

AN INVESTIGATION INTO THE EFFECTIVENESS OF KNOWLEDGE SHARING IN A SELECTED PRIVATE HIGHER EDUCATION INSTITUTION IN BOTSWANA

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Abstract

The study of knowledge sharing has emerged as a key research field in the strategic management genre. Organisational experience and research suggest that successful knowledge sharing has become the in-thing and a major factor contributing to the enhancement of business performance and long term sustainability. This paper investigates the effectiveness of knowledge sharing in a selected private higher education institution in Botswana, firstly looking at the views of other authors on the concept of knowledge sharing through examination of existing literature and secondly, through an empirical examination of the movement of knowledge in a selected institution and the factors inhibiting the smooth transfer of knowledge. The paper adopted the mixed methods research approach to collect data through a questionnaire and interviews. The questionnaire collected data from a large sample by targeting ordinary employees of the institution, while interviewing collected data from a small group of well-informed respondents by targeting employees in managerial positions. The study revealed that there is ineffective flow of knowledge in the selected institution and barriers to the smooth movement of knowledge such as lack of staff interaction, inadequate infrastructure, heavy workload for staff, interaction of staff along nationality lines, lack of trust, inappropriate organisational structure, and inappropriate organisational culture were unearthed.

Keywords: Knowledge Management, knowledge sharing, organisational infrastructure, organisational culture, reward systems, trust.

INTRODUCTION

Knowledge is a strategic resource that gives an organisation a competitive edge over its rivals if properly managed. Halawi, Aronson, and McCarthy (2005) and Hansen (2009) posit that success in today's global economy arises from the fast and efficient sharing of information. They further postulate that sustainable competitive advantage today lies in effective channeling of intellectual capital rather than in the physical assets and financial capital.

Different Knowledge Management solutions are required by different organisations and adhoc or standard KM solutions are no longer a good idea (Edwards and Collier, 2005; Henczel, 2000; Jans and Prasamphanich, 2007). Therefore, it is critical to investigate the unique knowledge environment and knowledge sharing culture of an organisation as a first step in the process of determining appropriate KM programmes. Knowledge is firm capability and plays a critical role in providing organizational competitive advantage as a critical intangible asset of the enterprise (Rinaldo, 2005; Boisot, 1999). It focuses on the organisational competitive strategies by which to enhance the business performances of the organisation. It therefore hinges, among other things, on the knowledge articulation within the enterprise (Sanchez, 1999). It is therefore imperative that an organisation is effective with regard to all activities and integrating mechanisms by which to coordinate, transfer, and deploy the knowledge embedded in individuals and organisational networks. The organisation also needs to be effective in dealing with the social context enabling the knowledge creation and sharing in the business processes.

Knowledge Management is a core competence that organisations must develop in order to succeed in a dynamic global economy (Jashapara, 2004). The importance of leveraging knowledge to increase efficiency and effectiveness within the organisation is now widely acknowledged not only among large corporations and small business enterprises, but even among educational institutions. Valuable human and knowledge resources will be wasted unless management openly accepts and supports efforts to gather, transform, and record and share knowledge (Haslinda and Sarinah, 2009). Effective distribution and management of knowledge is probably the greatest source of untapped value and security available to any organisation if it expects to enhance and maintain survival and sustainability of the business model.

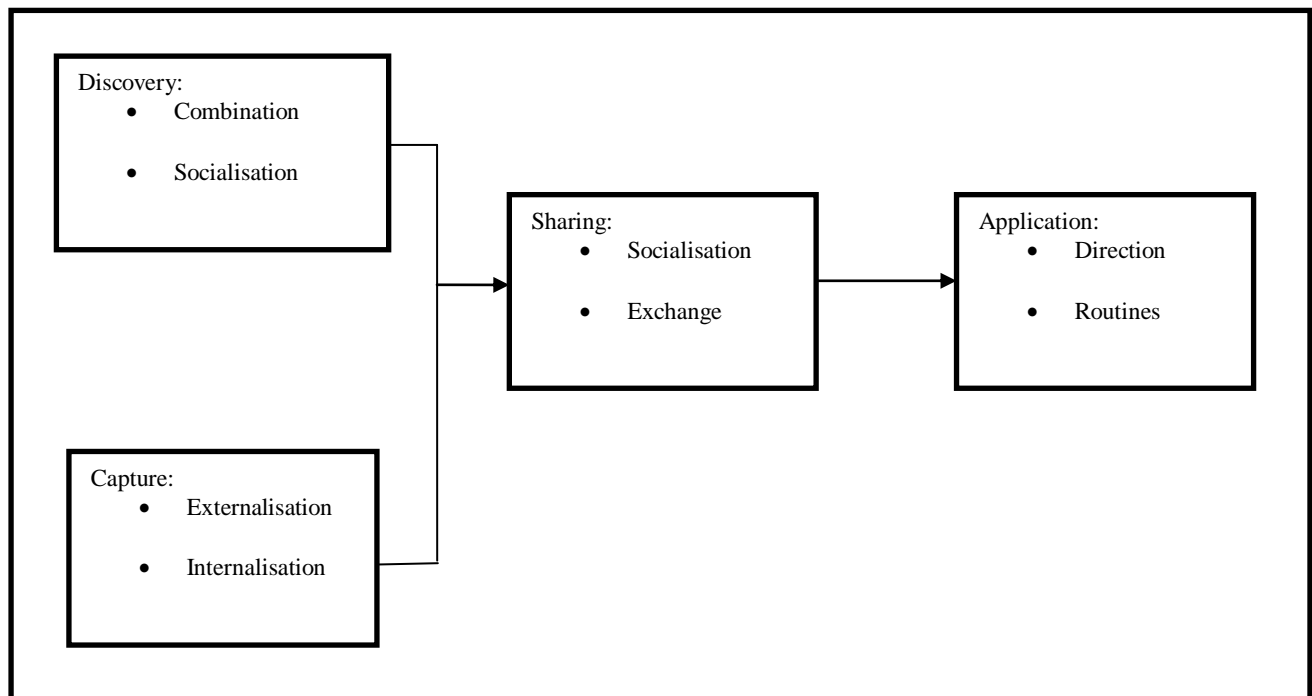
This paper therefore seeks to ascertain the effectiveness of the process of knowledge sharing at a selected private higher education institution in Botswana and come up with recommendations for enhancing the movement and access to knowledge in the institution in order to enhance the performance and sustainability of the business model.

LITERATURE REVIEW

Knowledge management processes

These are the broad processes that help in discovering, capturing, sharing and applying knowledge. These processes are supported by an integration of technologies and mechanisms (knowledge management systems). According to Beccera-Fernandez (2004), Knowledge Management relies on four main processes as depicted in the diagram below:

Figure 1: Knowledge Management Processes



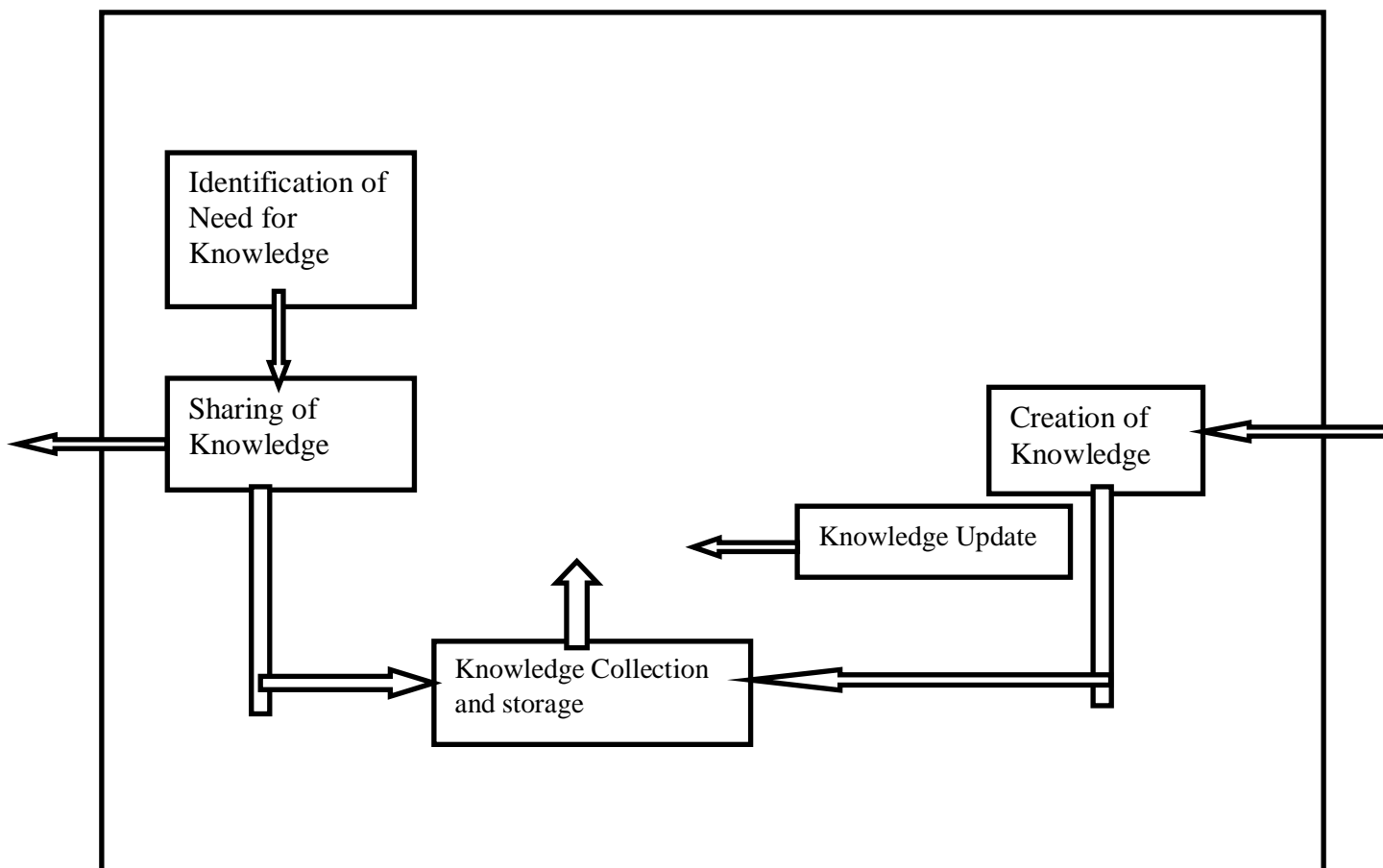
Source: Beccera-Fernandez, p.32

Knowledge sharing

Connelly and Kelloway (2000) argue that knowledge sharing is the process or activity whereby the existing knowledge in an organisation is transferred from those who hold it to those who may not have it, that is, the process of communicating both tacit and explicit knowledge. An organisation's knowledge management system should ensure that there is effective transfer of knowledge such that the recipient understands it well so as to use it productively in the organisation and be able to internalise it for easier use in the future. Alavi and Leidner (2001) assert that for an organisation to benefit immensely from its knowledge, knowledge sharing must take place across individuals in an organisation as well as groups, departments, or organisations so as to enhance organisational innovativeness and performance.

Knowledge sharing is facilitated by the process of socialisation and exchange. While socialisation enables the sharing of tacit knowledge, exchange facilitates sharing of explicit knowledge by communicating or transferring this form of knowledge between individuals, groups and organisations. In academic institutions, individuals are encouraged to write policy documents, proposals, academic regulations and so on and these are transferred from one employee to another through the process of exchange as shown below.

Figure 2: KM Process Model (showing knowledge sharing)



Note: Model illustrating all inflows and outflows

Sharing is initiated in order to find out whether knowledge that already exists in the system can be used. This covers both the searching for knowledge by a person who needs it (knowledge pull) and the feeding of knowledge to recipients who are known to be in need of it (Knowledge push). If the needed knowledge is not available yet, creation of knowledge is initiated. Creation of knowledge and sharing may have external links. External link of sharing enables knowledge brokering such as selling knowledge to the outside world.

Kucza (2001) and Bock,Zmud, Kim, and Lee(2005) postulate that knowledge sharing takes place through the following ways:

- i. Communication
- ii. Learning
- iii. Memos and instructions- sharing knowledge between an organisation and its employees
- iv. Group discussions and internal meetings – sharing of knowledge between employees of the organisation
- v. Seminars and workshops - sharing knowledge with people outside of the organisation

Knowledge sharing in organisations must be encouraged and nurtured. In general, it is necessary to facilitate communication and nurture the right culture within the organisation in order for proper sharing of knowledge to take place (Uriarte, 2008). He further argues that knowledge sharing can be enhanced through (Uriarte, 2008; Becker and Knudsen, 2000):

- Implementation of appropriate technologies
- Operations and systems that stimulate collaboration
- Facilitating the process of sharing
- Rewarding those individuals who share knowledge the most and those who use the knowledge that has been shared.

Through the questionnaire and interviews, this paper explores the effectiveness of knowledge sharing in a selected higher education institution through the use of technology, operations, systems that stimulate collaboration, and organisational structure and culture (rewards, trust, formal and informal interaction) that facilitate knowledge sharing so as to address the challenges of inadequate and inappropriate knowledge as well as difficulty in locating knowledge quickly which is needed to make crucial and critical decisions.

RESEARCH METHODOLOGY

The paper used the mixed methods approach in gathering data. More specifically, the sequential mixed design was adopted in which the quantitative approach, through the questionnaire, was followed by the qualitative approach, through interviews. One strand of the research (quantitative) determined the subsequent strand (qualitative) and then the major findings from all strands subsequently synthesised. Interviews were used to try and buttress the

outcome of the questionnaire and probe further to remove any doubt about the authenticity of the findings.

A good literature review was conducted to ground the research validity and reliability. A literature survey on barriers that inhibit knowledge flow in organisations was done. This established a theoretical framework for the research, indicating important investigations that other researchers in the area have conducted.

The questionnaire was used to determine the effectiveness of the flow of knowledge in the organisation (knowledge flow/sharing), that is, whether employees regularly participate in internal and external formal and informal meetings to discuss challenges, solutions and progress such as departmental and interdepartmental meetings, tea and lunch break meetings and seminars and workshops. It was also used to find out if employees have access to communication means, and whether there is sufficient infrastructure for formal and informal meetings. The questionnaire also attempted to find out if knowledge sharing is encouraged and rewarded, whether employees trust each other in order to facilitate sharing of information and knowledge, whether management allows employees to freely express their views without fear which stimulates knowledge sharing, and whether employees feel their contributions and knowledge are appreciated which will encourage knowledge sharing. A total of fifty questionnaires were distributed and forty-six were returned amounting to a 92% response rate. This study used non-probability sampling technique (purposive sampling) which is premised on the professional researcher's desire to want to discover, understand, and gain insight into the research problem. Units of analysis were therefore selected based on some characteristic from which the most can be learnt about the problem. Purposive sampling was therefore used to select respondents with a good knowledge on the topic of knowledge Management practices in the institution.

In order to get a firmer understanding of the effectiveness of knowledge sharing in the selected institution, interviews were conducted with selected members of senior and middle management. All in all, fifteen respondents were interviewed ranging from middle to top management. The interviews enabled participants to discuss their understanding and interpretations of the vital phenomena under investigation and to express how they regard situations with reference to knowledge sharing at the institution from their own points of view. The interviews managed to put into perspective the barriers to knowledge flow. Semi-structured interviews were used to find out whether employees share knowledge and how they share it.

ANALYSIS & RESULTS

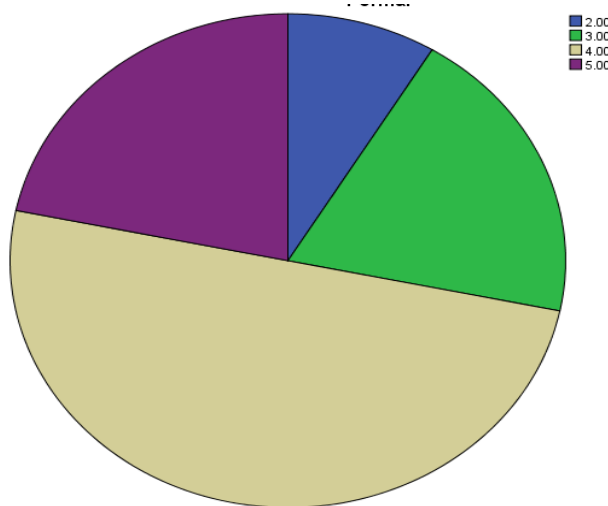
Formal interaction

The study sought to establish whether the knowledge junior and middle level managers need for their work is easy to find. Twelve of the fifteen interviewees indicated that it is not always the case. There are times when these managers have to appeal to the Director for intervention after failing to access crucial knowledge required to accomplish certain tasks. Junior and middle managers share knowledge mostly with their team members during the performance of their job roles. However, virtually all the respondents indicated that the workload is too heavy for them to constantly hold meetings and briefings. The diagram below indicates the distribution of respondents by whether they regularly participate in formal, internal and planned meetings with colleagues to discuss problems, solutions, and progress as well as other organisational issues.

Table 1 : Formal interaction

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	4	8.7	8.7	8.7
Neutral	9	19.6	19.6	28.3
Valid Agree	23	50.0	50.0	78.3
Strongly agree	10	21.7	21.7	100.0
Total	46	100.0	100.0	

Figure 3: Formal interaction



Seventy-two percent of the respondents agreed with the statement that they regularly participate in formal, planned meetings with colleagues to discuss work-related issues, while the other twenty-two percent ranged from neutral to disagree. Reasons cited most for the lack of formal meetings are inadequate infrastructure such as unavailability of meeting rooms, heavy workload, attitude of some staff towards meetings, lack of trust of colleagues and management (in cases of contributions made by employees during such meetings) and so on.

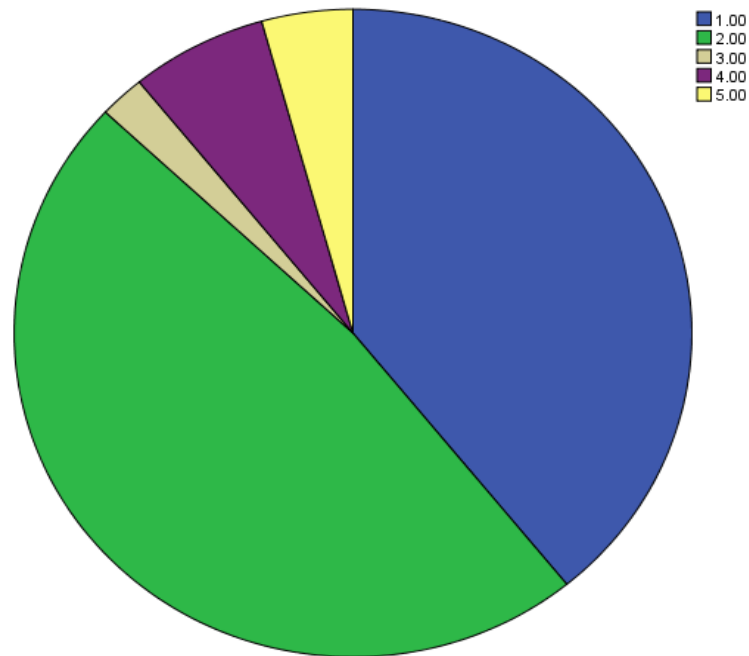
Informal interaction

All the fifteen respondents intimated that informal meetings such as during tea and lunch breaks are practically impossible because tea is taken in the staff room by between thirty and fifty employees ranging from cleaners to security, teaching and non-teaching staff, and discussing business informally is difficult due to challenges of confidentiality and noise. Lunch meetings are not possible because team members have different lunch schedules. There are classes going on right through lunch times such that members of the teaching staff can have lunch times ranging from 11.30 to 15.00. All the fifteen members indicated that their work loads are too heavy during working hours making informal interaction difficult. This is further compounded by instances where staff has to scrounge for information during the incidents that it is not readily available leaving very little room for informal interaction. By the time they knock off at the end of the day, everybody will be so tired that the only thing in every one's mind will be to go home and rest. The diagram below shows distribution of respondents by regularity of participation in internal and informal meetings with colleagues during tea and lunch breaks as well as other times.

Table 2: Informal interaction

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	7	15.2	15.2	15.2
Disagree	27	58.7	58.7	73.9
Neutral	4	8.7	8.7	82.6
Agree	5	10.9	10.9	93.5
Strongly agree	3	6.5	6.5	100.0
Total	46	100.0	100.0	

Figure 4: Informal interaction



From the responses to the question, a combined eighty-seven percent of the respondents intimated that they do not participate in any meaningful informal and internal meetings, while only about ten percent indicated that they do so. The remainder was indifferent (neutral).

Top management role in knowledge sharing

On whether top management is playing a significant role in promoting knowledge sharing, ten of the fifteen interviewees feel that management is not doing enough in this regard. They indicated, for example, that meetings particularly involving all staff and top management do not happen at all. There has not been a single general staff meeting for the past two years, and one interviewee mentioned that during the four years he has been at the institution, the only time he was addressed by the Managing Director was in 2009. Half of the interviewees, especially those who work far from the administration block, indicated that they rarely meet top management walking around, meeting employees informally. Seven interviewees mentioned that email communication from top management comes in the form of directives and tends to be one way. It is not meant to solicit views of the receiver but rather to give instructions and directives. They feel that it is only top – down communication with no bottom - top response.

Institutional Policy on knowledge sharing

Concerning the institution's policy on knowledge sharing and use, all the fifteen interviewees indicated that the institution has no specific policy on the matter. This exposes knowledge sharing to the whims of volunteerism particularly where it is not part of an individual's job responsibility. All the fifteen respondents intimated that there is very little knowledge sharing across departments. There have been many instances where, for example, assessments have failed to schedule examinations for students ostensibly because they had not paid fees only because Accounts will not have communicated to Assessments, or where technical department did not connect internet to the rooms and sort out computers because Assessments will not have informed Technical that there was going to be an examination.

Knowledge sharing infrastructure

Thirteen of the fifteen staff members interviewed mentioned that their institution's infrastructure is not quite conducive for effective knowledge sharing. They indicated that while the open office concept used at the institution may, to some extent, promote faster dissemination of knowledge, the staff rooms have become too crowded and housing employees whose work roles are too diverse as not to even need each other. Examples are cleaners, lecturers and interns. Meeting rooms are too few and need advance booking making them difficult to access for informal meetings. The diagram below represents respondents' views on whether the college has sufficient infrastructure and good meeting spaces for formal and informal meetings.

Table 3: Knowledge sharing infrastructure

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	12	26.1	26.1	26.1
Disagree	28	60.9	60.9	87.0
Neutral	1	2.2	2.2	89.1
Agree	3	6.5	6.5	95.7
Strongly agree	2	4.3	4.3	100.0
Total	46	100.0	100.0	

Figure 5: Knowledge sharing infrastructure

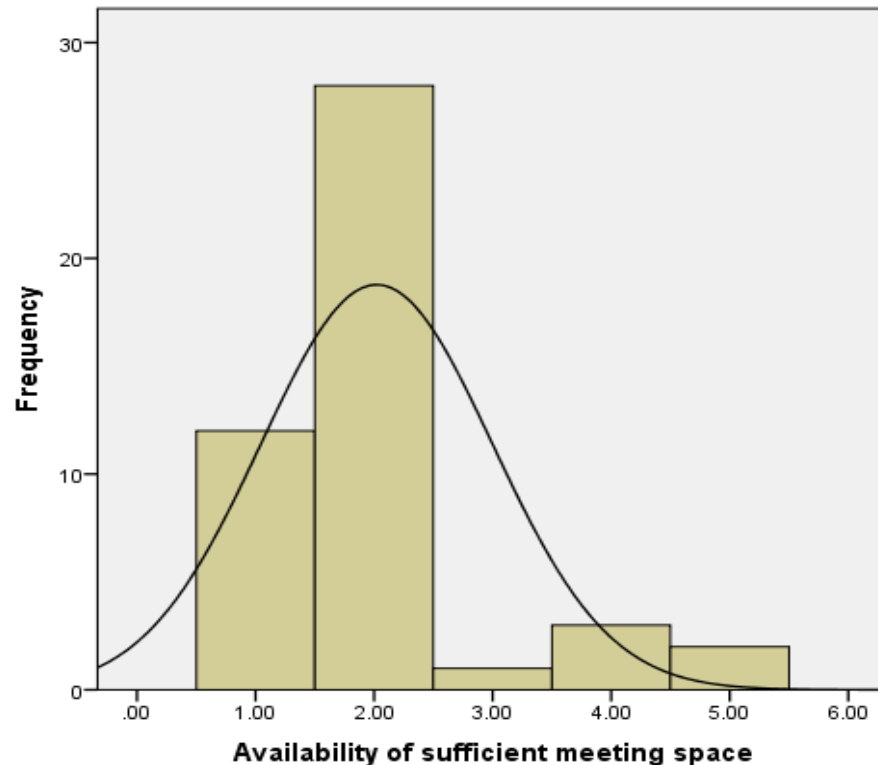


Diagram above shows that slightly over 84% of the respondents to the questionnaire do not believe that infrastructure at the college is sufficient to enable effective sharing of knowledge. Only about 8% believe the college has in place sufficient infrastructure to promote knowledge sharing.

Technology

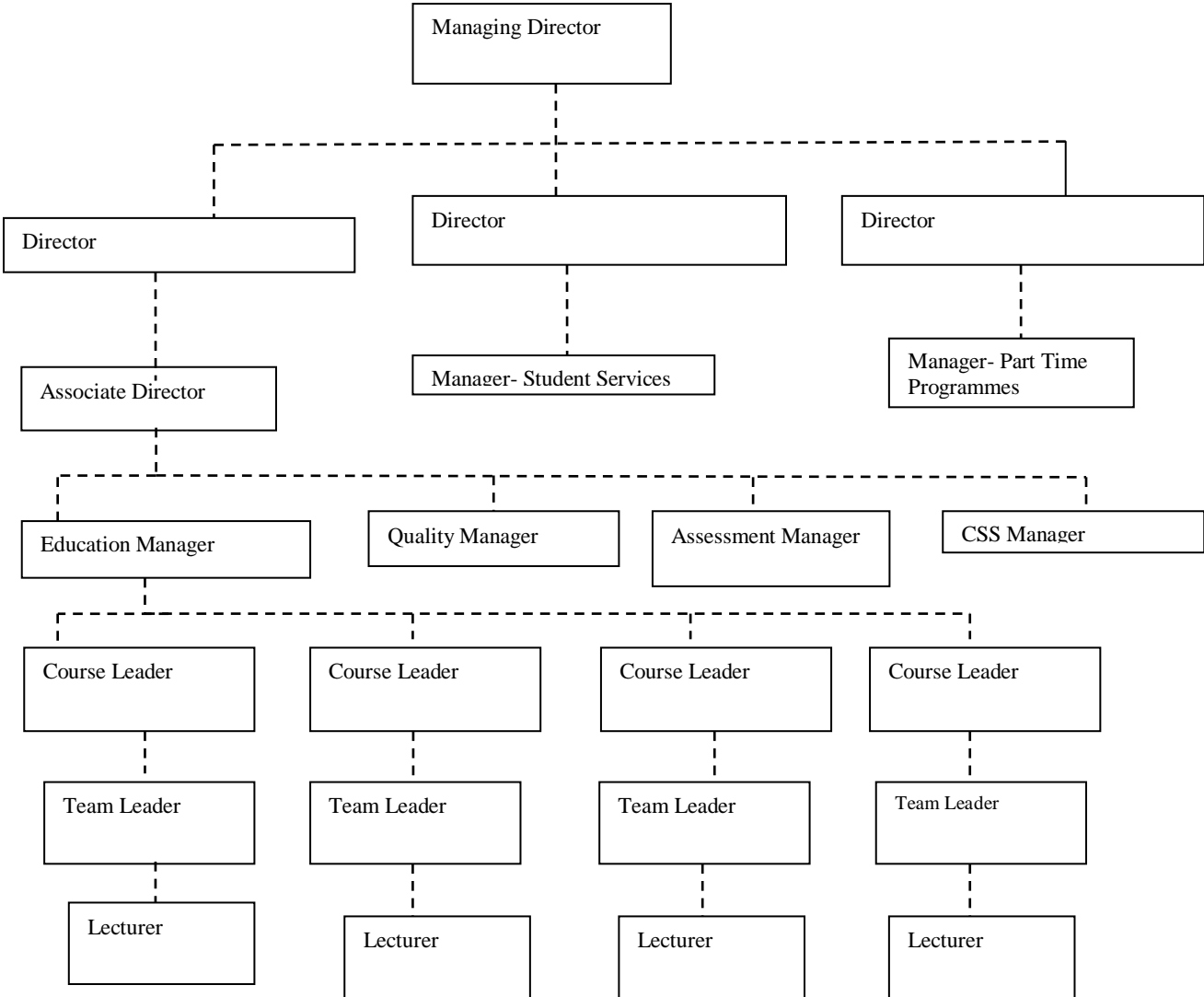
A significant number of interviewees, while applauding the college of being techno-savvy in terms of communication, are of the view that some of the technology has not been effectively utilised. Five of the fifteen members said they have never used the FTP Server to access information yet this database contains very crucial information such as staff hand book, student hand book, plagiarism policy, examination policy, and so on. They feel not much effort has been

put into conscientising staff on the importance of this data base and make it easily accessible to staff.

Organisation structure

All the 15 interviewees indicated that they have access to experts in their respective areas who happen to be their immediate supervisors. They interact with them on a daily basis promoting knowledge dissemination. However, all of them feel that, owing to the nature of the institution’s organisational structure which is hierarchical, knowledge sharing beyond the immediate supervisor is almost non-existent. Staff has very little interaction with other experts above the immediate supervisor or across departments which could further enhance knowledge sharing. The diagram below shows the selected institution’s organisation structure:

Figure 6: The selected institution’s organisation structure



Reward systems

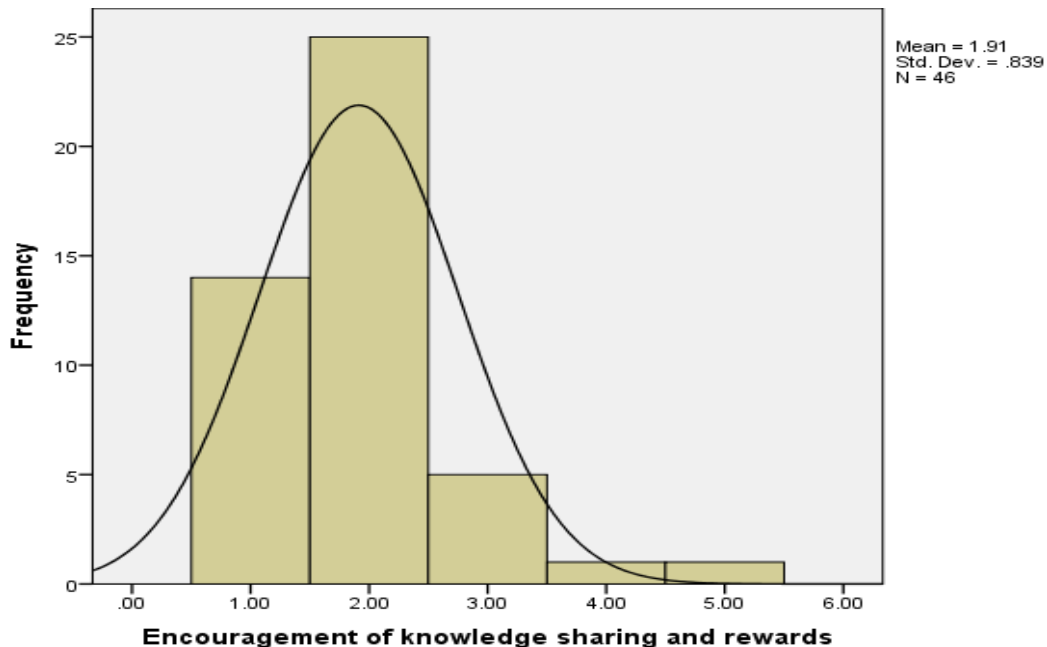
Reward Systems can be used by an organisation to facilitate knowledge sharing through the recognition and rewarding of employees who engage in the generation of new knowledge and facilitate knowledge sharing. This is one area where the institution seems to have a serious challenge. Research results overwhelmingly show that there is no deliberate policy at the college to encourage and reward knowledge sharing as indicated by the diagram below.

A total of thirty-nine respondents (Eighty-five percent) did not agree to the statement that knowledge sharing is encouraged and rewarded as they do not know of any rewards at the institution that are linked to knowledge creation and/or sharing, while about eleven percent were indifferent.

Table 4: Reward systems

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	14	30.4	30.4	30.4
Disagree	25	54.3	54.3	84.8
Neutral	5	10.9	10.9	95.7
Agree	1	2.2	2.2	97.8
Strongly agree	1	2.2	2.2	100.0
Total	46	100.0	100.0	

Figure 7: Reward systems



Employee initiative

The study sought to establish whether the selected institution encourages and nurtures employee initiative which is one of the key success factors in facilitating a knowledge creation and sharing culture in an organisation. Respondents were asked to respond to a statement that read “At your institution, is employee initiative encouraged.” The diagram below represents the results of the survey on this particular aspect.

Table 5: Employee initiative

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	5	10.9	10.9	10.9
Disagree	25	54.3	54.3	65.2
Valid Neutral	13	28.3	28.3	93.5
Agree	2	4.3	4.3	97.8
Strongly agree	1	2.2	2.2	100.0
Total	46	100.0	100.0	

Figure 8: Employee initiative



A massive number amounting to ninety-one percent of respondents either disagreed or strongly disagreed with the statement meaning to say they do not think their institution encourages employee initiative.

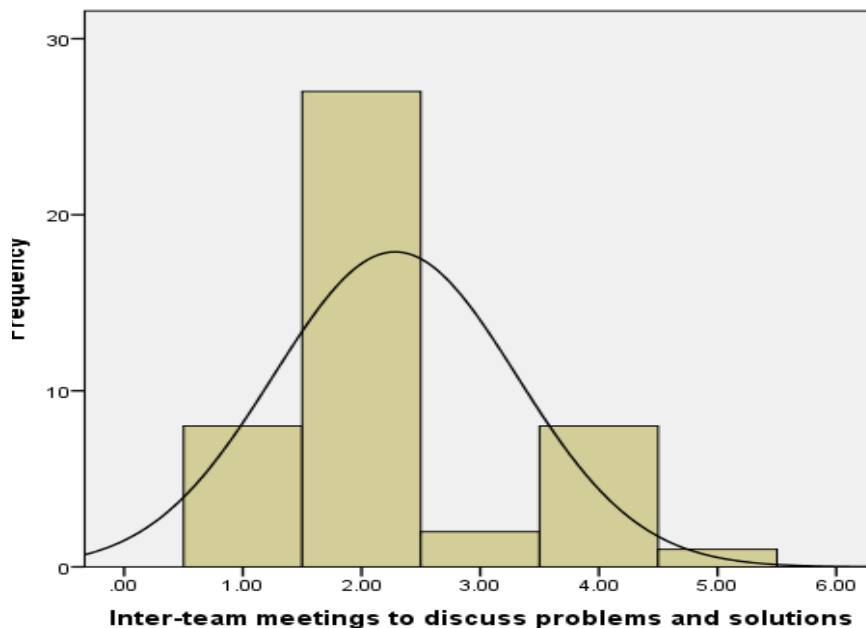
Inter-team meetings

The selected institution’s core processes permeate departmental boundaries. For example, it is not easy for the Education department to operate effectively without close interaction with the Technical Department, or for Education Department to run smoothly without cooperation from Assessments Department and vice versa. There is therefore need for regular, formal (and informal) interaction among departments through regular and planned inter-team meetings. The distribution of responses below indicates whether this is happening at the college.

Table 6: Inter-team meetings

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	8	17.4	17.4	17.4
Disagree	27	58.7	58.7	76.1
Neutral	2	4.3	4.3	80.4
Agree	8	17.4	17.4	97.8
Strongly agree	1	2.2	2.2	100.0
Total	46	100.0	100.0	

Figure 9: Inter-team meetings



Asked whether inter-team meetings are held at the college to discuss problems, solutions and explore areas of cooperation, seventy-six percent did not believe so, while twenty-two percent were neutral as depicted above.

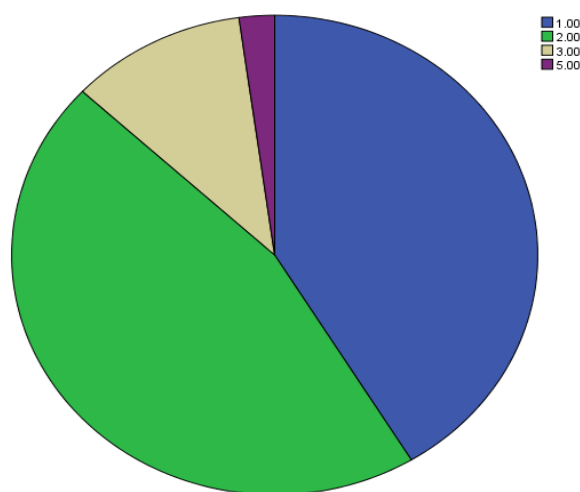
Trust

Trust among employees and between employees and management is a critical factor in knowledge sharing. For employees to willingly share knowledge with other employees and with management, they need to be convinced that such sharing of knowledge will not lead to negative ramifications against the same employees, that is, they will not be victimized for possessing the knowledge. Unfortunately, it is abundantly clear that there is lack of trust at the institution as shown in the diagram below.

Table 7: Level of trust among employees

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	3	6.5	6.5	6.5
Disagree	33	71.7	71.7	78.3
Neutral	7	15.2	15.2	93.5
Agree	2	4.3	4.3	97.8
Strongly agree	1	2.2	2.2	100.0
Total	46	100.0	100.0	

Figure 9: Inter-team meetings



A whopping eighty- seven percent of the respondents intimated that they do not trust their work mates with regards to knowledge sharing, while eleven percent was neutral. Only two percent of the respondents indicated that they have trust for their workmates when it comes to knowledge sharing.

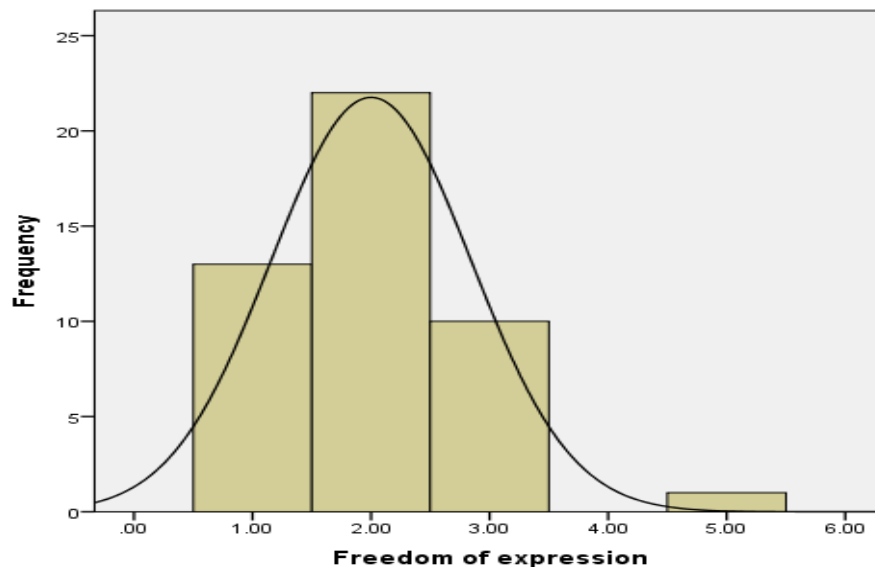
Freedom to express views without fear

For knowledge flow to take place effectively in an organisation, employees must free to express their views without fear of reprisals even if those views are contrary to the positions of management as long as such views are expressed in a constructive manner. The study therefore sought to establish whether employees at college are afforded such an opportunity. The responses are shown in the diagram below.

Table 8: Level of freedom of expression at the College

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	13	28.3	28.3	28.3
Disagree	22	47.8	47.8	76.1
Valid Neutral	10	21.7	21.7	97.8
Strongly agree	1	2.2	2.2	100.0
Total	46	100.0	100.0	

Figure 11: Level of freedom of expression at the College



Close to eighty-three percent of the respondents (including those who were neutral) did not respond favourably to the statement that the institution's management allows employees to freely express their views even if they run contrary to theirs. Only slightly over seventeen percent believe freedom of expression is tolerated at the institution.

CONCLUSION

The aim of this paper was to determine how knowledge flows around the selected private higher education institution and the barriers that hinder the effective flow of knowledge. With the rapid growth of the institution without corresponding expansion in the physical infrastructure, the research proved that there is inadequate infrastructure to facilitate knowledge sharing. Some staff rooms have become overcrowded to the extent that one staffroom was discovered to be housing over sixty members of staff ranging from lecturers to cleaners and security personnel. Such a range of occupants means no effective knowledge sharing takes place due to lack of commonality and noise. Some lecturers have actually resorted to operating from their cars instead of the staff room. This works against effective sharing of both explicit and tacit knowledge.

Becerra-Fernandez et al. (2004) retorts that besides IT infrastructure which facilitates knowledge sharing, the physical environment within the organisation is a crucial foundation upon which knowledge sharing takes place and key aspects of this environment with a bearing on knowledge sharing include the design of buildings and the separation between them, the location, size and type of offices, and the type, number and nature of meeting rooms, among others.

Results of the study indicate that the leadership of the selected institution has not played a significant role in promoting effective knowledge sharing. One way they have not done so is by not encouraging employee initiative where employees try new ideas and make suggestions to management which will create new knowledge. The implication is that staff keeps new ideas they may have to themselves to the detriment of the dissemination of knowledge at the institution. This inhibits the flow of new knowledge over and above inhibiting employee growth and decreases employee and organisation performance.

The selected institution's reward systems were found to inhibit knowledge sharing. Employees who share knowledge are not rewarded hence those who may be possessing knowledge of certain processes have no motivation for sharing it with colleagues at work so as to enhance organisational performance. The lack of a reward system that facilitates knowledge coupled with the absence of employee freedom of expression, where employees of the organisation can freely express their views without fear of reprisals even where such views are

not in sync with those of senior managers, have seriously stifled knowledge sharing in the institution.

An organisation seeking to perform well in the 21st century knowledge economy should have as its primary function means to discover and disseminate knowledge. To fulfill this function effectively, a free interchange of ideas is necessary not only within the organisation's walls but with the outside world as well (Jashapara, 2004). Knowledge sharing thrives in an environment of trust where parties involved have absolute trust of each other. The results of the survey indicated that there is very high level of mistrust within the institution caused mainly by the different degrees of employee access to top management yet knowledge sharing requires high levels of trust and in order for employees to share knowledge, they need to trust the recipients of that knowledge. Overall, the institution's culture does not encourage, promote, and facilitate knowledge sharing since it does not support learning. Organisational cultural factors such as interpersonal trust, communication between staff, information systems, rewards and organisational structure play an important role in defining relationships between staff and in turn providing possibilities to break obstacles to knowledge sharing.

Although the findings of this study are quite valid, it is useful to acknowledge the limitations of the study. The findings are only preliminary and there is room for further research. It is acknowledged that the results of this study are not generalisable. However, at least in learning institutions, the results should be valuable. The sample size of 46 poses a limitation since a bigger sample size could further enhance the validity of the research. Qualitative research is particularly subject to researcher bias although the researcher attempted to minimise the bias by being objective and recording the interviews using electronic devices so as to capture exactly what the respondent said. Interviewer bias was also minimised by corroborating interview results with other data sources such as the questionnaire. A further limitation emanates from the cross-cultural composition of staff members of the institution with different cultural backgrounds hence different world views. This leads to different perceptions on what knowledge to share and how to share it. Future research could therefore focus on these cultural dimensions and determine how they influence knowledge sharing.

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