Transfer of tacit knowledge among staff at the Kenya National Library Service, Nairobi County, Kenya

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Abstract

This paper explored the transfer of tacit knowledge among staff at the Kenya National Library Services (KNLS), Nairobi County. KNLS plays an important role in planning the development of library infrastructure throughout the country. KNLS's mandate is to foster a reading culture through the provision of information services to all clientele countrywide, in all formats, to enhance social, political and economic development. Effective knowledge management results in better quality services and enhances employee performance and satisfaction. The purpose of this study was to explore the transfer of tacit knowledge among staff of Kenya National Library Service to enhance service delivery, productivity and business continuity. The specific objectives of this study were to explore knowledge management practices at the Kenya National Library Service; determine the kinds of tacit knowledge; explore communication channels used to transfer tacit knowledge; identify challenges and experiences in transferring tacit knowledge; and propose a framework to enhance the transfer of tacit knowledge at KNLS. The Theory of Communities of Practice by Etienne Wenger et al. (2002) informed the study. The study adopted a qualitative approach. The population of the study was stratified into departments. Purposive sampling was employed to select respondents. Key informants in the study were senior members of management. Data was collected through face to face interviews and analysed using content analysis software. Data has been presented using qualitative techniques; where necessary, the study employed the use of tables, graphs and charts. No study

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known to the authors has investigated the transfer of tacit knowledge among staff at the KNLS. This study is original in terms of its scope and methodology.

Keywords: Knowledge management, knowledge management practices, tacit knowledge, knowledge sharing, transfer of tacit knowledge

Introduction

In today's life environment, knowledge is the driver of social, economic and political development. It is a key resource and the main source of creativity, innovation and competitiveness. The management of tacit knowledge in organisations today is regarded as a fundamental activity of obtaining, growing and sustaining intellectual capital. Grant (1996) noted that knowledge management is strategically important for organisations to gain a competitive advantage over their competitors and to add value to their products. Drucker (1993) predicted that knowledge would replace land, labour, capital and machines in economic production. Today, organisations are busy trying to capitalise on their organisational intellect to maintain competitive advantage through knowledge management practices. Armstrong (2006) points out that the foundation of industrialised economies has shifted from natural resources to intellectual assets. He further stated that executives have been compelled to examine the knowledge underlying their business and how that knowledge is used. Hansen, Nohria and Tierncy (1999) remarked that for hundreds of years, owners of family businesses have passed on their commercial wisdom to children; master craftsmen have painstakingly taught their trades to apprentices; and workers have exchanged ideas and knowhow on the job.

Knowledge management deals with how people acquire, exchange, and disseminate knowledge. Rowley (1990) points out that knowledge management is concerned with the exploitation and development of knowledge assets with a view to furthering organisational objectives. Grey (1997) defines knowledge management as an audit of intellectual assets that highlight unique sources of critical functions and potential bottlenecks which hinder knowledge flows to the point of use. He further opined that knowledge management protects intellectual assets from decay; seeks opportunities

to enhance decisions, services and products by adding intelligence; increases value through flexibility. Therefore, knowledge is an intellectual asset and knowledge management is a tool which utilises intellectual assets to broaden the organisation's objectives.

In the 19th century, libraries were known as the only information suppliers. In the 20th century, libraries have undergone enormous changes dictated by advances in information technologies; socio-economic developments such as the growth of private libraries, cyber cafés, information consultancy and brokerage firms; and high levels of user expectations. All these changes have resulted in competition for a qualified, competent and skilled work-force to deal with the current and future demands in information processing and knowledge dissemination. Teng and Hawamdeh (2002) suggested that knowledge management can be applied in non-profit making organisations to improve communication among staff and between top management. Mchombu (2007) argues that knowledge management in libraries improves work efficiency, productivity and the ability to manage change. He further pointed out that knowledge management practices enable organisations to attract, retain and motivate committed talent. In libraries, knowledge management facilitates the institutions to maximise the use of available collective wisdom, experience and brainpower of human capital assets. Kim (1999) pointed out that knowledge management practices aim to draw out the tacit knowledge people have, what they carry around with them, what they observe and learn from experience, rather than what is usually explicitly stated.

Problem and purpose of the study

There is a relatively low volume of literature that deals with tacit knowledge transfer and almost none when it comes to the transfer of tacit knowledge in public libraries in Kenya. This study attempts to fill this gap by investigating the transfer of tacit knowledge at the KNLS, Nairobi County. This study specifically investigated the transfer of tacit knowledge among library staff of KNLS with a view to identifying the inherent challenges and proposing a framework to enhance the transfer of tacit knowledge in the organisation. The specific objectives of this study were to explore

knowledge management practices at the KNLS; determine the kinds of tacit knowledge held by KNLS staff; explore communication channels used to transfer tacit knowledge by KNLS staff; identify challenges experienced by KNLS staff in the transfer of tacit knowledge; and propose a framework to enhance the transfer of tacit knowledge at KNLS.

Theory and literature review

A theory is a set of explanatory concepts (Silverman, 1993). A theory is a system for explaining phenomena, which states constructs, and laws that inter-relate the constructs to one another (Mugenda & Mugenda, 1999). Cozby (2001) argues that theories have four purposes in scientific research, namely: description, explanation, prediction and control. He further notes that theories generate new knowledge and new hypotheses about behaviour which could be confirmed or contested through research. This can reveal weaknesses in a theory and force researchers to modify or develop a new and more comprehensive theory.

Several theories have been used in the study of tacit knowledge management. One of these is the knowledge spiral model proposed by Nonaka and Takeuchi (1995). These researchers attributed the success of Japanese companies to their effectiveness in creating knowledge. The core assumption of this model was that tacit knowledge has to be mobilised and converted. The model does not only explain knowledge creation but also describes knowledge transfer. Nonaka and Takeuchi (1995) identified four specific conversion processes: socialisation, externalisation, combination and internalisation (SECI). The model explains that tacit knowledge can be transformed into explicit knowledge and vice versa. The model also emphasises that tacit knowledge cannot be easily codified; once it is codified it loses its tacit nature. Therefore, tacit knowledge might be lost in the process of codification. Related to SECI is the knowledge transfer theory (Szulanski, 1996) which presents knowledge transfer as a sequential process which encompasses four steps between the sender and the receiver: initiation, implementation, ramp-up and integration.

Another theory relevant to tacit knowledge management is the Communities of Practice (CoP) theory (Wenger, McDermott & Snyder, 2002). The theory was introduced by Jean Lave and Etienne Wenger in 1991. They first used the term 'Communities of Practice' to describe learning through practice and participation which they named 'situation learning'. They suggested that most of the learning for practitioners occurs in social relationships in the workplace rather than in a class room setting. In this theory, the structure of the community was created over time through a process of legitimate peripheral participation. Building on the situation leaning theory, Wenger expanded the concept of CoP in 1998, and focused on socialisation, learning and the individual's identity development instead of expanding the concept based on the apprentice-expert relationship (Wenger, 1998). This was based on a case study on how medical claims processing clerks interacted with each other to share information. He described a community of practice as an entity bounded by three interrelated dimensions: mutual engagement, joint enterprise and a shared repertoire.

In 2002, Wenger, McDermott and Snyder in the study, 'cultivating communities of practice', shifted their focus from individual learning and identity. They focused on providing a tool for organisations to manage 'knowledge workers'. Wenger, McDermott and Snyder (2002) revised the three characteristics of CoP and named them, 'domain', 'community' and 'practice'. Wenger, McDermont and Synder (2002) defined communities of practice as groups of people who share a concern, asset of problems, or a passion about a topic and who deepen their knowledge and expertise in the area by interacting on an on-going basis. They suggested that organisations can engineer and cultivate CoP as a managerial tool for improving an organisation's competitiveness.

This study was built on the work of Wenger, McDermont and Synder (2002) theory of communities of practice. Jain (2009) in a study 'Knowledge management in e-government' stated that no technology or database can capture all the knowledge required in an organisation. The study revealed that communities of practice were proved to be the most powerful tools for learning, sharing and for intellectual

interaction and experience. Therefore, COP can be used to capture, share and transfer tacit knowledge from retiring older employees, experts, to younger or new employees. This transfer process ensures that knowledge is retained in the organisation even when employees depart from the organisation. The next section reviews literature in the research domain.

Data, information and knowledge

Data is the sum of raw, scattered, unrelated, unprocessed issues, facts and events, numbers and symbols without meaning (Semertzaki, 2011). Porat (1977) stated that information is data that has been organised and communicated. Data is the basis for the creation of information, while information is analysed and organised data. Lee (2000) defines knowledge as a set of organised statements of facts or ideas, presenting a reasoned judgment or an experimental result, which is transmitted to others through some communication medium in some systematic form. Davenport and Prusak (1998) define knowledge as a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. They further emphasise that knowledge originates and is applied in the mind of knowers. Semertzaki (2011) defined knowledge as the baby of mental operations; the outcome of the thinking procedure of a person based on experience, education, cultural and socio-economic background; information gathered and elaborated in the brain. Therefore, information becomes knowledge when it is interpreted by individuals and given context.

Tacit and explicit knowledge

Human knowledge exists in tacit or explicit forms (Polanyi, 1966). Tacit and explicit knowledge are complementary and essential for knowledge creation. There are many definitions of tacit knowledge but Polanyi's (1966) definition is widely accepted. He encapsulates the essence of tacit knowledge in the phrase "we know more than we can tell". Nonaka and Takeuchi (2007) argue that tacit knowledge is highly personal and hard to formalise. Therefore, it is difficult to communicate to others. Rosenberg and Nathan (1982) describe tacit knowledge as the knowledge of techniques, methods and designs that work in certain ways and with certain consequences, even

when one cannot explain exactly why. Tacit knowledge consists of the “know-how” and the “know-that” (Polanyi, 1966). Polanyi pointed out that “know-how” is the ability of a person to perform tasks while “know-that” is holding pieces of knowledge in one’s mind. Semertzaki (2011) defines explicit knowledge as the output of tasks and activities of an organisation in the form of reports, records, databases, and procedures, among others. Explicit knowledge is recorded in order to be retained for future generations and mostly captured in libraries, archives, databases and cultural heritage institutions.

Tacit knowledge can be defined as personal knowledge embedded in individual experience and involves intangible factors such as personal beliefs, perspectives and a value system. This personal knowledge is sometimes known as individual tacit knowledge. It is the knowledge that an individual possesses; natural talent or expertise that can neither be articulated nor transferred easily. Another category of tacit knowledge is collective knowledge. This kind of tacit knowledge belongs to a group of people and has its own values, beliefs and unwritten norms that the group fully agrees to and follows. Tacit knowledge functions naturally as background knowledge which assists in accomplishing a task in focus or at hand.

Communication channels that enhance the transfer of tacit knowledge

Communication is the social glue that keeps an organisation tied together. It is a key process underlying all aspects of the organisation’s operations. Organisational structure directs the flow of information and describes the formally prescribed pattern of interrelationships existing between various units or departments. Sekeran and Bougie (2009) define communication as the process of conveying information from a sender to a receiver using a medium in which the communicated information is understood the same way by both the sender and the receiver. Knowledge is created through the flow of information and is anchored on the beliefs and commitments of the holder. Tacit knowledge consists of the hands-on skills, special know-how, heuristics, intuitions, and the like that people cultivate as they engage in the flow of their work activities. Tacit knowledge is deeply rooted in action and comes from the

simultaneous engagement of mind and body. Nonaka and Konno (1998) stated that tacit knowledge can be communicated through a process of dialogue, discussion, experience sharing and observation. Transfer of tacit knowledge happens through storytelling, brainstorming, on-job training and debriefing sessions.

In the African culture, sharing of narratives and stories of routine experiences in the form of oral internal antiquity is a powerful device to communicate values and experiences. Stories exist in the realm of knowledge and are particularly suited to knowledge management instead of information management (Reamy, 2002). Brainstorming leverages the collective thinking of the group by engaging each other, listening to and building ideas. Brainstorming can be summed up as a methodology used to bring out creativity and innovation. On-job-training is planned, organised and conducted at the employee's worksite. On-job-training is used generally to broaden the employee's skills and increase productivity as well as to develop proficiency skills unique to the employee's job. This kind of method of training lifts the employee's morale, productivity and professionalism. Alipour, Salehi and Shahnavaz (2009) in a study on the effectiveness of on-job training in Iran revealed that on-job training leads to more creativity, achieving organisational objectives and improves work quality.

The tacit knowledge transfer process is ultimately human to human and is inherently interactive and dynamic. Tacit knowledge transfer is enhanced if the environment is right, that is, the people involved, the right conditions exist, right means are used and right actions are taken (Collison & Parcell, 2001). In debriefing, the what, why, how and when of things is explored orally (Kransdroff, 2003). Debriefing was originally used in military campaigns and war games to question and examine persons who have returned from mission or exercise, to establish what has occurred and design new strategies as a result of previous experience (Pearson & Smith, 1985).

Barriers to transfer of tacit knowledge

Fear and ambition mixed with a dollop of distrust create a condition for knowledge hoarding. Fear is a strong emotion affecting behaviour. People will hoard their knowledge if they think sharing it will result in punishment or competitors stealing their ideas. Bartol and Srivastava (2002) stated that individual employees are reluctant to

share knowledge and expertise because the disclosure might lead to erosion of individual power. Knowledge hoarding also comes in when people or employees feel that an injustice has been done to them. They become distrustful of management and become afraid of negative job evaluations and figure out that they are better off not sharing anything.

When people acquire new knowledge, they believe that it is the key to their success and are likely to guard instead of sharing it. Many employees do not want to share the expertise they get through many years of hard work due to competition. These employees feel that if they can solve problems they will be valued and get self-respect. Greenhalgh and Rosenblatt (1984) defined job insecurity as a perceived powerlessness to maintain desired continuity in a threatened job situation. They further maintained that job insecurity is based on individuals' perceptions and interpretations of the immediate work environment. Job insecurity in organisations leads to attitudinal reactions, intentions to quit, reduced commitment and reduced job satisfaction which makes the transfer of tacit knowledge impossible.

Neo (2002) in a study of knowledge sharing practices in a Singapore news company found that cultural factors have significant impact on an individual's decision to share or hoard knowledge. This study revealed that lack of motivation, management support, trust and teamwork spirit were considered as major barriers to knowledge sharing. This concurs with Albers (2009) in a study which revealed that culture was critical in implementing knowledge management. He emphasised that an ideal knowledge management culture should be characterised by trust, openness, teamwork, collaboration, risk taking, tolerance for mistakes, common language courage and time for learning. The noise in tacit knowledge transfer can be ringing telephones inside or outside the room, people moving in and out of the room, mumbling, speaking too fast and distracting gestures from the sender of the message or recipients. Blacker (1995) stated that poor lighting and uncontrolled temperatures could affect people's morale and concentration, which in turn interfere with knowledge transfer. Geographical distance is also a physical barrier in the transfer of tacit knowledge. Distance between the sender and the receiver of a message determines

the effectiveness of the transfer of a message. Semantic barriers such as language, use of complicated words or uncommon expressions hinder the transfer of tacit knowledge. Semantic barriers occur when a sender and the receiver assign different meanings to the same word. Physiological barriers such as visual challenges, hearing problems and ill health also hinder tacit knowledge transfer.

Attitude is a set of beliefs and feelings people have about specific ideas, situations and people, which influence behaviour. Cools and Van den Broeck (2006) in Martins and Martins (2011) defined attitude as a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object. Attitudinal barriers can be brought about by factors such as poor staff management, lack of consultation and personality conflicts which can make people refuse to communicate or share knowledge. Personal attitudes of individual employees which may be due to lack of motivation or dissatisfaction at work can result in resistance to change. Disterer (2001) notes that if leading members of an organisation are not comfortable with change and are not willing to take risks, then new ideas may be covered very easily and knowledge not culturally legitimated may be suppressed.

Research methodology

Methodologies used in the previous studies to study knowledge transfer were primarily quantitative and mixed methods approaches. Szulanski (1996) applied quantitative methods to examine the transfer of best practices among eight firms. Szulanski (2003) further used a quantitative approach to examine stickiness associated with knowledge transfer in multinational enterprises in which the transfer was in multiple contexts. Binotto, Siqueira and Simioni (2011) used a mixed methods approach to examine the difficulties associated with transferring marketing knowledge. The current study adopted a qualitative approach to get rich information about the transfer of tacit knowledge among library staff at KNLS. This approach was humanistic, interactive and enabled the researchers to build rapport and credibility with the respondents. The methodology facilitated the exploration and understanding of people's beliefs, experiences, attitudes, behaviour and interactions. In terms of paradigms, this study employed an intepretivist worldview which relies on naturalistic

methods, based on people's subjective experiences of their internal worlds, and treating them as the sources of their thoughts and feelings. Kroeze (2012) explains that the aim of interpretivism is to understand the subjective experiences of those being studied as well as how they think, feel and act or react in their habitual contexts.

The study was based at the KNLS establishments in Nairobi City County. The population of the study consisted of all staff in these establishments. Stratified sampling was used to select the actual respondents in the study. The KNLS establishments in Nairobi were stratified into departments. Payne (1990) opines that stratification involves organising population into distinct groups or strata as per their characteristics. The study further employed purposive sampling to select respondents based on their professionalism and the area of specialisation. Therefore, the respondents in this study were librarians and library staff from the following departments: National Library, Nairobi Area Library, Collection Development and Book Distribution, Buruburu Library, Outreach Mobile Library Services and the administrative office in Buruburu. Key informants in the study were senior members of management from Technical Services, Human Resource, Audit, Corporate Communications, as well as Research and Planning. The key informants were purposively sampled based on their positions and duties performed at KNLS. Of particular interest were policy formulation and implementation, training and development of staff, information and knowledge flow inside and outside the institution, technical services, audit, information processing and dissemination strategies amongst other duties in the institution. Patton (1990) observes that qualitative inquiry typically focuses in-depth on a small sample. Sekeran and Bougie (2009) point out that in qualitative research, a researcher does not determine the number of subjects that will be sampled at the beginning of the study. They further explain that the general rule in qualitative research is to continue to sample until no new information or no new insights are gained. Overall, data was collected from thirty six (36) librarians and eight (8) key informants who were senior management staff in Nairobi. Data was collected through in-depth face to face interviews and analysed using content data analysis software (Nvivo) and presented using qualitative techniques, where necessary, the study employed tables, graphs and charts.

Research findings

The findings of the study are presented hereunder according to the research objectives:

Knowledge management practices

Knowledge creation, capturing, sharing and transfer

The study found that knowledge creation at KNLS was the outcome of an interactive process between the staff and management. Knowledge was created on a daily basis through group discussions, staff meetings, brainstorming, on-job training, in-house trainings and practical demonstrations. The respondents stated that they created new knowledge through group discussions, brainstorming, staff meetings, staff evaluation reports and appraisals. One of the respondents had this to say:

> *I participate effectively in face to face group discussions in our section and forward questions on what I want to know, and when I get the answer, I apply it to the problem at hand and hence get new ways of solving the problems at hand.*

The key informants in the study stated that they habitually pick staff to work on research papers and present them in staff forums where the management and the staff participate effectively in asking and answering questions thereby creating new knowledge. The study established that new knowledge acted as a key resource in influencing library operations. The new knowledge also helped the libraries in catching up with changing user needs and information technologies.

Eighteen (50%) of the respondents stated that knowledge was captured through the presentation of research papers and appraisal of staff expertise; fourteen (39%) were not aware of how knowledge was captured; while four (11%) of the respondents stated that there were no activities on knowledge capturing. The study findings indicate that knowledge capturing was semi-formal. This study concurs with Martins and Martins (2011) in their study which revealed that the wave of knowledge loss and attrition that organisations were facing in a world of layoffs, retirements, death and mergers poses a threat and challenge to organisations.

The study further established that the KNLS staff acquired knowledge through attending conferences, seminars, workshops, in-house/outside trainings, research and collaboration with other institutions. The study established that KNLS had staff with a wealth of experience and expertise in the field of librarianship. The respondents were well trained. Over half of the respondents had worked for over fourteen years. The respondents acted as repositories of knowledge. The study findings indicated that knowledge sharing at KNLS was semi-formal. The staff shared their knowledge during staff meetings, tea and lunch breaks, research presentation, practical demonstrations, brainstorming sessions, KNLS intranet, e-mails, and social media. The study further indicated that the staff transferred their tacit knowledge during the sharing process consciously and unconsciously.

Knowledge management policy

The study established that KNLS did not have a written policy to govern knowledge management activities. Thirty-four (94%) of the respondents pointed out that there was no written knowledge management policy governing knowledge management practices at KNLS. Two (6%) of the respondents stated that they were not sure of the existence of any policy that governs knowledge management practices. The key informants pointed out that KNLS had not formally embraced knowledge management into the institution hence there were no written policies to guide in knowledge management. The study's findings indicated that knowledge management practices were informal. The findings also revealed that knowledge management was new at KNLS and only about 60% of the staff participated intuitively in knowledge management activities. KNLS management had taken initiatives to facilitate knowledge sharing and transfer activities through job rotations, in-house trainings, staff meetings, use of intranet, e-mails, and workshops. The key informants pointed out that KNLS management had taken a further initiative to sponsor some of the library staff to attend knowledge management courses.

Kinds of tacit knowledge at KNLS

The study revealed that KNLS staff have both individual and collective tacit knowledge. The individual tacit knowledge consisted of a life-time's accumulation of

skills, wisdom, experiences, expertise, and best practices. The collective tacit knowledge was embedded in daily practices, routines, organisational culture and in their informal groupings. This study concurs with Jacobs & Roodt (2011) in their study which concluded that individual tacit knowledge is deeply rooted in individual experiences, ideas, values and emotions. The study further revealed that individual tacit knowledge was based on individual competences, experience and skills.

Transferability of tacit knowledge

As shown in Figure 1, 72% of the respondents stated that tacit knowledge was transferable. The respondents narrated that the expertise in areas such as binding, indexing, cataloguing and classification were transferrable after some time while working practically with the expert in the area. The respondents pointed out that the tacit knowledge transfer occurred during face-to-face interactive knowledge sharing. They gave examples such as hands-on training, on-job training, internship training and informal discussions. More than one-quarter (28%) of the respondents said that tacit knowledge was not transferrable. These respondents argued that the know-how and expertise was hard to transfer since the process was complex, time consuming and required a lot of patience '*to fit into another person's shoes'.*

The key informants in the study pointed out that tacit knowledge was transferred through job rotation, practical demonstrations, training and mentoring. They stated that the institution had not laid down strategies and policies to facilitate tacit knowledge transfer although the process was informal. This finding strongly agrees with the assertion of Nonaka and Takeuchi's (1995) definition that tacit knowledge is "knowledge that has been transformed into habit, and is highly context-specific and has a personal quality hence difficult to transfe*r*". Hislop (2009) as well as Mládková (2012) posit that tacit knowledge is always stored in peoples' brains. Therefore, sharing of tacit knowledge is difficult, complex, time-consuming and one of the biggest challenges of knowledge management. The study further concurs with Hariharan (2015) in a study which concluded that "wisdom represents a deeper understanding of knowledge and the fundamental principles behind this knowledge".

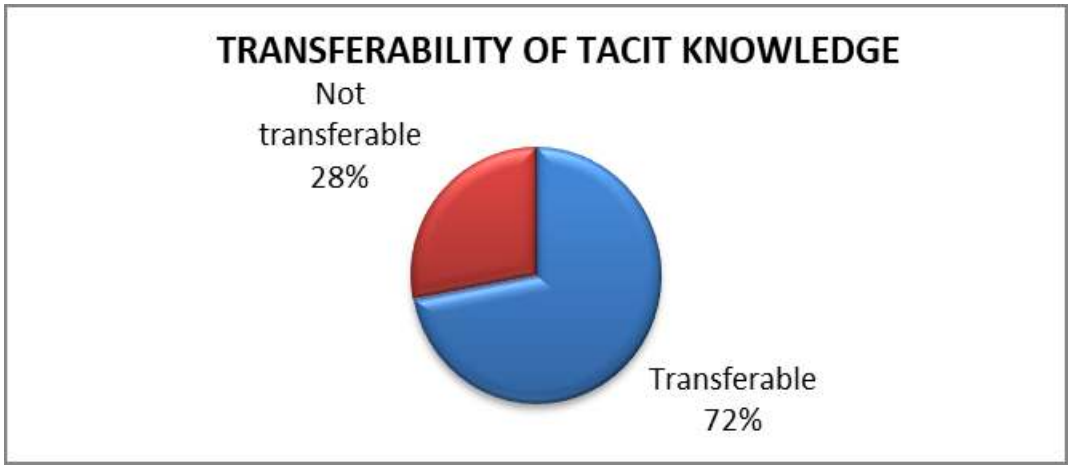

Figure 1: Presents responses from the respondents on transferability of tacit knowledge

Communication channels for tacit knowledge transfer

As indicated in Figure 2, most respondents used practical demonstrations, brainstorming, and face to face staff meetings to transfer tacit knowledge. The key informants of the study pointed out that 80% of the communication channels used by the library staff to transfer tacit knowledge were informal.

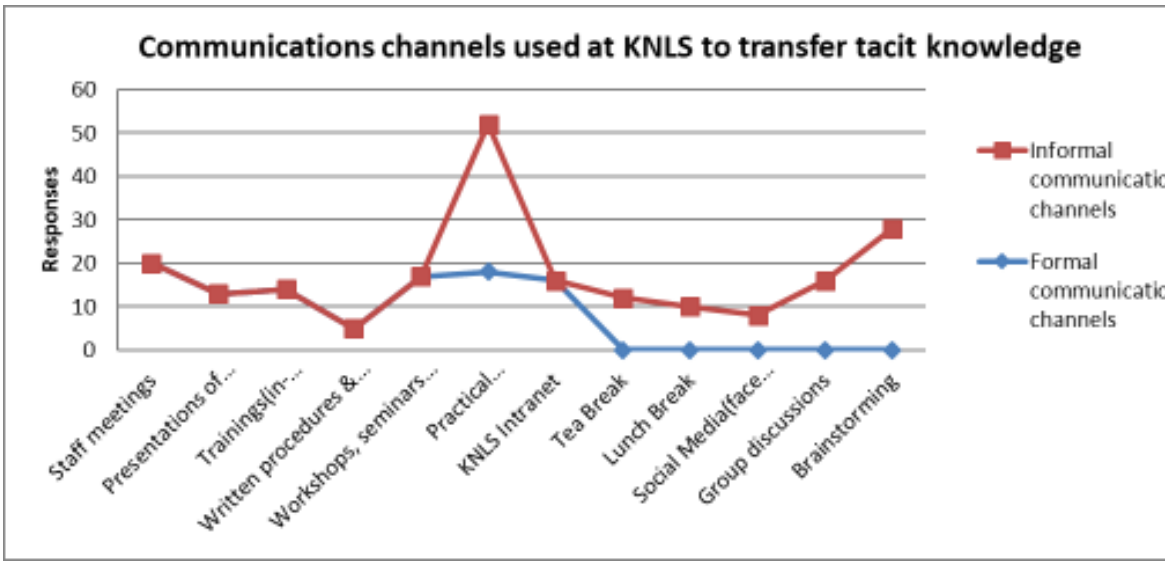

Figure 2: Communication channels used at KNLS to transfer tacit knowledge

Effectiveness of communication channels used in transfer of tacit knowledge

Twenty-two (61%) of the respondents stated that the communication channels were effective, whereas fourteen (39%) of the respondents said that the communication channels were not effective in aiding the effective transfer of tacit know-how and expertise.

Preferred communication channels

Twenty-six (72%) of the respondents stated that they preferred brainstorming and practical demonstration, which were face-to-face interactive communication channels, to transfer know-how and expertise to another person, new employee or intern. These respondents reiterated that face-to-face interactions were effective and provided a smooth transfer of tacit knowledge. One respondent said:

> *I prefer practical demonstrations and brainstorming because it is easy in terms of recall than written procedures*

These findings concur with Collison and Parcell (2001) that tacit knowledge transfer process is a human-to-human process and that this process is inherently interactive and dynamic.

Best communication channel to transfer tacit knowledge in a multi-generational workplace

The study sought to find the best communication channel to employ in a multi-generational workplace to transfer tacit knowledge. Sixteen (44%) respondents preferred brainstorming; twelve (33%) practical demonstrations; seven (19%) social media; while three (8%) favoured written procedures and manuals. The key informants stated that coaching and mentoring were the best communication channels to transfer tacit knowledge in a multi-generational workplace. They pointed out that these communication channels would mitigate challenges associated with differences in age, interests and culture.

Challenges in transfer of tacit knowledge

The study sought to determine the challenges encountered by the library staff in the transfer of tacit knowledge. The study established that lack of motivation, lack of knowledge management strategies and policies, and knowledge hoarding were the major challenges that hindered the transfer of tacit knowledge at KNLS.

Table 1: Challenges that hindered effective transfer of tacit knowledge at KNLS

No.	Challenges/barriers to transfer of tacit knowledge	Frequencies (multiple responses)					
		Staff /staff		Staff / New employee		Staff to Interns	
		No. of responses	Percentage (%)	No. of responses	Percentage (%)	No. of responses	Percentage (%)
1	Knowledge hoarding	23	63.8	8	22	5	13.8
2	Lack of trust	18	50	7	19	-	
3	Arduous Relationship	14	38.8	12	33		
4	Lack of motivation	30	83	--	-	-	-
5	Inadequate training	21	58	19	52.7	19	53
6	Inappropriate communication channel	8	22	10	27.7	6	16.6
7	Physiological factors	16	44	8	22	3	8
8	Fear	12	33	-	-	-	-
9	Language barrier	14	38.8	10	27.7	12	33
10	Lack of knowledge on the subject	3	8	-	-	-	-
11	Attitudinal barriers	18	50	-	-	-	-
12	Age gap	18	50	22	61	16	44
13	Technophobia	6	16.6	8	22	-	-
14	Distance	4	11	-		-	
15	Culture	18	50	19	52.7	-	-
16	Lack of knowledge management awareness, programmes & policies	27	75	-		-	

As shown in Table 1, the study further established that a lack of motivation, lack of knowledge management awareness, strategies and policies and knowledge hoarding were the major challenges that hindered the transfer of tacit knowledge at KNLS. The findings also concur with Riege (2005) that the lack of time to identify colleagues and share knowledge; low awareness of the benefits of possessed knowledge to others; poor interpersonal skills; lack of social networking; and differences in culture, race and value systems are some of the individual barriers to tacit knowledge sharing.

Challenges that hindered transmission of tacit knowledge when acting as the source

As shown in Table 2, the major challenges in the transfer of tacit knowledge from the source to the recipient(s) at KNLS were noise, lack of motivation, lack of trust, resistance from recipients and attitudinal barriers.

Table 2: Challenges in transfer of tacit knowledge

NO.	Challenges	Responses		Details of responses
		Multiple responses (No.)	Percentage (%)	
1	Resistance from recipients	18	50	Unwillingness from the recipients to contribute or ask questions. Poor listening skills of recipients, lack of cooperation and collaboration on the task at hand.
2	Context	16	44	The environment not conducive for learning e.g. sometimes the temperature is too hot where a recipient sleeps or takes nap. Sometimes the temperature is too cold for the recipients to concentrate.
4	Noise	32	88.8	Distractive noise from the background e.g. use of mobile phones, people moving in and out.
5	Equipment	10	27.7	Outdated equipment, shortage of equipment and lack of modern equipment for practical use by the recipients.
6	Attitude	17	47	This happens due to personal perceptions or past experiences. People are rated as incapable of performing or accomplishing tasks thus recipients do not want to pay attention to what is being presented.
7	Lack of motivation	21	58	Lack of recognition and rewards

8	Lack of trust	18	50	Lack of amiable relationship with the recipient
9	Fear	12	33.3	Fear of unknown, past experiences, fear of victimisation and fear of losing ownership of the knowledge.

Challenges that hindered reception/absorption of tacit knowledge: recipient

As shown in Table 3, the major challenges hindering the absorption or reception of tacit knowledge were noise, context, attitudinal barriers and the source.

Table 3: Challenges that hindered reception of tacit knowledge: recipient

No.	Challenges	Multiple responses		Details of responses ("…")
		No	Percentage (%)	
1	Language barrier	12	33	The source used difficult words, semantics, accents and mother tongue interruptions
2	Inappropriate communication Channel	6	16.6	The channel used was inappropriate for the audience e.g. use of power point, issuing written manuals instead of practical demonstrations
3	Context	16	44	Lack of controlled room temperatures and the sitting arrangement and layout.
4	Source	15	41.6	The source was not knowledgeable in the subject area. Lack of clarity of the source in delivering the message, mother tongue interruptions and use of semantics
5	Physiological factors	10	28	Factors such as ill heath, poor eyesight and hearing difficulties
6	Attitudinal barriers	16	44	Poor perception, insufficient training and lack of motivation
7	Noise	20	55.5	Background noise disruptions, ringing phones and mother tongue interruptions (MTI)
8	ICT illiteracy	4	11	Technophobia due to lack of ICT literacy skills
9	Inadequate equipment	10	27.7	No enough equipment to provide hands-on training.

Challenges that hindered transfer of tacit knowledge in a multi-generational workplace

Figure 3 shows that lack of trust, age gap, lack of motivation, attitudinal barriers, and different learning styles were the major challenges that hindered the transfer of tacit knowledge in a multi-generational workplace.

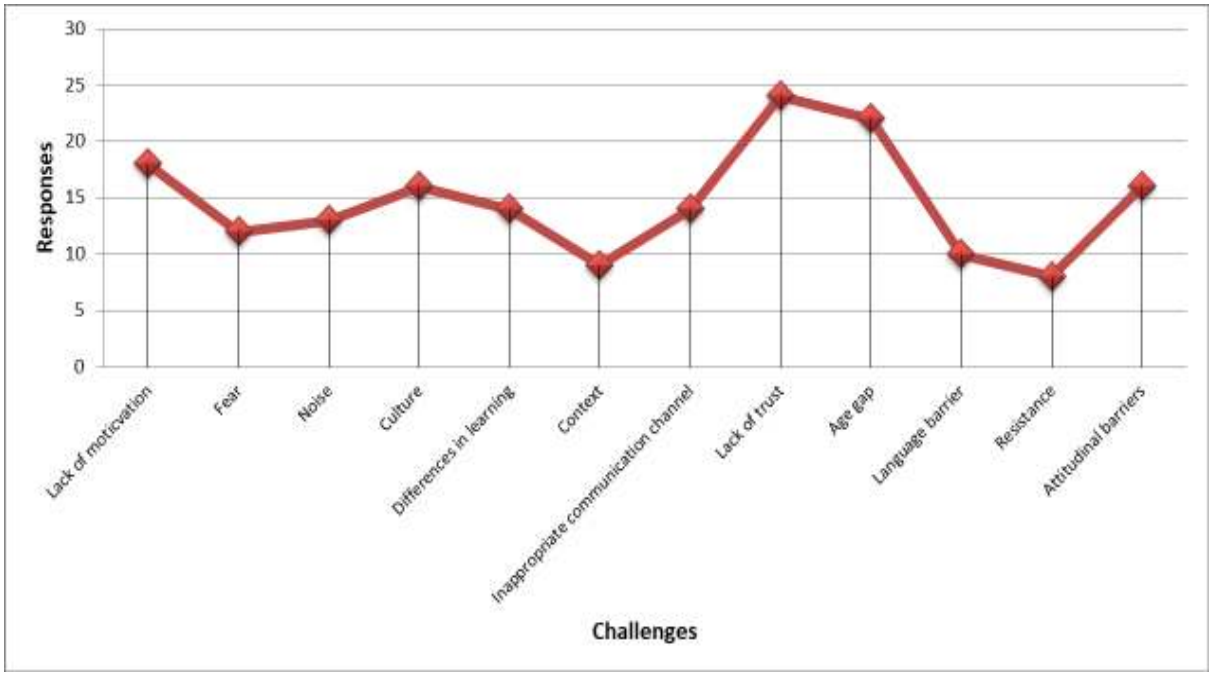

Figure 3: Challenges that hinder transfer of tacit knowledge in a multigenerational workplace

Conclusions and recommendations

The study concluded that KNLS library staff had accumulated a wealth of knowledge, expertise and experiences, which should be tapped, used to improve library operations, re-engineer existing services, and attain a competitive edge. Generally, tacit knowledge was shared through informal communication and interactions. A lack of motivation and knowledge management strategies and policies compounded with knowledge hoarding hindered the effective transfer of tacit knowledge at KNLS and could lead to knowledge loss. The study concurs with Leonard and Swap (2014) who concluded that recovering losses associated with tacit knowledge gap can be costly and time-consuming or impossible to replace.

The study recommends that KNLS should formulate a knowledge management policy, motivate staff, carry out a knowledge audit, inculcate a knowledge sharing culture and continue to train and develop its staff. The study also recommends that the KNLS management capture and harness the wisdom, expertise and experiences embedded in the minds of older employees before they leave the organisation through brainstorming and mentoring of younger employees.

The study proposes a model to enhance the transfer of tacit knowledge at KNLS. The model presents five stages that would ensure a smooth transfer of tacit knowledge. This is summarised in Figure 4.

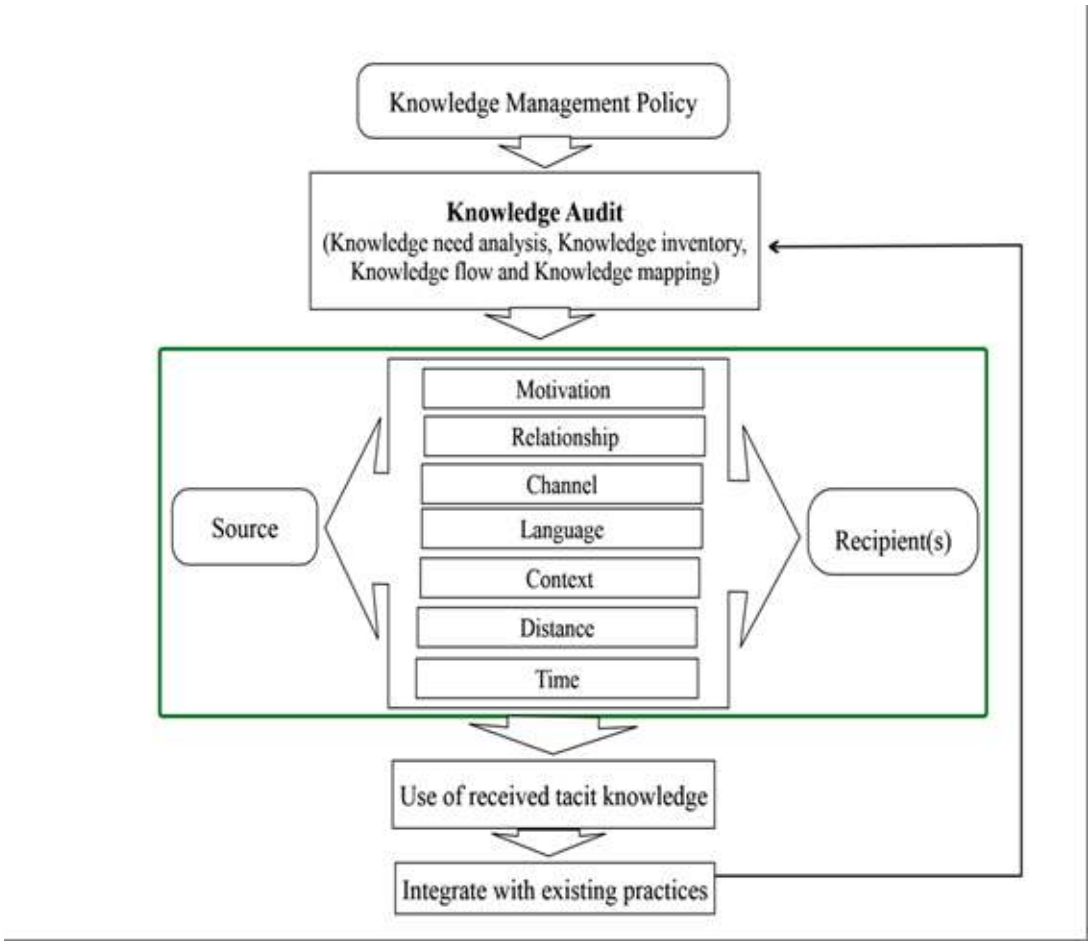

Figure 4: Proposed model for transfer of tacit knowledge at KNLS

Stage 1: Knowledge management policy (KMP)

Intellectual capital is the foundation for the creation and protection of an organisation's value. A knowledge management policy would foster knowledge management initiatives, procedures and tools that will enable KNLS to truly and effectively exploit its intellectual capital.

Stage 2: Knowledge audit (KA)

A knowledge audit is a view of the organisation's knowledge assets and associated knowledge management systems. Knowledge auditing will facilitate a detailed examination, review, assessment and evaluation of KNLS' knowledge abilities, its

existing knowledge assets and resources, and its knowledge management activities. Knowledge audit would help to determine the knowledge being managed and how well it is being managed. Knowledge audit has four components, namely:

Knowledge needs analysis

This component identifies knowledge KNLS library staff possess, and what they would require in future in order to meet the institution's objectives. The knowledge needs analysis will assist KNLS to develop future strategies and measure the library staff skills, competency enhancement needs, and opportunities for training and development.

Knowledge inventory

This component is a knowledge stock taking exercise to identify and locate knowledge assets and resources throughout the KNLS as an organisation.

Knowledge flow

This component looks at the flow of knowledge in the institution. It examines attitudes, habits, behaviours, and skills in knowledge sharing, use and dissemination. This component would examine how the library staff in the institution go about their daily work activities and how they seek, share, transfer and use their knowledge. This component further allows the institution to identify knowledge gaps and areas of duplication. It would generally highlight the areas of good practice that can be built on as well as barriers to knowledge flow and effective use.

Knowledge mapping

A knowledge map is defined as an on-going joint quest to help discover the constraints, assumptions, allocation, ownership, value and use of knowledge assets, artefacts, people and their expertise. It is a component that uncovers blocks to knowledge creation, and finds opportunities to leverage existing knowledge. It would show the knowledge which exists at KNLS and where it can be found. It would direct how knowledge moves around the organisation from where it resides, to where it is required. It identifies constraints to the flow of knowledge and highlights opportunities

to leverage existing knowledge. It discovers effective and emergent communities of practice where learning is happening.

Stage 3: Tacit knowledge transfer process

This is the stage where tacit knowledge is shared and transferred between the source and the recipient(s). It is influenced by the following factors:

Source

This is the provider or presenter of the know-how, skills, experiences and expertise. The source in the proposed tacit knowledge transfer model can also act as the recipient in the communication process.

Recipient(s)

The recipient in the proposed tacit knowledge transfer model receives the knowledge from the source. Given that this is a multidirectional process, the recipient can also act as the source in the transfer of tacit knowledge.

Motivation

This ingredient enables sharing and transfer of tacit knowledge. Motivated employees go to higher levels to ensure that they meet the targeted goals at all times. They always put the organisation first before their own interests. The source needs motivation to share and transfer his or her expertise, know-how, experiences and skills. The source also needs recognition, rewards and incentive for work well done. The recipient, on the other hand, requires motivation to enable him or her to absorb and retain the knowledge. An unmotivated recipient tends to be busy, making unnecessary noise in the background as well as causing disruptions. Recipients who are not motivated resist change and may use all means to resist the absorption of expertise and know-how.

Relationship

The source and the recipient should have a good relationship in order to facilitate the transfer of tacit knowledge. The relationship between the two needs to be intact and built on trust to ensure that none of them has ill feelings of the other.

Language

The language used by the source when transferring his/her expertise, know-how, skills, ideas and experiences should be understood by the recipient(s). The transfer process significantly depends on the communication abilities of both the sender and the receiver. They both should have a common language to make transmission and absorption of tacit knowledge easier and faster.

Context

Context is a framework that embeds the behavioural and structural aspects of an organisation. This includes organisational knowledge sharing culture, organisational structures and climate.

Distance

Distance between the source and the receiver is a significant factor in the transfer of tacit knowledge. There should be physical and social interactions such as face to face contact of the participants to facilitate tacit knowledge transfer.

Time

Time is a scarce resource. Transference of tacit knowledge is time-consuming. Therefore, quality time for interaction should be allocated to facilitate the transfer of tacit knowledge.

Stage 4: Use of the received knowledge

Tacit knowledge is identified as transferred when the recipient uses or applies it.

Stage 5: Integration of the new knowledge with existing practices

The expertise, skills and know-how can be embedded in the daily routines, procedures and can be used to improve performance, reengineer existing services and enhance the competitive edge.

Stage 6: Loop

After integration of new knowledge with existing practices, the loop goes up to the audit level. The new knowledge integrated with existing practices should be audited.

Today, knowledge is vital for the survival of any organisation. In the current knowledge-based economy, gaining a small advantage over competitors carries an organisation a long way. Private libraries, cyber cafés, resource centres and

information bureaus are on the lookout for possibilities of exploring the optimal exploitation of intangible assets to attain a competitive advantage. The findings of this study may assist the Kenya National Library Service to leverage available resources and utilise its intellectual capital to enhance creativity as well as innovate existing services to attain a competitive advantage. Knowledge management practices provide effective management of intellectual capital, which leads to effective dissemination of library services and user satisfaction.

This study is significant to KNLS and information centres because it suggests ways to identify, share, and transfer tacit knowledge that exists within libraries and utilise it to enhance learning and performance. This study may also benefit KNLS and other institutions by identifying ways of retaining and motivating staff in order to get an excellent output from them. The findings of the study may also enable libraries and other related organisations to identify and address the challenges that hinder the transfer of tacit knowledge. This study acts as a guide to KNLS and various information centres in the formulation and implementation of strategies and policies to enhance a smooth transfer of know-how, expertise and experience. This would pave the way to tapping invisible reservoirs of experience for creativity and innovation of library services.

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