

Enhancing Organisational Performance in Kenyan Universities Through Effective Tacit Knowledge Management

Joan Wakasa Murumba
Department of Computer Science and Informatics
Karatina University
jwakasa@karu.ac.ke

Tom Kwanja
Department of Information and Knowledge Management,
The Technical University of Kenya.
tkwanja@yahoo.com / tkwanja@kenpoly.ac.ke

Abstract

Knowledge is an important asset and tacit knowledge is located in the minds of people. To succeed, organisations have to make the best use of their knowledge assets. This can be achieved through diverse initiatives such as mentorship programmes, team learning and development, communities of practice, development of knowledge sharing platforms, storytelling and enhanced channels of communication. Universities, just like all the other organisations must strategically respond to the current developments in the knowledge society and specifically in the management of tacit knowledge assets. This chapter reviews literature on tacit knowledge management to unravel how universities in Kenya manage and utilise their tacit knowledge to improve organisational performance, as well as the challenges they face in this process. The authors propose a tacit knowledge management framework for consideration by universities in Kenya and beyond. The authors reviewed literature on tacit knowledge management in relation to universities in Kenya. They specifically analysed documents on the strategies for managing tacit knowledge as well as the challenges hampering their effectiveness. Well defined organisational strategies, good leadership, knowledge sharing culture, mentorship, communities of practice and customised technology are seen to be catalysts of tacit knowledge management. While, the lack of incentives and rewards, insufficient mentorship programmes and lack of recognition of human capital inhibit tacit knowledge exploitation which negatively influences organisational performance. The authors established critical contributions of tacit knowledge management on organisational performance. These findings may be used to support relevant policy development in academic institutions. Universities may also benefit by implementing or adapting the proposed tacit knowledge management framework.

Keywords: *Knowledge management, tacit knowledge, organisational performance, universities, Kenya*

Introduction

Universities have substantial opportunities to integrate knowledge management initiatives in their institutions to support their mission (Kidwell *et al.*, 2001). Tacit knowledge management activities can be put in place to contribute to the organisational growth and development. Currently, knowledge has become a critical resource for growth and survival in all spheres of life. Countries are able to rise in their socio-economic realm because proper management of knowledge resources provides for low-cost and effective ways for service provision and production of goods (World Bank, 2012).

Tacit knowledge management is the management of individuals with specific know-how. The most important feature of tacit knowledge is the fundamental principle that knowledge is individualistic in nature; it is not easy to extract it from the heads of individuals (Sanchez, 2012). Kwanya (2009) explains that tacit knowledge is personalised and contextualised. Although appropriate management of tacit knowledge enhances organisational performance, not much is known about the management of this resource (Pathirage, Amaratunga & Haigh, 2007). Botkin and Seeley (2001) revealed that 80% of the organisational knowledge is tacit and therefore forms a very important component of the organisational memory. While tacit knowledge is credited for all its potentials and values, its management has not been fully implemented.

The creation and dissemination of knowledge has long been the social role of universities. It has been mentioned that when people leave, their knowledge leaves with them (Pickett, 2004). This chapter has the potential of helping universities to adapt strategies of capturing tacit knowledge before people possessing this knowledge leave the institution. Managing knowledge assets in universities needs to be a daily agenda. These knowledge assets include people (human capital) because a significant proportion of an organisation's knowledge assets is often stored in the minds of its employees; knowledge artefacts (organisational capital) including video tapes, DVDs, databases, books, memos, business plans, manuals, patents and products; structural and procedural assets (organisational capital) manifested in an organisation's actual behaviours such as culture, infrastructure, purpose and strategy; and customer relationship (customer capital). Academicians are a reservoir of tacit knowledge which needs critical management. The authors have examined literature on tacit knowledge management elements, the challenges hampering knowledge management and the impact of tacit knowledge

management. They then propose a framework for managing this important form of knowledge in universities.

Methodology

Using documentary analysis, the authors reviewed literature on the general areas of knowledge management to have a general understanding. Further review was done on tacit knowledge management in organisations and narrowed down to universities in Kenya. A number of factors in tacit knowledge management were explored by means of insightful literature review in order to conceptualise tacit knowledge by identifying components that support tacit knowledge management. In view of this, a new framework for tacit knowledge management is proposed for the universities. Literature was obtained from electronic databases, Internet sources, textbooks and peer reviewed journal articles and publications.

Findings and Discussions

The findings of the study are presented and discussed hereunder.

Knowledge Management in Kenya

The Kenyan government believes in the role of incentives in promoting exploitation of tacit knowledge (GoK, 2007). Many countries in the Sub-Saharan Africa have failed to integrate knowledge management in their operations because knowledge has not been fully embedded despite the presence of ICT policies (Ondari & Minishi-Majanja, 2007). Universities in Kenya are not an exception. The value of ICT has not been fully realised because Kenya has not utilised the potential of technology in development. This is explained by the World Bank's knowledge assessment framework (Ngulube, Shezi & Leach 2009) which noted that the performance of Kenya is below average. According to the frameworks' parameters on education, innovation and ICT, Kenya scored 1.83%, 4.18% and 2.28% respectively (World Bank, 2012). It is worth noting that Kenya is performing poorly especially in education, innovation and ICT by scoring below average in a scale of 1-10.

Tacit Knowledge Management

Tacit Knowledge (TK) is a type of knowledge that cannot be easily expressed because it is engraved in an individual's experience, ideas, values and emotions (Foos, Schum & Rothenberg, 2006). This chapter defines tacit knowledge as knowledge developed and constructed by people which is then shared through social processes.

Poor management and lack of the realisation of the value of tacit knowledge causes a challenge to an institution which would want to remain competitive. This mismanagement of tacit knowledge necessitates a deeper understanding of the construct so that it can be managed competitively to improve performance. Newly created tacit knowledge as well as existing knowledge gets lost through high rate of staff turnovers, retirement, transfers, redeployment, job-hopping, poor organisational culture of sharing, and lack of knowledge management systems, among other contributing factors.

A study of 240 organisations in the United States by Frank, Finnegan & Taylor (2004), indicated that 78% of the lost knowledge resulted from employee turnover. In addition, Kransdorff (2003) reports that losing corporate memory from employees is very expensive. As a result of this knowledge loss, organisations become deficient in managing their knowledge work activities which leads to inefficiency. Retaining knowledge within the organisation is important for competitiveness (Bender & Fish, 2000).

Organisations (irrespective of the sector of economy and size) are faced with tacit knowledge management challenges (Stam, 2009). Preservation of this important resource is susceptible. To ensure tacit knowledge continuity, organisations should devise strategies to reduce this loss. Tacit knowledge, therefore, should not be looked at as an object but instead as a valuable asset created from different knowledge platforms within the universities. There is need to explore tacit knowledge management strategies to ensure business continuity, and by ensuring tacit knowledge continuity the universities can develop competitive advantage through improved performance. Knowledge continuity ensures competitiveness for organisations (Strack, 2008; Stam, 2009), their management and employees.

Scholars and authors in knowledge management literature have identified elements and strategies for the utilisation of tacit knowledge and its management. Others have provided recommendations on the proper management of tacit knowledge after realising its potential benefits. This is displayed in Table 1 below.

Table 1: Tacit Knowledge Management Strategies

Author	Tacit knowledge management strategies
Mungai (2014)	Communities of practice; organisational culture; technology; leadership and organisational processes.
Runyenje (2012)	Tacit knowledge preservation.
Kimile (2012)	Tacit knowledge sharing culture.
Ogare and Othieno (2010)	Converting human capital (tacit knowledge) into structural capital (explicit).
Mosoti and Mesheka (2010)	Organisational culture; organisational strategy and organisational leadership.
Wangari (2009)	Organisational and knowledge strategy.
Ragins and Verbos (2007)	Clear vision and strategy.
Kimile (2006)	Integrating knowledge management technology and communities of practice.
Herbert (2000)	Tacit knowledge is a major asset for competitive advantage.
Darwin (2000)	Mentorship programmes - enhance professional and career development through transfer of knowledge, skills, values and attitudes from a senior staff to a junior colleague.

Challenges in Tacit Knowledge Management

Tacit knowledge management is faced by a number of challenges as illustrated in Table 2 below.

Table 2: Challenges of Managing Tacit Knowledge

Author	Challenges of tacit knowledge management
Wamitu (2016)	Lack of attention to tacit knowledge; tacit knowledge is lost as a result of retirement and lack of trust.
Gitonga (2016)	Unfit mentor-mentee match and ratio; work overload; shortage of qualified staff; lack of support from mentors and institutions; inadequate time for mentorship; lack of recognition of mentors; unfitting personality traits; communication difficulties, and external interruptions.
Cummins (2004)	Low incentives (financial and non-financial); inadequate infrastructure and difficulties in capturing tacit knowledge.

Knowledge Management Frameworks/Models

The authors identified the gaps in the frameworks that can positively contribute to tacit knowledge management. It is important to note that tacit knowledge is not visible enough yet it is an asset in knowledge management. A summary of available knowledge management frameworks in the knowledge management literature is provided in Table 3.

Table 3: Knowledge management frameworks/models

Name	Author	Model	Gaps and success factors
Knowledge-Based Theory of a Firm.	Kogut and Zander, 1992.	Emphasised the strategic importance of knowledge as a source of competitive advantage.	Focused on knowledge creation and transfer. It didn't look at how to create a conducive knowledge creation environment.
Karl Wiig KM Model.	Karl, Wiig 1993.	Marks the basic principle which states that in order for knowledge to be useful and valuable, it must be organised and synchronised.	The how to organise and synchronise knowledge is missing, IT can be used to support this function. Policies, organisation structure, and good leadership practices are also important.

<p>Hedlund and Nonaka's Knowledge Management Model</p>	<p>Hedlund and Nonaka 1993</p>	<p>Describes four levels of carriers or agents of knowledge in organisations. These four levels of 'carriers' perspectives assume that knowledge is categorised into the individual, the group, the organisation and the inter-organisational domains.</p>	<p>This provides a clear indication that a good organisational culture should be created to promote organisational learning processes. The model suggests that the essence of organisations' survival and success can depend on how they create, transfer and exploit their knowledge resources.</p>
<p>SECI Model of Knowledge Conversion</p>	<p>Nonaka and Takeuchi, 1995.</p>	<p>The model displays four different modes of knowledge conversion (Socialisation, Externalisation, Combination and Internalisation)</p>	<p>After creating tacit knowledge from socialisation and internalisation processes, the framework doesn't provide a component of retention/storage/preservation. Aspects of the management function are missing.</p>
<p>Organisational Epistemology.</p>	<p>Von Krogh and Roos Model, 1995.</p>	<p>It is the first model that precisely differentiates between individual knowledge and social knowledge.</p>	<p>After the distinction, the handling of this knowledge types is not mentioned. Taking care of the human and organisational capital should be key.</p>
<p>Skandia Intellectual Capital Model of KM.</p>	<p>Skandia 1997.</p>	<p>The model focuses on the importance of equity, human, customer and innovation in managing the flow of knowledge within and externally across the networks of partners.</p>	<p>The model ignores the political and social aspects of knowledge which are very critical in tacit knowledge management. This gives an emphasis on measurement.</p>
<p>Sense-Making KM Model.</p>	<p>Choo, 1998.</p>	<p>Focuses on sense making, knowledge creation and decision-making skills.</p>	<p>It does not illustrate how knowledge is shared and used.</p>

<p>Boisot's Knowledge Diffusion Information Space Model</p>	<p>Boisot, 1998.</p>	<p>It is a model for knowledge asset development. The model introduces an extra dimension 'abstraction' to Nonaka's SECI model. The model emphasises that knowledge can be generalised to different situation.</p> <p>It can be seen as a three dimensional cube with the following dimensions; from uncoded to codified; from concrete to abstract; and from undiffused to diffused.</p>	<p>The model is very critical in the identification of knowledge assets in the organisations. This therefore directs the authors to identify knowledge audit as an important component of TKM which has not been identified by other models and also not mentioned in the literature.</p>
<p>Demerest's Knowledge Management Model.</p>	<p>Demerest, 1999.</p>	<p>Demerest's KM model emphasises the construction of knowledge within an organisation.</p>	<p>Does not focus on external collaboration.</p>
<p>KM Enabling Factors.</p>	<p>Stankosky and Baldanza, 2001.</p>	<p>KM enabling factors include learning, culture; leadership; organisation and technology.</p>	<p>The model discusses KM enabling factors in general. The specific sub-elements of these major elements were not mentioned. Some key factors like mentorship and knowledge audit are missing.</p>

<p>Wenger's Communities of Practice.</p>	<p>Wenger, <i>et al</i> 2002.</p>	<p>Wenger, acknowledges that there is explicit as well as tacit knowledge and also concludes that explicit knowledge however important, is dependent on tacit knowledge to be applied. This knowledge is not static and sharing tacit knowledge requires interaction and informal learning processes. CoPs provide such a platform through activities such as coaching, apprenticeship, storytelling and conversation where knowledge is codified. It facilitates tacit knowledge sharing.</p>	<p>Does not look at the platforms or enabling technologies to facilitate the knowledge sharing process. Elements like coaching, apprenticeship, storytelling to be made visible from the model since they are very crucial in knowledge sharing.</p>
<p>Frid's Knowledge Management Model</p>	<p>Frid, 2003.</p>	<p>This model states that KM maturity assessment levels and KM implementation can be divided into five levels; Knowledge chaotic; knowledge aware; knowledge focused; knowledge managed; and knowledge centric.</p>	<p>It points out the need for KM policies, training and awareness sessions for a successful KM project.</p>

The literature reviewed made it possible for the authors to propose a model for use in the management of tacit knowledge in universities.

Components of the Proposed Tacit Knowledge Management Framework

The framework is a guide to tacit knowledge management in terms of tacit knowledge management components. These components are leadership, organisational culture, enabling technology, mentorship and knowledge audit. If these components are integrated in the institution's operations it may lead to tacit knowledge creation. This knowledge can then be made accessible for use and reuse to ensure business continuity, tacit knowledge continuity, and hence improved organisational performance and competitive advantage. These may be realised through innovation, quality products and services, organisational learning and profitability.

Leadership

An effective leadership is paramount to the success of any organisational activity. Leadership support will create an environment conducive for tacit knowledge management. Good leaders ensure there is an efficient style of communication, provide a system of rewards and incentives to encourage tacit knowledge sharing, measure performance (reward good performance and discipline poor performance), ensure a flexible and stable organisational structure as well as develop and implement tacit knowledge management policies. Leadership is a complex multifaceted process perceived as a set of values, qualities and behaviours exhibited by the leader that encourage the participation, development, and commitment of followers. Leadership is also considered as the art of influencing others in a particular direction that involves casting a vision, goal setting and motivating people (Spendlove, 2007).

In many universities in Africa, leaders are not recruited for their leadership potential, but rather are nominated and rewarded for their research and teaching. Vice chancellors, deans, directors, and deans of departments in universities in Africa are often appointed based on academic qualifications, and rarely receive critical training in strategic planning, budgeting, human resource development and faculty management (Sifuna, 2012).

Appointments and promotions within the universities is a very contentious issue in tacit knowledge management. Universities breed knowledge intensive firms through skills development, research and innovation. Appointment of unqualified personnel, uncommitted or misplacement of expertise will negatively contribute to tacit knowledge management. The 'moonlighting'

(engaging in other income-generating activities) syndrome in Kenyan universities, the use of old teaching notes, zero research-based teaching and learning, a lack of commitment in the mentoring of students and lack of motivation (Waswa & Katana, 2008) hamper tacit knowledge management.

As noted in a contribution by a senior academic in one of the public universities:

“...A good number of us in the university know the rot within, but have selected either to remain silent or join the rot. The process of recruitment of academic staff in some of our universities has been abused to the point where interviews are held to justify already decided appointments. Why is it that someone is recruited into the university academic staff without submitting a CV for scrutiny among staff and students? Future appointments to university academic staff must require applicants to present a seminar paper before staff, students and interested public. Promotions are another area where consistency is lacking. We have colleagues in the university who have been promoted to senior positions, but whose CVs do not show a record of serious research and publications. A lecturer whose CV lists newspaper articles and articles in non-peer reviewed journals as publications is an embarrassment. When you have senior lecturers whose CVs do not have at least five peer-reviewed book chapters/ journal articles, it must be asked who in the university leadership promoted them. The process of aligning university education to the new constitution must clean up university management, streamline management structures and weed out scholars who are surviving through patronage. We owe this to our students...” (Murunga, 2012:16).

The proposed model has identified the following key elements on leadership: management support; communication style; open rewards and incentives system; performance measurement; flexible organisational structure; open management style and tacit knowledge management policies. These elements have the potential to alleviate leadership problems that undermine the tacit knowledge management efforts in Kenyan universities.

Organisational Culture

A good organisational culture supports socialisation through team work, solidarity, organisational learning and creation of communities of practice. Such a culture in turn nurtures trust where employees can share experiences through storytelling and hence enhance tacit knowledge sharing. Rigid organisational culture breeds unwelcoming work environments. In such

circumstances, there is rigidity by personnel to socialise and work together as team members. It is noted that faculty members would collaborate with other members of staff in other universities to do a research paper, but internal collaborations are unpopular.

Mentorship

A mentorship programme facilitates the transfer of knowledge, skills and values from experts to non-experts for professional and career development. The experts nurture the young talent in the organisation hence fostering continuity. Mentor-mentee relationship that occurs within an organisation, profession or occupation supports a learning collaboration between or among the parties involved. Such a strategy can help universities manage their tacit knowledge. Mentorship should be formalised and periodically reviewed to measure its success.

Tacit Knowledge Audit

A knowledge audit is a process that allows an organisation to know what knowledge exists, who has it, where it is, how it moves and how it is managed. A knowledge audit would be important because it can help an organisation to identify tacit knowledge assets, the tacit knowledge gaps, as well as review the use of internal tacit knowledge assets, their value, and how they may be improved to develop a tacit knowledge map for the organisation.

Technological Infrastructure

A technological infrastructure is a platform that supports the creation, capture, development, processing, preservation and sharing of tacit knowledge. Proper hardware and software facilities should be put in place in support of tacit knowledge management. Besides, right procedures, policies and guidelines should be implemented. Identifying and installing the right technological platforms and accessories for tacit knowledge management is important. Technology for managing tacit knowledge should allow for maximum interactivity to facilitate full utilisation, exploration and exploitation of tacit knowledge resources. Training and awareness forums should be made practical to ensure maximum utilisation.

Tacit Knowledge Generation/Creation/Capture

Tacit knowledge can be generated after integrating and interweaving leadership, organisational culture, mentorship, knowledge audit and technological infrastructure in the organisation. Tacit knowledge can be tapped and preserved in knowledge banks. The tacit knowledge harnessed will then be used for development of new products and services, research and innovation and business process reengineering.

Tacit Knowledge Use

Utilisation of tacit knowledge ensures there will be business continuity, tacit knowledge sharing, competitiveness and improved organisational performance.

Conclusion

It is evident that tacit knowledge is a key asset to the growth and development of an organisation. To remain relevant, universities and other organisations alike must nurture this important asset. Most organisations pay attention to tangible resources and overlook the intangible resources. The realisation of the value of tacit knowledge to the performance of universities is mandatory. Setting the knowledge priorities right is a critical strategy to be adopted by universities.

References

- Bender, S., & Fish, A. (2000). The Transfer of knowledge and the retention of expertise: The continuing need for global assignment. *Journal of Knowledge Management*, 4(2), 125-137.
- Botkin, J.& Seeley, C. 2001. The knowledge management manifesto: Why KM requires community-building. *Knowledge Management Review*, 3 (6), 16-22.
- Cummins, J.N. (2004). Work groups, structural diversity and knowledge sharing in a global Organization. *Management Science*, 50 (3), 352-64
- Darwin, A. (2000). Critical reflections on mentoring in work settings. *Adult Education Quarterly*, 50(3), 197-211.
- Frank, D.F., Finnegan, R.P. & Taylor, C.R. (2004). The race for talent: Retaining and engaging workers in the 21st century. *Human Resource Planning*, September: 12-25.
- Gitonga, L. (2016). Factors hindering formal and informal nursing mentorship programs in Kenyan public universities. *American Journal of Health Research*, 4(2), 23-29. Retrieved from <http://www.sciencepublishinggroup.com/j/ajhr>
- Government of Kenya. (2007). *Ministry of science and technology, technology and innovation policy and strategy*. Retrieved from http://www.scienceandtechnology.go.ke/index.php/downloads-1/doc_download/67-science-a-technology-a-innovation-policy
- Herbert, I. (2000). Knowledge is a noun learning is a verb. *Financial Management*, 78, 68- 69.
- Kidwell, J.J., Linde, V. M. & Johnson, S.L. (2000). Applying corporate knowledge management practices in higher education. *EDUCAUSE Quarterly*, 4, 28-33.
- Kimile, N. M. (2012). *Knowledge management practices at Moi University Eldoret, Kenya*. Germany: Lambert Academic Publishers
- Kram, D. (2007). *The Handbook of mentoring at work: theory, research and practice*. London: Sage Publications
- Kransdorff, A. (2003). How to debrief and cut the high cost of staff churn. *New Zealand Management*, 50(1), 42-43.

- Kwanya, T. (2009). *ICT simplified: a handbook for the communication worker*. Nairobi: Focus Publishers.
- Mosoti, Z. & Mesheka, B. (2010). Knowledge management: The Case for Kenya. *The Journal of Language, Technology & Entrepreneurship in Africa*, 2(1), 107
- Maingi, N, N. (2007). *Knowledge management in a competitive economy: The knowledge anagement readiness score (KMS)*. Available: <http://www.strathmore.edu/news/knowlegdemngt.php>. Accessed 23rd July 2016
- Mungai, G.N. (2014). *Tacit knowledge management in public institutions in Kenya: a case of the Kenya Institute for Public Research and Analysis (KIPRA)*. South Africa: UNISA
- Murunga, G.R. (2012). We need a judiciary-type vetting system to save Kenya's dying Universities. *East African*, 28 April 2012, p. 16
- Ngulube, P., Shezi, M. & Leach, A. (2009). Exploring network literacy among students of St. Joseph's theological institute in South Africa. *Libs & Info Sci*, 75, 56-67.
- Ogara, W.O., Jalong'o, J.W. & Othieno, O.J. (2010). Knowledge management and institutional framework: Kenyan veterinary services. *Journal of Knowledge Management Practices*, 11(3)
- Ondari, O., & Minishi, M. (2007). Enhancing governance, performance effectiveness and capacity to deliver basic government services in Sub-Sahara Africa through knowledge management. *Paper Presented at the Knowledge Management Africa (KMA) Second Biennial Conference. Nairobi.*
- Pathirage, C. P. & Haigh, R. P. (2007). Tacit knowledge and organizational performance: construction industry perspective. *Journal of Knowledge Management*, 11 (1), 115-126.
- Pickett, L. (2004). Focus on technology misses the mark. *Industrial and Commerce Training*, 36(6/7), 247-249.
- Ragins, B. R. & Verbos, A. K. (2007). Positive relationships in action: Relational mentoring and mentoring schemas in the workplace. In J. Dutton & B. R. Ragins (Eds.) *Exploring positive relationships at work: Building a theoretical and research foundation*. pp. 91-116. Mahwah, NJ: Lawrence Erlbaum and Associates
-

- Sanchez, R. (2012). *Tacit knowledge versus explicit knowledge: approaches to knowledge management practice*. Oxford: Oxford University Press.
- Sifuna, D. N. (2012). Leadership in Kenyan public universities and the challenges of autonomy and academic freedom: An overview of trends since independence. *JHEA/RESA*, 10, (1):121-137.
- Spendlove M., (2007). Competencies for Effective Leadership in Higher Education, *International Journal of Educational Management*, 21, 5.
- Stam, C. D. (2009). *Knowledge and the ageing employee: A Research agenda*. European Conference on Intellectual Capital, Haarlem, The Netherlands.
- Strack, R. (2008). Managing demographic risk. *Harvard Business Review*, 86(2), 119-134.
- Wamitu, S. N. (2016). Functional boundaries as a tacit knowledge sharing factor and its effect on public sector performance in Kenya. *Open Journal of Business and Management*, 4, 225-237. Retrieved from <http://www.scirp.org/journal/ojbm> <http://dx.doi.org/10.4236/ojbm.2016.42024>
- Wamitu, S.N. (2014). Tacit Knowledge sharing in public sector departments in Kenya. *Open Journal of Business and Management*, 3, 109-118. Retrieved from <http://dx.doi.org/10.4236/ojbm.2015.31011>
- Waswa, F. & Katana, G. (2008). Academic staff perspectives on operating beyond industrial actions for sustainable quality assurance in public universities in Kenya, *International Journal of Environment, Workplace and Employment*, 4, 1.
- World Bank. (2012). *KEI and KI Indexes*. Retrieved from <http://info.worldbank.org/etools/kam2/KAMpage5.asp>