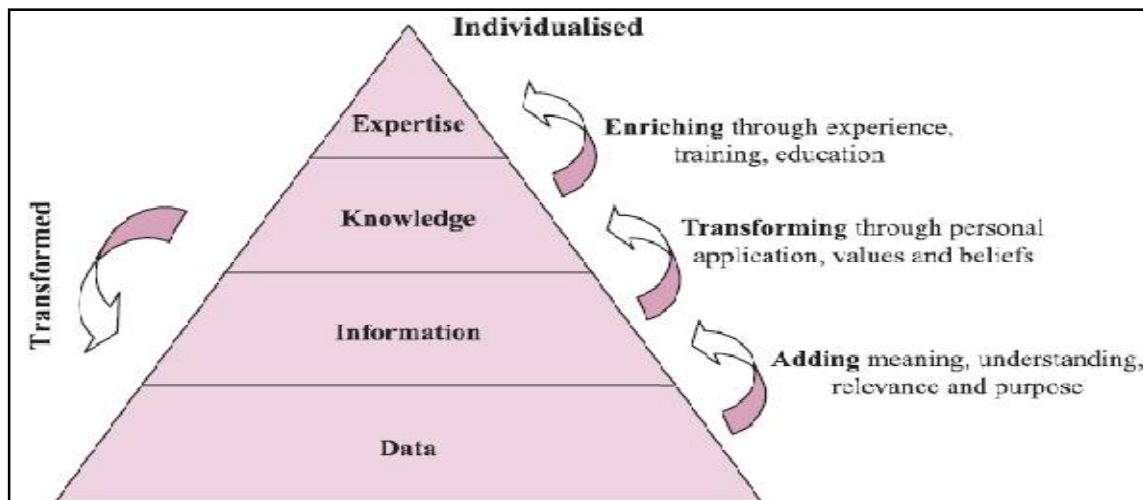


Figure 1: Knowledge hierarchies (Liyange, et al, (2009), p. 120)

### 2.2. Knowledge Creation and Transfer Theory (SECI)

The SECI theory of knowledge creation and transfer was first developed by Nonaka and Takeuchi in 1995, Nonaka and Takeuchi (1995). It was later modified and improved upon by Nonaka and Toyama in 2003, Nonaka and Toyama (2003). It was further refined in 2014 by Nonaka, Nonaka (2014).

The SECI model has four distinct phases: socialization (S) which implies empathizing with the reality through the actual experiences. In the context of MOE socialisation may be viewed as all the activities involved in the reflection on operationalisation of policies by the individual members. This exchange of tacit knowledge brings into the MOE a pool of new knowledge. Among the methods that could viably utilise for the socialisation phase include: use of social media, seminars and workshops, face to face meetings and communities of practice.

Externalization (E) refers to the articulation of the essence of the awareness into concepts, the tacit knowledge that has been generated through the socialisation phase in the MOE needs to be codified in order to make it in a form that can be easily shared by other members of the organisation. Codification enables documentation and verification of that accuracy of that knowledge. However, the concept of externalisation according to Easa (2012) contradicts Polanyi's assertion on tacit knowledge that "we know more than we tell". The implications being that some of the most crucial tacit knowledge in the minds of the people cannot be converted into explicit knowledge and be available to the whole organisation. Further Haag, et al. (2010) argues that most of the tacit knowledge cannot be articulated and if it cannot be articulated then it follows that it cannot be expected to be converted. Similarly, Briatanu (2010) argues that transformation of tacit knowledge into explicit knowledge has a major flaw because of the difference between tacit knowledge and explicit knowledge. He argues that while explicit knowledge has only extensive dimension, tacit knowledge has two dimensions; extensive dimension and intensive dimension. Therefore, conversion of tacit knowledge into explicit cannot be accurate. He further argues that externalisation process is incumbent on the capacity of the individual to understand and transmit meaning. It also depends on how much that individual feels motivated to do it. Therefore, externalization is not a linear process.

Combination (C) involves linking the new knowledge concepts with the existing body of knowledge this enables systematizing of that knowledge seamlessly into new procedures and routines. In the context of MOE once the new knowledge has been validated it is

incorporated into the ministry's procedures, processes and routines. The expectation is that being an ISO 9001-2008 certified organisation, the new knowledge will lead to updating the existing ISO 9001-2008 manuals. Briatanu, (2010), however argues that socialization and combination phases of SECI model are done in an automatic way. They are designed as processes for exchange of knowledge from one individual to another or individual to organisation or organisation to organisation. He proposed that these processes do not lead to knowledge transformation but the same knowledge passes from one individual and entity to another.

The final process in SECI is Internalization (I) which refers to embodying the knowledge to create value in form of software, technology, products and experiences while at the same time stimulating the emergence of new knowledge in the organisation. In the MOE context, the process of internalisation leads to the incorporation of the new knowledge into all the organisation processes, since some of organisation processes are automated, it will also mean creation of new software or updating of the existing software where applicable. Once the new knowledge has been internalised, it stimulates the next phase of socialisation. The knowledge creation is a never-ending spiral with incremental improvement with each spiral. This is diagrammatically presented in Figure 2.

The SECI theory is anchored on the assumption that human knowledge is created and expanded through social interactions. In the model, explicit and tacit knowledge interact and convert with each other dialectically. And it is individuals' tacit knowledge that is the basis of organisational knowledge creation.

The organisation has to unlock tacit knowledge that has been created and accumulated at the individual level. When mobilized, tacit knowledge is converted to explicit knowledge which can be shared within an organisation, eliciting the conversion of explicit knowledge to tacit knowledge and vice versa, amplified through the four modes of the SECI process.

New knowledge will be crystallized at higher ontological levels through a spiralling process, starting at the individual level and moving up through expanding communities of interaction that cross-sectional, departmental, divisional, and organisational boundaries. Through the continuous and fast spinning of the SECI spiral, where the interaction and the conversion between tacit knowledge and explicit knowledge occurs, a firm can build its capability to synthesize knowledge to pursue both creativity and efficiency.

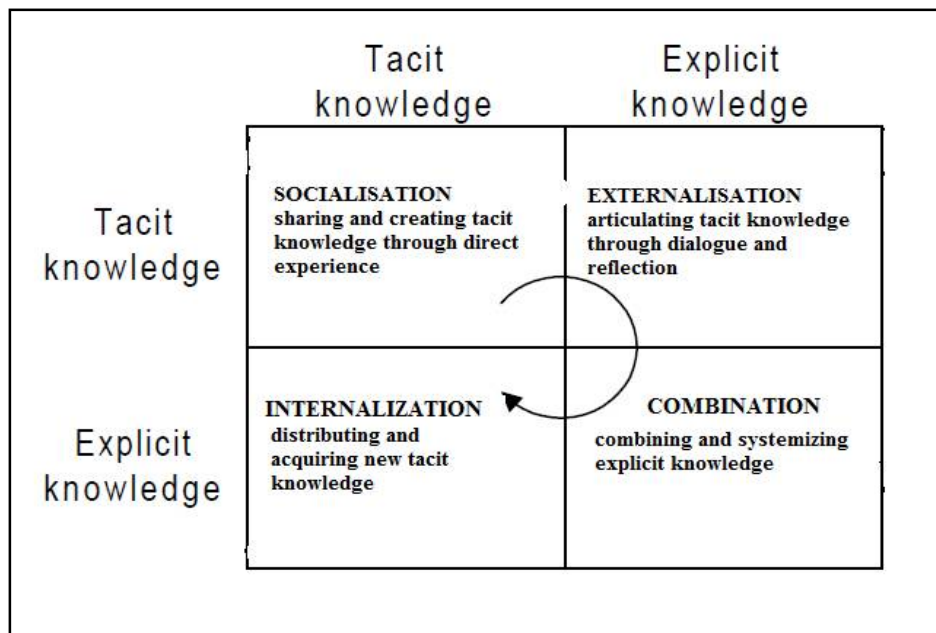


Figure 2: SECI knowledge creation and transfer model. (Nonaka, 2014 p.16)

### 2.3. Strategic Thinking Competence Framework

Mintzberg (2004) describes strategic thinking as a process of utilizing intuition and creativity and whose outcome is an integrated perspective of an enterprise. Strategic thinking competence encompasses search for alternative appropriate strategies (Abraham, 2005). It also involves systematic analysis of the organisation and formulation of its longer-term direction with the aim of finding clarity in what is done and in order to do what we do in the organisation more explicitly (Allio, 2010). Strategic thinking competence is holistically focused aimed at ensuring that the meaning and purpose are diffused throughout the whole organisation, so that appropriate goals and tactics are developed to meet the needs of the organisation (Fairholm and Card, 2009)

The United States Internal Revenue Service (USIRS) specify strategic thinking competence as leadership competency which offer another clearly different comparison to strategic planning by formulating effective strategies that take into account the external forces that affect an organisation from a national and global perspective. (Internal Revenue Service, 2001)

The strategic thinking competence is of concern in the public sector because it seeks to examine policy issues and strategic planning with a long-term perspective. It helps to lead to a compelling organisation vision, to determine objectives, set priorities, build upon the strengths as well as anticipating future opportunities and threats (Fairholm and Card, 2009).

Strategic thinking competence is described as the "glue" that holds together the many systems and initiatives within a company (Tavakoli and Lawton, 2005). They define strategic thinking competence as a cognitive process required for the collection, interpretation, generation, and evaluation of information and ideas that shape an organisation's sustainable competitive advantage.

This means that the strategic thinking competence is a mental process that aims at creating understanding and views of different standpoints of reality that needs to be tackled. It is seen to be therefore a psychological process. Mintzberg, (2004), suggests that strategies are visions in the head of the leader; serving as an inspiration and a sense of what needs to be accomplished. In that light therefore, approaches strategic thinking competence as a particular way of thinking with specific characteristics.

Masifern and Vila, (2001), see strategic thinking competence, as structure of meaning, presented as both the medium of social cognitive action and its product. They suggest that it is more a state of mind, than just another planning process. The concept of strategic thinking is a set of ideas; principles, policies, concrete rules, and operational approaches which shape the way managers think about their role and guide their daily actions. (O'shannassy, 2003)

Bonn (2005) argues that strategic thinking competence does not occur in a single mind but is affected by the social context in which the individual operates. The individual behaviour in an organisation is an embodiment of two entities; the individual themselves as well as the representation of the collectivity that the individual represents.

According to Bonn (2005) strategic thinking competence needs to take cognizance of three critical elements; systems thinking, creativity and the vision that the organisation envisages. Figure 3 shows the interrelationships of these three elements.

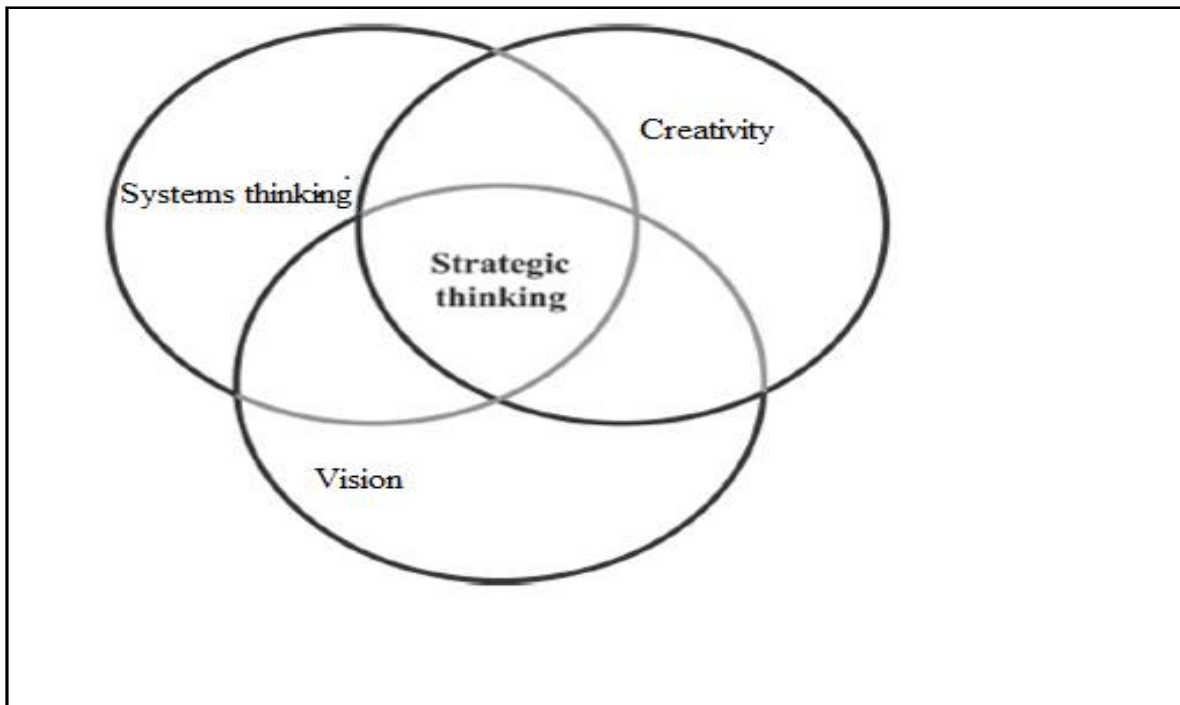


Figure 3: Elements of strategic thinking (Bonn, 2005 p. 340)

Bonn (2005) further suggests that for us to clearly understand and manipulate strategic thinking competence one must bear in mind the following factors: the characteristics of the individual thinker, the dynamics that take place within a group or the individual and the organisation context where the strategic thinking takes place.

### 3. Research Methodology

The research used descriptive design. The research studied the managers of county level, in MOE in Kenya. The study put its focus on the top managers at the county level heading the major sections: general administration, quality assurance and standards, audit, adult education and early childhood development (ECD). Multi-level sampling was used to obtain the sample; first the simple random sampling was done to obtain 15 counties in which the study was done. Then stratified sampling was done for each of the categories of management in each county. This was aimed at achieving the desired representation of the various sub groups within the population. (Mugenda and Mugenda, 2003) The basis for the strata was the categories of the managers of the county education sector.

The study primarily used quantitative data analysis since the main instrument of the study generated quantitative data. The main results of the study were obtained through Descriptive statistics, which was used to get frequencies and percentages of the responses for Likert scale questions. The study used linear regressions to test the relationship between Strategic thinking knowledge transfer structures.

### 4. Findings

The study sought to find out the structures that the organisation had that could ensure successful knowledge transfer. Some are default structures while others were a deliberate organisation effort to structure knowledge transfer.

Table 1 shows the structures that had been put in place to manage knowledge transfer. On the usage of the identified knowledge transfer structures in the organisation, majority of the respondents (87.1%) reported very frequent (5) and frequent (4) use of the

website and various web based tools. This was particularly explained by the decision for the MOE to conduct most of their internal correspondence online and via electronic mail and post critical information in its website. (Table 1)

The use of internal databases, data management and retrieval systems was noted to be low with 31.7% of the respondents reported that they very frequently and frequently had regular access to knowledge databases of the MOE (Table 1).

In a number of cases the respondents reported the existence of Education Management Information System (EMIS); a database software that was to facilitate collection of education data, analysis and generation of reports which would provide valuable data and information to managers. The system was to be hosted by the head offices of the MOE with the devolved levels and with a synch capability to provide real time access to data; however, the researcher found out the efficacy of those claims could not be verified since on seeking access to data, only obsolete unsupported data could be accessed.

Social media formed another structure that though informal and was there by default rather than design was highly utilised for knowledge transfer with 83.2% of the respondents very frequently (5) and frequently (4) reporting its use Table 1). The common social media used were the instant messaging platform commonly referred to as 'Whatsapp', with some of the managers forming 'Whatsapp' groups to share documents, information and opinions rapidly. The other social media used were the Facebook and the Twitter.

The study also investigated the use of formal structures of knowledge transfer; formal training sessions, seminars and workshops and seminars, were reported to have low usage, with only 8.9% of the respondents reported that they very frequently (5) and frequently (4) had trainings and workshops which would facilitate knowledge transfer (Table 1).

The communities of peers/ communities of practice were also reported to have a low usage; only 8.9% of the respondents very frequently (5) and frequently (4) reported that they belonged to any community of practice (Table 7). This finding was not surprising since the bulk of the managers of the education sector did not have any formal and informal avenues where they could exchange their views about their work.

Knowledge transfer structures in use	5	4	3	2	1	Key
websites and web-based tools including blogs	40.6	46.5	6.9	1.0	5.0	1- never
databases and data management and retrieval systems	12.9	18.8	15.8	31.7	20.8	2- rarely
social media	37.7	45.5	7.9	2.0	6.9	3- occasionally
training sessions, seminars and workshops	2.0	6.9	8.9	40.6	41.6	4- frequently
communities of peers /communities of practice	3.0	5.9	28.7	39.6	22.8	5- very frequently

Table 1: Structural elements of knowledge transfer

#### 4.1. Regression Model Summary

Table 2 depicts the Multiple Regression model summary showing the  $R^2$ , Adjusted  $R^2$  and Standard Error of Estimate. The Coefficient of Determination ( $R^2$ ) and Correlation Coefficient (R) show the degree of association between independent variable components and Strategic Thinking Competencies of the managers (dependent variable).

Model	R	$R^2$	Adjusted $R^2$	Std. Error of estimate
Dependent variable: Strategic Thinking Competence (STC)	0.804(a)	0.646	0.643	0.52187

Table 2: Regression Model Summary

a) Predictor (Constant):

Independent variable: knowledge transfer structures

As can be seen in Table 2, about 64.6% of variance ( $R^2$ ) in Strategic Thinking Competence can be explained by the knowledge transfer structures, which significantly predicted the dependent variable; Strategic Thinking Competence. The resultant output had an adjusted  $R^2$  of 0.643 ( $p < 0.05$ ) and contributing significantly to explaining the variance in overall Strategic Thinking Competence of the county level managers.

## 5. Conclusions

The research found out that there was a significant relationship between the accesses to the knowledge resources in the organisation on the strategic thinking competence of the managers (ch.4.5). This is in line with Syed-Ikhsan and Rowland's (2004) argument that availability of the rich knowledge assets in an organisation was a strong determinant in the strategic thinking competence in the organisations. Further it was also consistent with Kaulkarni and Freeza (2006) argument that the knowledge awareness and the constant reference to the knowledge resources increased the employees' strategic thinking competence and the skill in the areas which they operate in. Most of the MOE knowledge resources were in electronic format. This is consistent with arguments of Mostashari and Stankovi (2013) who argued that in many organisations knowledge transfer among the members is predominantly through use of communication technologies such as email lists, news/web portals, and organisation electronic based discussions.

The study also found that knowledge from Consultations with other individuals was the most accessible knowledge resources in the organisation. Most of the managers relied heavily on the knowledge in others through consultations, this was not sustainable since that knowledge could not be assured to be regular and that knowledge could not be interrogated to ascertain its accuracy, this tacit

knowledge could be of much use if there was a system for documentation and sharing the members knowhow and to ensure that such knowledge could be harnessed and exploited.

The MOE websites which was the most used to access the electronic resources faced challenges because of lack of access to it by most of the managers due to lack of supporting ICT infrastructure as well as its inadequacy to meet the knowledge needs of the managers. Most of the managers did not have access to the databases that would contain critical resources necessary for development of strategic thinking competencies of the managers. These findings confirm Cheruiyot, et.al (2012) findings which concluded that the knowledge infrastructure was important in the manufacturing firms in Kenya argue that since it enabled knowledge access and transfer; Facilitating the ease of knowledge use and reuse in the organisations.

The access to the physical documents was limited, the important documents like policy statements, annual reports, were not readily available. Updating both the physical documents and electronic documents in tandem with the changes that occurred in the organisation was a major factor in enhancing the strategic thinking competence of the managers.

The respondents rated the fragmentation of the knowledge resources as one of the major impediments to access to the knowledge resources.

The study found that the knowledge transfer structures contributed to the strategic thinking competence of the managers. The knowledge transfer structures were found to support the systems thinking of the managers; These findings correspond to the findings of Mosoti and Masheka (2010) that the organisations operating in Nairobi did not have an effective knowledge transfer structure, which according to them hindered the strategic thinking competence of the managers in the organisations, Ondari- Okenwa and Smith (2009) and Monnavarian and Kasaei (2007) assertion that absence of and weak knowledge creation and transfer structures was a major impediment to the knowledge transfer in the organisations in the public sector and hence affected the managers strategic thinking competence. Durmusoglu, Jacobs, Zamantili, Khilji and Wang (2014) also argue that good organisation system and appropriate organisation culture have a positive effect on the knowledge transfer and application by the individuals in an organisation. The study found on the organisation structures deployed to facilitate knowledge transfer; the websites and internet based resources were highly utilised by the majority of the respondents, this surprisingly high level of usage could partly be explained by the MOE decision to conduct much of its correspondence online. Many of the respondents reportedly were driven to use the electronic based knowledge by the need rather than choice. However, the rate of usage of knowledge data bases in the MOE by the managers was noted to be low. The knowledge transferred using the websites and the database was however established to have a very high value on the managers' strategic thinking competence.

Social media as a structure for knowledge transfer was utilised by a large majority of the managers, though the social media use mostly came by default rather than by design, it was seen to have been embraced by most of the managers particularly to supplement the other mainstream structures put in place by the MOE. The social media was however a low contribution had on the strategic thinking competence of the managers. This finding corresponds to Cheruiyot, Jagongo and Owino (2012) argument that social media although prevalent in usage among the Kenya employees, it had a low contribution as a structure of supporting knowledge transfer. This was explained by the fact social media mainly dealt with tacit (personal) and not organisational knowledge. However, the social media could be harnessed to enable the transformation of tacit knowledge into explicit knowledge.

Further, the social media can be utilised as the enabling context in which knowledge transformation can take place in the SECI cycle (Nonaka and Takeuchi, 1995, Nonaka and Toyama, 2003 and Nonaka, 2014)

The communities of practice/ peers as structures for knowledge transfer were largely absent in the MOE, this is consistent with Peterson D (2012) who found that the public broadcasting corporations in southern Africa did not have communities of practice in place. The respondents however felt that knowledge transferred using the communities of practice was very effective in creation of strategic thinking competence in the managers.

The workshops and seminars though recognised as an important tool for knowledge transfer were not utilised for that purpose. The study found a high level of the use of the social media as a platform for transfer of knowledge. This is consistent with Uriarte (2005) argument that groupware or tools that facilitate the collaborative tools that provide avenues for knowledge to be transferred across the members of the organisation.

The overall findings of the research showing the relationships between knowledge-transfer structures on the strategic thinking. These are summarised in a model represented in Figure 4 Using the combined theoretical frameworks of the SECI model of knowledge creation and transfer (Nonaka, 2014, Nonaka and Toyama, 2003 and Nonaka and Takeuchi, 1995), a practical model for understanding the contribution of the knowledge transfer on the strategic thinking competence is designed.

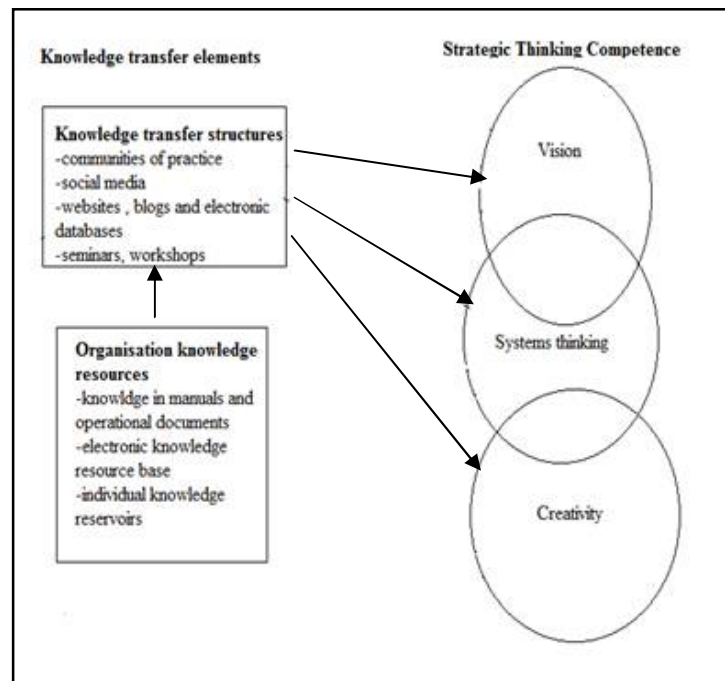


Figure 4: Model of the contribution of knowledge transfer structures to the strategic thinking competence in the MOE

The study justifies the fact that the managers of new structures created in the public sector require knowledge resources transferred to be able to develop in them strategic thinking competencies. The knowledge transfer plays a key role in facilitating the strategic thinking competencies of the managers. Specifically, the study recommends:

#### 6. Recommendations for Further Research

A study on the external knowledge transfers would be important so as to create a working framework within which the internal and external knowledge transfers can be modelled. This would build on the foundations of this current study to come up with a holistic picture. The researcher is cognisant to the complex knowledge management processes which are evident in a large organisation that is undergoing transition particularly so for a large complex organisation like the Ministry of Education.

#### 7. References

- i. Abraham, S. (2005). Stretching strategic thinking. *Strategy and Leadership*.33 (5): 5-12
- ii. Allio, J. R. (2010). Strategic thinking, the big ten ideas. *Strategy and Leadership*. 34(4): 4-13
- iii. Bonn, I. (2001). Developing strategic thinking as a core competency. *Management Decision*. 39(2): 63-70
- iv. Bonn, I. (2005). Improving strategic thinking: a multilevel approach. *Leadership and Organisational Development Journal*. 26 (5):836-354.
- v. Bou-Llusar, J. and Seggara-Cippres, A. (2006). Strategic knowledge transfer and its implications for competitive advantage: An integrative conceptual framework. *Journal of Knowledge Management*. 10(4): 100-112
- vi. Briatanu. C. (2010). A critical analysis of Nonaka's model of knowledge dynamics. *Electronic Journal of Knowledge Management*. 8 (2):193 -200
- vii. Buckova. J. (2015). Knowledge Management in Public Administration Institutions. *Procedia Economics and Finance*.34(1):390-395. Available at [www.sciencedirect.com](http://www.sciencedirect.com) accessed on 11<sup>th</sup> October 2016
- viii. Cheruiyot, C. K. Jagongo, A. and Owino, E. O. (2012). Institutionalization of knowledge management in manufacturing enterprises in Kenya, A case of selected enterprises. *International Journal of Business and Social Science*. 3 (10): 127 -138
- ix. Davenport, T.H. and Prusak, L. (1998). *Working Knowledge – How Organisations Manage What They Know?* Harvard Business School, Press, Boston, MA. 15 pp
- x. Draganidis, F. and Mentzas, G. (2006). Competency based management: a review of systems and approaches. *Information Management and Computer Security*. 14 (1): 51 - 64
- xi. Durmusoglu, S., Jacobs, M., Zamantili, D., Khilji, S. and Wang, X. (2014). The quasi- moderating role of organisation culture in the relationships between rewards and knowledge shared and knowledge gained. *Journal of Knowledge Management*. 18 (1): 19-37
- xii. Easa. N.F.H (2012). Knowledge management and the SECI model: a study of innovation in the Egyptian banking sector. An unpublished thesis Stirling business school, university of Stirling UK. 256pp
- xiii. Fairholm, M. R. and Card, M. (2009). Perspectives of strategic thinking; from controlling chaos to embracing it. *Journal of Organisation and Management*. 15 (1): 17-30



- xiv. Garratt, B. (2004). Helicopters and rotting fish: developing strategic thinking and new roles for direction givers, In: *Developing Strategic Thought; a Collection of the Best Thinking on Business Strategy* (Edited by Garratt, B.) profile books, London pp 311-328
- xv. GOK (2013) Education Act Number 14 of 2013, Government Printer, Nairobi
- xvi. Haag .M, Duay. Y and Matthew. B (2010). The impact of culture on the application of SECI, In *Cultural Implications of Knowledge Sharing, Management and Transfer: Identifying a Competitive Advantage*. (Edited by Harorimana. D and Hestey P.A.). Information Science Reference, pp 26-47.
- xvii. Kaulkarni, U. and Freeze, R. (2006). Measuring knowledge management capabilities. in: *Encyclopaedia of Knowledge Management* (Edited by Schwartz D.G.). IDEA Group Publishing pp 605-613
- xviii. Liyange, C., Elhag, T., Ballal, T. and Li, Q. (2009). Knowledge communication and translation – a knowledge transfer model. *Journal of Knowledge Management*. 13 (3): 118-131
- xix. McEvoy, P. J., Arisha, A. and Ragab, M. (2015) *A Review of Knowledge Management in the Public Sector: A Taxonomy*. International Forum on Knowledge Asset Dynamics. Bari, Italy, 2015.
- xx. Mintzberg, H. (2004). Strategic thinking as 'seeing'. In: *Developing Strategic Thought; A Collection of The Best Thinking on Business Strategy*, (Edited by Garratt, B.) profile books, London pp 79-84
- xxi. MOE (2008), Final report on the Kenya education Management Capacity Assessment. At [www.education.go.ke ] site visited on 22<sup>nd</sup> September 2016.
- xxii. Monnavarian, A. and Kasaei, M. (2007). A KM model for public administration: the case of Labour Ministry. *VINE: The Journal of Information and Knowledge Management Systems*. 37 (3): 348 – 367
- xxiii. Mosoti, Z., and Masheka, B. (2010). Knowledge management: the case for Kenya. *Journal of Language, Technology & Entrepreneurship in Africa*. 2 (1): 107-133
- xxiv. Mostashari, S. A. and Stankovi, I. (2013). Visualisation of the organisation knowledge structure evolution. *Journal of Knowledge Management*. 17 (5): 724-740
- xxv. Mugenda, O.M. and Mugenda, A.G. (2003). *Research Methods Quantitative and Qualitative Approaches*. Acts Press. Nairobi. 256 pp
- xxvi. Nonaka, I. and Takeuchi, H. (1995). *The Knowledge-Creating Company*, Oxford University Press, New York, 150 pp
- xxvii. Nonaka, I., and Toyama, R. (2003). Knowledge creation theory revisited: knowledge creation as a synthesis process. *Knowledge Management, Research and Practice*. 1(1): 2-10.
- xxviii. Nonaka, I. (2014). In (Kawamura, 2014) Kawamura interviews Nonaka. *Cross Cultural Management*. 21 (3): 1-18
- xxix. Ondari-Okemwa, E. and Smith, J. G. (2009). The role of knowledge management in enhancing government service delivery in Kenya. *South Africa Journal of Library and Information Science*. 75 (1): 28- 39
- xxx. O'shannassy, T. (2003). Modern strategic management balancing strategic thinking and strategic planning for internal and external stakeholders. *Singapore Management Review*. 25 (1): 53- 68
- xxxi. Peterson, D. (2012). *Knowledge retention strategies in selected Southern African Broadcasting corporations*; unpublished PhD thesis for award of PhD in library and information science of University of Fort Hare, South Africa 348 pp
- xxxii. Stary, C. (2014). Non- disruptive knowledge and business processing in knowledge life cycles – aligning value networks analysis to process management. *Journal of Knowledge Management*. 18 (4): 651-686
- xxxiii. Syed-Ikhsan, S.O.S. and Rowland, F. (2004). Knowledge management in public sector organisations: A study in the relationship between organisational elements and the performance of knowledge transfer. *Journal of Knowledge Management*. 8 (2): 95 – 111
- xxxiv. Tavakoli, I. and Lawton, J. (2005). Strategic thinking and knowledge management: *Handbook of Business Strategy*, pp 155-166
- xxxv. Tuomi, I. (1999). *Corporate Knowledge. Theory and Practice of Intelligent Organisations*. Metaxis. Helsinki. 457 pp
- xxxvi. Uriarte, F. A. (2008). *Introduction to Knowledge Management*. ASEAN foundation. Jakarta. 179 pp
- xxxvii. Wiig, K.M (1997). Knowledge Management: An Introduction and Perspective, *Journal of Knowledge Management*. 1 (1): 6-14