Motivators and Inhibitors of Knowledge sharing in public universities in Kenya

Nancy M. Kimile[1] and Harrison Bii[1]

[1]Maasai Mara University, P. O. Box 861-20500 Narok, Kenya,
Email: kimilenancy@gmail.com

[1]University of Kabianga, P. O. Box 2030-20200, Kericho, Kenya
Email: jhkbii@gmail.com

Abstract

Knowledge sharing at individual and organizational levels enhances knowledge creation, organizational learning and performance achievement and consequently improving competiveness. Effective knowledge sharing requires a good understanding of its enablers, to be sustained, and inhibitors, to be avoided. Very little research has been done on this in Kenya. To bridge this gap the study determined motivators and inhibitors of knowledge sharing among the academia in Kenya. The study was informed by Bandura's Social Cognitive Theory (SCT) in assess both intrinsic and extrinsic factors that motivate or inhibit academic staff as knowledge creators to share their knowledge. The objectives of the study were: to determine motivators and inhibitors of knowledge sharing in public universities in Kenya; Establish strategies that may be adopted to mitigate the inhibitors and propose solutions for effective Knowledge sharing in public Universities in Kenya. The researcher adopted a qualitative approach where censuses of 27 deans from four public universities were interviewed. It was established that the most outstanding extrinsic motivators were recognition, shared space necessary for knowledge creation, appropriate technology and promotion. Generally, time, lack of trust and fear of loss of power were major inhibitors to knowledge sharing. It is recommended that the selected Public Universities should adopt strategies that motivate staff both intrinsically and extrinsically in order to leverage on their knowledge for the organization to be more innovative, efficient and effective for competitive advantage.

Key Words: Knowledge Management; Knowledge Sharing (KS); Motivators to KS; Inhibitors to KS; Social Cognitive Theory (SCT)

1. Introduction

Today's society is in a transition from information to a knowledge-based one where knowledge is the most important resource for individuals and organizations. Knowledge contributes to an organizations creativity and innovativeness leading to its competitive advantage (Wang & Noe, 2010). It is important to note that, the economics of knowledge differ from those of ordinary goods and services. Knowledge can produce economic value to its creator and when shared, it benefits many others such as an entire organization. Hence, value of knowledge to society increases when it is shared and used by others (Hogan, 2011). Therefore, knowledge is the most important resource of a firm (Wang & Noe, 2010). Knowledge must be shared to create a sustainable competitive advantage for universities who are key producers of knowledge.

1.1 The concepts of data, information and Knowledge

It is important to understand the following related terms in the context of knowledge. These terms include data, information, knowledge, knowledge management and eventually knowledge sharing as part of knowledge management. According to Davensport and Prusak (2000), knowledge is rooted in information and information in turn, originates from data. Data has been defined as raw facts, observations or perceptions (Bhatt, 2001; Becerra-Fernandex, leidner & Armony, 2008). Information on the other hand, involves the

manipulation of raw data to obtain a more meaningful indication of the trend or pattern in the data (Becerra-Fernandex, Leidner & Armonk, 2008).

Although, the word knowledge is commonly used, it is not easy to define. Knowledge and information have been used interchangeably; however, they are two different concepts (Wang & Noe, 2010). Various scholars define knowledge from any of the following points of view: mind-made meaning of data and information, ideas, facts, expertise, judgments, and intuitions, among others (Wang & Noe, 2010). Knowledge is applicable for individual, team and organizational performance. Mutula and Wamukoya (2007) articulate the following knowledge assets in organizations: opinions, actions, pronouncements, minutes of meetings, presentations, websites/portals, databases, e-mails, records management systems, integrated financial management systems, communication systems, human resource management systems, communication systems or e-commerce. All these represent aspects of both tacit and explicit knowledge which have to shared in an organization to give it a competitive edge or success

Knowledge can be categorized into different types as follows: hard and soft (Huber, 1991), formal and informal (Conklin, 1996), proprietary, public, personal, and commonsense (Boisot, 1995), embraced, embodied, embedded and encoded knowledge (Blackler, 1995), tacit and explicit (Polanyi, 1966; Nonaka and Takeuchi, 1995; Argote and Ingram, 2000; Probst, Raub and Romhhardt, 2000). The study adopted the later, explicit-tacit dichotomy. The focus was particularly

concerned with tacit knowledge and its codification to explicit knowledge for ease of sharing in an organization. Explicit knowledge refers to the fact that knowledge is expressed in words and numbers, it can easily be codified or articulated and shared (Pan & Scarborough, 1999). On the contrary, tacit knowledge is quite challenging to express and share, such as intuitions and insight (Mutula & Wamukoya, 2007). Notwithstanding, tacit knowledge has to be shared in order to add value to an organization.

1.1.1 Knowledge management (KM)

There is no consensus on the concept of KM. Different authors and different disciplines have provided diverse definitions. Most of these definitions aim at creation, capture, sharing and application of knowledge for the success of a firm (Barcerra-Fernandez, Conzalez, Sabherwal, 2004). It entails a progression of knowledge from individual to group (CoPs) to organization and eventually to international levels. Proper knowledge management is a daunting task, which ensures all the processes are well coordinated. Knowledge management to be effective individual knowledge has to be shared with colleagues/CoPs (Davensport and prusak, 1998) and captured and stored for the benefit of the organization. The major focus of KM is to ensure that, knowledge which is personal and residing in individuals becomes organizational knowledge which is critical for the success of the organization (Ipe, 2003).

1.1.2 Knowledge sharing (KS)

Knowledge sharing helps to collaborate to solve problems, develop new ideas/knowledge or implement policies or procedures, or just exchanging knowledge (Van Den Hoof & de Ridder, 2004; Wang & Noe, 2010). KS can be seen as a dual process where knowledge is exchanged through informal conversations, mentorship programs, online databases among others and it entails both seeking and providing knowledge (Cabrera et al, 2006). The main

goal of KM is to ensure knowledge flows around the organization. This flow depends on knowledge sharing to be effective. Therefore, knowledge sharing facilitates improved individual and organizational performance (Verburg & Andriessen, 2011). Knowledge sharing in the context of knowledge management has various benefits such as: reduced production costs, faster completion of new products development, team performance, firm innovation and performance, and improved decision making, among others (Becerra-Fernandex, Leidner & Armonk, 2008). Ideally, Knowledge management initiatives strongly depend on the individual knowledge sharing for success (Wang & Noe, 2010). On the other hand, the application of technology can only solve part of the problem (Cabrera, Collins & Salgado, 2006). The use technology ensures faster distribution of explicit knowledge at the point of use (Cabrera, Collins & Salgado, 2006) and it can also be used for tacit knowledge sharing over telecommunication lines.

Knowledge sharing involves the exchange of knowledge to create new knowledge or even working together towards a common goal (Van Den Hoof and de Ridder, 2004). Knowledge sharing is influenced by various factors that can be categorized as individual factors, Organizational factors and finally, technological factors (Riege, 2005).

1.1.3 *Motivation*

Motivation can be referred to as the psychological processes that give people energy and drive/desire for certain actions (Ryan & Deci, 2001). When a person is driven and activated for certain actions one is considered motivated. In the context of this study one willing to share his/her knowledge is considered motivated towards this action or considered to have a knowledge sharing behavior. Motivation has been emphasized as critical in explaining individual behavior, including

knowledge sharing (Bock and Kim, 2002). Motivators, both monetary and non-monetary are key enablers to making employees share their knowledge. These motivators can have either intrinsic or intrinsic impact depending on unique individual needs. On the contrary, the absence of motivators leads to inhibitors or the unwillingness of staff to share.

1.1.4 *Motivators of knowledge sharing (KS)*

Knowledge sharing among individuals can be hampered by lack of motivation to share their knowledge (Mahmood, Quresh and Shabaz, 2011). Mahmood, Qureshi and Shahbaz (2011) further, they opine that particularly tacit knowledge sharing is a voluntary act and sharing of quality knowledge by knowledge workers is only possible if individuals are willing to share. According to Wenger (1998) the advantages of KS are twofold: they give both the eggs and the goose that lays them. This means that the organization or university must appreciate the goose (knowledge worker) and to understand how to keep it alive and productive via motivation (Wenger & Snyder, 2000). This can be done through both extrinsic and intrinsic motivation.

There are various motivators and inhibitors to knowledge sharing. Therefore, to share knowledge effectively, knowledge workers have to be motivated either intrinsically or extrinsically. Incentives can motivate both extrinsically or intrinsically, such as participation making the job easier for an employee (Robbins and Judge, 2005). Other ways are a conducive work environment or provision of appropriate ICT infrastructure among others. Ipe (2003) feels that knowledge sharing is a function of reciprocity, friendship and rewards.

Incentives can either be financial and non-financial rewards or both. Generally, findings indicate non-financial rewards motivate much more than financial rewards

(Simon, 1991; Osteroh & Frey, 2000). Osterloh & Freys (2000) research on intrinsic and extrinsic motivation for knowledge sharing suggest that intrinsic motivates are more powerful enablers of such sharing than extrinsic (e.g. Monetary or administrative stimuli). Theories that emphasize intrinsic motivation, on the other hand, view workers as social beings striving to fulfill innate human needs (intrinsic).Surprisingly, a supply of hygiene factors such as salary, status and quality supervision will not result in greater motivation although a deficit of them will result in demotivation. They mainly increase competition which dilutes the intention of sharing (Kim, 2002). Herzberg theory is relevant when studying the factors influencing the motivation for knowledge sharing. This is where people share because they expect or hope for recognition and appreciation of their work, promotional opportunities or because of a sense of responsibility (Constant et al., 1994; Jarvenpaa and staples, 2001; Cameron & Pierce, 1997).

It is important to note that people share their knowledge expecting something in return/ Reciprocity (Davensport & Prusak, 1998; Stenmark & Turning, 2000). According to Eleveth (2014) facilitating the exchange of benefits or rewards between members strengthens the connections, thereby increasing the potential for spreading activation, innovation, problem solving etc. Olje, Mazleena and Noorminshah (2011) say that the fundamental assumption is that workers can be motivated with the economic threat/reward systems and would increase their output according to incremental financial incentives – work behavior is therefore logical, predictable and manageable. Furthermore, Van den Hoof et al. (2004) opines that, management need to motivate professionals via socialization process of commitment, respect and recognition. To create motivation factors such as recognition for achievement, an interesting job and advancement must exist (Olje, Mazleena and Noorminshah, 2011).

Universities need to develop incentives that are either monetary, non-monetary or both to motivate people to share. They can ensure interactions between the expert and the novice by letting then bond as mentor and apprentices. At the same time create an environment/climate (Bock & Kim, 2005) that facilitates knowledge sharing among members of an organization such as conducive work environment, appropriate ICT infrastructure, conducive 'ba' among others. The trust of the employees in the organization is seen in their commitment to share and this can particularly be motivated by expected benefits (Ruguillies, 2003; Riege, 2005; Garfield, 2006).

1.1.5 Inhibitors of Knowledge Sharing
There are a number of diverse aspects that are likely to affect intention to share knowledge. These may include culture and demographic characteristics such as gender. Lu & Koch (2006) say that women tend to spend more time providing assistance to others than men and so have a positive attitude toward knowledge sharing. However, Makela, Andersson & Seppala (2011) found that, in the context of muiltinational corporation gender's influence on knowledge sharing attitude was insignificant. Further, Li et al. (2007) in a study of employees in Chinese company found out that culture had little influence on their intention not to share. Rather the reluctance to share was linked to the competiveness in the organization.

Some researchers do, however emphasize financial rewards as important means of facilitating knowledge sharing (Foss,2003; Nickerson & Zenger, 2004), but the dominating logic in research on knowledge sharing is that even though knowledge might be .considered as yielding power, and individuals seek self-interest, knowledge

sharing can definitely be facilitated by non-financial rewards. At the same time, It is important to note that knowledge sharing cannot be forced but need to be nurtured. Hence the atmosphere of caring, interaction, trust and respect need to be provided. Tacit knowledge can help improve existing organizational practices and fuel the innovation process.

Personality, attitude, work norms, vocational reinforces, organizational factors, policies and strategies are some of the impediments to KS (Awade et al., 2004). An individual's beliefs play a part in KS. When an individual believes that sharing is good and beneficial for organization and is aware that, he/she will be recognized and given credit for his/her contribution then the worker is likely to initiate sharing (Riege, 2005). According to Eveleth (2014) tacit knowledge provides the greatest opportunity to develop a source of sustainable competitive advantage in universities. However the very characteristics that make tacit knowledge potentially sustainable source of competitive advantage also advance characteristics that also make it hard to manage tacit knowledge and use.

In universities, academic workload contributes negatively in participating in KS. At the same time KS can aid in personal development where novice collaborates with an expert specialist (Van Winkelen, 2003).While one of the roles of KM processes and systems is to create, store and share explicit knowledge (Codified). The ability to use such processes and systems to successfully manage tacit (Un-codified) knowledge provides the greatest opportunity to develop a source of sustainable development (Harlow, 2008).

Riege (2005) summarises inhibitors into three levels:

- Individual level: lack of communication skills and social networks, differences in national culture, differences in position status, lack of time and trust.
- Organizational level: lack of infrastructure or support environment
- Technological level Correlated with peoples unwillingness to use applications and systems

1.2 *Theoretical Framework*

The study was informed by Bandura's Social Cognitive Theory (SCT) (1986). The social cognitive theory is a psychological theory that tries to explain why human beings behave the way they do (Bandura, 1986). It emphasizes on motivation and self-regulation of cognition in human behaviour (Bandura, 1986).

The study examined the positive relationship between intrinsic and extrinsic motivation and how they produce the outcome of knowledge sharing Behaviour. The social cognitive perspective looks at human Behaviour as triadic, dynamic and reciprocal interaction of personal factors, Behaviour and environment (Bandura, 1985). A person's own reality is thus defined as the interaction of the environment (extrinsic motivation) and ones cognition, which can change over time over a learning process. The challenge for organizational management is to effectively analyze how the organizational environment (extrinsic) can influence intrinsic motivation and how this individual behavior can shape the organizational environment in a reciprocal interaction. An individual who is either intrinsically or extrinsically motivated can be actively involved in knowledge sharing for the benefit of the organization.

Bandura's Social Cognitive Theory proposes the following factors in relation to motivation: Bandura's self-efficacy asserts

that motivation can be cultivated through self-evaluating mechanism (Bandura, 1982; 1997). Self-efficacy can provide intrinsic motivation to share knowledge. Hence, it is important for an organization to foster self-efficacy. In other words self-efficacy refers to ones confidence to share with others.

Vicarious learning refers to an observer who learns from the behavior and consequences experienced by a model than from outcomes stemming from him/her performance (Goias & Manz, 1985). An individual gets the incentive to share by modifying behavior through vicarious learning or from observing the actions of others and internalizing new behaviour. This can be well demonstrated by mentorship or learning from others, especially as people work together in groups, where the novice learns from leaders or experienced knowledgeable members. The organization can put mechanisms in place to ensure employees have opportunities for vicarious learning. Vicarious learning can well be actualized in seminars, workshops, conferences among other knowledge sharing fora. These are key forums that an organization can support in an organization/University and can foster both self-efficacy and vicarious learning which are crucial in motivating KS. Reciprocity refers to the perceived fairness of the individuals involved in a knowledge sharing process. This means, having benefited from knowledge sharing one is likely to share ones knowledge in return.

Generally, Bandura's Social Cognitive Theory covers diverse issues of analysis of an individual as part of a social system. The study will focus mainly on intrinsic and extrinsic motivation which can be understood in the context of self-efficacy, vicarious learning, reciprocity and triadic reciprocal determinism. This is evident in the relationship between motivation and the environment in turn affecting behavior. It

can therefore be inferred that the willingness to share knowledge with others can be referred to as interplay of triadic reciprocal determinism.

A review of literature on KM and KS in Kenya, revealed that most studies concentrate on knowledge management (Mosoti & Masheka, 2010; Jagongo & Owino, 2012) and Knowledge sharing (Kahinga, 2014; Wamitu, 2015). There were limited visible studies on knowledge sharing in academic institutions in Kenya. The aim of this study was to assess the motivators and inhibitors of knowledge sharing among the academia in selected public universities in Kenya in order to fill this gap.

1.3 Objectives of the study
1. Determine motivators and inhibitors of KS in public universities in Kenya;
2. Establish strategies that may be adopted to mitigate the inhibitors;
3. Propose solutions for effective KS in public universities in Kenya

2. Research Methodology
Descriptive design was adopted for the study as it is flexible and focused on understanding and providing an in-depth description of knowledge sharing in selected public universities in Kenya. The study used the qualitative methodology to understand the subjectivity of the social phenomena such as KS. A multi-case study provided the constant comparative approach and insight into a complex social process of knowledge sharing (Lincoln & Guba, 2005; Eisenhardt and Graebner, 2007). A multi-case approach is appropriate for developing richer interpretations of phenomena, replication and also provides scientific rigor or robustness of the study (Yin, 1984; Bhattacherjee, 2012). Data was collected from four universities namely: Moi University, Multimedia, Karatina and Kibabii University respectively. The universities were purposively selected due to

sharing can definitely be facilitated by non-financial rewards. At the same time, It is important to note that knowledge sharing cannot be forced but need to be nurtured. Hence the atmosphere of caring, interaction, trust and respect need to be provided. Tacit knowledge can help improve existing organizational practices and fuel the innovation process.

Personality, attitude, work norms, vocational reinforces, organizational factors, policies and strategies are some of the impediments to KS (Awade et al., 2004). An individual's beliefs play a part in KS. When an individual believes that sharing is good and beneficial for organization and is aware that, he/she will be recognized and given credit for his/her contribution then the worker is likely to initiate sharing (Riege, 2005). According to Eveleth (2014) tacit knowledge provides the greatest opportunity to develop a source of sustainable competitive advantage in universities. However the very characteristics that make tacit knowledge potentially sustainable source of competitive advantage also advance characteristics that also make it hard to manage tacit knowledge and use.

In universities, academic workload contributes negatively in participating in KS. At the same time KS can aid in personal development where novice collaborates with an expert specialist (Van Winkelen, 2003).While one of the roles of KM processes and systems is to create, store and share explicit knowledge (Codified). The ability to use such processes and systems to successfully manage tacit (Un-codified) knowledge provides the greatest opportunity to develop a source of sustainable development (Harlow, 2008).

Riege (2005) summarises inhibitors into three levels:
- Individual level: lack of communication skills and social networks, differences in national culture, differences in position status, lack of time and trust.
- Organizational level: lack of infrastructure or support environment
- Technological level Correlated with peoples unwillingness to use applications and systems

1.2 *Theoretical Framework*

The study was informed by Bandura's Social Cognitive Theory (SCT) (1986). The social cognitive theory is a psychological theory that tries to explain why human beings behave the way they do (Bandura, 1986). It emphasizes on motivation and self-regulation of cognition in human behaviour (Bandura, 1986).

The study examined the positive relationship between intrinsic and extrinsic motivation and how they produce the outcome of knowledge sharing Behaviour. The social cognitive perspective looks at human Behaviour as triadic, dynamic and reciprocal interaction of personal factors, Behaviour and environment (Bandura, 1985). A person's own reality is thus defined as the interaction of the environment (extrinsic motivation) and ones cognition, which can change over time over a learning process. The challenge for organizational management is to effectively analyze how the organizational environment (extrinsic) can influence intrinsic motivation and how this individual behavior can shape the organizational environment in a reciprocal interaction. An individual who is either intrinsically or extrinsically motivated can be actively involved in knowledge sharing for the benefit of the organization.

Bandura's Social Cognitive Theory proposes the following factors in relation to motivation: Bandura's self-efficacy asserts

that motivation can be cultivated through self-evaluating mechanism (Bandura, 1982; 1997). Self-efficacy can provide intrinsic motivation to share knowledge. Hence, it is important for an organization to foster self-efficacy. In other words self-efficacy refers to ones confidence to share with others.

Vicarious learning refers to an observer who learns from the behavior and consequences experienced by a model than from outcomes stemming from him/her performance (Goias & Manz, 1985). An individual gets the incentive to share by modifying behavior through vicarious learning or from observing the actions of others and internalizing new behaviour. This can be well demonstrated by mentorship or learning from others, especially as people work together in groups, where the novice learns from leaders or experienced knowledgeable members. The organization can put mechanisms in place to ensure employees have opportunities for vicarious learning. Vicarious learning can well be actualized in seminars, workshops, conferences among other knowledge sharing fora. These are key forums that an organization can support in an organization/University and can foster both self-efficacy and vicarious learning which are crucial in motivating KS. Reciprocity refers to the perceived fairness of the individuals involved in a knowledge sharing process. This means, having benefited from knowledge sharing one is likely to share ones knowledge in return.

Generally, Bandura's Social Cognitive Theory covers diverse issues of analysis of an individual as part of a social system. The study will focus mainly on intrinsic and extrinsic motivation which can be understood in the context of self-efficacy, vicarious learning, reciprocity and triadic reciprocal determinism. This is evident in the relationship between motivation and the environment in turn affecting behavior. It

can therefore be inferred that the willingness to share knowledge with others can be referred to as interplay of triadic reciprocal determinism.

A review of literature on KM and KS in Kenya, revealed that most studies concentrate on knowledge management (Mosoti & Masheka, 2010; Jagongo & Owino, 2012) and Knowledge sharing (Kahinga, 2014; Wamitu, 2015). There were limited visible studies on knowledge sharing in academic institutions in Kenya. The aim of this study was to assess the motivators and inhibitors of knowledge sharing among the academia in selected public universities in Kenya in order to fill this gap.

1.3 Objectives of the study
1. Determine motivators and inhibitors of KS in public universities in Kenya;
2. Establish strategies that may be adopted to mitigate the inhibitors;
3. Propose solutions for effective KS in public universities in Kenya

2. Research Methodology
Descriptive design was adopted for the study as it is flexible and focused on understanding and providing an in-depth description of knowledge sharing in selected public universities in Kenya. The study used the qualitative methodology to understand the subjectivity of the social phenomena such as KS. A multi-case study provided the constant comparative approach and insight into a complex social process of knowledge sharing (Lincoln & Guba, 2005; Eisenhardt and Graebner, 2007). A multi-case approach is appropriate for developing richer interpretations of phenomena, replication and also provides scientific rigor or robustness of the study (Yin, 1984; Bhattacherjee, 2012). Data was collected from four universities namely: Moi University, Multimedia, Karatina and Kibabii University respectively. The universities were purposively selected due to

their fit into the four quotas that represent the university's age in terms of when they were established. Purposive or judgemental sampling was used to select a census of all Academic deans as respondents. Out of 30 deans, 27 were successfully interviewed. A review of relevant literature such as policies was also conducted. The study adopted thematic analysis approach.

3. Discussion

The study sought to establish the motivators and inhibitors of knowledge sharing in the 4 institutions/Universities with the aim of providing solutions. Out of 30 deans 27 deans were successfully interviewed. 27 deans of the 4 Universities gave responses regarding their motivation to knowledge sharing, inhibitors to knowledge sharing and proposed mitigation measures.

3.1 Satisfaction with knowledge sharing

In order to determine what motivates academics to share their knowledge the academic deans were first asked whether they were satisfied with knowledge sharing in their institutions. The data revealed that, a majority of the deans of schools/faculties were not satisfied with knowledge sharing strategies adopted in their institutions in terms of number of seminars, workshops and conferences; mentorship programs; conducive work environment, appropriate technology for knowledge sharing among other knowledge sharing strategies. These KS strategies facilitate self efficacy, vicarious learning and reciprocity which help enhance KS in an organization. Only one dean from Multimedia University indicated satisfaction with knowledge sharing strategies in their institution. In addition, dean two, three and four from Karatina University commented that there is more to be done.

The study further sought to find out their reasons for dissatisfaction and they gave the following reasons why they were not satisfied as: Need for facilitation, lack of a policy framework to guide the process, not consistent and sometimes even non-existent incentives. In addition, there was lack of a policy to enforce a knowledge sharing culture.

Thus, motivation is essential in ensuring that, the objectives of knowledge sharing are met because knowledge does not move without force and people will not give away valuable possession such as knowledge without concern for what they stand to gain or lose in this 'informal transaction' (Stenmark and Turning, 2000).

3.2 Factors that motivate knowledge sharing

All the 27 deans agreed that there are factors that enable knowledge sharing in their institution both at personal and institutional level. Among the factors they suggested were: Personal which included; self-efficacy and vicarious learning while the institutional factors included promotion, recognition for contribution to research, facilitation to present in conferences, incentives, conducive environment, adequate ICT infrastructure, mentorship, reliable network and research policy. Whereas earlier studies reported that, factors such as salary, status and quality supervision resulted in greater motivation (Bock & Kim, 2002). In the current study it was found that salary was not the main motivator but the end result of knowledge sharing. The findings further revealed that, knowledge sharing strategies provide opportunities for KS and for vicarious learning (Learning from another person's performance) which impacts positively on their self-efficacy enhancing their KS in the organization.

With regard to incentives provided for staff to share their knowledge, the deans identified monetary incentives such as facilitation to conferences and research funds and non-monetary incentives such as research policy, promotion, recognition,

reputation, appropriate ICT infrastructure and friendly work environment. There are various motivators to knowledge sharing. Therefore, knowledge workers have to be motivated either intrinsically or extrinsically. The various deans' responses towards monetary and non-monetary motivators were quoted verbatim as follows:

> "Non-monetary has a more enduring value and most of the time eventually leads to promotion."

> "Both were important, as one leads to the other"

> "I prefer non-monetary especially recognition. I remember when I wrote on the Ten Miles Coastal strip. The recognition I got made me very happy. The work has been quoted extensively and elucidated a lot of interesting debate."

> "Both, monetary gratifies on the moment while non-monetary takes time to show benefits. One leads to another."

> "We need to create a knowledge sharing culture, improve the incentives so that people share more e.g. facilitation, train and create awareness on modern knowledge sharing tools."

The findings agree with those of Van den Hoof et al. (2004) who felt that management need to motivate professionals via socialization process of commitment, respect and recognition. Other deans also indicated that both were equally important with some highlighting the non-monetary compared to the monetary incentives in agreement with Osterloh & Freys (2000). Generally, findings on intrinsic and extrinsic motivation for knowledge sharing suggest that intrinsic motives are more powerful enablers of such sharing than extrinsic (e.g. Monetary or administrative stimuli).Notwithstanding, incentives can either be financial and non-financial rewards to meet different individual needs. The general feeling was that non-financial rewards are much more important than financial rewards a view that concurs with Osteroh & Frey (2000) finding on motivation. In most of the institutions the general feeling was that both intrinsic and extrinsic motivators from their institutions were in their infancy which implies that, the motivation levels in their institutions was minimal. This finding agrees with Mahmood, Quresh and Shabaz (2011) who indicated that knowledge sharing among individuals can be hampered by lack of motivation to share their knowledge.

The majorities of the deans were highly experienced academicians and said they shared knowledge because it was the natural thing for them to do. This finding agrees with the finding by Wasko and Faray (2005) whose finding indicated that self-efficacy was a strong motivator among academicians. This is also sign of confidence and the need for reputation or even recognition. The deans also indicated that, they have played an important role in helping younger academicians in mentor and apprentice relationship. This finding was particularly evident in the science based schools/department where staffs work together in research and where individual work is unacceptable. However, in the arts based Schools/departments there was a tendency towards individual work which can be construed as knowledge hoarding. These findings concur with Van Winkelen (2000) findings that emphasize on the collaboration of the novice and the expert to share knowledge.

3.3 Inhibitors to knowledge Sharing

All the 27 deans indicated that, there were various inhibitors to knowledge sharing in their school/ faculty/ institution. The main inhibitor was found to be lack of time due tight schedules in their assignments in the University. Other reasons identified were: inadequate facilitation, Lack of knowledge sharing culture, non-Conducive work environment, Inadequate incentives to attract

staff. Lack of leadership on this matter, Inadequate funds to support research and guidelines for promotion from CUE that discourage working in large groups. This negates working in groups and can impact on vicarious learning which a strong source of intrinsic motivation is.

The identified inhibitors agree with the categorization by Riege (2005) into three inhibitors levels which are individual level such as lack of time and trust, organizational level such as lack of conducive environment and technological level such as inadequate ICT infrastructure and lack of training on modern ICT tools. The study revealed that, all knowledge sharing approaches have a long-term perceived benefit which is promotion. Hence, this creates an environment of competiveness, which is also an inhibitor of knowledge sharing. Under these prevailing circumstances it's important to nurture reciprocity and trust to guarantee continuous KS. Most of the inhibitors identified concur with the findings of Awade *et al., (*2004).

3.4 Mitigation measures to Knowledge sharing
The academic deans from the selected universities were also asked to give ways through which these identified inhibitors can be mitigated for effective/ efficient knowledge sharing in their schoos/faculty/institutions and their suggestions were as follows: Motivate staff with more incentives; nurture Mentorship programs; strong leadership to ensure knowledge sharing thrives; conducive work environment; policy framework to guide the process; create a knowledge sharing culture and increase research funds among others. Generally, the findings have revealed various elements that significantly determine the motivation to sharing of knowledge in the selected Universities and provided suggestions on how they can be mitigated.

Some researchers however, emphasized on financial rewards as important means of facilitating knowledge sharing as also articulated by the findings by Nickerson & Zenger (2004), but the dominating logic in research on knowledge sharing is that, even though knowledge might be considered as yielding power, and that individuals seem to be self-interest seeking, knowledge sharing can definitely be facilitated by non-financial rewards. It is also important to note that knowledge sharing cannot be forced but has to be nurtured.

Consequently, Universities need to come up with incentives or motivators in order to motivate individuals to share knowledge. In addition, the creation of a friendly work environment and trust goes a long way in motivating individuals to not only just share knowledge but also take an active part in the cultivation of the knowledge sharing culture within a university.

3.4.1 Policy review
While the study revealed that the selected universities rewarded staff for their contribution to knowledge sharing, the study also revealed both non-monetary and monetary incentives provided by the various policies as: Non-monetary incentives were identified as: Promotion; Recognition and acknowledgement via commendation letters while monetary incentives were: Inaugural lecture cash award; Facilitation to conferences; Long service award; Honoraria; endowment fund (Research funds); Teaching staff excellence award; Innovation award. It is important to note that the incentives varied in all the Universities. Multimedia University was the only university among the 4 universities that has a recognition policy that clearly articulated monetary and non-monetary incentives to staff. From the findings we can infer that, the universities provide some form of incentives to staff for their contribution to knowledge sharing both directly and indirectly.

Based on these findings, it was revealed that the universities support knowledge sharing among staff through: policies such as research policy, Seminars, workshops, annual conferences, regular public lectures, postgraduate seminars, Committees, meetings (departmental, school, senate and Management), research funds among others.

4. Conclusion

Generally, the selected public universities have embraced some form of knowledge management of which Knowledge sharing is part. There are various traces of motivators to knowledge sharing in all the Universities selected. However, it is not clear whether there is a deliberate approach to understand motivational effects that influence knowledge sharing among academia. A number of strategies exist that provide opportunities for sharing knowledge such seminars, workshops, conferences, meetings among others, but they may not be well coordinated. This implies that, Universities may not accrue maximum benefits for competitive advantage. It is important for Universities to understand motivational factors that influence knowledge sharing among academics and mitigate all inhibitors for competitive advantage.

5. Recommendations

Owing to the findings of the study, the following recommendations are made to improve motivation for knowledge sharing among academia in the selected public universities:

- University management should appreciate their staff and ensure they are motivated to share their valuable knowledge. This can be done by ensuring both extrinsic and extrinsic motivators are in place to meet their various individual need a this will enhance knowledge sharing for completive advantage to the organization.

- The success of any organization today is dependent on its intellectual capital/knowledge and therefore organizations should leverage on their knowledge to be innovative, efficient and effective and therefore staff must be motivated to share their knowledge. Universities should therefore address both intrinsic (self-efficacy; Vicarious learning) and extrinsic motivators (conducive 'ba'; appropriate ICT infrastructure; Recognition among others) for competitive advantage.

- Develop Knowledge Management Systems to manage organizational knowledge such as an Institutional Repository (IR). This will ensure knowledge flows from the individual (motivated) to the organization for easy sharing in the organization leading to innovations, efficiency and effectiveness hence success of the organization.

- Provision of opportunities for knowledge sharing at all levels i.e. departmental, school/faculty and university-wide. This will enhance self-efficacy and vicarious learning among staff. At the same time, efforts should be made to ensure regular and well-coordinated workshops, seminars, conferences and other meeting places such as cafeterias, open offices, nurture of CoPs and mentorship programs are in place.

- Develop a knowledge sharing culture where efforts are made ensure knowledge flows throughout the organization and staff are motivated to be willing to share and not hoard Knowledge. This can be done by ensuring key organizational knowledge is captured and shared to avoid reinvention of the wheel. Best practices and lessons learnt can be brought to the attention of staff to

6. References

Argote, L. and Ingram, P. (2000), Knowledge transfer: A basis for competitive advantage in firms, *Organizational Behavior and Human Decision Processes*, 82(1), 150-169.

Bacerra-Fernandex, T. O. & Leidner, D., Armonk, M. E. (2008), Knowledge Management: an Evolutionary View, Retrieved from: http:/site.ebrary.com/d/10292209?ppg=3

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman and Company.

Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1982), Self-efficacy mechanism in human agency, *American Psychologist*, 37(2), 1222-147

Battacherjee, A. (2012), *Social Science Research: Principles, methods and practices*, 2nd ed., textbooks Book 3. Available at: http://scholarcommons.usf.edu/oa_textbook/3

Blackler, F. (1995). Knowledge, knowledge work and organizations: an overview and interpretation. *Organization studies*, 16(6), 1021. doi:10.1177/017084069501600605

Bhatt, N. (2000). Organizing Knowledge in the knowledge cycle. *Journal of Knowledge Management*, 4(1), 15-26

Bock, G. W. & Kim, Y. G. (2002), Breaking the Myths of Rewards an Exploratory study of Attitudes about Knowledge Sharing: Examining the roles of Extrinsic motivators, Social-psychological forces, and Organizational Climate, *Information Resource managementJournal*, 15(20), 14-21

Boisot, M. (1995). *Information space: A framework for learning in organizations, institutions and culture*: Thomson Learning

Cabrera, A., Collins, W. C., & Salgado, J. F. (2006). Determinants of individual engagement in knowledge sharing. *The International Journal of Human Resource Management*, 17(2), 245-264. doi: 10.1080/09585190500404614

Conklin, J. (1996). Designing organizational memory: preserving intellectual assets in a knowledge economy. *Group Decision Support Systems*, 1, 362.

Davenport, T. H., & Prusak, L. (2000). *Working knowledge: How organizations manage what they know*: Harvard Business Press.

Davenport, T.H., Prusak, L. (1998). *Working Knowledge: How Organizations Manage what they Know*. Boston: Harvard Business School Press.

Hogan, T. (2011). *An overview of the knowledge economy with focus on Arizona*. Arinzona: Arinzonal State University.

Huber, G. (1991). Organizational learning: The contributing processes and the literatures. *Organization science*, 2(1), 88-115. doi:10.1287/orsc.2.1.88, http://dx.doi.org/10.1287/orsc.2.1.88

Ipe, M. (2003), Knowledge Sharing in Organizations: a conceptual. *Human Resource Management Development Review*, 2(4), 337-359

Lin, H. F. (2007). Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. *Journal of Information Science*, 33(2), 135-149.

Lu, L., Leung, K. & Tiemain. K. P. (2006), Managerial Knowledge Sharing: The Role of Individual Iterpersonal and Organizational Factors, *Management and Organization Review*, 2(1), 15-41. Doi: 10.1111/j.1740-8784.2006.00029.x

Makela, k., Andersson, U., Sepala, T. (2011), Interpersonal Similarlity and Knowledge Sharing within Multinational Organizations, *International Business Review*, 21(3), 439-51. Doi: 10./016/j.ibusreev.2011.05.003

Mutula, S. M., Wamukoya, J. M. (2007). *Web information management: across-disciplinary textbook.* Oxford :Chando's publishing

Nonaka, I, Takeuchi, H. (1995). *The Knowledge-creating Company: How Japanese Companies Create the Dynamics of Innovation.* New York: Oxford University Press

Olje, N. D., Mazleena, S, Noorminshah, A. (2011), Knowledge sharing in the Workplace: Motivators and Demotivators, *International Journal of Managing Information Technology (IJMT),* 3(4).

Pan, Sl. & Scarbrough, H. (1999). Knowledge management in practice: an exploratory case study, *Technology analysis and strategic management,* 11(3), 359-374

Polanyi M. (1966). *The tacit dimension.* Doubleday. Garden City, N.Y.

Probst, G., Raub, S., &Romhardt, K. (2000). *Managing knowledge: Building blocks for success* (Vol. 360): John Wiley & Sons.

Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management,* 9(1), 18-35.

Ryan, R. m. & Deci, E. L. (2000). Self-determination Theory and the Facilitation of intrinsic motivation, social development and wellbeing, *American Psychologist,* 55(1), 68-78

Van den Hoof, B. & de Ridder, J. a. (2004), Knowledge sharing in Context: the influence of Organizational Commitment, Communication Climate, and CMC use on Knowledge Sharing, *Journal of Knowledge Management,* 8 (6), 117-130

Wang, S., Noe, R. A. (2010). Knowledge sharing: a review and directions for the future, *Human Resource Management Review,* 20: 115-131

Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly,* 9(2), 35-57.

Wenger, E. (1998). *Communities of practice: Learning, meaning and identity.* Cambridge: Cambridge University Press

World Bank (2008) Available at: www.worldbank.org/html/afrilink (Accessed on August 23 2015)