Journal of Multidisciplinary Engineering Science and Technology (JMEST)
ISSN: 2458-9403
Vol. 3 Issue 12, December - 2016

Understanding Knowledge Sharing Activities Through The Use of Social Media Tools in Higher Educational Institutions

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***Abstract*—Knowledge sharing is a process where individuals mutually exchange their knowledge and jointly create new knowledge. Several of the previous studies found that besides face-to-face interactions, students also share their knowledge through social media tools. Social media tools are currently considered as the key value in the campus to facilitate knowledge sharing and the main tasks in order to support the daily communication. Although the importance of using these tools among the students in educational institutions, many dimensions of knowledge sharing in social media environments have not yet been examined. Furthermore, many questions are still unanswered and need to be explored across different social media tools. Additionally, literature also stressed the need to focus more on use the social media with education in developing countries. For this purpose, this empirical study sought to explore the knowledge sharing activities among local and international postgraduate students at one of public universities in Malaysia, as well as find the benefits and barriers through using social media tools during sharing knowledge. With regard to data collection, the best manner to understand the perspective of the students about some of the new phenomena through harness qualitative approach. Data were collected through qualitative approach. More specifically, a total of 12 postgraduate students were interviewed and received answers from them through semi-structure interviews. Interpretive analysis method was used to find the themes via using NVivo qualitative data analysis software. The results for this study included four sections based on Nonaka and Takeuchi theory. The findings indicated that, the activities for students include exchange experience and perspective as well as confirmed the importance of social media in overcome time, geographical distance and cost that is a barriers to share knowledge as well as provide more confident to share ideas for students. This study contributed by using the Nonaka and Takeuchi model with higher educational institutions. In the same context, there are few empirical studies focused on the Information technology with knowledge sharing, therefore this research sought to add valuable information into the literature by shedding light the barriers and the benefits through utilize the new technologies to share know among the team work.**

Keywords—Knowledge sharing, higher education, qualitative approach, student's perspective, Nvivo software

I. INTRODUCTION

Recently, there has been a growing attention in treating knowledge as an important institutional resource. Regardless of the knowledge forms, it has been increasingly recognized as an important asset in any modern organization (Saad & Haron, 2013). According to Adhikari (2010) knowledge is an essential factor and successful application that helps institution to create services and provide products. Akhavan and Hosnavi (2010) defined the knowledge as a combination of values, experience, expert idea and context of information that helps to assess and incorporate new information and experience.

Since early 1990's, many institutions have been implementing Knowledge Management (KM) to achieve competitiveness (Suhaimee, Zaki, Bakar, & Alias, 2006). KM is known in general as a discipline for identification, collection, storage, and sharing of knowledge and its application. In addition, knowledge and KM have become increasingly the significant features of the management research literatures in recent years. Moreover, the importance of KM and learning subjects are increasing in many institutions to present opportunities and challenges for academic centers. These arguments also stated by Adhikari (2010), who mentioned that, KM helps the institutions to improve the teaching and learning environment.

Consequently, over the past ten years, several institutions, including higher education institutions, have adopted KM effectively because it is considered as an essential tool for their success. Specifically, in higher education, universities are considered as knowledge based institutions due to their role in exemplifying knowledge development and KM (Goh & Sandhu, 2013). Bakhuisen (2012) pointed that, to facilitate KM, the management of institutions promotes innovation, learning, and effective knowledge sharing.

With regard to knowledge sharing, Bakhuisen referred that it is a process where individuals mutually exchange their knowledge and jointly create new knowledge. Saad and Haron (2013) asserted that, the knowledge should be shared to increase the value of the institution. Knowledge sharing is important because it is the link between individual and institution (Johannessen, Olaisen, & Olsen, 2001). For institution, knowledge sharing is a supporting aspect that represents an important concept in all higher learning institutions (Sohail & Daud, 2009). In universities, knowledge sharing plays a key role in the development of teaching and learning (Qun & Weihua, 2013) and it is particularly important when students are working in groups (Sie, Aho, & Uden, 2014), for instance, the students in universities share what they learned with their classmates and other students (Gikas & Grant, 2013).

Normally, knowledge sharing activities are implemented by institutional structures by providing the application of technology that stimulate people to share their knowledge for the achievement of institutional goals (Tan, Wong, Lam, Ooi, & Ng, 2010). Nowadays, the use of computer-mediated communication (CMC) in increasingly noted in higher education as a medium for the delivery of educational programs anytime and anywhere (Garrison, 2000). With the help of various suitable IT tools, organizations can use it to facilitate sharing and application of knowledge among teams (Raab, Ambos, & Tallman, 2014).

According to Samoilenko and Nahar (2013), one of the IT tools that can facilitate knowledge sharing is social media. Social network is considered as the key aspect in the campus to facilitate knowledge sharing and perform major tasks to support daily communication. These activities include teaching, learning and research of campus users. The users in campus universities include students who are the most active users in using internet services, especially emerging services such as social media (Du, Fu, Zhao, & Liu, 2012).

Hrastinski and Aghaee (2011) argued that, students can use social media to connect with classmates to work on the assignment and support their learning. Moreover, students are enabled to engage in discussion forums and communicate with classmates in their Facebook group (Duncan & Barczyk, 2013). Currently, most of the university's students harness the social media tools such as Facebook to share their academic knowledge. This phenomenon is prevalent particularly among postgraduate students since some of the groups live out of the campus, while others have part time work, preventing daily meetings. In order to defeat this problem, the student of the universities find social media tools a convenient way to interact, exchange ideas and discuss their academic work by posting their academic issues, ideas, or assignment.

With reference to the descriptions in the previous section, the motivation of this research is based on composition of group work for postgraduate students in one of the public universities in Malaysia. The group of students consists of local and international students with some local students holding part time jobs that could lead to preventing frequent meetings to time restraints and geographical dispersion of members (Wendling, Oliveira & Maçada, 2013). Because of the difficulty of meeting between students continuously during the study, this issue is considered as a problem that affect knowledge sharing among local and international postgraduate students.

In addition, Panahi *et al.*, (2013) argued that face-to-face contact is not the only way to exchange knowledge as there are other ways for knowledge sharing through the use of IT that are effective. Therefore, the key purpose of this study is an attempt to determine the effective use of social media in facilitating knowledge sharing among local and international students. Moreover, this research aims to fill the gap of the literature, by focusing on the use of social media for academic purpose and knowledge sharing. As well as, This study exploited Nonaka and Takeuchi model as a guide for supporting knowledge sharing process among international and local postgraduate students at the selected University.

II. THEORETICAL BACKGROUND

A. Definitions of Knowledge

Knowledge can be defined in a variety of ways according to specific aspects of the organization. For example, Tan *et al*. (2010) defined knowledge as *"an organized body of data, information, skills and expertise for the purpose to create new information when carrying out a task"*. On the other hand, Sharma (2014) mentioned that knowledge is *"A combination of experience, values, contextual information and expert insight that help to evaluate and incorporate new experience and information"*.

More specifically, Nonaka and Takeuchi (1995) defined knowledge as *"a dynamic human process of justifying personal belief toward the truth"*. Furthermore, Wendling *et al.* (2013) described knowledge as "information combined with experience, context, interpretation, and reflection". On the other hand, Saad and Haron (2013) stated that a number of researches refer to knowledge as combination of data and information.

Based on Saad and Haron's argument, there is a necessity to clarify and distinguish between the concepts of knowledge and information as there are confusions in the comprehension of both terms. Nonaka (1994) clarified that information is "a flow of messages" while knowledge is grounded on information and justified by individual's belief. However, Bhatt (2001) differentiates between the concepts of information and knowledge by considering information as an systematized and structured set of data, and knowledge as meaningful information.

B. Types of Knowledge

According to Saad and Haron (2013), some of the studies categorized knowledge based on cognitive theory, while others classified it through an epistemological perspective. Adhikari (2010) categorized knowledge into two types. The first type is called explicit knowledge, which is also recognized as *"hard"* knowledge that can be stated through numbers and words. Explicit knowledge can be shared systematically in the form of data. It plays a significant role in everyday professional life, and it can be represented by text books and articles. Thus, explicit knowledge can simply be obtained, and then transferred to others either through courses or books for self-reading.

The second type of knowledge is known as tacit knowledge. Tacit knowledge is also called soft knowledge, which contains insights, intuitions, and hunches. Unlike

explicit knowledge, tacit knowledge is demanding and challenging to present, formalize, and share. In fact, this type of knowledge contains personal skills and *"know how"* that resides inside each individual and cannot be conveyed easily.

In general, Nonaka and Takeuchi (1995) argued that explicit knowledge is documented, structured, fixed and externalized. Explicit knowledge can be presented and shared through information technology. On the other hand, tacit knowledge exists in the human mind, behavior, and perceptions and thus, it is difficult to share this type of knowledge. In other words, tacit knowledge is personal and emerges from personal beliefs and experiences. Figure 1 illustrated the difference between the tacit and explicit.

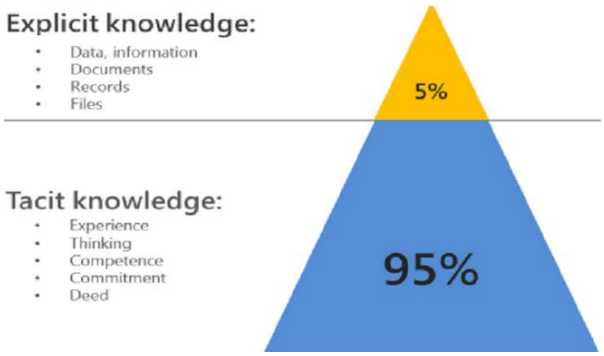

Figure 1: Tacit and Explicit Knowledge

C. Knowledge Management and Its Importance in Education

A historical analysis of today's knowledge management (KM) demonstrates that it is not a new phenomenon but an old quest. Knowledge has been documented by western philosophers for ages (Wiig, 1999). Sharma (2014) defined KM as *"a systematic, explicit and deliberate building, renewal and application of knowledge to maximize an enterprise's knowledge relative effectiveness and return from its knowledge assets"*. Moreover, Malhotra (1998) defined KM as a tool that *"caters to the critical issues of transitional adaptation, survival and competence in face of increasingly discontinuous environmental change; essentially, it embodies organizational processes that seek synergistic combination of data and information processing capacity of information technologies, and creative and innovative capacity of a human being"*. In addition, Wiig (2002) defined KM as the essential procedure to recognize and attract *"data, information and needed knowledge by an institute from internal/external environment and to transform them to decisions and actions by people and by the institute"*.

With regard to the KM in educational institutions, it's defined as a structured and organized procedure of generating and distributing information as well as choosing and arranging explicit and tacit knowledge to generate unique value that can be employed to improve teaching and learning context. According to this educational definition, the fundamental role of institutions is to administer tacit and explicit knowledge in order to increase its performance of individuals. It is crucial to generate and enhance value that assists to build an appropriate educational environment for teaching as well as learning (Adhikari, 2010). In a related study, Akhavan and Hosnavi (2010) argued that KM plays a significant role in educational environments by increasing the effectiveness of research and by providing significance and profits to educational institutions. Meanwhile, Martensson (2000) asserted that KM can be perceived as a system to advance performance, productivity, efficiency, and described it as a way to develop, distribute and use the information within organizations. Due to the critical role of KM, in the last decade, the significance of knowledge management has been emphasized by academics (López-Nicolás, Mero˜, & No-Cerdán, 2011).

As argued above, KM in the education environment is a comprehensive way to find and investigate the resources of the education information. However, KM in education institutions cannot be achieved without the support of the current information technology. Moreover, Lu and Liu (2008) stated that, the most information technology in education institutions includes: Internet, group technology and knowledge sharing technology.

D. Usage of Social media in Higher Education

Social media tools refer to the collaborative employment of the internet in the tools where the operator can contribute in terms of creating content, promoting cooperation and communication as well as distributing new knowledge (DeWitt, Naimie, & Siraj, 2013). Dabbagh and Kitsantas (2012) provided some forms of social media that contain experience and resource-sharing platform such as Twitter, and wiki software that assists the cooperative workspaces, media sharing tools including Flicker and YouTube and social networking sites (SNS) such as Facebook and LinkedIn that facilitate social networking. With the important of the Social media tools, it's increasingly becoming popular in higher education contexts as lecturers employ technology to facilitate and improve their instruction as well as encourage active learning for students (Tess, 2013). Increasing numbers of educationalists start to consider the possible implication and probable consequences of social media on education practice and provision, particularly in the context of further education (Selwyn, 2012). Therefore, Tess (2013) claimed that, the future role for social media as a facilitator and supporter of education is worthy of investigation

Furthermore, recently, the educators have constantly been early adopters in terms of employing new technology within their domain (Ractham & Firpo, 2011), particularly today when generation of learners trained and grew in the shadow of digital technologies, in a world of interactions and wide accessibility of information (Popescu, 2012). Marwick (2001) claimed that physical interaction is very important for sharing ideas whilst, Ractham and Firpo (2011) confirmed that social media tools, such as file uploading and discussion meetings, empowered educators and learners to improve the education and knowledge sharing process in order to enhance the learning procedures. These arguments also were supported by Korpman (2004), who mentioned that online environment can be used to create virtual communities of learners.

E. Knowledge Sharing in Education

Several scholars have defined knowledge sharing in various ways. Li (2010) described knowledge sharing as the activity in which contributors are engaged in the multiparty procedure of contributing, transferring and employing

knowledge while Yu *et al.* (2010) considered knowledge sharing as a procedure that contains three phases. According to Yu *et al*., knowledge sharing stands at the center of constant development process. It is essential for transforming an individual's process improvement into actual learning. Knowledge sharing is highly acknowledged that knowledge sharing can increase institution's ability to resolve problems and avoid reoccurrences of mistakes by bringing together an inclusive range of knowledge, information, skills, and experience. Accordingly, knowledge sharing directly affects an organization's knowledge creation, organizational learning, performance accomplishment, development, and competitive improvement (Shoemaker, 2014).

Indeed, in an institute like a university, knowledge sharing offers high quality instruction, outstanding results, and favorable learning environment. Furthermore, Tan *et al.*, (2010) referred that, the universities are known as knowledge based institutions that play the role of the embodiment of knowledge development and management. Therefore, Goh and Sandhu (2013b) stated that, in an educational environment such as the university, knowledge sharing assists academics to develop teaching ability, improve quality of research and avoid previous mistakes. This claimed also stated by Fullwood *et al.,* (2013), where they asserted that, knowledge sharing in universities is expected to develop and facilitate students' connections and relations with course-mates, and prepare opportunities for internal and external activities.

Shukor, Nawi, Basaruddin and Rahim (2010) added that, knowledge sharing activities at higher education institutions may take place with students in groups. These groups of students are from different backgrounds, which have different skills, knowledge and experiences. They cooperate and exchange their knowledge to fulfill the requirements of the given tasks which will then create a new environment. In addition, Tan *et al.*, (2010) also stated that, knowledge sharing is an important process for everyone, particularly the students as it facilitates exchanging knowledge which is generally known as one of the sources of power. Therefore, it will be important and necessary to understand the student's perception about this modern technologies.

F. Nonaka and Takeuchi's model

In the present study, the researchers employed the Nonaka and Takeuchi's model as the theoretical framework. This model has been recognized as one of the most suitable models in the field of knowledge managment, and it can be continuously applied in various settings (Dalkir, 2013). It represents the main theoretical to support the understanding of how knowledge is created, transferred and shared in an organization (Rai, 2011). According to Dalkir (2013), the Nonaka and Takeuchi model has been proven to be more powerful in the domain of KM. One of the greatest strengths point is its simplicity in terms of understanding the essential view of the model as well as in terms of its ability to internalize and apply the KM model expediently. Figure 2, depicted the components of the Nonaka and Takeuchi model.

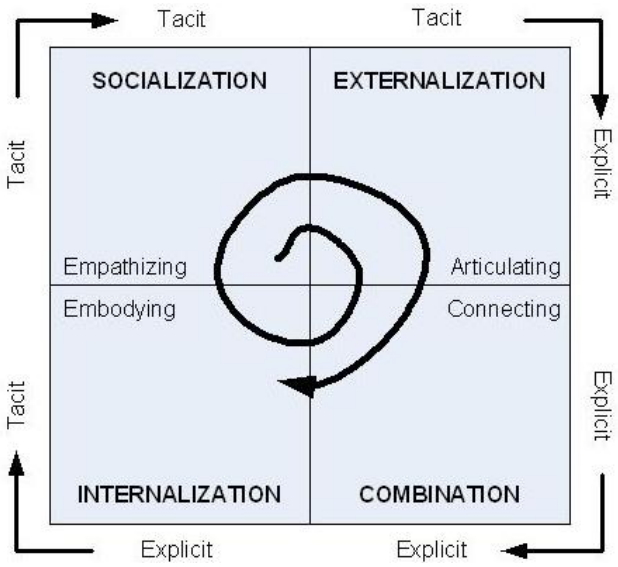

Figure 2: Nonaka and Takeuchi model

Moreover, Isika, Ismail and Khan (2013) mentioned that Nonaka and Takeuchi's model created a template that explains the process of converting tacit to explicit knowledge. The knowledge conversion template stresses the importance of knowledge sharing in the knowledge conversion process. Isika *et al.* (2013) also explained that knowledge sharing is a vital part in knowledge management by making the knowledge available for use in an organization and transforming this knowledge to a form that can be understood and utilized easily by others working in the organization.

In this study, Nonaka and Tackeuchi's model helps the researcher to investigate how people transfer/share knowledge among each other. This model is very suitable to study the transfer or sharing knowledge between individuals within group work. With the important to harnessing the Nonaka and Tackeuchi's model in the higher educational institutions, we saw very few research exploiting this model in the area.

1. **Socialization (tacit-to-tacit):** It is the first dimension of spiral model that entails exchanging knowledge in face-to-face, natural, and normally social communications. It involves reaching at a shared and common understanding through the exchange of mental models, and brainstorming to come up with new ideas (Dalkir, 2013).
2. **Externalization (tacit-to-explicit):** Externalization is the second dimension of spiral model that makes the tacit knowledge visible and transforms it to explicit knowledge.
3. **Combination (explicit-to-explicit):** Combination is a process that converts the knowledge explicitly into more systematic sets of knowledge (Weng, Chou & Wu, 2011).
4. **Internalization (explicit-to-tacit)**: Internalization is the last and fourth dimension of spiral model. Internalization is a process that recycles explicit knowledge back into tacit knowledge. Through internalization, explicit knowledge is shared throughout the organization as well as among the team work and then converted into tacit knowledge by individuals. Internalization is closely related to "learning by doing" and/or organizational learning (Nonaka & Takeuchi, 1995).

III. Research Method

This section of the paper describes the methodology used and the conceptual framework. In specific, in this article the methodology used is qualitative in natures which include the collection of data and the technique of analyzing it. Qualitative methods are specifically constructed to take account of the particular characteristics of human experience and to facilitate the investigation of experience (Polkinghorne, 2005).

A. Conceptual framework

In this empirical study, the main research question aims to determine the knowledge sharing process among local and international students. The conceptual framework of this study assists in carrying out the study while the research questions highlight the relationship between knowledge sharing and group work. The relationship between knowledge sharing and group work is presumed to be moderated by social media tools. Thus, this framework explains the role of social media in conducting and facilitating the knowledge sharing process. Such a process generally includes bringing knowledge and getting knowledge (Hooff & Ridder, 2004). In the context of this study, the knowledge sharing process takes place in group work among local and international students using social media tools based on the Nonaka and Takeuchi model which consist of four part; SECI (Socialization, Externalization, Combination, and Internalization). The conceptual framework is presented in Figure 3.

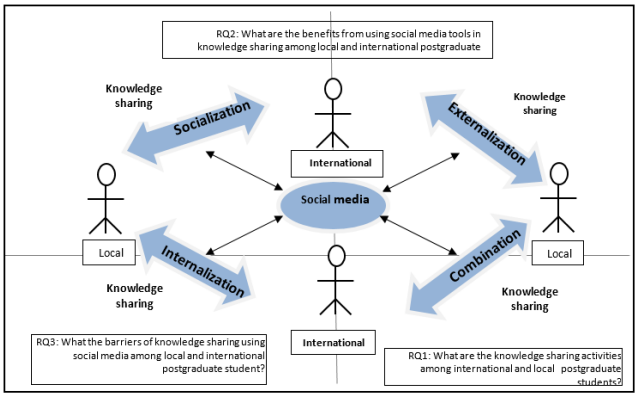

Figure 3: Conceptual Framework

B. Data collection

Data collection methods are essential part of the research design. Data can be collected in multiple ways and from diverse settings. Data collection methods include interviews, questionnaires and observation (Sekaran, 2000). In this study, a semi-structured interview was used. Semi-structured interview allow the interviewer to uncover a specific list of hidden issues of research issues and to explore underlying motives and attitudes towards sensitive issues (Saleh, 2006). Specifically, in this study, the postgraduate students are requested to answer open-ended questions. This type of question has many advantages including flexibility, allowing the interviewer to probe more in depth and clear up any misunderstandings, allowing the interviewer to test the knowledge of the respondents, encouraging cooperation and helping to establish the relation and allowing the interviewer to create a right review of what the respondents really believes (Cohen *et al.*, 2007).

With regard to sampling, it is the process of selecting a subset of a population with the intent of making statements about the entire population. The sample of this study comprises postgraduate local and international students enrolled in the School of Computing (SOC) for IT and ICT in one of the universities in Malaysia. In fact, in this study, purposive and snowball sampling techniques are used because employs a qualitative method of study.

C. Data Analysis

After gathering the data, the researcher moves to the tasks of analyzing it. The researcher collected data from 12 participants and stopped collecting when arrived to saturation. Data saturation entails bringing new participants continually into the study until the data set is complete, as indicated by data replication or redundancy. Generally, as a qualitative research, this study engages in interpreting data through interpretive techniques as recommended by Saad and Haron (2013). Interpretive techniques can be used to decode, patterns decipher, translate, and find out the meaning of the occurring phenomenon. In this qualitative study the researcher analyzed the interviews into codes manually, and then apply the codes using the software for NVIVO 10, to understand the raw data more deeply.

IV. Finding and Discussion

As mentioned previously, the researchers interviewed twelve participants (see Table 1), with ten of them through face-to-face interviewed and with two through online questionnaire. Owing to the brief answers provided for the online questionnaire, the researcher selected the two best answers among them. However, the interview's questions were developed according to the Nonaka and Takeuchi model, where the questions therein are categorized into four parts namely socialization, externalization, combination and internalization.

Table 1: Selected participants

ID	Gender	Age	Semester	Nationality	Program
P1	Male	29	Third	Iraqi	PHD/IT
P2	Female	38	Fourth	Malaysian	MSC/IT
P3	Male	39	Fourth	Egyptian	MSC?IT
P4	Female	30	Fifth	Malaysian	MSC/IT
P5	Male	28	Third	Jordanian	MSC/ICT
P6	Male	41	Third	Nigerian	MSC/IT
P7	Male	34	Fourth	Iraqi	MSC/IT
P8	Female	28	Fourth	Malaysian	MSC/IT
P9	Female	26	Fourth	Iraqi	MSC/IT
P10	Female	30	Third	Yamani	MSC/IT
P11	Female	30	Third	Iraqi	MSC/IT
P12	Female	39	Third	Iraqi	MSC/IT

In this article, the researchers sought to achieve the following research question: *What are the benefits from social media tools during knowledge sharing among local and international postgraduate students?*

A. Socialization

Even though face-to-face is the most reliable and effective process in knowledge sharing, the study findings show that social media tools are a popular choice among the students. The effectiveness of social media is exploited in virtual learning. Environments because it gives the students the opportunity to communicate easily. In other words, rather than waiting for a long period of time to meet the group member face to face, social media features can facilitate interactive and immediate responses between group members. Thus, this makes sharing of knowledge quicker and more effective because some of the students do not have the time to meet their group members, as they are busy with other activities related to the university, home and work that prevent them to share their work in assignments and project reports in a timely manner. These issues are supported by Riege (2005) who stated the lack of time is a barrier in sharing knowledge. Figure 4, Themes for Socialization.

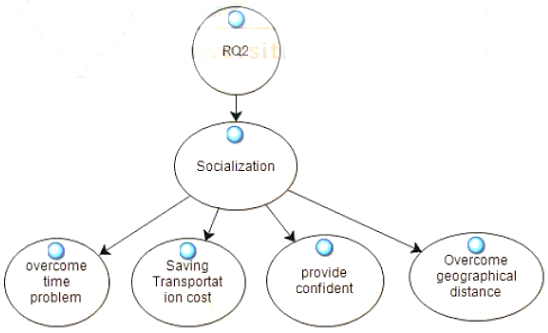

Figure 4. Themes for Socialization

The findings of this study confirmed that social media tools can solve issues in sharing knowledge by offering enough space to allow the students to take time to generate and share knowledge. Korpman (2004) mentioned that online tools such as wikis or blogs can be used to create an online community of learners. More specifically, he said that, the students may post to ask and respond weekly questions between each other, and this gives the students the opportunity to communicate online especially for those who spend little time on campus due to work or family commitments. Thus, his arguments support this study.

In terms of geographical distance, Steinheider and Al-Hawamdeh (2004) mentioned that geographical distance is one of the barriers to knowledge sharing. The findings of this study reveal that social media tools can solve the problem of geographical distances that prevent the students from sharing their knowledge because most of the students living outside the campus face such a problem. This study found the social media tools is best used to overcome these issues, where the group members make use of social media tools to discuss and converse online without meeting face to face. For example, the group member used social media such as Whatsapp to share their ideas and discuss the assignment and project report with other members.

Additionally, shyness is considered as a barrier among students because it prevents them from sharing knowledge (Sabbir *et al.*, 2014) especially if the group consists of different genders, where different genders are considered as a factor that can impact the group-work process (Analoui *et al.*, 2014). Therefore, using social media is a convenient way to solve this barrier. The findings of this study confirm that using social media for knowledge sharing among students gives them the opportunity to communicate with their classmate confidently. The virtual environment, such as social media, helps some of the students to gain more confidence especially with students are shy to talk or communicate with his/her classmates – they feel more comfortable to express their opinions through these tools rather than in face to face meetings.

The findings of this study reveal that using social media tools to convert the group members' thoughts help in saving transportation cost when conversing through chatting in social media tools. This allows the group member to meet each other online instead of meeting each other face to face, with the latter being cost consuming. For example, the group members use Whatsapp or Facebook to discuss and convert their ideas about their assignment and project report through chatting. Therefore, this finding is considered as one of the benefits of social media tools and as a technology to help the students, particularly those who are unemployed students.

B. Externalization

In this section, the students' knowledge is converted from tacit to explicit, and this knowledge is stored and protected online using social media. Using social media as tools to store data provides the member a chance to save the file and retrieve it any time. To this end, the findings of this study show that social media is crucial in knowledge storage such as files and figures related to the assignment and project report. This finding is compatible with that of Banzato (2012) that confirmed that the use of Google Docs from the teacher is invaluable in saving materials in text format to share with students. Figure 5, Themes for Externalization.

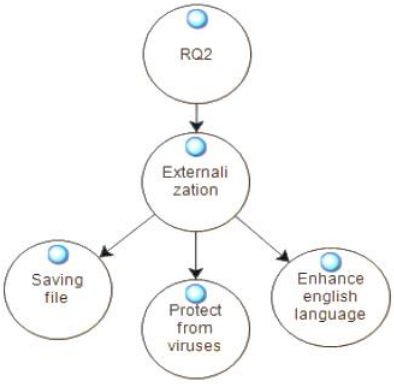

Figure 5. Themes for Externalization

The findings also reveal that social media is a tool that protects from viruses because in the externalization part, the group members convert their thoughts into documents such as MS word and diagram files. The group member uploads this document by using social media tools; for example, uploading the files for assignment and project report to Facebook group. Thus, a group member will not require the use of external RAM to send the files and diagram to other group members and as such, the files are protected from viruses.

Generally speaking, the English language is very important for the academic purpose and sometimes the students need some assistance to develop their academic language skills, especially when English is their second language. Consequently, writing documents offer opportunities for students to use English language as an instrument to transform their thoughts into text document. Riege (2005) listed the barriers of sharing knowledge, with one of them being poor written communication. Therefore, based on the findings, the social media tools used in sharing knowledge can enhance the writing process among the postgraduate students when they work as a team. Thus, social media is important to enhance English language when students want to write their thoughts down in text document and send it to their group members. Sending thoughts through word document would give the opportunity to correct some word or learn some new word, especially when interacting with students from diverse cultural and linguistic backgrounds. This finding is supported by Korpman (2004) that highlighted the potential benefit of peer interaction for learning across diverse cultural and linguistic groups in the form of improving English language skills of international students.

C. Combination

In this section, the students collected data from all group members in the form of text and diagrams and put it together in one file using social media. Hew (2007) stated that ease to use technology motivates people to share knowledge due to the fact that the technology provided allowed people to easily receive posting. In the same concept, the findings of this study show that, the postgraduate students benefited from the features that the social media provided in collecting data by downloading the assignment parts or the project from all group members in an easy manner, where the students (or the leader of the group) just copy the paragraph or sentence from the source and paste it to the file or post on the social media tools. Figure 6, Themes for Combination

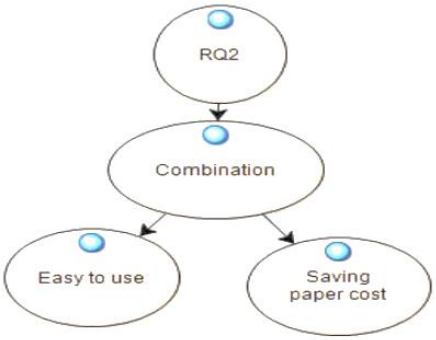

Figure 6. Themes for Combination

Additionally, the findings for the combination part uncover that when using social media, the group member saves on paper costs because in this part the leader of the group collect the soft copy of the files from other group members online. In other words, the group member sends the work for assignment and project report without printing a hard copy of the file that will be in which case, cost-consuming. This finding highlights another benefit that can be gained from the social media tools.

D. Internalization

Internalization involves the transformation of the explicit knowledge to tacit knowledge, where knowledge acquired by learning is internalized and integrated to the tacit personal knowledge of the individual to become a valuable asset. It is the process of transforming explicit knowledge in practice into tacit knowledge. After combining all the work by using social media tools, the students begin to check the work by going through it and noting down what they understand. In particular, this study found that through the social media tools, the students' main activity is to discuss the comments through social media to deeply understand the subject or topic. Based on the discussion above, the researcher found that the finding is consistent with that reported by Wankel (2012) who stated that through the discussion by using social media among the classmates, the students might restructure their thoughts on the information and improve their understanding about a particular subject. Figure 7, Themes for Internalization.

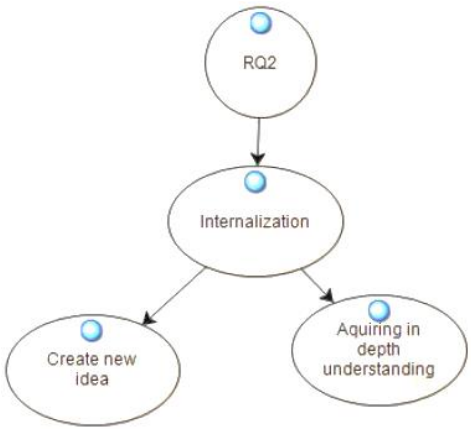

Figure 6. Themes for Internalization

Another benefit of social media tools that is highlighted in the findings is the creation of new ideas. In this part, the transformation of explicit knowledge (for example, the files for final work) to tacit knowledge (for example, the thoughts that can understood from the group member) involved the use of social media tools as the assignment and project report are posted online along with the discussion and comments. Through this explanation the group member can benefit from the creation of a new idea after reading the discussion and comments.

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