# Knowledge Sharing Networks Used by Academicians in Malaysian Public University

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**Abstract**

This qualitative study aims to explore and describe the knowledge sharing networks used by academicians to share their knowledge. The study was conducted in a Malaysian public university. A single case study strategy used to gather deeper insights on the knowledge sharing networks. A face-to-face semi-structured interview was conducted to collect the data over a six month period. A total of 15 renowned academicians were interviewed. Content analysis method was used to extract the knowledge sharing categories from the qualitative data. The study reveals that academicians share their knowledge through three main knowledge sharing networks, namely Business Club network, Research network, and Personal network. The research findings may expand a research area of knowledge sharing networks in universities which still theoretically and empirically not sufficiently covered.

*Keywords*: Knowledge sharing network; academicians; malaysian public academic institutions

**Abstrak**

Kajian kualitatif ini bertujuan untuk meneliti dan menerangkan tentang rangkaian perkongsian pengetahuan yang digunakan oleh ahli akademik bagi berkongsi pengetahuan. Kajian ini telah dijalankan di sebuah universiti awam di Malaysia. Strategi kajian kes telah diguna pakai untuk memperoleh kefahaman mendalam berkenaan rangkaian perkongsian pengetahuan. Temu bual separa struktur secara bersemuka telah dijalankan untuk mengumpul data dalam tempoh enam bulan. Sejumlah 15 ahli akademik terkemuka telah ditemu bual. Kaedah analisis kandungan telah digunakan untuk mengekstrak kategori perkongsian pengetahuan menerusi data kualitatif. Kajian menunjukkan ahli akademik berkongsi pengetahuan menerusi tiga rangkaian perkongsian ilmu yang utama iaitu rangkaian Kelab Perniagaan, rangkaian Penyelidikan dan rangkaian Peribadi. Dapatan kajian ini boleh memperluaskan lagi bidang kajian rangkaian perkongsian pengetahuan di universiti yang masih kurang dari segi teori dan empirik.

*Kata kunci:* Rangkaian perkongsian ilmu; ahli akademik; institusi akademik awam Malaysia

## ■1.0 INTRODUCTION

Knowledge is a vital resource for organizations (Kekwaletswe & Bobela, 2011). Many researchers emphasized the importance of sharing knowledge to increase the organization value (Chandran, Raman, 2009; Abedini, 2012; Huang, Davison & Gu, 2008) including academic institutions (Syed-Ikhsan & Rowland, 2004). The network leads to intensify and diffuse ideas and knowledge to high level of extent which could not be reached by individuals or organizations alone (Stone, 2003). It is important for individual, particularly, within learning institutions to engage and share with other members. In their paper, Seufert, Von Krogh and Bach (1999) emphasized that the individual learning has to cooperate and interact with their dynamic social environments so as to contribute to organizational learning. The network plays an important role for sharing knowledge. Büchel and Raub (2002) stated that creating a knowledge network is the most valuable activities which knowledge management should focus on. They added also that one benefit of creating effective knowledge networks is enhancement of organizational efficiency. Hence, this research was carried out to explore and describe the knowledge sharing networks used by academicians in public academic institutions.

## ■2.0 LITERATURE REVIEW

The "networks" term can be understood as those between individuals, groups, or organizations (Seufert *et al.,* 1999). According to Kühne, Lambrecht, and Gellynck (2011), knowledge network is "a set of actors connected by a set of repeated interaction of formal and/or informal ties" (p. 8). The actors according to them encompass humans and organizations such as industry or academic institutions. The relationships among those actors describe as ties. The relationships between actors can be classified according to "contents (e.g. products or services, information, emotions), form (e.g. duration and closeness of the relationship) and intensity (e.g. communication-frequency)"

(Seufert *et al.,* 1999, p. 182). For the purpose of this research, knowledge network is referred to organizations or individuals who connected together with the aim of sharing knowledge.

Through reviewing literatures, five important types of network have been identified. These networks are Business Club network, Community of Practice network, Personal network, Strategic Alliance network, Research network, and Learning network. Most of these networks have different activities and ties characteristics. Some of them, however, have similar characteristics, especially, in the ties relationship. Those five networks could be found in many sectors including education sector.

The Business Club network was defined by Kühne *et al*. (2011) as a "platform where responsible people or representatives of organizations can meet each other with the aim to learn from each other by gathering, talking, listening and exchanging experiences" (p. 27). This network normally is establish and manage by a partnership of interested organizations including local councils, utility companies, government, and universities, and all actors in this network should have expertise in relevant and specific areas that needed by most (Hyde, Miller, Smith & Tolliday, 2002). In their study, Kühne *et al.* (2011) highlighted that, Business Clubs network are often established for a specific purpose, like for instance, developing sustainable practices in a certain sector. On the other hand, the Community of Practice network was defined as a "group of people informally bound together by shared expertise and passion for a joint enterprise" (Wenger & Snyder, 2000, p. 139). In a Community of Practice network, individual share their experiences and knowledge in free-flowing. This network normally comprises members who share knowledge, ideas and insight, experience in an interested area (Hustad, 2004). According to Hustad, these communities have more opportunity to increase over time compared with being projected or driven by a specific deadline. The personal network consists of the set of people including relatives, friends, colleagues, fellow members of organizations, and acquaintances with whom the focal person has a direct personal relationship (Van Tilburg, 1998). It is characterized by a decentralized structure since its members initiate and make a lateral relationship (Kühne *et al*., 2011). The strategic alliance network is a group of organizations entering into voluntary and formal arrangements to share common knowledge with several purposes including technologies, product development, and enhance services (Gulati, 1998). The research network can be defined as a collection of associations, social companies, governmental organization, institutions, [individuals] which collaborating to do research (Kühne *et al*, 2011). Finally, the learning network is a network within an organization where its structures and systems have established with the aim of increasing the participants' knowledge (Apostolou, Kafentzis, Mentzas & Maas, 2003). Members of this network have the opportunity to interact and share their knowledge with professionals in similar fields and interests (Apostolou *et al.,* 2003). Table 1 summarizes the knowledge network types and its main characteristics.

■ **3.0 METHODOLOGY**

The research orientation was a descriptive form of qualitative research. Because the aim of this research is to comprehensively describe and build in depth understanding of knowledge networks being used by academicians, , a qualitative approach is thus most appropriate. The key element for qualitative research is to learn about the issue from participants and involve in the best practices to get the information needed (John, 2007). According to Mayrhofer *et al.* (2004), implementing a qualitative research can contribute to both a theoretical as well as empirical advancement. The research question developed based on grasping the problem of research through both reviewing as well as examining of related literatures. According to John (2007), the qualitative researcher "does not tend to use or rely on questionnaires or instruments developed by other researchers" (p. 45). The research site (university) has been chosen to be a site for this research because it is one of the largest universities in Malaysia with about 480 academic programs in both modes of study (both coursework and research), so that would offer great opportunities for identifying and deep understanding the various knowledge sharing networks that its academic staff is really shared with.

To determine the research participants, a purposeful technique was used. The purposeful sampling is the main technique in a qualitative research that would assist the researcher to choose the most appropriate sample that is able to answer questions of research (Marshall, 1996). To minimize the potential researcher bias, a high level of integrity has been done. For example, the participants were noted that their involvement in the study is voluntary basis, and they have a freedom to deny or accept to participate. Participants who accept the invitation, they had a choice to suggested the appropriate both place and time to conduct the interview. The data were collected from fifteen academic staffs in one Malaysian public university. The qualitative research sample size is often small (Fossey, Harvey, McDermott & Davidson, 2002; Ryan, Coughlan & Cronin, 2007).

Only two participants' having Associate Professor positions' and thirteen having a Professor positions', three of them are deans of faculty. Two more participants' answers were deleted since they did not give considerable and informative information because of their limited free time. The study participants work in many faculties and disciplines. In spite of the participants work in different faculties, the conclusion is that they have been homogeneous participants as all of them were academic staff and there was no any non-academic staff engaged.

The data were collected from the participants over a six month period through face-to-face semi-structured interviews. The interviews continued until the respondents do not give difference information, and data saturation developed in their responses. Reaching to the saturation stage determines the point at which adequate data have been generated, accordingly, the sufficient number of participants to be involved (Jennings, 2011).

According to (Maxwell, 1992), the researcher should heed the validity when he/she conducts a qualitative research. Steps were taken in a credible scholarly to ensure the research findings validity. Johnson (1997) recommended some strategies to promote qualitative research validity. In this study, there were two strategies have been used to promote the findings which are the Low Inference Descriptor and Data Triangulation. Table 1 illustrates these strategies.

The low inference descriptor in this study was used through the presentation of respondents view by using quotations from the participants' answers. "A verbatim is the lowest inference descriptor of all because the participants' exact words are provided in direct quotation" (Johnson, 1997, p. 285). In addition, John (2007) pointed out that the researcher in qualitative research should bring in the voice of participants in the study such as use many quotes. Data triangulation for this research was used through conducted a multi-interview in

different places and times. "Another important part of data triangulation involving collecting data at different times, at different places, and with different people" (Johnson, 1997, p. 289).

**Table 1** Qualitative research validity strategies

| No. | Strategy | Description |
|-----|----------|-------------|
| 1 | Low inference descriptor | The use of description phrased much closed to the participants' accounts and researchers' field notes. Verbatim (i.e. direct quotations) is a commonly used type of low inference descriptor. |
| 2 | Data Source triangulation | The use of multiply data sources to help understand a phenomenon. |

## ■4.0 DATA ANALYSIS & FINDINGS

### 4.1 Data Analysis

The site which this research conducted was a public university in Malaysia and has been established in 1956. The university is one of the largest universities in the country. It has expanded nationwide with fifteen branch campuses distributed in all the country states. Also, it has three satellite campuses, nine city campuses and twenty-one affiliated colleges. With this vast network as well as seventeen thousand workforces, the university offers about five hundred academic programs, and there is about one hundred and seventy two thousand students study at the university. It has earned a good reputation as being one of Malaysia's innovative and entrepreneurial universities, as it has formed linkages with many and various industrial sectors.

Fifteen participants were involved in this research, nine males and six females. For the confidentiality purpose, the participants' names have been hidden. All the participants in this study held a PhD degree which is the highest degree, thus the participants in this research consisted of highly educated academicians. Although the participants work in different faculties, the conclusion is that they have been a homogeneous participant group since all of them were academicians. To minimize the bias as much as possible, the schedule of all interviews were prepared in a standard manner for all participants, allowing minimal allowances for researcher's bias. During the data collection and coding, other activities were recorded and considering. For instance, in the interview, the participants have been encouraged to discuss and talked more through probing questions.

A qualitative content analysis was conducted to analyze all the data that have been collected from the participants. As a qualitative research, the study procedure established an analysis as well as coding the participants' answers. In the coding process, the interviews with the study participants have been taped by using the electronic voice recorder and then transcribed into textual format. The participants' responses have been reviewed numerous times to determine the concepts, name, and category of the networks. The categorization process of knowledge sharing network has been achieved based on group of a similar participants answer together. According to John (2007) the "code labels emerge from several source. They might be also drawn from names the researcher composes that seem to best describe the information" (p. 185). Protégé software was used to model the findings in a graphical context and to determine the relationships among the Networks types became apparent.

### 4.2 Findings

The research found three main networks which academicians share their knowledge with others through. These networks were Business Club network, Research network, and Personal network.

It can be interpreted from the participants' responses that they share their knowledge through these three networks with eight groups of people including academicians in local academic institutions, academicians in international academic institutions, associates in governmental organization, associates in private organization, research groups, personal friends, students, and colleagues. With these groups of people, academicians share usually some types of knowledge include knowledge on subjects, research, university policies, ethics, religion, values, entertainment, and culture.

#### 4.2.1 Business Club Network

Business Club network in this research refers to a platform where academicians formally meet others for talking, listening, and exchanging experiences as well as knowledge with the aim to learn from each other. Through Business Club network, the research results reveal that the academicians share their knowledge with three groups of people include academicians at local and international universities, with associates in government organization, and with associates in Private organizations. Figure 1 shows the organizations within Business Club network which the academicians share with.
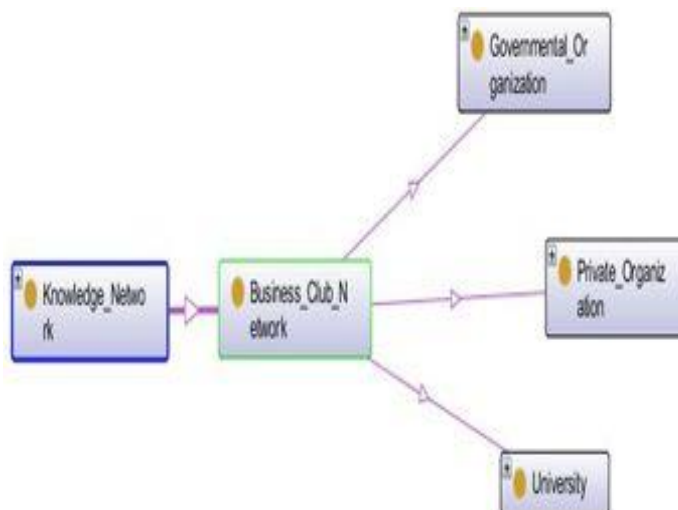
**Figure 1** Business club network

*4.2.2 Research Network*

Research network refers to a group of individuals from same or different associations, companies, governmental organization, institutions which collaborating to do research. The research result reveals that the academicians share their knowledge with five main research group networks which are Chemical Technology research group, Chemical Engineering research group, Information Retrieval research group, Knowledge Management Society research group, and Asian Information Retrieval Society research group.

In general, in Research network, the research groups usually share their knowledge virtually through some Internet applications such as email and forums, because they probably belong to different organizations at different places and countries. In addition to sharing knowledge virtually through the Internet, they have weekly or monthly meetings where their research group members share their research knowledge through face-to-face discussion. Figure 2 shows the research group names that have been identified and categorized under the research networks.
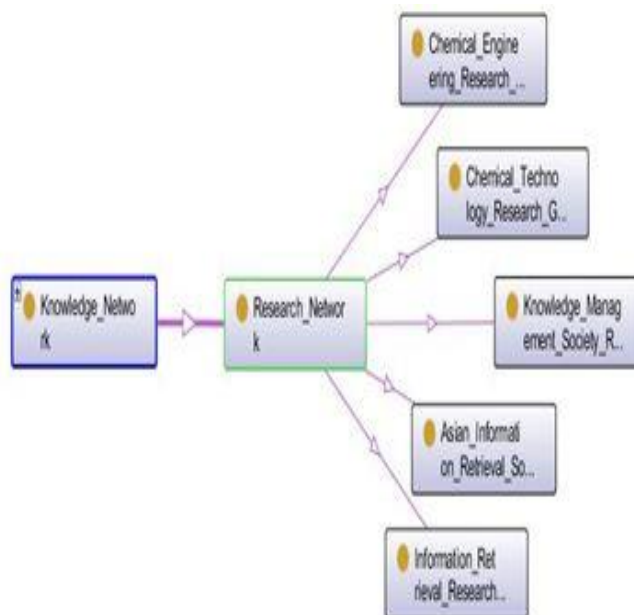


**Figure 2** Research network

*4.2.3 Personal Network*

For this research the Personal network consists of a set of people including relatives, friends, colleagues, fellow members of organizations, and acquaintances with whom the academician has a direct personal relationship. Under this network, the research found three main groups of people who academicians share their knowledge with which was colleagues, personal friends, and students. Figure 3 shows the Personal

network which academicians share with. In Appendix A, Figure 1 illustrates all the knowledge sharing networks that academicians share their knowledge with.

## ■5.0  FINDINGS AND DISCUSSION

The multiple efforts of data analyses have been conducted to ensure thematic categories were accurate. Many research articles have been reviewed with the aim of understanding of qualitative findings. The purpose of this study is to explore, describe the knowledge sharing networks among academicians in academic institutions. The category analyses centered on research question which is what are the knowledge networks used by academicians to share their knowledge. In other words, with whom they share their knowledge. From the analysis, it can be summarized that the academicians share their knowledge with eight groups of people which are academicians at local academic institutions, academicians at international academic institutions, associates in government organization, associates in private organization, research group members, personal friends, students, and colleagues.
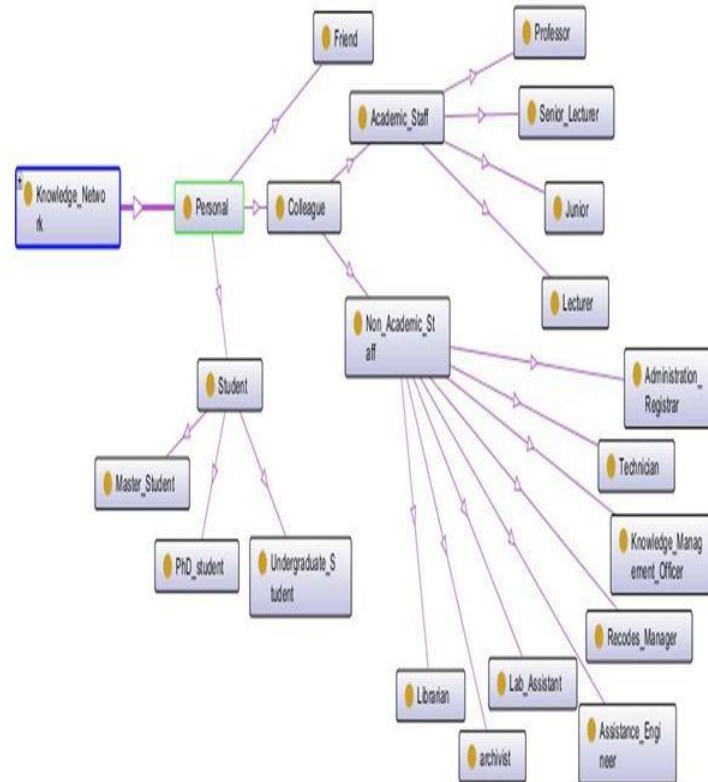


**Figure 3**  Personal network

Through reviewing and analyzed a knowledge network past studies, these groups of people belong to different types of knowledge network. In this research, the academicians at both local and international academic institutions and the associates in both governmental and private organizations have been categorized under a Business Club Network because they normally have been appointed and candidates by their institutions or organizations to attend some knowledge sharing related activities (such as conference, seminars and others) with aims of learning from each other. According to Kühne *et al*. (2011), the Business Club network is a platform where responsible people or representatives of organizations gathering and talking with each other in order to learn. Additionally, 'the business clubs are typically initiated and run by a partnership of interested organizations such as local councils, utility companies, government, technical support organizations, regulators, and universities, with expertise in specific areas of relevance to most members of the business group' (Hyde *et al*., 2002, p. 330).

The second knowledge sharing networks which the research results reveal is the Research network. Five different research groups have been identified and classified under the Research network including Chemical Technology research group, Chemical Engineering research group, Information Retrieval research group, Knowledge Management Society research group, and Asian Information Retrieval Society research group. This group of people has been categorized under the Research network because their main aim from communication and collaboration is merely for doing a research. As Kühne *et al*. (2011) pointed out the research network is a group of people in different organizations and institutions collaborating with each other to do research.

On the other hand, the academicians share their knowledge with other groups of people including their colleagues, students and personal friends. It has been found that these groups of people whom academicians share their knowledge with are belong to a Personal network. The Personal network consists of the set of people including relatives, friends, and colleagues, fellow members of organizations, and acquaintances with whom the focal person has a direct personal relationship (Van Tilburg, 1998) included students. The students have been included in this network because the nature of direct relationship between them and their lecturers (academicians) as it is indicated by

Van Tilburg (1998). It should be noted that the sharing of knowledge here with students does not mean teaching. The researcher in this research differentiates between teaching and sharing. Sharing of knowledge with students means that the academicians - 'have not' or 'it is not' their duty or responsibility to share with that particular students,  for example,  when academicians share knowledge that not related to their subjects such as, religion, value, or ethical knowledge.

## ■6.0  CONCLUSION AND FUTURE WORK

This study identified three main knowledge sharing networks used by academicians in public academic institutions. These networks are Business Club network, Research network, and Personal network. This research extends prior research on knowledge sharing networks in academic institutions, particularly, universities. The study findings might provide useful insights for university administrators to exploit and utilize these knowledge sharing networks to enhance their academic staff performance through sharing the most valuable knowledge. This research also contributes to future research on knowledge sharing networks, specifically in universities. Since the research focused only on the knowledge sharing networks among academicians in universities, it is recommended to study the type of knowledge sharing networks that being used by other staff in the academic institutions such as non-academic staff.

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