

THE ROLE OF CULTURE: A SUCCESSFUL KNOWLEDGE CREATION (KC) AND KNOWLEDGE SHARING (KS) WITHIN HIGHER EDUCATION INSTITUTIONS

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Abstract: The higher education institution plays a crucial role as an educational organization for critical thinking for achieving academic excellence. Many good practices can be identified to support this role as a source of value creation to develop and deliver knowledge widely. The culture has a great influence to knowledge Management (KM) which operates in an institution. Knowledge creation (KC) and knowledge sharing (KS) of the university is a goal of KM by encouraging everyone recognize and participate on it as a desirable practice. KC includes the process of reproduce and create knowledge by knowledgeable people through their own and others experiences. Whereas, KS is the action of knowledge exchanged comprising information, skills, or expertise among people. Accordingly, fundamental elements of organization culture are belief, value and assumptions. These elements' interaction describes the role of culture within an organization. This paper investigate the role of culture in the successful KC and KS within higher education institutions by examine the two world ranking university that has been mentioned in the literature review.

Keywords: Higher education, Academic Excellence, Knowledge Management, Knowledge Creation, Knowledge Sharing, Organizational culture, Role of culture.

1. INTRODUCTION

Knowledge includes the recall of a broad range of material concerning definite facts to exhaustive theories, yet it is prescribed to carry applicable knowledge (Filemon A. Uriarte, 2008). In many organizations, they might have been given networks of knowledge resources however unenlightened of their presence as well as unaware on how these resources can be leveraged for competitive advantage (Leidner et al, 2006). Knowledge management (KM) refers nurturing knowledge where it occupies from variety of sources such as databases, websites and employees and partners, while at the same time capturing its framework and conveying it greater implication through its concern to other knowledge in the organization (The Microsoft Knowledge Management Strategy, n.d). Similarly as with all organizations, higher education institutions require creating knowledge and fostering the culture of knowledge sharing for proceeding academic excellence and innovation in research. The components of knowledge management consist of people, processes and technology within culture where those are required in designing, capturing and applying the intellectual infrastructure of an organization to facilitate the people to share knowledge, leading to enhance performance and result (Bhusry & Ranjan, 2011). Knowledge creation involves the process of reproducing and creating knowledge by knowledgeable people through their own and others experiences (Siadat et al., 2012). The organizational culture affects both the process of knowledge sharing and the way an organization works to create knowledge. An organizational culture motivates and promotes collaboration and trust for the continuous of knowledge to be shared in an organization. Besides, knowledge sharing differ from knowledge transfer in which knowledge sharing refers to interchange roles among individuals and groups (Hendriks, n.d). Knowledge sharing is the action of knowledge exchanged such as information, skills, or expertise among people including colleagues,

family members, a community, an organization or collaborative parties (Parekh, 2009). Consequently, the basic elements of culture are belief, value and assumption to define the role of culture within an organization. This article emphasizes the need of higher education to recognize the role of culture to value the knowledge creation and inspiring the knowledge sharing practice within higher education institutions.

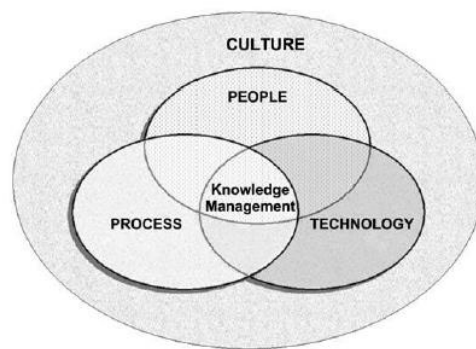
2. PROJECT BACKGROUND

The role of culture as belonging to a group that provokes in individuals as group members certain behavior, puts the analysis steps in order. The acknowledgement of knowledge sharing facets specifies the third cultural aspect: knowledge sharing involves a form of behavior. These facets can therefore be used as a checklist to pinpoint the influence of culture on knowledge sharing behavior. The notable types of relationship between culture and knowledge sharing guides the valuation of how organization (higher institutions) culture can play a role in each of the knowledge sharing facets (Hendriks, n.d). Knowledge Creation and sharing is the process for exchanging knowledge (skill, experience and understanding) among researcher, policy maker and service provider. Knowledge sharing is becoming increasingly important to ensure the policy and practice are based on sound evidence. The gap that found among research, practice (culture) and policy. Organization culture provides a system of behavioral patterns, it involves methods of cooperation, organization culture gives direction and meaning to action, it is the basis of acquired behavior. Many organization and higher institutions are not aware of the culture role and the effectiveness to set the basic the infrastructure for the knowledge creation and sharing. In spite of the increased attention for the relationship between culture and knowledge sharing no discussion is available of a general framework for diagnosing the knowledge culture, nor an overview of alternative procedures, methods and techniques (Hendriks, n.d).

3. LITERATURE REVIEW

I. FOUNDATION OF KNOWLEDGE MANAGEMENT:

Carol Gorelick (2005) points out the foundation of KM system to ensure performance and learning for sustainable progression incorporating people, process, and technology within a specified culture as illustrates in figure 1:



Sources: Carol Gorelick (2005)

Figure 1: Foundation of KM system

The higher education institutions have to support and endure an environment where people deliver and share necessary information. The ethical environment can be developed through a reliable organizational culture for critical success by developing the people with the mutual belief, trust and team coordination (Madu, n.d). The process component is to ensure the KM is aligned with operational organizational processes whereas technology is a medium which enabling activities concern to KC and KS among people. The foundation of KM system in an institution required the interaction of culture's elements to value the knowledge creation and motivating the knowledge sharing practice for achieving academic excellence.

II. WHAT IS ORGANIZATIONAL CULTURE?

The topic of organizational culture is increasingly understood as a company asset that can be used to increase business performance. As important, organizational culture is a slippery concept to on concretely define. A foundational definition

by Edgar Schein of MIT's Sloan School of Management is arrived at as well as the notion that culture can be observed at three levels of the organization: artifacts, espoused values, and basic assumptions (Tharp, n.d). Mobley define Culture is a conceptual word that has been discussed for thousands of years by anthropologists, sociologists, historians and philosophers. Each society is underpinned and defined by a distinctive culture (Mobley et al, 2005). Other definitions according to Vijay Sathe is "the set of important understandings (often unstated) that members of a community share in common." These shared understandings consist of our norms, values, attitudes, beliefs and 'paradigms' (Gurteen, 1999).

III. ELEMENTS OF ORGANIZATION CULTURE

Culture is a social product where it is not natural, inherent and will-less in which people learned culture through relation among each other (Mahadi & Jafari, 2012). Organization culture can be described as the character or the behavior of an organization. There are three elements of organizational culture, value, belief and assumptions. The interaction of these elements describe the role of culture to demonstrate organizational behavior operate under organizational behavior surface. They are not directly spotted yet but their impact are everywhere. Assumptions shows the inmost part of organizational culture because they are lifeless and taken for granted. Assumptions are the shared mental models, the broad worldviews or theories-in-use that people rely on to guide their perceptions and behaviors (Objectives, n.d.). An organization's cultural beliefs and values are slightly easier to decipher than assumptions because people are already aware of them. Beliefs represent the individual's insight and perceptions of the reality. Values are more firm, lifelong beliefs about what is important and lead us to define what is right or wrong, or good or bad, in the world. One's can define an organization's cultural values just by enquiring employees and other people about them. The espoused value are the value that socially required, what people say the y value. Enacted value is truly value. Organization's culture does not characterize by espoused value. Somewhat, is about what the corporate leaders want to display about the public image, the values-in-use it is the Enacted values. The individual decision, behavior and guide are the value in work place.(Objectives, n.d.)

IV. CULTURE OF EXCELLENCE

a) Criteria of Excellence:

According to Brusoni, et al. (2014), the term of excellence in higher education can be subjectively defined by a person including the inspiration to achieve it. Generally, by demonstrating good practice in a variety of diverse areas are projected to accomplish the excellence's status of institutions. Brusoni, et al. (2014) identify below criteria of excellence for adopting the culture of excellent:

✓ Robust and progressive strategic governance and management.

Demonstrate a solid commitment of institutional mission and purpose by both executive management and governing groups would be expected to establish and support objectives in promoting excellence in institution.

✓ High standards of academic achievement.

The staffs and students' performance is the key measurement for the successful of institutions such as through the award of qualifications and records of performance (for example the ability to be the top world universities).

✓ A strong track record in student destinations.

The ability of students to further study in higher-level education or succeed in professional occupations can be an indicator of excellence institutions. This denotes the ability of universities in producing good students not only for achieving good result in examination but capability to get the students ready for the world of work.

✓ An exceptional student experience.

Excellence refers to high quality teaching and learning, and student support as well as learning resources. The institutions efforts in finding ways to develop and enhance learning experience of students is considered the process of education concern to knowledge gained by students.

✓ Positive stakeholder satisfaction.

Excellence performance of institutions evaluated through stakeholders' feedback which include a broad range of multiple employers, and other users of research results and knowledge transfer. The students which meet the employers'

expectation or other interested parties as well as the focus of institutions on the stakeholders' needs and expectations are refer to high performing institutions.

✓ **High levels of student satisfaction.**

Students themselves are an important group of stakeholders. The service and satisfaction level of student with the quality of their education experience can be judged through survey.

✓ **Commitment to research and academic development.**

Dynamic academic community including academic staff, researchers and students participating in research and academic development would be a target. The measurement of research activity are quantity and quality of research produced as well as engagement of academic staff through individual studies and participation in the broader subject community.

✓ **Support for social, economic and cultural development.**

Higher education institutions are the place to support social, economic and cultural development through syllabus development, functional research, knowledge transfer and social welfare.

✓ **Recognition of the social benefit of education.**

Higher educations would be expected to cultivate the civilized societies' value and to nurture social mobility and social justice.

✓ **Commitment to internationalization.**

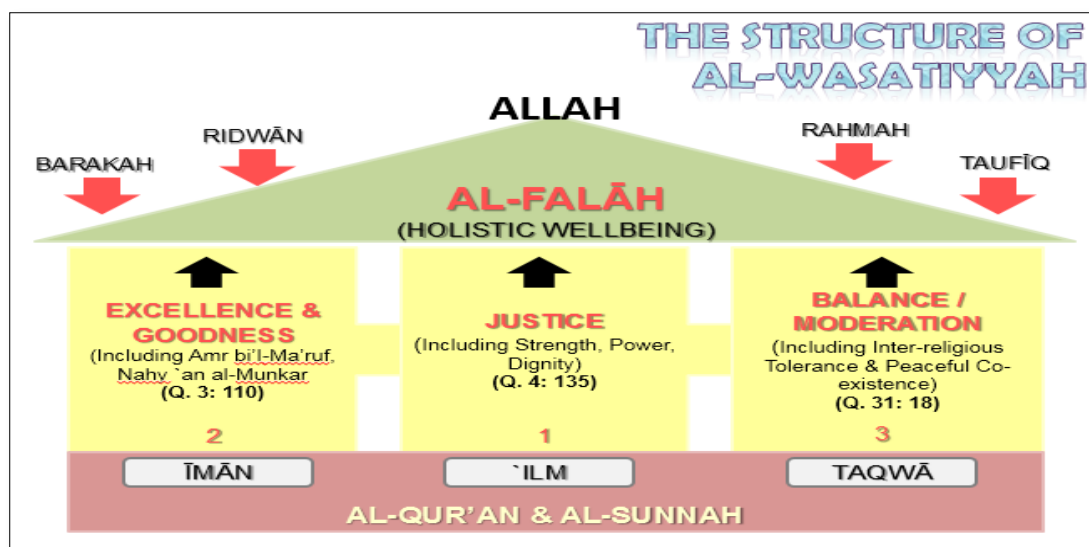
Higher educations should concern on their standard performance against comparable institutions in other countries and should involve in international collaboration in research and academic development.

✓ **Promotion of equity and academic freedom.**

The important feature of higher education is the commitment to the value of neutral enquiry and to the pursuit of knowledge with no restriction of political determination or free from any forms of interference.

b) Al-Wasatiyyah (Moderation) as Educational Effort:

According to Haniff Hassan (2014), the explanation of Wasatiyyah has been presented by Prof. Kamal Hassan, the former rector of the International Islamic University of Malaysia (IIUM) in March 2013 at the Second International Conference on Terrorist Rehabilitation and Community Resilience in Singapore. Based on Islam's two primary sources from the Quran and the Sunnah, Prof. Kamal concluded the concept of wasatiyyah into three key values of Islam including iman (belief), 'ilm (knowledge) and taqwa (compliance to divine guidance) as illustrates in figure 2:



Source: M.Kamal Hassan, (2013). "The need to understand Al-Wasatiyyah". Centre for Islamisation, IIUM

Figure 2: Graphical Representation of the Concept of Wasatiyyah

The standard **iman** (belief) of every Muslim Allah as the only God (monotheism) and Muhammad as His final Messenger. Prof. Kamal has pointed that one will never believe in the true God without '**ilm** (knowledge), what more to support the concept of *wasatiyyah*. Thus, this is the reason for *wasatiyyah* has been positioned as the foundation of knowledge by Prof. Kamal. To achieve the stage of **taqwa**, a Muslim has to be a good believer by learning about Islam and practicing Islam in his daily life. The perfect taqwa requires a Muslim performs all voluntary and recommended acts as well as avoiding from all wrong-doing acts. (Taqwa: The Provision of Believers, n.d).

Prof Kamal's research on the meaning of *wasatiyyah* should include three key attribute of justice, excellence and balance instead of commonly translated as moderation. This is based on his review of the Quran and he concluded *wasatiyyah* is more than moderation, nonviolence, non-radicalness and non-militancy. Justice can be referred as putting things in a right place (al-Attas, 1980), which requires neutral mind with no judgments, decision or resolving arguments are influenced by emotion, biases or prejudice. Next, the root for integrating excellence into the meaning of *wasatiyyah* which derived from Arabic word, "*wasat*" to denote "the best" or "excellence". This point can be viewed on the Islamic scholar interpretation of *wasat* means "the best" to define the word *wasat* in a reported Sunnah, "the Prophet was the *wasat* among his people". The balance or moderation is the most explicit meaning from the word *wasat* and broadly recognized and used by Arabs in the past until today. However, the qualities of justice and excellence are being neglected due to the prominence use on moderation. Moderation is the assumption of a middle position between two prohibited immoderations of excessiveness (*ifrat*) and laxity (*tafrīt*). Besides, moderation is struggling to sustain every good thing and instructed in Islam and to reach excellence (*ihsan*) in every aspects.

According to Prof. Kamal conception of *wasatiyyah* is relating to concept of *khayr ummah* (the best nation). Figure 3 shows inseparable sides of presence Muslim. The *khayr ummah* concept affirms the excellence attribute of *wasatiyyah* where Muslims as human being should play important roles for "civilizational witnessing".



Figure 3: The Quranic meaning and the connotation of Wasatiyyah

Prof. Hassan has mentioned on few tangible exhibitions of *wasatiyyah*:

- *Amr bi al-makruf and nahy `an al-munkar* ("enjoining good and right deeds and prohibit bad and wrong actions").
- Possession of power and strength to recognize justice.
- Tolerance and peaceful co-existence between different religions and cultures
- Dignity as a result of the three attributes of *wasatiyyah*; *Excellence, Justice and Balance*.

To achieve the stage of a holistic well-being, Muslims should refer to the Quran and the Sunnah as the primary resources in uphold the concept of *wasatiyyah*. The concept of *wasatiyyah* including three key values of Islam; iman (belief), 'ilm

(knowledge) and taqwa (compliance to divine guidance). Muslims attain a holistic well-being (*al-falah*) may qualify them for blessing (*barakah*), pleasure (*ridwan*), mercy (*rahmah*) and success (*taufiq*) from Allah.

To enlightening the public to fully recognize about al-wasatiyyah or any Islam related matter, it is a need for Islamic universities to produce more scholarly publications in English. Figure 4 illustrates the proposed research and publication on aspects of the justly balanced nature of Islamic society & civilization in examining ideals and realities.

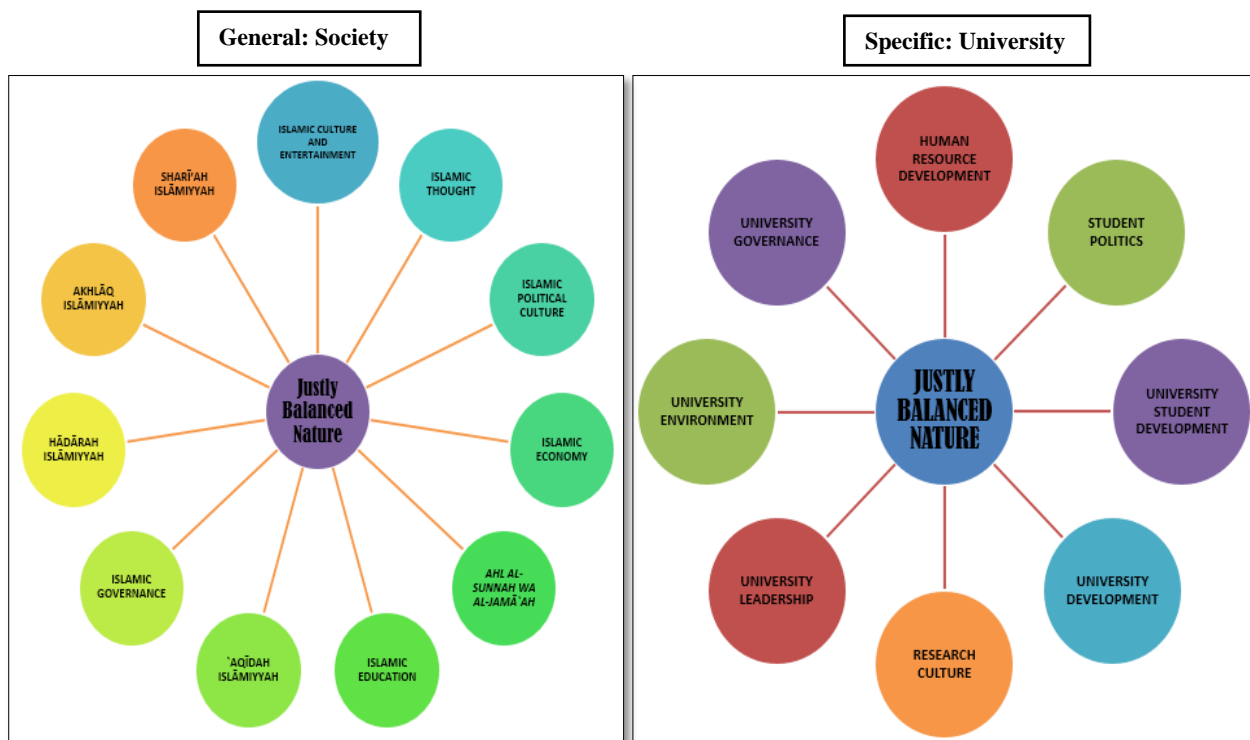


Figure 4: Justly Balanced for Society and University Sources: M.Kamal Hassan, 2013

V. UNIVERSITIES: FOSTERING CULTURE OF EXCELLENCE:

1. Massachusetts Institute of Technology (MIT):

MIT is a private institution that was founded in 1861. MIT focuses on scientific and technological research and is divided into five schools and one college. While MIT is a research university committed to world-class inquiry in math, science, and engineering. The culture of creating knowledge that successful because MIT has diverse, supportive campus environment-with range of student groups and athletic and fitness opportunities-ensures that it's not all about the work. And in MIT's intensely creative atmosphere, the arts flourish in all their forms. By supporting the financial need of each undergrad, community is incredibly diverse, and organically collaborative, with students coming from many different backgrounds, across the country and around the world. Students are frequently encouraged to unite MIT's engineering excellence with public service. Beyond academic coursework, MIT's D-Lab, Poverty Action Lab, and Public Service Center all support students and professors in the research and implementation of culturally sensitive and environmentally responsible technologies and programs that alleviate poverty and improve quality of life in low-income areas locally, nationally, and worldwide.

The MIT bring the culture of sharing knowledge by community brings its dynamism and creativity outside the classroom. Many programs around MIT allow students to get reduced-price tickets to various events, including the Boston Symphony Orchestra, the American Repertory Theater, and Bruins, Celtics, and Red Sox games. Students get free admission daily to the Museum of Science, the Museum of Fine Arts, and all Harvard University and MIT museums.

❖ MIT Open Courseware project:

The Massachusetts Institute of Technology began to initiate the most extensive collection of coordinated educational

technology innovations it had embarked on in a quarter century **which is MIT Open Course Ware project** visionary commitment by the Institute to publish the materials from all MIT undergraduate and graduate subjects freely and openly on the Web for permanent worldwide use (Abelson, 2006).

❖ **MIT mobile web:**

Transforming the campus experience with MIT mobile web, the mobile Web is designed to offer “on the fly” information to MIT community members and visitors through a collection of web-enabled service adapted for mobile devices. The services spin around the MIT experience so that people can access needed information while completing their daily MIT – related activities. “The student’s everyday routine involves the mobile devices-going to class, going to lunch, going home,” stated Ann Wright Wilson, marketing specialist, campus dining. MIT Mobile Web brings all part of students’ day onto the mobile device. Since the day first in the university, a student can access his or her course information, classroom venue, course-related updates, faculty contact information and shuttles schedule (Albrecht & A.Pirani, 2009). These systems are the reliable technology infrastructure that facilitate knowledge sharing, storing and creation at MIT. It seem that the members of MIT has understand not just how to use the technology but also the benefit from it that can give to improve productivity and the university performance.

2. National University of Singapore (NUS):

National University of Singapore (NUS) is an Asia’s leading global university. According Ramakrishna (2012), Singapore adopting best practices of higher education from around the world by facilitating culture of excellence. Greater autonomy has been provided by Singapore to all its public universities and the role in shaping the university’s governance and management of resources has been taken by successful alumni. In producing a good result in education, research, innovation as well as service to the society have been aligned to University’s governance, vision, internal structures, processes and resources. NUS partnership with Duke University in gradual medical education is an effort of internalization of University in Singapore. Besides, NUS deals with varied talent pool where it has approximately 50% of faculty members, offers undergraduate and graduate programs with percentages of students at 25% and 70% respectively as well as having 70% of researchers coming from over one hundred nations. In Addition, the University offers a global way to education and research with the focal point on Asian perspectives and expertise such as transformative education programs, entrepreneurial internships at NUS Overseas Colleges, and double degree and joint degree programs with some of the world’s top universities. This collaboration and global approaches of education and research are identified as the culture of knowledge creation and sharing to cultivate existing talent and fascinate best available talents globally.

4. LITERATURE FINDING, ELEMENT AND KEY SUCCESS FACTOR

The higher education institution is a platform where knowledge is widely created, shared and distributed. Besides, the higher education institution is a place for supporting and enduring an environment where people deliver and share essential information through professional processes and advance technology. Organization culture is the elementary outline of shared assumption, value and belief measured the right way of thoughtful and stand-in on problems as well as chances fronting the organization. The impact of organizational culture on knowledge creation and knowledge sharing in ensuring academic excellence are identified in the case of two world ranking universities which are National Massachusetts Institute of Technology (MIT) and University of Singapore (NUS) with ranked number 1st and 22th respectively in the world ranking 2014/15^{**}. From our finding, these universities are providing the basic need to support the knowledge creations and knowledge sharing concern organizational culture and it brings positive impact and result. The belief, value and assumptions are the elements of culture for defining KC and KS within higher education in turn describes the role of culture within an organization. The collaboration and global approaches of education and research are identified as the culture of knowledge creation and sharing to cultivate existing talent and fascinate best available talents globally. By structuring a world-class university system such as internationalization of university and students’ global orientation, Singapore able to produce an Asia’s leading university which is NUS. Next, the use of this technology may improve productivity and university’s performance. For example, MIT Open Courseware project and MIT mobile web are the reliable technology infrastructure where knowledge sharing, storing and creation are facilitated. The key factor in KC and KS that contributed to the success factors of these 2 universities are innovation, strategy and management values to motivate and encourage students as well as academic staffs to participate in fostering the culture of excellent such as through collaboration and global approaches of education as well as the use of technology for KC and KS.

5. CONCLUSION

The foundation of KM system to certify performance and learning for maintainable progression in an organization incorporating people, process, and technology within a definite culture. The specific culture for this paper focusing on KC and KS practiced by the top world universities which are MIT and NUS. People and technology are enablers that makes KC and KS culture are possibly implemented in an organization. The elements of organizational culture are value, belief and assumptions. The interaction of these elements deal with the people belief to value the knowledge creation and inspiring the knowledge sharing practice within higher education institutions. The people within higher education is reinforced and defined by a distinctive culture to sustain good performance of the institution through suitable process or activities such as collaboration and global approaches of education and research. Assumptions are the pooled mental models, the broad worldviews or theories-in-use that people depend on to guide their perceptions and behaviors. KC and KS are importance to improve and maintain the advancement of a community because we are not living isolated and we must work in a group. The mentioned criteria of element that help those two universities to develop their culture of sharing maybe applicable or maybe not applicable to those universities that are not success in their knowledge sharing. In Islamic teaching, human being must take the thing that suitable to our needs, as what mentioned in the following verse:

Who listen to speech and follow the best of it. Those are the ones Allah has guided, and those are people of understanding. (Az-Zumar: 18)

Translation: Sahih International

The concept of *wasatiyyah* is concerning to concept of *khayr ummah* (the best nation). Dignity is the outcome from the three attributes of *wasatiyyah*; *excellence, justice and balance*.

To succeed the level of a holistic well-being, Muslims should always refer to the Quran and the Sunnah as the primary resources in uphold the concept of *wasatiyyah* which including three key values of Islam; iman (belief), 'ilm (knowledge) and taqwa (compliance to divine guidance).

Belief is one of the organizations cultural as it represents the individual's insight and perceptions of the reality. Values are more firm, lifelong beliefs about what is the priority or important and guide people to define what is right or wrong, or good or bad. Hence, in Islam taqwa is the best investment a believer can make for himself, family and his society. It is the best provision a Muslim can carry if he wants to reach Allah's Pleasure. The Quran calls towards this in the following verse:

O mankind, indeed We have created you from male and female and made you peoples and tribes that you may know one another. Indeed, the most noble of you in the sight of Allah is the most righteous of you. Indeed, Allah is Knowing and Acquainted. (Az-Hujurat: 13)

Translation: Sahih International

This verse mention that people are difference from many aspects. This shows human being can have a same belief on a particular knowledge but the way we practice the knowledge value might be different. However, it is not a reason for people to live separately among each other as it is a common from Allah for people to know each other and work together to be the best in the sight of Allah. The most righteous people is those who has taqwa. The perfect taqwa requires a Muslim performs all voluntary and recommended acts as well as avoiding from all wrong-doing practices. KC and KS are the example of voluntary acts which are importance to improve and maintain the advancement of a community because we are not living isolated and we must work in a group.

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