

KNOWLEDGE SHARING AMONG UNDERGRADUATE STUDENTS

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ABSTRACT

The success of knowledge management initiatives depends on knowledge sharing. Knowledge sharing is the activity of transferring knowledge from one to another. Knowledge sharing is widely occurred and a few people have given different statement on the factors of knowledge sharing. This paper present the medium and tools used in sharing knowledge among undergraduate students in the Faculty of Built Environment, University of Malaya. Based on the literature review a questionnaire was developed and distributed to all undergraduate students in Faculty of Built Environment, University of Malaya, Kuala Lumpur. This paper concludes that the lecture is the highest ranking followed by discussion as a medium in sharing knowledge among students of the faculty of Built Environment in University of Malaya. Facebook has been identified as the highest ranking for the tools used in sharing knowledge among them. This paper shows that there is a culture of knowledge sharing among student in the Faculty of Built Environment, University of Malaya.

Keywords : *knowledge, knowledge sharing, undergraduate student, facebook,*

INTRODUCTION

Knowledge is defined as information with context and understanding (Susan, 2003). Knowledge comes either formal or informal. Formal knowledge come in the form of e-mails, reports, official policy documents, Web pages, letters, memo, financial records, minutes meetings and database records. Informal knowledge is about how things really work and keep going. Informal knowledge is communicated through the ancient storytelling, legends and it has been passed from one media to another. This informal knowledge is not written down or officially documented.

Knowledge sharing happens daily among students, academic staff and also among random people either directly or indirectly. Knowledge sharing is the activity of transferring knowledge from one to another (Lee, 2000). The knowledge exchange was between two parties in a reciprocal process (Willem, 2003). In this globalization era, knowledge sharing is very important as we being driven by so many new technologies every day. Sharing knowledge not only rely on tangible part such as notes and report but it is the process of sharing a tangible knowledge such as experiences, thoughts, ideas ,intelligences, feelings and emotions (Nonaka, 1995).

Knowledge can be shared with anybody through different medium such as social networking, discussion, portal or forum and etc. Knowledge sharing is where knowledge is generated within the knowledge-processing scope (Shapira et al, 2005).Based on the previous study by (Tampoe, 1996) technology is one of the common motivations which act as tools to support and boost the knowledge sharing skills.

KNOWLEDGE SHARING

Knowledge sharing has been taken lightly because the importance of it is not fully understood by most of the people. Knowledge can be transmitted and share among others and can be transfer to the next generation. In order to produce a new ideas or innovation, previous knowledge is important as a basis and guide. Information can be retain for future use if everyone willing to share knowledge and the knowledge can be expend through the knowledge exchange. Knowledge shared from one person to another help to add value in organizational activities (Mitchell, 2008). Guteen (1999) highlighted when a person or experts from one organization leave the

organization, their knowledge is what they left and contributed. If knowledge is not share and expand the organization will lose precious asset which is knowledge and in order to create a new knowledge, knowledge sharing from previous expert is important so we can achieve competitive advantage.

Knowledge sharing can be done with the medium and tools that help in transmitting knowledge. Ideas and opinions from the past experience or from the lesson elsewhere need to be share so that the knowledge would not loss. There are a few medium and tools that recently use among undergraduate student in order to share, store and transmit knowledge. The tools provide different frameworks to evaluate and monitor knowledge. Previous studies had mention that knowledge is about two way communication and to improve the knowledge one can apply some techniques to improve it for the better. Face-to face meeting, email, instant massaging are part of the medium use to share knowledge in any organization. In the process of gaining knowledge we need to expand our contact among colleagues, classmates and random people we met. According to (Rückriem , 2003) there are differences between tools and medium. Tool is the concept of activity theory while medium is the central concept of media theory. Tool is refer to instrument, machine or apparatus which is in physical form and use to achieve our goal to transfer knowledge and medium has the ability to store or transmit data. Therefore we can widen and share our knowledge by expanding contact and share knowledge by using the tools and medium that we have to increase performance in organization.

MEDIUM TO SHARE KNOWLEDGE

Lecture

Lecture would be an appropriate medium to share theoretical knowledge (Tsui, Chapman, Schnirer& Stewart, 2006). Usually lecture is conducting to large number of students when the interactive element is limited. The lecturer would distribute lecture notes or teach the lesson by using slides. The lecture notes and slide will be the guide for the students to study for final examination, tests and quizzes and they will search other additional information from the books in the library or online information from internet.

Group discussion

Another method to share knowledge is by having a group discussion with the classmates. Each student have their own understanding and through this method weak student could get the idea what is taught by the lecturer in the class and this would help them to excel in study and increase the students achievement. Certain subject like integrated project subject need a group discussion because to solve the task according to the time given by the lecturer each student in the group need to play and understand different roles.

Seminar

According to (Canada International Development Agency, 2003) knowledge sharing can be done through seminar and during seminar people will listen to the presenter without interrupting. Seminar is another method to share knowledge among students and seminar usually was held to discuss and share on a particular subject. Other than having a lecture and tutorial for study purposes, seminar is an extra knowledge which student could gain either it held inside university or outside university. In a seminar there would be a group of people come to discuss on certain topic and the speakers are mostly expert in the field that they are going to talk. Through a seminar student could get a knowledge which is additional and sometime it would not relate with the subject they took in university but the topic could be on the knowledge of other field such as housing seminar, photography seminar or how to set up a business seminar and etc.

Presentation

Presentation is one of the way to share knowledge with others in the form of speaking from one person to another (Tsui, Chapman, Schnirer& Stewart, 2006). The benefits knowledge sharing from presentation is that we could share knowledge with a group of people and face-to-face. Presentation is being done based on the research and additional information get from indirect study.

TOOLS TO SHARE KNOWLEDGE

E-mail

Most of professional organization use online database and technology to improve the weakness and limitation of personal acquaintance in sharing knowledge or information. Email or also known as electronic mail is use as a communication tools to speed up and to make the knowledge sharing between other users easier. Even though in

this new globalization era had a lot of other tools to share knowledge email still being chosen as one of those knowledge sharing tools because we can communicate in more formal way other than existing social network such as Facebook, Twitter, Friendster and etc. By using email the sender will communicate in more appropriate way and think of the important points before compose the mail and it is one of the easiest tools to be use in sharing and exchanging knowledge.

Social networking

Social networking had gain a big attention nowadays because the user can communicate in informal or formal way. Technology is chosen based on its function, cost, and technical and cultural fit. (Ettore, 1999).A lot of online business and other communication use social network as a medium to market and communicate with their buyers online. University student actively use social networks to know and discuss about assignment and ask virtually after the lecture. Through social network people could expand their contacts wider and can jump from their list of friend to other to share knowledge worldwide.

Dropbox

Dropbox is an application which used to share document. It is another tools that is being use currently to share information and documents with other. It is an online storage utility that had been created to send document rather than email. The documents that can be attached in email is just limited up to 25 MB while dropbox can share up to 2 GB of the files. Dropbox makes sharing easier by just share a folder that consists of the file we would like to share with others. Therefore, technology nowadays had make sharing easier and we should take advantage to share the knowledge with others.

SMS

Mobile phone is essential tools for everyone to communicate in daily lives as it no longer function to talk with other but it can be used to share information, opinions and even discussion. (Faulkner &Culwin, 2005) said that telecommunications industry had growth the fastest among other industry. Individuals share a lot of information and through SMS people communicates faster and the communication between one another is private (Lu, et al., 2010). SMS is convenient and it do not need us to talk to communicate and it can be a part of efficient tools to share knowledge and information.

SPECTRUM

SPECTRUM is the student portal used in University Malaya. The usage of student portal is widely use in higher learning education which act as information gateway. Nowadays, there a huge number of users on internet who search data and information online and web portals manage to give the relevant information. It is a step to globalization of knowledge sharing and the existence of portal ease the users who need specific information. Users can stores, retrieve learning sources and share with the other students easily. A technology had become a good teaching tool (Adonis, 2006) for better information and knowledge dissemination, universities and academic institutions encourage using it. An educational portal had been acknowledged in many countries. The usefulness and the ease of portals help to encourage knowledge sharing especially for students.

Video or audio

Knowledge sharing start with communication and one of the tools to communicate is video or audio. E-discussion that had being done structurally can be made into a video. This can be use as primary source and same goes to audio (Ramalingam, 2006). Some lecturers use video and audio to share information with their students. This could help student understand better and give a clear view on the topic. In fact video sharing or audio sharing could help to get student attention in class rather than the usual slide presentation. Through video, knowledge can be share by video conferencing.

RESEARCH METHODOLOGY

The research data were collected by using questionnaire survey.Four hundreds and seventy one (471) sets of questionnaire were distributed to all undergraduate students in Faculty of Built Environment, University of Malaya, Kuala Lumpur, Malaysia. The questionnaire contain 2 sections which section A is respondent's details and section B is multiple choice questions for tools and mediums to share knowledge. Data were analyzed using Statistical Package for Social Science (20.0) (SPSS).

DATA COLLECTION AND DISCUSSION

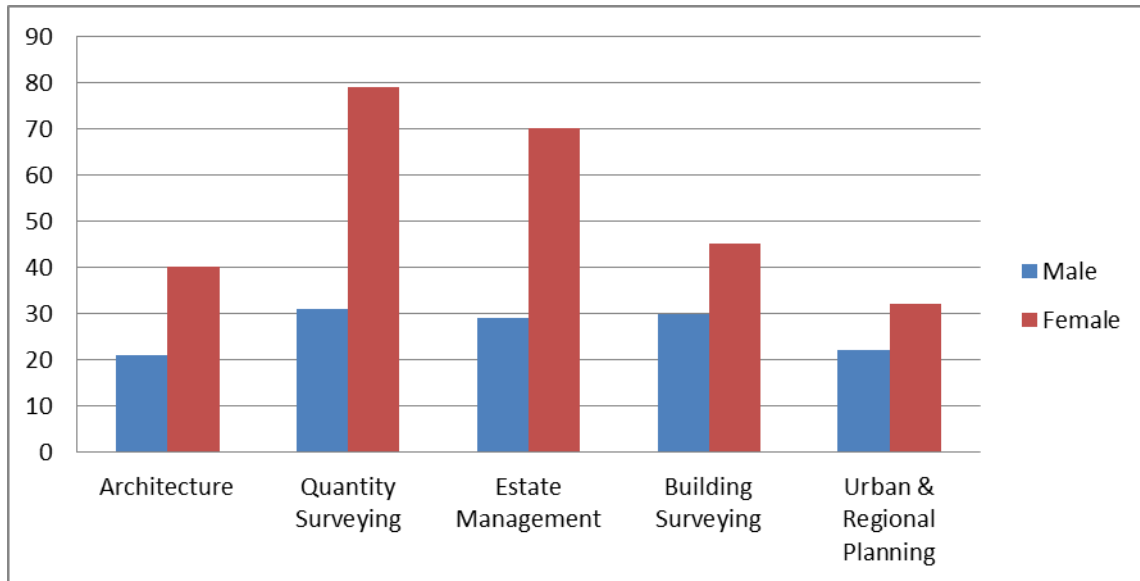


Figure 1: The number of respondents in departments of Faculty of Built Environment

Based on the questionnaire distributed to all four hundred and seventy one (471) undergraduate students in Built Environment Faculty, three hundred and ninety nine (399) respondents had returned and filled in the survey. Two hundred and sixty six (266) of the respondents are female students and hundred thirty three (133) are the male students. The response from the student shows the tools and mediums that they used to share knowledge.

Table 1: Frequency table of the number of respondents with medium to share knowledge

		Responses		Percent of Cases
		N	Percent	
Medium	Lecture	253	39.9%	78.1%
	Discussion	236	37.2%	72.8%
	Seminar	41	6.5%	12.7%
	Presentation	104	16.4%	32.1%
Total		634	100.0%	195.7%

The cell N under response is the number of positive responses for each item. According to the Table 1, the percent is more than 100% and this is possible because each respondent can select more than one as their medium to share knowledge (Atkins, 2012). Lecture was the most commonly used as a medium to share knowledge among students with 39.9%. The second medium that was preferable by the student to share knowledge was group discussion which is at 37.2% from the total respondents. The other medium that also being used as medium to share knowledge is presentation at 16.4% and the least medium that students rarely used to share knowledge was Seminar at 6.5%.

Table 2: Medium to share knowledge by department in Faculty of Built Environment

Department		MEDIUM				Total
		Lecture	Discussion	Seminar	Presentation	
Architecture		35	36	8	25	104
		5.5%	5.7%	1.3%	3.9%	16.4%
Quantity Surveying		76	62	6	31	175
		12.0%	9.8%	0.9%	4.9%	27.6%
Estate Management		66	62	9	19	156
		10.4%	9.8%	1.4%	3.0%	24.6%
Urban & Regional Planning		35	35	11	16	97
		5.5%	5.5%	1.7%	2.5%	15.3%
Building Surveying		41	41	7	13	102
		6.5%	6.5%	1.1%	2.1%	16.1%
TOTAL		253	236	41	104	634
		39.9%	37.2%	6.5%	16.4%	100.0%

Table 2 shows the cross tabulation of respondent's department with the medium they used to share knowledge. From the table, Architecture students used discussion as their main medium for knowledge sharing with 36 respondents (5.7%), followed by lecture with 35 respondents (5.5%), seminar 8 respondents (1.3%) and presentation 25 respondents (3.9%). Students from Quantity Surveying department with 76 respondents (12%) used lecture as the most favourable medium in sharing knowledge and followed by discussion 62 respondents (9.8%), presentation 31 respondents (4.9%), and seminar 6 respondents (0.9%). Meanwhile, for Estate Management students, they also prefer lecture as a medium to share knowledge with 66 respondents using it with 10.4%. The second medium that Estate Management student use to share knowledge was discussion 62 respondents (9.8%), followed by 19 respondents (3.0%) use presentation and 9 respondents (1.4%) use seminar. 35 respondents (5.5%) of Urban and Regional Planning students use lecture and discussion as their main medium to share knowledge. 16 (2.5%) respondents use presentation and 11 (1.7%) respondents use seminar. 41 respondents (6.5%) in Building Surveying departments use lecture and discussion as medium to share knowledge whereas, 13 (2.1%) respondents and 7 (1.1%) respondents use presentation and seminar respectively.

Table 3: Medium to share knowledge by gender

Medium		Gender		Total
		Female	Male	
Lecture		173	80	253
		53.4%	24.7%	78.1%
Discussion		161	75	236
		49.7%	23.1%	72.8%
Seminar		24	17	41
		7.4%	5.2%	12.7%
Presentation		72	32	104
		22.2%	9.9%	32.1%
Total		221	103	324
		68.2%	31.8%	100.0%

Table 3 shows the cross tabulation of the respondent's gender with the medium they use to share knowledge. From the table, female students mostly prefer lecture as their medium to share knowledge with a number of 173 respondents (53.4%). The other medium they prefer were discussion about 161 respondents (49.7%) using it and presentation with 72 respondents (22.2%). From the male student's respond, they have chosen lecture as their most preferable medium to share knowledge with 80 male respondents (24.7%) have used lecture and followed by discussion 72.8%, presentation 9.9% and the least favourable medium which male respondents chosen was seminar with 5.2% respond.

Based on the result of medium in sharing knowledge, Quantity Surveying department and Real Estate Management department had chosen lecture to be the medium they used the most to share knowledge with the highest number of respondents used it. Meanwhile, Urban & Regional Planning department and Building Surveying department had chosen lecture and group discussion as their preferred knowledge sharing medium. However, students in Architecture department preferred group discussion as their most preferable medium due to the tasks and studies need to brain storm more ideas and creative thinking compared to other department. From both female and male students in Faculty of Built Environment we know that they had chose lecture as the most preferable medium to share knowledge. Therefore, there was a differences for medium used in sharing knowledge among department and there is no difference in the medium used for both gender in sharing knowledge.

Table 4: Frequency table of the number of respondents with tools to share knowledge

Tools	Responses		Percent of Cases
	N	Percent	
SMS	181	18.7%	49.6%
SPECTRUM	136	14.0%	37.3%
Email	176	18.1%	48.2%
Dropbox	116	12.0%	31.8%
Video	45	4.6%	12.3%
Facebook	316	32.6%	86.6%
Total	970	100.0%	265.8%

Based on the findings above, Facebook was the highest chosen tools to share knowledge among undergraduate students in Faculty of Built Environment with the number of respondents up to 316 and equal to 32.6%. The other tools followed by SMS with 18.7%, Email 18.1%, SPECTRUM with 14.0% and Dropbox with 12.0%. The least favourable tool to share knowledge among student was video with 4.6%.

Table 5: Tools to share knowledge by departments in Faculty of Built Environment

Department		Tools						Total
		SMS	SPECTRUM	Email	Dropbox	Video	Facebook	
Architecture		30	21	33	22	16	51	55
		8.2%	5.8%	9.0%	6.0%	4.4%	14.0%	15.1%
Quantity Surveying		45	36	54	59	11	86	102
		12.3%	9.9%	14.8%	16.2%	3.0%	23.6%	27.9%
Estate Management		49	31	36	9	4	75	89
		13.4%	8.5%	9.9%	2.5%	1.1%	20.5%	24.4%
Urban & Regional Planning		26	26	21	17	9	45	49
		7.1%	7.1%	5.8%	4.7%	2.5%	12.3%	13.4%
Building Surveying		31	22	32	9	5	59	70
		8.5%	6.0%	8.8%	2.5%	1.4%	16.2%	19.2%
Total		181	136	176	116	45	316	365
		49.6%	37.3%	48.2%	31.8%	12.3%	86.6%	100.0%

Table 5 shows the cross tabulation of department in Faculty of Built Environment with the tools use to share knowledge. For Architecture department, the highest chosen tool used among the students to share knowledge was Facebook with 14.0% respondents used it. The second tool that they had chosen were Email with 9.0%,

SMS with 8.2%, Dropbox with 6.0%, SPECTRUM with 5.8% and video with 4.4%. For Quantity Surveying students they also had chosen Facebook for their most preferable tool to share knowledge with 86 respondents (23.6%) using it. The other tools they had chosen rather than Facebook were Dropbox(16.2%), Email (14.8%), SMS (12.3%), SPECTRUM (9.9%) and video (3.0%). From the table, 75 (20.5%) respondents of Estate Management department, prefer Facebook as their main tool to share knowledge. 13.4% of the respondents had chosen SMS and followed by Email (9.9%), SPECTRUM (8.5%), Dropbox(2.5%) and video(1.1%). Building Surveying students had used Facebook as main tool to share knowledge with 59 respondents(16.2%) and followed by Email (8.8%), SMS (8.5%), SPECTRUM (6.0%) ,Dropbox with 2.5% and the least number of respondents for Building Surveying department was the use of video with 1.4%. Urban & Regional Planning students had chosen Facebook as their most preferable tool to share knowledge with 45 respondents (12.3%) chosen it. The second tools they preferred were SMS and SPECTRUM with 7.1% respondents chosen it. The other tools they chose were Email (5.8%), Dropbox4.7%, and video 2.5%.

Table 6: Tools to share knowledge by gender

		Gender		Total
		Female	Male	
Tools	SMS	125	56	181
		34.2%	15.3%	49.6%
	SPECTRUM	94	42	136
	M	25.8%	11.5%	37.3%
	Email	128	48	176
		35.1%	13.2%	48.2%
	Dropbox	84	32	116
		23.0%	8.8%	31.8%
	Video	31	14	45
		8.5%	3.8%	12.3%
	Facebook	220	96	316
		60.3%	26.3%	86.6%
Total		249	116	365
		68.2%	31.8%	100.0%

From Table 6, Facebook had been chosen as the highest preferable tool for knowledge sharing among female students with 220 respondents (60.3%). The second preferable tool was Email with 128 respondents (35.1%), followed by SMS (34.2%), SPECTRUM (25.8%), Dropbox(23.0%) and the least was video(8.5%). For the male students in Faculty of Built Environment, 96 respondents (26.3%) had chosen Facebook as the most preferable tool to share knowledge. Followed by SMS (15.3%), Email (13.2%), SPECTRUM (11.5%), Dropbox (8.8%) and video (3.8%) which was the least preferable tools for male students in Faculty of Built Environment. The findings shows that female and male undergraduate students in Faculty of Built Environment, University of Malaya had chosen Facebook as the most preferable tool to share knowledge.

Based on the cross tabulation result, all departments in Faculty of Built Environment Faculty had chosen Facebook as their most preferable tool to share knowledge. Both female and male students in Faculty of Built Environment chose Facebook as a tool to share knowledge. There is no difference in the tool used for both gender to share knowledge. The result had proven the previous research done by (Phosaard, S. et. Al, 2011) which stated that Facebook was the most popular tools for knowledge management and the communication via Facebook was less formal as compare to other communication forms. It also had been supported by the study done by previous researcher (Murphy, 2010) which said that Facebook as one of the great capacity tool of problem sharing and solution and with the high degree of users made knowledge sharing activity being done easily. He had previously mentioned on the previous research that Facebook was the place where knowledge exchange occurred rapidly. In fact, the students said that they could create a special group to discuss about the task and lecture in the class with the classmates on Facebook.

CONCLUSION

In conclusions, there was a knowledge sharing activity among undergraduate students in Faculty of Built Environment, University of Malaya, Kuala Lumpur. The most preferable medium for knowledge sharing in all departments were through lecture and group discussion. Meanwhile for the tools all students in each department for both male and female had chosen Facebook as their preferred tool to share knowledge.

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