

**Global Perspectives on Knowledge Sharing:
Investigating Malaysian Online Community Behaviour**

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Abstract

This paper reports on an exploration of the critical success factors of knowledge sharing behaviour among Malaysian undergraduate students. The paper presents an overview of knowledge and knowledge sharing and then presents empirical case study evidence. The two case studies that were identified as accessible and important were that of the Malaysian undergraduate communities in Manchester, United Kingdom and that of a similar undergraduate community in Kuala Lumpur, Malaysia. The research explored concerns about knowledge sharing behaviour and successful communication. This is an area which is of particular interest to the Malaysian government and so will have practical applications in the future.

1. Introduction

This study outlined in this paper is concerned with how Malaysian undergraduate students assess information so that it becomes the type of knowledge which can enhance their student lives. The paper aims to give an overview of a three year research project which identified how Malaysian undergraduate students are using Web 2.0 applications and other media for knowledge sharing. This will be achieved by a discussion of what we mean by knowledge and knowledge management; a consideration of the literature on knowledge sharing and how this relates to current models of effectiveness; identification of the actual research study; the research approach and an overview of results.

During the study a new theory was developed, that of “Knowledge Sharing Behaviour” theory which was adapted from four established theories. The research approach was interpretive and the methodological tool was an online questionnaire. A model of critical success factors for effective knowledge sharing among Malaysian undergraduate students was one of the main contributions of this research.

2. Knowledge

The definition of knowledge must be clarified before discussing KS terms because they determine the way the study focuses on KM (Biejerse, 1999). In addition, knowledge is an “important element in human life” (Davenport and Prusak, 1998). This definition has been quoted by many academicians and practitioners (Gamble and Blackwell, 2001; Abdul Aziz and Lee, 2007; Ke and Wei, 2007; Zheng, 2005; Gammelgaard and Ritter (in Al-Alawi et al., 2007); Kim and Lee, 2006). Meanwhile many experts in management also have their own definition of knowledge, for example Wiig (in Brooking, 1996) claimed that knowledge is about truths and beliefs, perspectives and concepts, judgments and expectations, methodologies and know-how. However, Nonaka and Takeuchi (in Kubo et al., 2001) define knowledge as clear job-related information and the skills and experience required to carry out tasks. Furthermore, Gammelgaard and Ritter (in Al-Alawi et al., 2007) have concluded that knowledge is a combination of life experiences which can evaluate and contribute new ideas. Based on this, Al-Alawi et al., (2007) suggest that knowledge is not limited to paper or databases, it also exists in people’s minds and is expressed by their behaviours. In other words, knowledge has also been defined as justified belief which can enhance an entity’s ability for action improvement (Alavi and Leidner; Huber and Nonaka (in Ke and Wei, 2007).

Knowledge is different from information in the sense that it is restricted to context, is more subjective and is connected to behaviour (Shaari, 2009). “Information becomes knowledge

when it is interpreted by individuals and given a context in the beliefs and commitments of individuals” (Nonaka et al., 2000).

Knowledge consists mainly of explicit knowledge and tacit knowledge. Explicit knowledge can be identified as documented knowledge while tacit knowledge can be known as non-documented knowledge (Ali and Ahmad, 2006; Brooking, 1996; Jain et al., 2007; Selamat and Choudrie, 2007; Zheng, 2005; Song, 2002; Kim and Lee, 2006; Brent and Vittal, 2007). In addition, Biejerse (1999) confirms that knowledge is more than information and seen more as a “capability”.

From an overview of the literature then, this research study adapted the definition of knowledge as a “justified belief which can enhance an entity’s ability to act and improve” (Ke and Wei, 2007).

3. Knowledge Management

In the new global economy, knowledge has become a central issue of primary resource for individuals (Drucker, 1992).

‘Knowledge is a fluid mix of framed experience, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routine, processes, practices and norms’

(Davenport and Prusak, 1998, in Gamble and Blackwell, 2001; Zheng, 2005; Abdul Aziz and Lee, 2007; Weiling and Kwok, 2007)

The definition of knowledge above highlights the fact that Davenport and Prusak (1998) agreed that knowledge had been recognized as the most significant outline of capital needed.

Knowledge can be arranged into a hierarchy according to Bender and Fish (2000) and then becomes information when the data are understandable and have meaning. This means that information is processed data and becomes knowledge when authenticated. Knowledge is also the application and productive use of information (Roberts, 2000). Knowledge is gained via a transformation through personal application, values and beliefs.

Storey and Barnett (2000) point out that various studies have highlighted a shift of focus from technical factors to human factors. At its early stage, knowledge management (KM) was largely in the domain of information technology (IT). According to a report by Storey and Barnett (2000), about 70% of articles on KM in 1998 appeared in IT or information systems (IS) publications. These articles focused on how to create the best technology to help companies manage their core knowledge. This turned out to be an ineffective approach to KM. The failure was mostly due to an overemphasis on IT and a lack of attention to human factors such as motivation, attention, creativity and organizational culture (Martensson, 2000; Malhotra, 2002; Storey and Barnett, 2002). To address this lack of attention to human factors, there emerged another approach to KM that focused on social and cultural factors (Davenport et al., 1998). Politis (2003) claimed that the new model of KM is about people. This new model considers actions and has nothing to do with technology.

Politis's statement resonates with the statement by Gurteen (1999) on his website (<http://www.gurteen.com>); he considers a correlation of KM and KS as a way of looking at, and for, business philosophy. It involves principles on process, organisation structures and technology. These principles may help people to apply knowledge to achieve their business' purpose. Furthermore, he tries to change the old paradigm about knowledge being power to sharing knowledge is power. This shows that KS can empower people to fulfil a job effectively, maintain career development and achieve personal recognition targets.

However, the field of KM and intellectual capital is predicted to explode in the 21st century. This statement is proven by a study into the meta-analysis of this field which discovered that

the literature consist of more than 100,000 publications (Serenko and Bontis, 2004). This study will consider the concept of human capital of knowledge management and knowledge sharing. Human capital is one of the primary components of Information Capital. Graduates are one of the important sources of human capital for every country. Furthermore, the government of Malaysia realised the importance of human capital to the country. Malaysia's Science and Technology Policy for the 21st century, states that "Malaysia should change to become knowledge based and driven by human capital, and quality wise human capital should become the main factor for its independent and wealth nations" (Official Portal, Ministry of Science, Technology and Innovation, 2009). Moreover, to ensure Malaysia achieves its "targeted aspirations, extensive endeavours must be implemented, to build up human capital. Indirectly, it may increase the nation's competitiveness, efficiency and capability for modernization". (Office of Prime Minister of Malaysia, 2010)

4. Knowledge Sharing

Recently many KM studies have been done in diverse sectors in Malaysia. For example, in the public services (Salleh and Ahmad, 2005; Ikhsan and Rowland, 2004a; Ikhsan and Rowland, 2004b), in small and medium enterprises (Wong, in Sharimllah Devi et al., 2007), in information technology and Multimedia Super Corridor organizations (Chong a; Chong b; Chong and Lin; Chong et al, in Sharimllah et al., 2007), in telecommunication (Chong et al., in Sharimllah et al., 2007), in oil and gas (Abdul Aziz and Lee, 2007) and also in finance and banking (Ali and Ahmad, 2006). Studies on KM in the education sector exist but are limited. However, there has been little discussion about KM in education. Currently, only two studies have been found. The first research focuses on KS implementation among academic staff in Klang Valley (Jain et al., 2007), and the second is about organisational culture and KM processes of an institution of higher learning (Sharimllah et al., 2007). However, far too little attention has been paid to KS implementation among university students. Currently, this

work has been applied to Singapore and only focuses on KS patterns in student learning styles (Yuen and Majid, 2007).

This study was restricted to MUS who have good communication skills as well as basic IT skills. Eppler (2007) has suggested that knowledge communication has become an interactively assigning the message, which can be either verbal or non-verbal. Furthermore, communication skills have become one of the most important elements needed. Recently, communication tools which are affected by technology have also become extremely important. It is because of the rapid changes in trends that a competitive society now exists (Burke, 2007). These rapid changes can be as digital culture which it is still as new phenomenon to MUS.

5. Knowledge Recovery: the context of memory.

What then is Knowledge Recovery? This is a new term and one that can be used to find out information, to find out about memories and about identities of artifacts, to engage almost with history. This kind of knowledge is embedded personally in an individual experience and depends on other factors such as personal belief, perspective and the value system (Shaari, 2009). Gourlay (2002) discovers that tacit knowledge has the identical phrase and defines it as practical know-how. It is informal rather than formal among professional groups including managers. What is particularly interesting is that new forms of digital technology are being used to enhance this process. For example, the web site talesofthings.com which allows users to record a "tale" about any object and to upload to an open source database is a form of both knowledge sharing and knowledge recovery. This is a new kind of forum in which knowledge is both transformed and distributed.

In addition, Yang has identified emancipatory knowledge as the third dimension and it means the sentimental component of knowledge that determines one's view about how the

world should be and is the product of seeking freedom from natural and social restraints (in Zheng, 2005).

Nonaka and Takeuchi (1995) have attempted to explain the basic gaps between Western and Japanese philosophy of 'knowledge inquiry'. The purpose for understanding the epistemology is that it may influence managerial practices. It may in terms of managerial thought lead to either knowledge or innovation. In the Western philosophical tradition, it is influenced by the 'Cartesian split'. It happens within the subject as the knower and the object as the known mind and body, or mind and matter.

However, in Japanese philosophy, knowledge sharing is based on the strong traits of intellectual tradition. It includes: (1) individual of humanity and nature; (2) individual of body and mind; and (3) individual of self and other. In order to make important elements in the notion of knowledge in Japanese tradition, the concept of integration has been introduced. The human relationship characteristics are collective and organic in relation to the aforementioned notion. Furthermore, according to Nonaka and Takeuchi (1995), the most importance is among the individual. Those are the key elements for social interaction within knowledge conversion. This is supported by the idea that knowledge is dependent on the context itself due to the dynamic, relational and human action basis. So, that the situation and people involved are important rather than truths or facts themselves.

This situation reflects the Malaysia scenario, according to Mohayidin et al., (2007), the realization that knowledge is an intellectual asset is important. Their study reports that the Malaysian Ministry of Higher Education has identified KM as one of the requisites to ensure that Malaysia will become a quality hub of higher education and be able to compete with other developing countries. This support by a study of efficient and effective KM is reported by Marwick (2001). His study found that KM typically requires suitable grouping of managerial, community, and administrative efforts with suitable technology. Furthermore, in

the field of business IT, various definitions of KM are found (Brooking, 1996; Rowley, 1999; Liebowitz, 2000; Alavi and Leidner, 1999; Zheng, 2005; Hult, 2003; Scott and Law, 2006; Hawamdeh, 2007). In other meanings, KM can also be considered as the process of transforming information and intellectual assets into enduring values (Alias, 2008). This is because it can connect people with the knowledge that they need to take action, when they need it (Alias, 2008). Furthermore, KM also can be one discipline that allows the transformation of ideas and information into business values (Alias, 2008). Thus, KS is one of the important knowledge activities in the KM process.

We have now discussed Knowledge, Knowledge Management and Knowledge Sharing and next we will consider how the theories can be applied to increase our understanding of human behavior in one particular context – that of the International University Student.

6. The Empirical Study; the two online communities

This study outlined in this paper is concerned with how the Malaysian Undergraduate students assess information so that it becomes knowledge which enhances their student lives. Initial work was undertaken by Yuen and Majid's (2007) which investigated Knowledge Sharing in different learning styles among Singaporean undergraduates. This work differs in that it is looking at sharing behavior and how that impacts on the life on an undergraduate. So, first we need to identify the barriers to knowledge sharing that occur either at organization level or individual level (Jain et al., 2007). These are well documented as follows. Culture is another of the main obstacles which is cited repeatedly in the literature on KM (Ikhsan and Rowland, 2004a; Riege, 2005; Ramirez, 2007; Jain et al., 2007; Rosen et al., 2007). Besides that, other obstacles in KS include lack of communication and social networking skills (Riege, 2005), lack of time (Rosen et al., 2007) and lack of trust (Cross and Baird, in Yuen and Majid, 2007; Riege, 2005). Furthermore, many situations occur where individuals will not share their personal knowledge on certain topics. This situation can be

attributed to various factors including physical, technological, psychological, personality and cultural (Riege, 2005 and Yuan et al., in Yuen and Majid, 2007).

An additional factor is lack of motivation or rewards (Davenport, 1997, Soo et al., in Ramirez, 2007; Smith and McKeen, in Yuen and Majid, 2007), as people are reluctant to share without incentives. Another main obstacle in KS is the 'power of knowledge mentality' (Davenport, 1997; Chaudry, 2005; McClure and Faraj, in Yuen and Majid, 2007; Ramirez, 2007). People normally do not like to share their best ideas because it reduces their credibility in the organization and their ability to move ahead (Greengard, in Ramirez, 2007; Bender and Fish, 2000; Martensson, 2000 and Miller, in Ramirez, 2007). Based on the findings of this study (Yuen and Majid, 2007) it may be assumed that Malaysian undergraduates should realize the importance of skills in communication and social networking (Riege, 2005). With this assumption, barriers such as lack of communication skills and social networking can be reduced.

Besides the barriers in knowlege sharing behaviout , the Ministry of Higher Education of Malaysia had not created any policies to encourage students to share their knowledge in order to enhance their life on the campus.

Whilst the aim of the research was to identify the Critical Success Factors for effective Knowledge Sharing among Malaysian Students, there were five clear objectives, as follows:

- To identify the types of knowledge shared among MUS who were members registered within the two Malaysian communities.
- To exploring the process of KS among Malaysian students' weblogs by using content analysis
- To compare KS experiences among Malaysian students in two different cities: Manchester and Kuala Lumpur.

- To create a way of evaluating the effectiveness of KS.
- To develop a model of Critical Success Factors of Knowledge Sharing among Malaysian Under graduate Students.

7. Research Methodology

The research was interpretive (Burrell and Morgan,1979;Oates,2006), the approach was qualitative (Creswell, 1998, 2007) and several research instruments were deployed as follows. First, interviews were used for the pilot, second, content analysis of student weblogs were used for the main data collection and third, an online questionnaire survey was undertaken for final validation. Taken together these approaches worked well and gave a thorough overview of the study.

8.Results

The web logs were observed over a period of time and a variety of theories were used to identify the Critical Success Factors. These were the Theory of Planned Behavior; Social Cognitive Theory; Social Capital Theory and Social Exchange Theory. (The Malaysian Community blogs are “closed” blogs in that they are open only to Malaysian Undergraduates) The final results were interesting and the following factors identified as “needed” for effective sharing. These included Fairness and Enjoyment; Sharing Awareness (with others)and Openness; Relevancy;Usefulness

This paper followed several steps in developing the results and in particular looked at two previous studies in this area. The identification of the success factors in the first study was done by frequency variables in measuring knowledge sharing behaviour (King and Marks, Burgess, Wasko and Faraj in Liang et al., 2008; Chiu et al., 2006). This measurement was uncovered in analysis stage. The frequency of knowledge sharing behaviour was also measured by quantity or time spent by knowledge sharing. In this Research (Study 1), the success factors were subjective norm and behaviour itself,(ie what constituted normal values and beliefs) whilst in Research (Study 2), the identified success factors started with behaviour and attitude towards acts or behaviour.

Finally, these identified success factors are also underpinned through the online validation questionnaire.

This research is based on findings from the Malaysian studies and the previous relevant research studies in the area (Jain et al., 2007; Yuen and Majid, 2007; Ramirez, 2007; Al-alawi et al., 2007 and Zheng, 2005) on the relationship between KM, KS and Web 2.0 technologies. The four new findings can be utilized as part of a Malaysian government policy or University Policy which will assist the students to prepare and equip themselves to become successful students. A successful student in this context means having “a knowledge-sharing lifestyle during their student life in campus”. The four new findings were:

- The critical success factor for knowledge sharing among Malaysian undergraduates were *Fairness (sharing seen to be just); Enjoyment; Sharing Awareness (with others) and Openness; Relevancy and Usefulness*
- Identification of which mediums were used to share knowledge among Malaysian students. These *were found to be Web 0.2 related such as weblogs and Facebook*
- The Sharing differences of Knowledge Sharing Behaviour among Malaysian students in two different cities, Manchester and Kuala Lumpur *which were identified in the reactions of students in two areas of academic matters and social matters.*

9. Conclusion

This paper has given a brief overview of a three year research project, more detailed full results published in the near future. The notions of knowledge; knowledge sharing, knowledge recovery have been discussed and the research relating to the investigation of knowledge sharing in an on line Malaysian Community has been conveyed.

The importance of the work which will assist the Malaysian Government to design curriculum which will encourage sharing, cannot be overestimated. For example, the undergraduate candidates in Malaysia have a Student Personality Development Programme (Official Portal Ministry of Higher Education, 2010) to ensure that they are well prepared for university, and is it feasible that these research findings can be adapted for this Programme.

It is only by exploring and achieving global perspectives on knowledge sharing will we truly achieve international harmony across the world. It is hoped that this study, by investigating Malaysian Online Community Behaviour, has made a small step in that direction.

10. References

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