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Abstract

Of late, South African higher education sectors have been engulfed with spontaneous and frequent protests by students. These protests have often led into violence and horrifying physical injuries to some victims, some victims being students, while some are members of the public. Amongst others, the latest episodes of the #FeesMustFall movement and protests bear witness. During this violence, valuable time is lost and assets are vandalized and also destroyed. The state has also suffered implacable budgetary loses when property gets torched and destroyed. Various studies have mushroomed investigating the causes of these violence and in addition their resolves. However, this literature has a gap because it fails to investigate the critical issue on decision-making during critical times. Decision-making plays a major role during these times. However, decision-making being not a simplistic issue needs to be developed to an extent of worthwhile decision-making and avoiding naïve arguments as well as opportunism. The aim of this article is to improve decision-making capabilities through knowledge management and critical thinking. Critical thinking enhances the potential of being judgmental. This qualitative study which uses desktop approach and PARA focuses on the higher education sector of South Africa. However, the higher education sector is vast as it includes hundreds of TVET colleges



and several universities for example. For the purpose of this study, one rural-based university was purposively selected for study. The data was collected through qualitative technique.

Collected data was analyzed using thematic code and results presented as main report

Key words: Knowledge, Knowledge management and Decision-making

Introduction and background

Since the advent of democracy in South Africa, institutions of higher learning are predominated by violence more often. The violence seems to occur after decision -making by either students themselves or leadership and management of the institutions. Although problems happen to prevail in the institutions of higher learning, they are not insurmountable if information from institutions of higher learning is obtained and used in the process of decision making. This includes institution-based problems. The state also suffers implacable budgetary loses when properties get torched and destroyed. Teaching and learning is jeopardized. Institution of higher learning is an organization with full information that could help students to make worthwhile decisions. However decision-making is a skill that needs to be developed through knowledge development and critical thinking. If the information could be accessible and readily available to students, these could help to broaden the scope of accountability for good or quality decision making before terrifying violence could occur. Just information, is not enough but critical understanding of the information is vital. The information from this organization helps students



to build their knowledge that would contribute towards their decision making though is not a simplistic issue. An institution of higher learning is an organization like any organization.

The institutions of higher learning use information to make sense of change in their environments, to create new knowledge for innovation and to make decisions about courses of action. Through sense making, people in an organization give meaning to the events and actions of the organization. During knowledge creation, the individuals' insights are converted into knowledge that can be used to design new products or improve performance. In decision making, understanding and knowledge are focused on the choice of and commitment to an appropriate course of action (Choo, 1996)

An organization needs to know what it knows as part of knowledge management although there are many ways to clarify what knowledge management is. The organization also needs to be able to put this knowledge in some formal ways where other people or employees could possible use it. It needs to turn an organizational knowledge into explicit information. In turn people or employees need to be able to use this information to turn it into their own knowledge and be able to create and share additional knowledge from it. This helps people to move from the level of general knowledge into a level of specific knowledge. Knowledge alone without management is not sufficient and efficient in any decision-making process. That is knowledge management that could contribute significantly towards decision making (Teg,2012).

Therefore students should not be left at the level of general knowledge if an institution has full information more especially in the democratic culture. They should not hesitate to start knowing



what they have to know. They have to turn this knowledge into they own knowledge for better decision making. If students are abreast of any development in an institution of higher learning, this would help them to be equivocal and take worthwhile decision. A person who does not have knowledge is dangerous in any Community hence knowledge alone without management is more dangerous. Both emotional and social intelligence are crucial in the decision making to avoid decision that could be facilitated by emotions.

According to Teg (2012), Knowledge management comprised of nine activity classes. The first five are considered primary while the last four are secondary. Primary classes are used to manipulate knowledge resources but secondary classes are involved in supporting and guiding the performance of the primary activities. Holsaple and Singh developed a framework called the knowledge chain model which reviews these nine classes of activity in light of Porter's value chain model.

When one makes decision, one should have a critical understanding of the organization. Therefore critical knowledge is vital in any decision making process. Unless one can manage one's knowledge, one could hardly make worthwhile decision. The knowledge of the institution of higher learning is crucial in the decision making by both university community members and students. After uncaring and scathing decision making, violence usually prevails which results vandalizing of Community and institution properties, people get injured and sometimes other people could happen to loose their lives.

According to Renn, Webler, Rakel, Daniel and Johnson (1993) public participation in decision



making occurs in the form of Citizen panels organized into three major components reception of information lectures, field tours, video, written material processing of information through small group discussions, plenary, hearings and evaluation. For this study, the public participation will be in the form of Students Representatives and University Community through small group discussions, plenary sessions, and hearings, recording, analyzing and interpreting their responses. The participants demonstrate knowledge management in the discussions.

Knowledge management is imperative in the decision-making process under any circumstances. This adds to knowledge as the first attribute of decision-making process. Critical understanding of the knowledge is fundamental in order to take worthwhile decision making.

Knowledge management could hardly have single definition; however Knowledge management is a meticulous approach towards the optimization of a firm's knowledge economy. It involves several elements like human resources practices, technology, culture and organizational structures. Knowledge management should have a basic understanding of knowledge operations and infrastructures to support the organizational operations. Knowledge management is the process of using meticulous steps to acquire, design, manage and share knowledge within an organization to achieve better performance such as reduced costly rework, faster work and use of best practice (Abubakar, Elrehail, Alatailat and Elc,i,2017) For this study knowledge management refers to the ability to use the knowledge that a person might have acquired during studies or from experiences to deal with the problems arising in that particular environment. Hence a person applies knowledge step by step to the satisfaction of the people affected by the decision taken. This includes an appropriate application of knowledge that an individual has acquired through learning and experience to minimize the conflict and maximize the



responsiveness to the people's demands. The knowledge acquired should improve decision-making towards the solutions to some of the institution –based problems.

Knowledge management focuses on problem solving and therefore is strongly problem oriented. This has to do with the improvement of the performance of individuals and organization by maintaining and leveraging the value of knowledge assets (Zhang, Zhou and Nunamaker, 2002) Knowledge management should also help to specify knowledge form hence it is grouped into knowledge based on common sense and personal experience, knowledge based on technical expertise and knowledge derived from social interests and advocacy. These three knowledge forms are integrated into a sequential procedure in which different decision makers could implement (Renn, Webler,Rakel ,Daniel and Johnson, 1993) Therefore, it is essential to understand knowledge-based on common sense, personal experience and technical expertise to avoid decision that could be facilitated by common sense. It is apparent that unless you have aspiration and knowledge management you would make worthwhile decision that would help to reinvent the organization.

Although it is not easy to make a worthwhile decision, decision making can still be improved if knowledge management strategy is driven by the organizational strategy and all the phases of decision making are considered. Knowledge management is a well established and developed area that allows efficient knowledge flow and knowledge sharing process to prevail amongst community members or members of any institution. Most of the knowledge management has been restricted to the management of know-how, know-what and know-why in the decision making (Liu, Leat, Moizer, Megicks and Kasturiratne, 2012). Knowledge gives people the power to make decisions and to act. Knowledge management is responsible for determining which



information is needed and for overseeing the acquisition and dissemination of information. Improving knowledge management do not only help decision makers but also those affected by decisions (Zhang,Zhou and Nunamaker, 2002). Nobody knows everything just as no one knows nothing hence the little knowledge one has, could also contribute in the decision making as long as it is well managed.

Decision making occurs after people would have reached a dead log without a satisfactory response under conditions of complexity and is a demanding task because of a number of challenges. The decisions that need to be made involve all Community members or students and their lecturers, the processes need to engage a wide range of stakeholders with different roles, from none members of structures to the executive members of different community structures, due to the nature of problem, decision making needs to be made at different times. There could be dominant role players or passive partners in the decision making and this affects how the decisions are reached when there are conflicting interest and priorities in existence. Some of the role players could remain dissident although there could be a fact. This happens when people are against a person instead of his or her ideas. (Liu, Leat, Moizer, Megicks and Kasturiratne, 2013).

Decision making becomes a problem when Community members or students disagree with the appointed decision makers. This happens where there is a claim by the interest groups and the appointed decision makers. Community members or students should be an integral part of decision making. The evaluation of option, performance profiles for each decision option and Community recommendations are the three steps to be taken into account during the process of decision making (Renn, Wabler, Rakel, Daniel and Johnson, 1993). During the decision making



process, those who are to make decision need to perceive the problem, gather relevant information, make the right judgment and conduct a plan of action. The problem that might threaten decision making environment should be dealt with consistence in a timely manner. In a real situation, real time decision makers encounter a variety of challenges, like gathering information in a timely and accurate manner. How to store, organize and manage information efficiently so that the resources can be accessed and shared? How to reuse knowledge or past experience to facilitate current decision making? The challenges are generated by the characteristics of real time decision situation such as mission critical or time critical, real time acquisition and analysis of distributed data, uncertainty due to the dynamically changing situation and cognitive overload (Zhang, Zhou and Nunamaker, 2002).

The Sociopolitical landscape sometimes informs the decision makers on what option could be suitable in a particular environment. This on the other hand could appear as a challenge to the decision makers by the predilection that could be remarkably explained by those appeared to be accustomed to the politics of that particular environment.

Research Design and Methodology

The researcher adopted Participatory Action Research Approach within a Critical paradigm. Participatory Action Research Approach is a study which aims towards empowering and building the capacity of the participants. The researcher employed qualitative technique for the collection of data. The researcher selected purposively, students from one of the rural-based Universities. Fifteen students were selected purposively from student representatives. Five students were selected from each group that is second year students, third year and fourth year students. The purpose of selecting these students was to find their experiences of making



decision during tough times more especially after each problem since they are abreast of the university situation. The participants were interviewed individually at their respective places after classes. The same questions were used for the individual interviews. The purpose for using the same questions was to find different views on the same questions. Another purpose was to confirm the validity and reliability of the instrument. Their responses were recorded and transcribed after each interview. The findings were presented, analyzed, synthesized and interpreted. The findings were presented as a report.

Results

Individuals' responses to interview questions

The responses to the interview questions were recorded and then transcribed by the researcher. The respondents used their experiences to respond to the interview questions. The purpose of the interviews was to find out if the respondents have knowledge about decision- making and institution-based problems. The aim of the research was to inform the reader that decision making is not a simplistic issue hence it needs skills and development.

The respondents appeared to have different understanding and views on decision-making. The interview questions were based on the understanding of decision-making and institution-based problems. Below are the responses to the interview questions:

What is an Institution-based problem?

The first respondent indicated that an Institution-based problem includes problems that affect students such as a shortage of study materials and failing to provide students with their needs.



The second respondent defined Institution-based problem as the needs of the community institution including the students' needs. The third respondent pointed out that this includes shortage of learning materials such as books and equipments such as projectors. The fourth respondent showed that this refers to lack of equipments that support learning and teaching including electricity backup such as generators. The fifth respondent pointed out that this includes the shortage of qualified lecturers which results the appointment of unqualified and under qualified lecturers. These ultimately give high failure rate in the institution. This also includes unfair distribution of funds to students. The sixth respondent indicated that this is a problem affecting a particular institution and does not affect the next institution like the online teaching problem. The institution accustomed to online teaching might have its own problem except online teaching. The seventh respondent showed that this includes an institution or organisation barriers that may have negative impact towards the growth and development of the institution such as shortage of teaching and learning materials. The eighth respondent pointed out that these are problems or troubles that are experienced by a particular institution which could not be the same in the vicinity institutions. The ninth respondent showed that this includes WiFi problem, online teaching and learning, shortage of laboratories and lack of learning and supporting materials. The tenth respondent indicated that this refers to problems that arise in a particular institution such as conflict between the students and management more especially on the allocation of funds. The eleventh respondent indicated that this is a problem emanating in that particular institution including students uprising and lack of cooperation between students and management. The twelfth respondent pointed out that this refers to problems that hamper the development and growth of the institution. The thirteenth respondent showed that this is a problem that affects a particular institution and needs to be resolved by that affected institution



only. The fourteenth respondent indicated that this is a situation-based problem which affects the service offered to people concerned. This can be in a formal or informal setting institution.

The responses to the question indicated that the respondents have clear understanding of institution-based problem. They appeared to know some of institution-based problems affecting a number of institutions and how they jeopardize teaching and learning.

What do you understand by decision-making?

The first respondent showed that this is the stage of concluding what you could be settling or discussing. This includes giving the final words. The second respondent indicated that this is the process of indicating what should be done or what should not be taken into consideration. The third respondent pointed out that this is the ability to conclude the matter under discussions. This includes the ability to stand and make a ruling. The fourth respondent indicated that is when you decide to take a specific action towards settling or solving a particular problem. The fifth respondent pointed out that this is when a person decides on the last course of action to take to rescue the situation. The sixth respondent showed that this is a process of making a choice by identifying and gathering information about a resolution to the problem. This includes assessing the information people have at a point in time. The seventh respondent indicated that this is a process of making a choice of decision to improve the situation. The eighth respondent pointed out that is a process of choosing a wise decision or action. The ninth respondent showed that this includes making the final choice of action after comparing different inputs from all people involved. The tenth respondent indicated that this occurs when there is a problem which needs to be resolved and then you have to take a final decision to the problem. The eleventh respondent pointed out that is when you have to a decision about a certain problem in order to solve it. The



twelfth respondent indicated that decision making needs a wise man because this is a process of deciding on the future of people or institution. You have to be well conversant to the problem as well as the situation. The thirteenth respondent showed that this is a process of making choice by identifying decisions and gather enough information to decide on a ruling. The fourteenth respondent indicated that it is the process of making a decision based on the information gathered and identified most relevant ones to inform your decision.

The responses to the question appeared that the respondents understand what decision-making is.

They are aware that this is a process that needs a wise decision maker who will have to gather enough information first to make worthwhile decision.

What informs your decision making process?

The first respondent pointed out that the effects of the problem or a situation a person is facing help to inform decision making process. The views of other people can inform your decision making process because these can help to make a choice. The respondent further indicated that the interest sometimes informs decision process. The third respondent showed that this is informed by experience a person has and the nature of the problem. The environment also contributes towards decision make of a specific kind. The fourth respondent indicated that the information that one should have collected and the knowledge of the steps to follow when one makes a decision. The fifth respondent showed that the knowledge that a person has about the problem, helps in the decision making process. The sixth respondent pointed out that the information about the problem and the situation informs decision making process. The experience of a person of dealing with the problem of the same character also informs decision making process. The seventh respondent indicated that the environment where one grew,



contribute towards decision making process. The environment which is predominated by uneducated people informs poor decision making unlike environment predominated by people who are knowledgeable. The eighth respondent pointed out that the prediction of the future and the knowledge about the problem inform decision-making process. The ninth respondent indicated that self motivation and ideas from other people help in the decision making process. The tenth respondent pointed out that problem solving skills inform decision making process. Decision taking is not a simple issue, therefore one should have knowledge. The eleventh respondent indicated that knowledge of the problem and knowledge about problem solving techniques are significant in the decision making process. The twelfth respondent pointed out that the capacity of the individuals informs their decision making process. The thirteenth respondent showed that relevant information about the problem informs decision making process and the ability to assess and analyze the information are fundamental. The fourteenth respondent indicated that critical thinking of a person informs decision-making process.

The responses to the question indicated that decision making process is not a simplistic issue. Knowledge is paramount important in any decision making process. The relevant information is also significant in decision making process.

How do you get knowledge that would empower you in the decision-making?

The first respondent indicated that this is possible if you trying to identify points from any discussion. One should analyze the knowledge that one got to find out if it is valuable to other people. It is also important to understand information processing technique to get knowledge. The second respondent pointed out that by listening to other people one could get knowledge as well as by reading books, more especially related to problem solving. The third respondent



showed that knowledge is acquired through research related to a particular problem. The fourth respondent indicated that people get knowledge by researching what you want to understand better so that you can help other people. If you ask other people who appear to have knowledge better than you, you can get knowledge. Sometimes you can ask people who once experienced the same problem. The fifth respondent showed that one could get knowledge by listening to other people and reading books. The respondent further indicated that by searching information from the previous researches that could be used for decision making. The sixth respondent pointed out that by thinking critically, one could get knowledge. Creative and critical thinking help to get more knowledge that could help in the decision-making. The seventh respondent indicated that by becoming friendly to someone who is highly educated could contribute to your knowledge enrichment. The eighth respondent pointed out that by researching meticulously, reading books and by setting achievable objectives could help for knowledge enrichment. The ninth respondent showed that one can get knowledge if one is self motivated and ready to take advice. The tenth respondent pointed out that unless you spend most of your time in the library reading books, you could hardly get knowledge. The eleventh respondent indicated that you get knowledge by reading books and journals. People who have experience could also help to enrich you. The twelfth respondent indicated that reading gives you knowledge so that you can take worthwhile decision. The thirteenth respondent pointed out that people get knowledge by researching and consulting other sources of knowledge. The fourteenth respondent indicated that if you want to take worthwhile decision you have to study including research project.

The responses to the question indicated that respondents believe that studies including research are imperative for knowledge enrichment. They further pointed out that people who are



experienced could help much towards knowledge enrichment. They emphatically indicated that knowledge is significant for worthwhile decision making.

What do you understand by knowledge management?

The first respondent indicated that this is a state of taking care of what you know or what you understand. This refers to the way you handle the information that you have. The second respondent showed that this is a process of creating, sharing and managing the knowledge and information related to an organization. The third respondent pointed out that this is how you use the knowledge of the institution. This includes how you process the knowledge you have. The fourth respondent indicated that this is the power to control the knowledge you have by ensuring that you preserve that knowledge. The fifth respondent pointed out that this is when you know the knowledge that can help and that can not help you. The sixth respondent showed that this is a multidisciplinary approach to achieve organizational objectives by making the best of knowledge. The seventh respondent indicated that knowledge management is the process of creating and sharing the knowledge and information of an organization. The eighth respondent pointed out that this is a conscious process of defining, structuring, retaining and sharing the knowledge and experiences of employees with an organization. The ninth respondent indicated that this refers to the process of creating something and share it with others. This includes managing the knowledge to boost your efficiency in an organization. The tenth respondent pointed out that this is how a person uses the information and knowledge acquired to improve the situation. The eleventh respondent showed that this is the way you manage your knowledge. Some people use their knowledge in a wrong way or unproductively. The twelfth respondent indicated that this is a conscious process of structuring, sharing and retaining knowledge and experiences of the employees within an organization. The aim of knowledge management is to



improve an organization's efficiency and save knowledge. The thirteenth respondent pointed out that knowledge management is the retaining and sharing of knowledge for the betterment of the environment. The fourteenth respondent indicated that this is the management of knowledge that you have acquired through your studies and experiences.

The responses to the question indicated that the respondents have understanding of knowledge management. Their responses seem to show the importance of knowledge management in any organization for improvement. They seem to believe that knowledge management is fundamental for worthwhile contributions to any organization.

Where do you start when you take decision if there is a problem?

The first respondent indicated that you have to know the whole scenario so that you can come up with your own views. Make sure that you understand the whole story. The second respondent pointed out that you have to identify the information that could help you when you make decision. The third respondent showed that you have to listen attentively to all the views, analyze and come with interpretation. There after you can make your decision. The fourth respondent indicated that you have to understand the problem itself and listen to those who are justifying the problem and then make decision. The fifth respondent pointed out that you have to know yourself before you make decision. If you do not know yourself you can hardly make a worthwhile decision. The sixth respondent showed that you have to know what you want before making any decision. If you know what you want to achieve, you can make decision. The seventh respondent indicated that one should start by identifying the problem and try to get information around the problem. One should have a profound understanding of the real problem. The eighth respondent indicated that the first thing is brainstorming and defining the problem.



One has to identify the appropriate approaches to solve the problem, and then select the most appropriate one that will help you to arrive at a decision. The ninth respondent pointed out that one should get information about the problem and try to understand the knowledge about the problem. The tenth respondent indicated that one should identify the causative factor of the problem. One has to try to identify the possible solution to the problem. Try to get amplified understanding about the problem before arriving at a decision. The eleventh respondent showed that the first thing is to identify the cause of the problem and get more information about the problem. The twelfth respondent pointed out that one should have clear understanding of the problem. One should get more information related to the problem and analyze it. You should also have multiple options before arriving at the final decision. The thirteenth respondent indicated that start by understanding the problem by gathering the information about the problem. Try to solve it and then make decision that is informed by your understanding of the problem. The fourteenth respondent showed that one should think much about the problem and get information around the problem. One could try to solve the problem with multiple options before making the final decision.

The responses to the question indicated that the respondents appeared to understand that one should have information about the problem identified first. They showed that knowledge is significant when one makes a decision.

Decision making module should be introduced to all institutions of higher learning programme.

The first respondent agreed that this module should be introduced because it could help students to make decisions that would help then tomorrow. It might help students with techniques for take worthwhile decision in life. The second respondent agreed that the module should be introduced



to equip students with knowledge for making decision in their communities and institutions. The third respondent agreed that students will know what is important to any decision maker. After completing their studies they will join workplaces where they will have to make decisions. When you take decision, you will have to be firm. The fourth respondent agreed that it should be introduced because taking decision needs adequate knowledge. If you take this module, you will get adequate knowledge that will assist you in the decision making process. The fifth responded agreed and indicated that students are sometimes in leadership which needs them to make decision. If they have knowledge about decision making, this would help them when making decisions. Some of us grow without parents who can advise us how to make decision. Youth are implicated in Gender Based Violence because of poor decision making. The mortality rate of student in Higher Institutions of learning could be reduced. The sixth respondent indicated that this will also help when deciding which political party to vote. It is a fundamental module more especially in a Democratic country where every body decides what to go for and when. The seventh respondent indicated that it is important because students will not take field of study because of friends but they will have to make their own choice. The eighth respondent pointed out that most of the students appear to be involved in different juveniles because they can not make their own decisions but their friends make decisions on their behalf. If there is a module, every student will have knowledge about decision making. The ninth respondent showed that this could also help students on how to spend their funds. They would make worthwhile decisions on the use of money before they use it. The tenth respondent indicated that this module will add problem- solving skills. If you do not have problem solving skills you quickly jump to final decision which might not be acceptable one. The eleventh respondent pointed out that the introduction of decision making model is an ideal which will help most of the students. Students



happen to take courses without making a clear decision. Students find themselves in protests without decision making as long as some individuals would have made decision. The twelfth respondent showed that the introduction of decision making module is a good idea. This would help students to make worthwhile decision when they have problems rather than resorting on protests. This would help us because students are killing one another for poor decision making. The thirteenth responded indicated that this module is significant to all students in Higher Institution of learning so that they can make worthwhile decision that would benefit both students and their institutions. The fourteenth respondent showed that the introduction of this module would contribute much towards the decision making of students. Students would get knowledge that would help them in the decision making.

The responses to the question indicated that the respondents seem to appreciate the introduction of the Decision Making Module in Higher Institutions of learning. They indicated that this will provide them with adequate knowledge for solving their problems. The Institutions of Higher learning appear to be overwhelmed by predicaments which are not insurmountable if adequate knowledge for decision making is acquired.

How can you avoid biased decision making?

The first respondent indicated that you can avoid biased decision making by acquiring adequate knowledge about decision making. Do not hurry when you make a decision. The second respondent pointed out that you have to read the minds of other people when you make decision for balancing your interest with the interest of other people. The third respondent showed that do not take side when you make decision or have an interest to another party. The fourth respondent indicated that you have to think critically about the problem before making a decision. Make sure that no party should suffer after your decision. The fifth respondent pointed out that self



knowledge is significant when you make a decision because you would make a decision which is none of your concern or business. The decision you make should not serve your interest only. The sixth respondent pointed out that you have to redefine the problem once more before you make decision. Avoid relating the problem with the previous problem where it once happened. The seventh respondent indicated that do not be influenced by bad friends when you make decision. The eighth respondent showed that you can avoid biased decision making by collecting enough information about the problem and the people involved. Knowledge is power in this regard. The ninth respondent indicated that do not take decision when you are under pressure. You have to make a consistent and coherent reasoning before you make a decision. Avoid making a decision alone but try to involve other people who are experienced and knowledgeable. The tenth respondent showed that you have to consider other people's views when you make decision more especially the participants of decision making to that problem. The eleventh respondent indicated that you have to consult before you make any decision because other people could have better knowledge about the problem. Do not make decision when you are under pressure. The twelfth respondent pointed out that you should not have an interest on the problem. You have to understand what you want to achieve at the end. You should have positive attitude towards the problem and the people involved. Ensure that you make a research to have a profound knowledge on the problem. Stay away from the naysayers. The thirteenth respondent indicated that identify people who could help you in your decision making. Try to get the history you make decision in any environment. The fourteenth respondent showed that unless you have enough information about the problem you could hardly make a worthwhile decision. The responses to the question indicated that the respondents are aware that people sometimes are biased when making decision. They tried to identify some of the contributing factors towards a



biased decision making. The have the knowledge that you have to balance your interest with the interest of other people.

Discussions

The discussions presented below, together with the above presented findings helped the researcher to arrive at the conclusion of the study.

Knowledge management process

There are many efforts at developing knowledge management frameworks and identifying key components to support knowledge management in each organization. Despite the type of an organization, knowledge management is crucial for any problem that could arise. Knowing organization is a model in which an organization uses information strategically for sense making, knowledge creation and decision making. During sense making, an organization tries to understand its changing environment. The knowledge creation process shows how to transform information into new knowledge. Decision making is a process to analyze information and use knowledge to resolve problems. Another model comprised of four core capabilities which include employee knowledge or skill, physical or technical systems, and managerial systems and values all work together to build the core system. In addition to core capabilities, there are four knowledge-building activities surrounding the core capabilities: shared and creative problem solving, implementing and integrating new methodologies, experimenting and prototyping and importing and absorbing technologies from outside sources. The knowledge management process which supports real time decision making process includes knowledge creation, acquisition, sharing, maintenance, filtering and categorisation (Zhang, Zhou and Nunamaker, 2002). The components or qualities of knowledge management process which supports real time decision making process are explained below.



Knowledge creation

This refers to the ability of an organization to formulate and circulate knowledge in their services, products and systems. Effective and consistent creation of knowledge in an organization is fundamental to its growth and success. The knowledge is created by the interaction of knowledge elements such as knowledge assets which include the output, input and brokers of the knowledge creation process. Knowledge is created through the transformation of tacit knowledge to explicit knowledge and the communal perspective for knowledge (Abubakar, Elrehail, Alatailat and Elc,i 2017). New knowledge is created through different processes ranging from data visualization to data mining. People discover future disaster or problem trends by presenting data in a graphic manner. Automatic and intelligent data mining can obtain new knowledge by performing a statistical data analysis. The extracted information such as various situation features, action taken, and the relief organizations involved success of the resulting outcomes and the information source can be integrated and codified to generate well structured disaster cases. The cases are treated as knowledge for future reuse through case-based reasoning (Zhang, Zhou and Nunamaker, 2002). For this study knowledge creation refers to the ability to create approaches that would help people to solve their problems. This includes the development of the mechanics of intelligence.

Acquisition or knowledge capture process

Acquisition refers to the development of new procedures to ensure focused information for addressing problem needs of decision makers. This includes the discovering of critical information or knowledge required by different people dealing with the problem, identify which organizations or agencies are the major information sources for each particular part of the problem, specify the standard structures for each kind of information and knowledge, determine



how to acquire the relevant information from those authorized sources, examining the acquisition process to make sure that it is not cumbersome and can be aided by information systems and technologies and building information portal to enable the decision makers to know where to get the information when they need it (Zhang, Zhou and Nunamaker, 2002).

Sharing

Information and knowledge sharing is one of the most important and desired functions that could help in the decision making. Knowledge sharing is well recognized and understood bottleneck in the decision making where community hinders information dissemination and effectively utilize the available knowledge. An organization can officially recommend sharing information and knowledge in order to obtain useful relief recommendations (Zhang, Zhou and Nunamaker, 2002). This strategy helps the individuals to develop a shared repertoire of concept, tools and stories or a shared vision of the strategy and of the decision. Sharing brings individuals a collective rational dimension for choosing the right solution among many. Socialisation is significant in the improvement of the organisation's responsiveness by providing knowledge across the organization (Nicholas, 2004). It has been well acknowledged that efficient knowledge flows and knowledge sharing processes among supply chain partners have three advantages: agility, adaptability and alignment (Liu, Leat, Moizer, Megicks and Kasturiratne, 2013).

Unless people share, they would never have common understanding hence common understanding helps people to take collective decision that could benefit Community members or students. An individual knowledge is not enough to solve Community-based problem or an organization-based problem, but if individuals share their knowledge they would have the same understanding that could help in the decision-making process.



Maintenance

The knowledge base should increase or improve everyday through receiving new information and taking out the out dated information. The information related to an organization which is no longer existed should be deleted and replaced by the information efficient to mitigate the problem. This ensures how recent is the information and knowledge base (Zhang, Zhou and Nunamaker, 2002).

Filtering

After collecting information from various sources, there is a need to find out which information is relevant and irrelevant. The main objective of filtering is to sort the information according to their importance in the decision making process to the solution to the problem at hand. The filtering methods depend on the features of the information to some extent. The easiest way is content-based filtering which is based on the correlation between the information content and user's preferences (Zhang, Zhou and Nunamaker, 2002).

Categorization, Indexing and Linking

Information and knowledge collected should be stored in the knowledge base where it can be retrieved. This retrieval occurs if the information and knowledge are organized into categories. Organisation of knowledge is defined as the description of documents, their contents, features and purpose and the organization of these descriptions. Knowledge base, indexing, categorization and linking are performed to organize information and knowledge. Linking means to establish connections between relevant information and knowledge so that everything related to a specific problem in the knowledge base can be located through interconnected links (Zhang, Zhou and Nunamaker, 2002). All these qualities of knowledge management process support the



real time decision making. Although decision making is not a simplistic issue, the discussions below can enhance one's decision-making process as indicated in phases which could assist people to reach a particular decision.

The decision makers have to develop procedures to ensure that information and knowledge would help to focus on the problem addressed only. This includes the identification of agencies that could provide with valuable information that could facilitate decision-making. The information acquired should be available to all responsible for the decision-making related to that particular problem. All responsible for that decision making should have the same understanding of the information acquired to avoid naïve argument. Critical understanding is crucial in this regard for knowledge creation. The knowledge the decision-makers have, should improve daily in order to take worthwhile decision. Only information related to the problem should be maintained for references and future use. After collecting information from relevant sources, filtering is paramount important for more relevant information. The information and knowledge collected should be categorized to be retrievable when needs arise.

Decision making

Decision making is a process which should go according to phases or stages. According to Teg (2012), there are four phases of decision making that could contribute significantly towards improving decision making. Both tacit and explicit knowledge are crucial in the decision making process including emotions. These decision making phases are intelligence phase, conception phase, selection phase and implementation phase. Therefore in order to make a wise decision, you have to take time to avoid a biased decision although it is not a simplistic issue.

Intelligence phase



In this phase the decision maker should be aware of the need for a decision. This is also a phase where the decision maker collects knowledge surrounding the potential decision and evaluates the knowledge in terms of the organization's purpose. Emotion is the knowledge which emphases information with feelings and makes them more interesting than other for the rest of the group. Knowledge moves from individual to collective and from collective to individual. Knowledge is used in this phase to link the actual situation with the previous one. The problem has to be defined in this phase.

The individuals involved in the decision making have to find reflective elements and to manage ignorance. Leadership tries to divide a problem into different portions or components because they believe that they can solve the problem in solving each component (Nicholas, 2004, Teg, 2012).

This phase is also characterized by the identification of objectives or goals that the process should serve once a problem is identified. The identification of objectives is accomplished by asking all the relevant stakeholders to reveal their values and criteria for judging different options. Although strategic reasoning and hidden agendas could influence decision making, the mere listing of concerns as expressed in values could help to expose hidden agendas (Renn, Webler, Rakel, Daniel and Johnson, 1993).

Conception phase

The second phase refers to the stage where alternative courses of actions are formed. The decision maker speculates the possible outcomes based on each of the alternatives. The possible outcomes are then reviewed in terms of the organisation's purpose. If additional knowledge is needed, a return to the intelligence phase will be required (Teg, 2012). This also refers to a process driven by action where individuals involved in the decision making process share



knowledge without preference regarding to its nature. People design new solutions or search routines in the organizational memory. Tacit and explicit knowledge are mobilized with the same interest and the same frequency. At this stage, complexity comes from ontology and if the ontology is ordered, causes and effects relationships will be known. If the ontology is complex or chaotic, there will be high level of uncertainty. Through this phase, managers develop a complex situation in providing multiple solutions for the problem. Each solution represents a different state which managers can not deal with such a high volume of information that is important to understand the results of each solution. This knowledge is nurtured by tacit knowledge, intuition and emotion (Nicholas ,2004).

This phase is also known as the identification and measurement of the impacts of the different decision options. Assembling options is part of this phase where options are found by brainstorming and interviewing the stakeholder groups. The purpose is to reconcile conflicts about factual evidence and reach an expert consensus via direct confrontation among a heterogeneous, preferably representative, sample of experts in the field. The desired outcome is a performance profile for each option. This includes opinions among the expert community and includes verbal justifications for opinions that deviate from the median viewpoint (Renn, Webler, Rakel, Daniel and Johnson, 1993).

Selection phase

Here the decision maker selects one of the alternatives. There may not be clear choice. Several of the alternatives may return similar outcomes. There may be instances when none of the alternatives seem to satisfy the decision maker. If it happens, the decision maker can either make a choice based on what is presented or choose to return to one of the earlier stages to reformulate



new alternatives (Teg, 2012). According to Nicholas (2004) all the alternatives should be evaluated before a choice is done. Emotion gives people the power to choose a solution in relation to a specific event and should be considered as the basis of intuition. This emotion is also an explication of improvisation. At this stage of decision making, explicit knowledge that is not important or related to the issue should be put aside. Individuals are influenced by their feelings and emotions. Selection consists of screen routines to arrive at a choice. Choice is made by a group with different goals and interests within each person taking a judgment (Nicholas, 2004).

Implementation phase

This is the fourth phase of decision making. One alternative has been chosen, the next step is to implement or put the choice into action. This may include alerting affected individuals of what is to be done next or simply reporting which alternative has been selected. The decision making process actually culminates with implementation (Teg, 2012). This phase is driven by argumentation which also gives an important part to the improvisation. Improvisation gives a sense to some feelings but is sometimes a consequence of the system failure. The improvisation should be the lack of constructive answers and can be considered as the last solution but not least solution (Nicholas, 2004).

In conclusion, intelligence including social and emotional intelligence is crucial in the decision-making process. In addition, mechanics and pragmatics of intelligence in a complex situation are likely to heed. Any decision-maker should have alternative ways of dealing with any problem and ready to reverse the decision if deems so. It should be crystal clear to any decision maker that an individual perception can be knowledge claim only after it has been tested against the



experiences of others; therefore one should be ready to change the decision if any alternative has been taken. If all the decision makers could happen to consider the above explained phases, decision making could improve to the better. Community members and the majority of students could lack this knowledge but leadership should be abreast of the above explained phases in order to make such magnificent and charming contributions in the decision making process. All valuable things should be transmitted morally and unobjectionably. Clear headedness and critical attitude could remain predominant in both university community and students. However, knowledge management is imperative in the decision making

Conclusion

Decision making is not a simplistic issue more especially if the decision maker does not have information. If you want make decision, you have to make sure that you have gathered enough information related to the problem as well as a particular environment. Knowledge is crucial in the decision making of any specific kind. Knowledge solely without knowledge management seems not enough for worthwhile decision making. The Institutions of Higher learning are similar to any organizations which have information that could assist in the decision-making process. Each Institution of Higher learning seems to have its own problems which need decision-making process by students. Decision-making is a skill which could be developed within a particular time depending on the dedication and determination of any decision maker for the coming tomorrow. Decision-making could be improved by knowledge and knowledge management acquisition.



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