# The Barriers to Knowledge Sharing in a Private Higher Education Institution in Botswana: An Empirical Investigation

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**Abstract**
Africa is fast developing into a knowledge-based economy with knowledge becoming a strategic resource that gives an organisation more competitive advantage than the traditional factors of production, namely land, labour, and capital. It is those organisations that effectively facilitate the movement of knowledge within the organisation to make it easily accessible to all employees who require it at the time it is required that will achieve sustainable competitive advantage and business growth and profitability. This paper, therefore, sought to investigate the barriers militating against effective flow of knowledge in a selected Private Higher Education (PHE) institution in Botswana. The paper adopted the mixed methods research approach to collect data through a questionnaire and interviews. The outcome of the questionnaire was used to determine who the interviewees were to be and what kind of data was to be collected from the interviews. This was meant to corroborate information and clarify issues emanating from a large sample (the questionnaire) by an in-depth study of a smaller sample (interviewing). The study revealed a number of critical barriers to the smooth and fast movement of knowledge in the PHE institution under investigation. These include lack of both formal and informal interaction, inadequate infrastructure to facilitate knowledge sharing, heavy workload for staff, division of staff along nationality lines leading to mistrust, and organisational structure and culture.
**Keywords:** Knowledge Management, Knowledge sharing, organisational structure, organisational culture, Barriers.

## 1. Introduction

Africa, like the rest of the world is fast becoming a knowledge-based economy. Knowledge is a strategic resource that gives an organisation a competitive edge over its rivals if properly managed [1]. Success in today`s global, interconnected economy springs from the fast and efficient exchange of information. Sustainable competitive advantage is no longer noted in physical assets and financial capital, but in effective channeling of intellectual capital [2].

Different companies need different Knowledge Management solutions, and hence adhoc or standard solutions are no longer effective [3]. Therefore, investigating the barriers to knowledge sharing and knowledge culture of an organisation is a necessary step in devising effective Knowledge Management (KM) initiatives.

**Knowledge as firm capability**

To ensure capability of the firm, there is need for management to understand and appreciate the role that knowledge plays in providing organisational competitive advantage as a critical intangible asset of the enterprise [4]. Focus should be on the organisational competitive KM strategies by which the firm can enhance the business performances of the organisation which include, among other things, the knowledge articulation within the enterprise [5]. 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 the use of knowledge in the business processes.

KM is a core competence that organisations must develop in order to succeed in the 21$^{st}$ century dynamic global economy. 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 also 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 [6].

Knowledge is power, but only if the people who use it can access exactly what they need and when they need it. Synergy between technological and behavioural issues of organisational employees is a prime necessity for the survival of organisations in the transformed business environment of the 21$^{st}$ century. The necessity for synergy of technological and human capabilities is based on the distinction between the "old world of business" and the "new world of business". Predictable environments in which focus was on prediction and optimization-based efficiencies characterized the "old world of business". That was the world of competence based on "information" as the strategic asset [7]. Information and control systems were used in that world for achieving the alignment of the organisational factors with pre-defined "best practices". The assumption was such best practices retained their effectiveness over time. In contrast, high levels of uncertainty and inability to predict the

future characterize the "new world of business". Use of the information and control systems and compliance with pre-defined goals, objectives and best practices may not necessarily achieve long-term organisational competence. This is the world of "re-everything" which challenges the assumptions underlying the "accepted way of doing things". The focus is not only on finding right answers but also on finding the right questions. This world is contrasted from the "old world" by its emphasis on "doing the right things" rather than 'doing things right'. Organisations are all confronted with the necessity to constantly reinvent themselves to adapt to their environments. Those participating in knowledge industries or performing knowledge work do so with shorter time cycles and higher risks if they cannot muster what they know and see what they need to take the next step. They need to ensure the effective deployment of knowledge and intellectual capital as important strategic assets. Whether knowledge is generated within the organisation or outside, it is highly critical that it is accessed by those who need it when it is needed, that is, the right knowledge must be at the right place at the right time and in right quantities. This means that the knowledge should flow with the velocity that makes it readily accessible to those requiring it. Despite this, barriers may exist in organisations that make it difficult for the knowledge resource to be distributed effectively in the organisation whether from the inside or outside reservoirs.

This paper explores several barriers to knowledge flow in one of the PHE institutions in Botswana, which will provide a starting point for the management of these when auditing their organisation's existing knowledge resources and knowledge sharing activities.

## 2. Literature Review
### 2.1 Barriers to knowledge flow

According to the core dictates of the knowledge-based view of the firm, knowledge, both from within the firm or outside, is a critical foundation of resource creation with potential for long lasting competitive advantage [8]. Knowledge can either be generated within the firm or flow from outside the firm. It can be embedded in an individual who is part and parcel of the organisation. The importance of knowledge flow in an organisation is emphasized by Riege who argues that knowledge sharing is the cornerstone of many organisations' KM strategy [9]. Despite the growing importance of knowledge to organisations' competitiveness and market performance, a number of barriers make it difficult for knowledge to flow effectively within organisations which would enable KM to achieve its strategic goals and deliver a positive return on investment for the organisation.

Knowledge flow/transfer is the diffusion of knowledge from one area within the firm to another [10]. Another definition also looks at knowledge transfer as a process whereby an organisation makes knowledge about routines available to other members in the organisation [11]. The diagram below indicates knowledge flow barriers/enablers.

**Figure 1: Factors used to identify mechanisms for knowledge transfer**
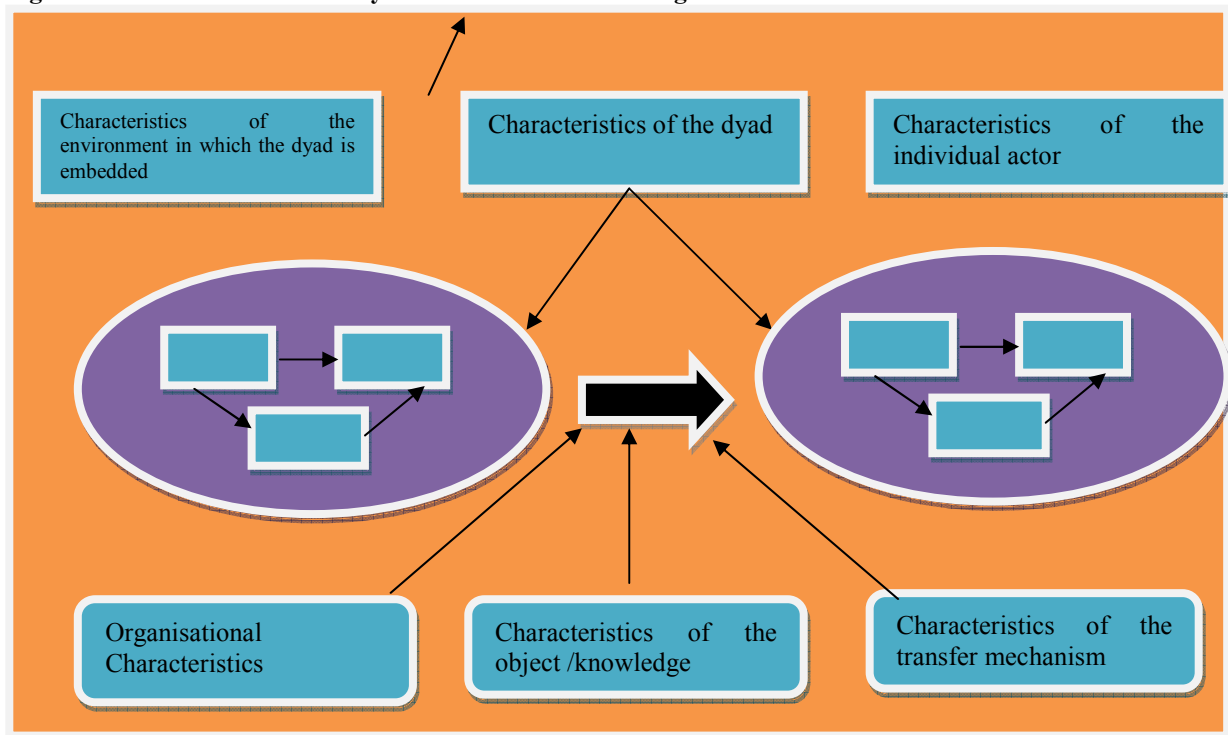


(Source: Becker, M.C. and Knudsen, M.P.) [12]

According to the diagram, the characteristics of the environment influence the dyad (two parties who share knowledge) and hence ultimately influence the knowledge flow process.

There are different types of barriers that inhibit knowledge transfer and these include individual, organisational, and technological barriers. These are outlined below.

**2.2.1 Individual barriers**

These are bottlenecks originating from individual behavior or people's perceptions and actions. These are listed as follows [13]:

- General lack of time to share knowledge and time to identify colleagues in need of specific knowledge.
- Fear that sharing knowledge may jeopardize people's job security.
- Low awareness and realization of the value and benefit of possessed knowledge to others.
- Dominance in sharing explicit over tacit knowledge such as know - how and experience that requires hands – on learning, observation, dialogue and interactive problem solving.
- Use of strong hierarchy, position - based status, and formal power.
- Insufficient capture, evaluation, feedback, communication, and tolerance of past mistakes that would enhance individual and organisational learning effects.
- Differences in experience levels
- Lack of contact time and interaction between knowledge sources and recipients.
- Poor verbal / written communication and interpersonal skills.
- Age difference
- Gender differences
- Lack of social network
- Differences in education levels
- Fear of not receiving just recognition and accreditation from managers and colleagues.
- Lack of trust in people because they may misuse knowledge or take unjust credit for it.
- Lack of trust in the accuracy and credibility of knowledge due to the source.
- Differences in national culture or ethnic background and values and beliefs associated with it, for example, language differences.

**2.2.2 Organisational Barriers**

This refers to conditions that impinge on the right corporate environment and do not promote free-flow of knowledge such as:

- Integration of KM strategy and sharing initiatives into the company's goals and strategic approach is missing or unclear.
- Lack of leadership and managerial direction in terms of clearly communicating the benefits and values of knowledge sharing practices.
- Shortage of formal or informal space to share, reflect and generate (new) practices.
- Lack of transparent rewards and recognition systems that would motivate people to share more of their knowledge.
- Existing corporate practice, which does not provide sufficient support for sharing knowledge.
- A situation where knowledge retention of highly skilled and experienced staff is not a high priority.
- Shortage of appropriate infrastructure that support sharing practices.
- Unavailability of company resources that provide adequate sharing opportunities.
- Communication and knowledge flows are restricted into certain directions (for example, top - down).
- Physical work environment and layout of work areas restrict effective sharing practices.
- Internal competitiveness within business units or functional areas.
- Hierarchical organisational structure that inhibits or slows down knowledge sharing processes.
- Physical distance between business units, for example, business units are located in different geographical areas, which is the case with the PHE institution under investigation whose business units are in Gaborone, Francistown, and Maun which are about 500km apart as shown on the map below.

**Figure 2: Botswana Map showing locations of Gaborone, Francistown and      Maun.**



### 2.2.3 Technology Barriers

Knowledge sharing is as much a people and organisational issue as it is a technology challenge hence the term 'hybrid solutions' that imply necessary interactions between people and terminology to facilitate knowledge sharing [14]. This view is further buttressed by Ruddy who postulates that to improve knowledge sharing in a significant manner requires a delicate fusion of technology with an unquestionable sense of cultural or behavioural aptitude [15].

Technology has the ability to offer instant access to large amounts of data and information and to enable long distance collaboration that facilitates a team approach in an organisation. There is no doubt therefore that technology can facilitate and encourage knowledge sharing processes by making knowledge sharing easier and more effective. The challenge of the organisation is to make available technology appropriate to the people and organisational processes. The following are some of the technological barriers that impede knowledge flow [16].

1.  Lack of integration of information Technology systems, organisational processes, and people
2.  Lack of technical support and immediate maintenance of integrated IT systems which obstruct work routines and communication flows.
3.  Unrealistic employee expectations as to what technology can do and cannot do
4.  Reluctance to use IT systems due to lack of familiarity and experience with them.
5.  Lack of training to enable employee familiarization with new IT systems and processes
6.  Lack of communication and demonstration of all advantages of new IT systems over existing ones

In short for companies to continuously grow their business through enhanced organisational performance, knowledge sharing practices need to become an integral part of their day to day business processes. Successful knowledge sharing goals and strategies must center on a knowledge sharing culture and depend on the synergy of the following three main factors [17].

1.  Motivation, encouragement and stimulation of individual employees to purposely capture, disseminate, transfer and apply existing and newly created useful and relevant knowledge, particularly tacit knowledge that is by its nature very difficult to share.
2.  Flat and open organisational structures that facilitate transparent knowledge flows, processes,  and resources that provide a continuous learning organisational culture, clear communication of company goals and strategy linking knowledge sharing practices and benefits to them, and leaders who lead by example and provide clear directions and feedback processes.
3.  Modern technology that purposely integrates mechanisms and systems thereby providing a suitable

sharing platform accessible to all those in need of knowledge from diverse internal and external sources.

It is the essence of this paper to explore the availability or otherwise of these knowledge barriers or enablers at this PHE institution and determine to what extent they impede or enhance knowledge flow at the institution.

## 3. Research Methodology
The paper used the mixed methods approach in gathering data. This refers to the application and combination of several research methodologies in the investigation of the same phenomenon [18]. 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 [19]. 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. Altrichter et al. contend that mixed methods approach provides a more elaborate and balanced view of the situation [20].

All in all, the following data gathering instruments were used:

### 3.1. Conducting and reporting a literature review
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 literature review helped to establish the key issues to be explored, and gaps to be filled through further research [21]. All this contributed not only to the credibility and validity of the research but also to its topicality and significance. Based on an extensive use of relevant literature covering theoretical foundations, an empirical research was conducted on top management of the PHE under investigation, middle management, and lower level employees in order to identify and understand the barriers that hinder knowledge flow in the institution.

### 3.2 Questionnaire
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, team- building events, seminars and workshops. It was used also 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, whether employees are involved in decision-making processes, 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.

### 3.3 Interviewing
In order to get a firmer understanding of knowledge practices and processes at the PHE institution in question, 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, both interviewer and interviewee, 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. Interviews usually unearth key cultural and other organisational factors that may influence implementation of KM initiatives. They enabled the researcher to probe further, verify and confirm issues raised by junior employees captured by the questionnaire.

## 4. Results
The following were the results obtained from both the questionnaire and interviews.

### 4.1 Lack of formal interaction
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 day available for meetings is Saturday only but even this is, more often than

not, occupied by assessments. This position was confirmed by responses to the questionnaire. 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.

**Figure 1: Formal interaction**

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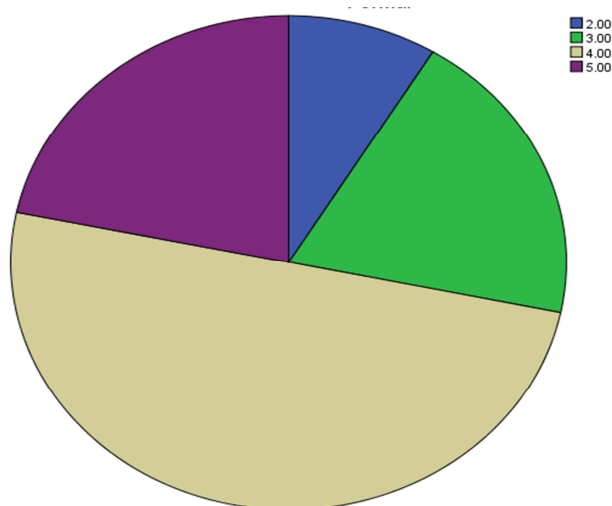


Seventy-two percent of the respondents agreed with the statement that they regularly participate in formal, planned meetings with colleagues to discuss work-related issues, while the other twenty-two percent ranged from neutral to disagree. Reasons cited most for the lack of formal meetings are inadequate 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.

**4.2 Lack of 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. This view was confirmed by the questionnaire as shown by the diagram below showing distribution of respondents by regularity of participation in internal and informal meetings with colleagues during tea and lunch breaks as well as other times.

**Figure 2: Informal interaction**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 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 | |
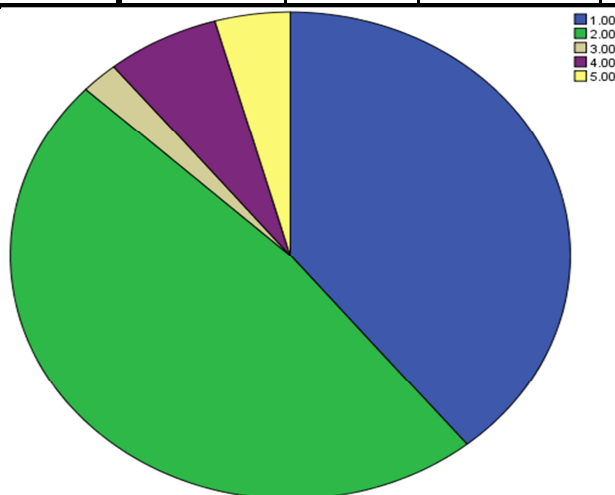


From the responses to the question, a combined eighty-seven percent of the respondents intimated that they do not participate in any meaningful informal and internal meetings, while only about ten percent indicated that they do so. The remainder was indifferent (neutral).

## 4.3  Lack of infrastructure
The majority of those interviewed indicated that unavailability of physical infrastructure hampers knowledge sharing by making interaction difficult. They cited crowded staff rooms, noise in the staff rooms, lack of adequate meeting rooms, lack of staff recreation facilities such as staff common room or staff canteens, and so on. They also cited inadequate internet facilities due to bandwidth challenges and close monitoring of internet usage by top management. For instance, social networking sites such as Face Book, Twitter and others are blocked since they are prohibited.

## 4.4  Heavy work load
Virtually all the interviewees indicated that most staff under them, including themselves, has too busy schedules to have time for informal interaction. Some members of the teaching staff do not even have time for tea since they will be in class at that time. While they have intermittent breaks in between classes, these are too short to enable any meaningful informal interaction and knowledge sharing. Most lecturers teach up to four batches each and quite a number take up to five different modules requiring a lot of time to prepare for lessons, thus leaving little room for informal and formal interaction since the lecturers are busy with classes throughout the day. Some lecturers will be having classes from 7 am to 17:00 hours with intermittent breaks of only one hour twenty minutes in between. By the time they finish classes, they will be so tired and hungry that they do not have time and energy to interact with other members informally to enable knowledge exchange to take place.

## 4.5  Nationality divisions
The entire staff membership of this institution is dominated by three nationalities namely Zimbabwe, India and Botswana (see the table below). There is other staff (one from each country) from Cameroon, Ghana, Kenya, Uganda and DRC. As per the researcher's observation and corroborated by 13 of the 15 interviewees, interaction seems to follow a nationality pattern with Indians preferring to be by themselves, so are Zimbabweans and Batswana. The same pattern has been observed even at social gatherings such as team building events and the Annual Christmas Party. This inhibits effective knowledge sharing.

**Table 1: Staff distribution by nationality**

| Nationality | Number of employees |
|---|---|
| Botswana | 136 |
| India | 58 |
| Zimbabwe | 71 |
| Other | 5 |
| **Total** | **270** |

### 4.6 Culture

Different nationalities mean different cultures. The most important cultural difference at the PHE under investigation that has had a negative effect on knowledge flow is language. Staff members prefer to informally interact with those who speak the same language with them. This has also been observed among students when they form project groups or when outside class. Members are often heard telling stories in groups in their own language since doing so in a second language is not easy and as interesting as it would be in one's mother tongue.

### 4.7 Organisational Structure

According to the results of the interviews, the PHE institution under consideration follows a hierarchical organisational structure. This creates bureaucracy and slows down knowledge flow. It also makes knowledge flow across departments difficult. Three of the five team leaders interviewed indicated that they only discuss business, thus sharing knowledge, only with their immediate superiors and subordinates along the hierarchy and have no access to those above their immediate superiors. Even at social gatherings, interaction still tends to follow the same hierarchical structure. At the team building event held recently, it was observed that the Managing Director and directors had to almost "hold some staff by their throats" to force them to join their teams. They preferred to belong to the teams made up of employees of their level.

### 5. Conclusion

In the PHE institution investigated in this paper, employees are not able to access the knowledge they require even if it exists in the organisation due to a number of barriers. There is lack of formal interaction due to the difficulty of holding meetings as a result of inadequate physical infrastructure such as meeting rooms which have all been converted to office space, and also because the staff rooms are overcrowded and noisy making it impossible to hold meetings there. Little or no informal interaction has also meant that informal sharing knowledge is severely curtailed. The fact that face-to-face interaction is not taking place means that there is no diffusion of knowledge, especially tacit which is more critical in an organisation. Staff members' workload, nationality divisions, hierarchical organisational structure, organisational culture, as well as the geographical dispersion of the institution into three distinct campuses separated by distances of over 500 km all constitute critical barriers to knowledge flow within the organisation.

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