

# Weblogs: Critical Factors Affecting Knowledge-Sharing Among Bloggers

Christine Nya Ling Tan, Tuan Hock Ng, and Ying San LiM, Multimedia University, Melaka, Malaysia

---

## ABSTRACT:

Weblogs or commonly known as blogs allows various opportunities for bloggers to easily share knowledge through their experiences, thoughts, and feelings. The intention of this paper is to understand and examine the factors that affect knowledge-sharing (KS) in blogs. Five (5) of factors identified as crucial in this study are: knowledge self-efficacy; personal outcome expectations; subjective norms; feedback; ICT (Information and Communication Technology) usage. The findings obtained are based on the 250 questionnaires distributed and collected from bloggers by means of convenience sampling. Based on the results, it is established that knowledge self-efficacy, personal outcome expectations, subjective norms, feedback, and ICT usage significantly influence KS among bloggers. This study justifies the need to improve both the individual and technological aspects of blogging so as to further increase the likelihood and tendency of bloggers to share their knowledge and opinions interactively on multiple topics and issues through this alternative mainstream media known as blogs.

Keywords: *Weblogs, Knowledge management, Knowledge sharing, Critical factors, Bloggers*

---

## 1. Introduction

Knowledge in knowledge management (KM) is observed as the valuable resource and intellectual asset, and perhaps the only dominant source of competitive advantage originating from the human mind (Drucker, 1995). Knowledge is not something that is different from data or information. As a matter of fact, data, information, and knowledge can be easily understood, in which data is identified as raw numbers and facts; information is recognised as processed data; knowledge is known as proved information (Dretske, 1981; Machlup, 1980; Vance, 1997).

Knowledge-sharing (KS) in KM involves the exchange of knowledge, skills, and experiences that defines a social interaction culture (Lin, 2007), that is not only related to communication but also to information distribution (Hendriks, 1999; Huber, 1991; Nelson & Coopriider, 1996). In KS, there is a relationship between at least two parties, i.e. one that possesses knowledge and another that acquires the knowledge. The first party should communicate its knowledge, consciously or willingly, in some form or another (either through writing, speech, or acts, etc.), while the other party should be able to perceive these expressions of knowledge by making sense out of them, either by simulating the acts, reading the material, or through listening (Hendriks, 1999).

Therefore, with KS, blogs provide speedy communication of ideas and diffusions of information among readers. It is through blogs that individuals are able to obtain pertinent information, which also resulted in constant sharing of knowledge (Ellahi & Mushtaq, 2011). Since blogs are all about contents, it provides an avenue for bloggers and readers to participate in KS, open reflection, and far-reaching discussion among the Internet community on new or timely topics. Consequently, bloggers need to be aware of these benefits that KS brings in blogs so as to further attract and persuade them to increase and enhance their KS practices. The challenge of this study is to understand and determined the factors affecting bloggers' sharing of knowledge.

### 1.1. What Is A Weblog And How Does It Work?

Weblog, popularly known as blog is defined as a form of personal, easy-to-manage web site with content presented in reverse chronological order (Schiano et al, 2004). A blog can be easily used to support constant updates made by the author or blogger with the help of simple templates that assist in informal and easy participative conversations (Ives & Watlington, 2005) by building and integrating relationships among bloggers from all over with no limitations to distances. Bloggers are recognised to be agenda setters (Larsson & Hrastinski, 2011) as they are never hesitant or rather afraid to share their knowledge and invaluable experience in blogs. Not only that, bloggers significantly influence the media coverage of politics (Ashbee, 2003; Sweetser & Metzgar, 2007; Wallsten, 2007) as well as facilitate the two-way communication between the readers, bloggers (Baker & Moore, 2008; Hodgkinson, 2007), and organisations (Kelleher & Miller, 2006; Sweetser & Metzgar, 2007).

Blogs are inexpensive and require less or no coding to set up. Basically it reduces entry barriers to have a web presence, with a computer and Internet access as what is needed for a blog is just time and imagination (Ives & Watlington, 2005). Blog is considered to be more dynamic as compared to a personal homepage since the content of a blog can be updated more regularly, at the same time allowing visitors to add comments (Adar & Adamic, 2005; Schmidt, 2007).

As for the types of blogs, personal blogs are usually written from a personal perspective; whereas business blogs are basically companion formal sites that provide a much more personal and informal contact with its readers especially learners. Last but not least, blogs are able to unite the accessibility of web sites with searchable archive of a KM system, as a result promoting transparency through accessibility (Ives & Watlington, 2005).

Blogs, a form of online publishing has its own unique Internet address, which allows easy links to other posts or sites, hence authorising bloggers or readers to pass these links to some other blogger's posts; expanding readership by generating a strong sense of community. Since much of the information is stored in a web-accessible location, a blog post provides a way to add context to content links, facilitating personal KM (Ives & Watlington, 2005) as they offer a simple means of creating a contextualised personal archive. Many bloggers and readers, for example, are able to gain knowledge on new technologies by using blogs as a digitally connected tool by allowing huge volumes of often disconnected information and knowledge to be available. Through this,

knowledge can be codified into a personal blog as it is possible to include comments and feedback as both information and knowledge can be continuously learned and gained by bloggers.

A particular blog's comments section allows blog readers to share their ideas, thereby connecting and linking numerous bloggers together; increasing huge learning opportunities. In doing so, blogs uses 'RSS', 'Atom' or 'XML' feeds that allows bloggers to easily follow the available links and to be able to read the contents of the links' visited; allowing bloggers to update their blogs (Ives & Watlington, 2005), share personal stories, links to online resources, and sometimes re-post the messages of other bloggers (Chenail, 2011).

## **1.2. Why Is Weblog Important?**

According to Huffaker (2005), the main significance of blogs varies. The importance include: 1) Connections between bloggers creates diverse opinions and interests, therefore encouraging critical thinking and respecting the much needed points of view given by other bloggers; 2) Features and functionalities of blogs such as replying, linking, and capturing makes it easier for the sharing of knowledge and information; 3) Discussions that are made available in blogs help to improve higher levels of thinking as bloggers and readers are allowed to think before answering back, 4) Support group learning and team work by creating new opportunities for interaction with peers, 5) Encourage informal communication, creativity and self-expression due to its similarity to that of a personal diary; writing in blogs is an interactive way that allow bloggers mainly students to easily share their experiences and feelings allowing these students to communicate and obtained feedback anytime of the day, anywhere all over the globe.

This study intends to determine and examine the critical factors affecting KS among bloggers. It provides the much-needed insight in developing a clearer understanding to bloggers in order to continuously share their most valuable knowledge and ideas, inevitably providing added advantages to bloggers. The result from this study can be used by researchers and academicians to improve KS practices via blogs by finding new ways to attract new bloggers to contribute their knowledge and ideas and at the same time gaining knowledge from existing bloggers. Moreover, this study will be significant as it provides a quantitative analysis to justify what needs to be carried out to improve the initiative and acceptance of bloggers to share knowledge while blogging. It also assists and guide the interested parties involved including businesses and learning institutions by providing them with future suggestions and recommendations in reaching out to bloggers especially those that frequently visit their blogs.

## **2. Critical Factors Affecting Knowledge-Sharing (KS) Among Bloggers**

Since there is a need to identify and examine the factors influencing KS among bloggers by encouraging the sharing of knowledge in blogs; this study looks into how the critical factors originating from both aspects such as individual (i.e. knowledge self-efficacy; personal outcome expectations; subjective norms; feedback) and technological dimensions (i.e. ICT usage) affect KS and how individuals' expect and react when it comes to KS. The primary purpose of this research is to understand the critical factors i.e. Knowledge self-efficacy (KSE); Personal outcome expectations (POE); Subjective norms (SN); Feedback (FB); ICT (Information and Communication Technology) usage (ICTU) that influences KS among bloggers. Also, it examines the interactions between the critical factors and KS in blogs. The objective of this study is divided into five (5) specific objectives as stated and discussed from section 2.1 till section 2.5. A hypothesis is formulated for each objective and stated at the final part of each objective.

### **2.1. Correlation Between Knowledge Self-Efficacy (KSE) & Knowledge-Sharing (KS) Among Bloggers**

Prior studies have declared that there is a positive correlation between self-efficacy and web-based systems usage when it comes to KS (Kulviwat et al, 2004; Lu & Hsiao, 2007; Nahl, 1996, 1997; Vijayasathy, 2004; Yi & Hwang, 2003). Knowledge Self-efficacy (KSE) can be described as the confidence in one's ability to provide reliable or valuable knowledge to others. When bloggers share useful information to others, they gain confidence in sharing knowledge to others, therefore increasing the bloggers' self-efficacy (Constant et al, 1996; Lu & Hsiao, 2007; Olaru et al, 2010). To achieve specific levels of performance, bloggers' judgements regarding their capabilities to organise and accomplish predetermined courses of action is essential (Bandura, 1986). Bloggers may be less willing to share information if they feel that they cannot contribute valuable knowledge to others (Lee et al, 2006). This belief can be viewed as a self-motivational force for bloggers to share valuable information. As mentioned in numerous past researches, in order to envisage KS among bloggers, KSE must be included as an important determinant in KS (Hasan, 2006; Lu & Hsiao, 2007; Nahl, 1996, 1997; Vijayasathy, 2004). Results had revealed that KSE is significant and is directly affected by bloggers' KS practices such as updating their blogs (Lu & Hsiao, 2007). So the proposed hypothesis is:

*H<sub>1</sub>: There is a significant relationship between knowledge self-efficacy (KSE) and knowledge-sharing (KS) among bloggers.*

### **2.2. Understanding The Relationship Between Personal Outcome Expectations (POE) And Knowledge-Sharing Among Bloggers**

Based on previous research, personal outcome expectation (POE) is hypothesised to influence bloggers in continuing to update their blogs (Compeau & Higgins, 1995a, 1995b; Compeau et al, 1999; Lu & Hsiao, 2007; Shih, 2006). POE is known as a blogger's belief that a possible outcome depends on his or her tasks performance (Chiu et al, 2006; Karimi & Danny, 2009). It also refers to the blogger's expectations in terms of rewards or a change in his or her image or status (Compeau et al, 1999; Lu & Hsiao, 2007; Moshabbaki & Jaha'nyan, 2009). Seemingly, POE is identified as the knowledge contributor's i.e. blogger's judgment of the effects that the sharing of knowledge will ultimately produce especially on a particular blogger (Compeau et al, 1999). As recommended in the Social Cognitive Theory (SCT), an individual is expected to engage in a particular conduct that will more likely to result in favourable effects. Based on this theory, if bloggers expect to be rewarded, they will therefore more likely to engage in KS (Chiu et al, 2006). Apparently, several studies had been conducted on information systems that state that the use of technology had a significant effect on performance-related outcome expectations (Compeau & Higgins, 1995a). Outcome expectations were significantly related to a user's technological commitment (Stone & Henry, 2003). Thompson et al, (1991) argued that if the expected consequences of using technology particularly personal computers (PCs) are attractive, the utilisation of the computers will be greater. Zhang and Hiltz (2003) further supported that with the expectations such as enriching knowledge, seeking support,

and making friends, a blogger might want to share knowledge within virtual communities. Other studies suggested that bloggers share knowledge with the expectation of assisting the growth of the blogging community; in accumulating its knowledge; in helping to continue its operation when it comes to blogging (Kolekofski & Heminger, 2003). Thus, Butler and Sproull (2002) suggested that the expectations of being seen as skilled, knowledgeable or respected are the primary reason for bloggers to share knowledge. Similarly, people will continue to share information on the Internet if they expect praises or rewards (Lee et al, 2006). Prior results revealed that POE significantly and directly affect bloggers' in KS by updating their blogs (Lu & Hsiao, 2007). The hypothesis developed is:

*H<sub>2</sub>: There is a significant relationship between personal outcome expectations (POE) and knowledge-sharing (KS) among bloggers.*

### **2.3. Examining The Correlation Between Subjective Norms (SN) And Knowledge Sharing (KS) Among Bloggers**

Subjective norms (SN) is the degree to perform a behaviour in which an individual believes the people who are important to the individual expects him or her to do so (Fishbein & Ajzen, 1975). It can also be defined as perceived social pressure to behave or not to behave in certain behaviour (Ajzen, 1991) that had received plentiful empirical support as an important precedent to behavioural intention (Mathieson, 1991; Taylor & Todd, 1995; Thompson et al, 1991). For instance, according to Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) and the Theory of Planned Behaviour (TPB) (Ajzen, 1985), individuals' significant beliefs and their normative beliefs are important predictors of KS. The TRA and TPB provided the theoretical bases for a relationship between subjective norm and blogger's sharing of knowledge (Hsu & Lin, 2008). Based on the empirical studies, researchers found that SN positively affect an individual's KS (Hsu & Lin, 2008). SN are often measured directly by asking respondents to indicate whether self-selected referents would approve or disapprove their performance towards a particular behaviour (Ajzen, 1991). Past studies using TPB have found that SN significantly impact the predicting behavioural intentions as compared to the other factors determined in the model (Chang, 1998; Kurland, 1995). Thus, the hypothesis is:

*H<sub>3</sub>: There is a significant relationship between subjective norms (SN) and knowledge-sharing (KS) among bloggers.*

### **2.4. Inspecting The Relationship Between Feedback (FB) And Knowledge-Sharing (KS) Among Bloggers**

Past studies had found that feedback (FB) affects KS (Abdullah et al, 2009; Lu & Hsiao, 2007). Researchers such as Barr and Conlon (1994) termed feedback as an advice, criticism, or information about the usefulness or goodness of something or somebody's work. Feedback is known to not only lead to the achievement of performance goals but also lead to a higher sense of competence among individuals (Barr & Conlon, 1994). Moreover, bloggers partly rely on the opinion of others as well as the encouragement and support they receive to judge their own ability to continue their KS practices. Bloggers are also likely to increase their abilities to perform a task if assistance is readily available. Barr and Conlon (1994) also argued that feedback affects a user's intention to persist at a new behaviour. Consequently, both authors agreed that feedback affects an individual's intention to pursue certain behaviour such as to share knowledge. Empirical studies have found that feedback (FB) positively affects a blogger's KS practices (Cheung et al, 2000; Karahanna & Straub, 1999; Liao et al, 1999; Liker & Sindi, 1997; Lu & Hsiao, 2007). Hence, the hypothesis would be:

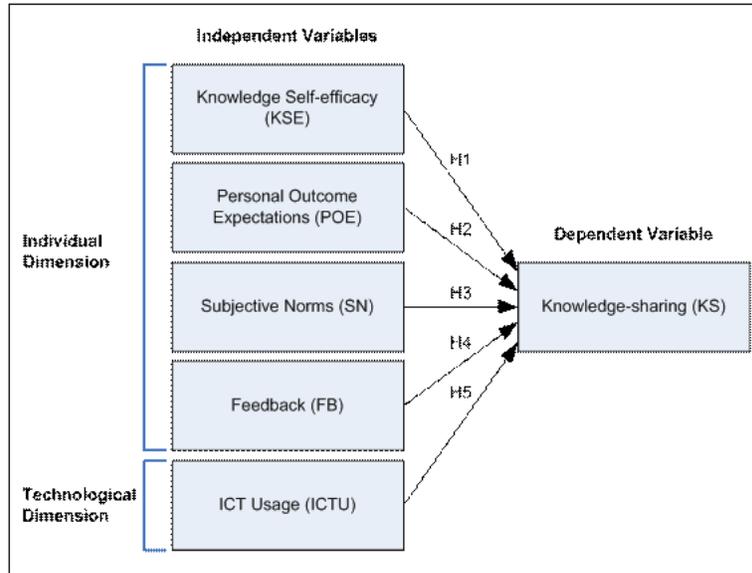
*H<sub>4</sub>: There is a significant relationship between feedback (FB) and knowledge-sharing (KS) among bloggers.*

### **2.5. Determining The Association Between ICT (Information And Communications Technology) Usage (ICTU) And Knowledge-Sharing Among Bloggers**

ICT (Information and communications technology) and KS are closely related since ICT is the most favoured KS initiatives (Sandhu et al, 2011) that enable the accessing, searching, retrieving of information, besides maintaining communication and collaboration among bloggers. ICT is an infrastructure that supports the information platform for KS (Chyan & Chen, 2007). However, without the capabilities of using ICT, its available platform would simply be worthless. ICT infrastructure and ICT know-how also have an important effect on KS performance (Syed-Ikhsan & Rowland, 2004). ICT can be considered as playing an important role as a facilitator for connectivity since it enables long distance collaboration. Connectivity is the ability for users of a social network system to contact each other directly (van den Hooff et al, 2003). In addition, technology can act as a facilitator to encourage and support KS by making KS easier and more effective (Riege, 2005). Han and Anantamula (2007) further exclaimed that the availability and usability of ICT influences KS. Due to the usage of ICT whereby interacting process yields fun and enjoyment, a blogger would be likely to participate in KS activities (Hsu & Lin, 2008). Within KS, the use of ICT develops several new methods and applications such as online databases, intranet, virtual communities, etc. In fact, Zack (1999) believe that ICT plays numerous roles in KM including obtaining knowledge, seeking and identifying related content, and defining, linking, indexing, storing, and categorising knowledge that is related to the digital items available. Likewise, Yeh et al, (2006) further claimed that effective KM requires bloggers to share their knowledge through ICT facilities since ICT is able to provide the necessary communication channels to capture knowledge, improve knowledge flow processes, and identify the location of knowledge carriers and requesters. With this, ICT plays a major part in ensuring that KS works, since the absence of ICT could hamper and discourage enthusiastic bloggers from sharing knowledge (Zawawi et al, 2011). Hence, the projected hypothesis is:

*H<sub>5</sub>: There is a significant relationship between ICT usage (ICTU) and knowledge-sharing (KS) among bloggers.*

In summary, it is posited that five (5) critical factors (KSE, POE, SN, FB, and ICTU) affect KS among bloggers. These factors represent the independent variables of this study with KS as the dependent variable. Figure 1 diagrammatically demonstrates the research framework.



**Figure 1: Research Framework For Critical Factors Affecting Knowledge-Sharing Among Bloggers**

### 3. Methodology

#### 3.1. Research Instrument

A questionnaire was designed, tested and deployed to collect the required data for this study. The questionnaire developed was divided into four (4) sections that include nominal, ordinal and interval scales. Section A contains the respondents' personal details such as gender, age, nationality, state of origin, race, education level and occupation. In Section B, the respondents were required to indicate their Internet and blog usage. As for Section C and D, the participants were asked to read and indicate their agreement or disagreement with each of the statement using a seven-point Likert scale, ranging from strongly disagree to strongly agree. The questionnaire contains thirty-one (31) questions on determining the factors that influence KS among bloggers. A pilot study was implemented beforehand to determine the validity and reliability of the questionnaire. For this reason, a few bloggers from a local private university in Melaka were chosen to take part in this study. As a result, some modifications were made based on the comments and suggestions given.

#### 3.2. Sources Of Research Data

A total of 260 questionnaires were distributed from respondents that consist of existing and new bloggers. Drop-off and e-mail surveys have been used to collect data. Drop-off questionnaires were distributed to bloggers in locations such as universities, colleges, offices, etc. As for the e-mail surveys, the softcopy of the questionnaires were sent to bloggers. Convenience sampling was applied as it selects a particular group of people i.e. bloggers that are sharing knowledge and at the same time have a detailed understanding of blogs. The data gathered from the survey was coded and analysed using SPSS (Statistical Software Package for Social Science) software version 19 and was summarised using appropriate descriptive and likely statistics.

### 4. Result and Discussion

A total of 250 questionnaires were managed to be collected and used in this study. From the 260 questionnaires, 10 of the questionnaires are unusable due to incompleteness and unanswered responses. Based on the demographic profile (Table 1), both male and female respondents are equal, which are 125 (50.00%) respectively. A majority of these respondents i.e. a total of 180 of the respondents are between the ages of 17 to 22 years old (72.00%), whereas 22.80% of them are from 23 to 28 years old, and the remaining 5.20% comes from the range of 29 till 37 years old. Among the respondents being studied, 215 (86.00%) are from Malaysia while the rest i.e. 35 (14.00%) are non-Malaysian. As for the category on race, the respondents comprises mainly of 144 (57.60%) Chinese, 46 (18.40%) Malays, 23 (9.20%) Indians, whereas the remaining 37 (14.80%) are from other races. The analysis on highest education level pointed out that 146 of the respondents are found to be degree holders (58.4%) as compared to a minority of only 5 PhD holders (2.00%). Lastly, as for occupation, a majority of 171 respondents are found to be students (68.40%) with the smallest number of respondents coming from housewives (0.80%).

**Table 1: Respondents' Demographic Profile**

Respondent's Profile		Frequency	Percentage (%)
Gender	Male	125	50.00
	Female	125	50.00

Age	17 - 22 years old	180	72.00
	23 - 28 years old	57	22.80
	29 - 37 years old	13	5.20
Nationality	Malaysia	215	86.00
	Others	35	14.00
Race	Malay	46	18.40
	Chinese	144	57.60
	Indian	23	9.20
	Others	37	14.80
Highest education level	SPM/ O-level	17	6.80
	STPM	32	12.80
	Diploma	41	16.40
	Bachelor Degree	146	58.40
	Master	9	3.60
	PhD	5	2.00
Occupation	Employed	60	24.00
	Self-employed	3	1.20
	Housewife	2	0.80
	Professional	9	3.60
	Unemployed	5	2.00
	Student	171	68.40

Table 2 illustrates the Internet and blog usage of the 250 respondents. From the findings, a majority of 139 (55.60%) participants had apparently used the Internet several times a day, with only a small number i.e. 17 (6.80%) out of the total 250 respondents that goes online 3 to 5 times each week. A majority of 35.20% of the respondents spent 6 to 10 hours each week on the Internet. The places in which these respondents access the Internet include homes (60.00%), offices (18.00%), schools (14.40%), while the remaining surf the Net in cyber cafes (3.60%) and other places (4.00%). From the 250 surveys collected, it is found that a number of 101 (40.40%) respondents used LAN (Local Area Network) at home in order connect to the Internet, while a total of 11 (4.40%) of these respondents owns a personal computer (PC) but are not connected to the Internet; only 3 (1.20%) of the respondents are not having any personal computer (PC) at all.

In terms of blogging, 123 (49.20%) of the bloggers have less than one year of experience, while 96 (38.40%) of them have 1 to 4 years of experience with the remaining 9 (3.6%) having more than 10 years of experience when it comes to blogging. The results had also identified that Blogger.com is the most used blog site among the respondents, having 96 (38.40%) registered bloggers as compared to Twitter (18.00%), Open Diary (0.40%) and other blog sites (4.0%). With regards to the number of times the respondents' blog in a week, the study found that most of the bloggers (41.20%) spent at least once a week blogging while a total of 69 (27.60%) bloggers spent several times a day blogging. Also, based on the reason as to why the respondents' blog, 96 (38.40%) of them stated that the main purpose is basically for leisure purposes, whereas 91 (36.40%) used blogs to checked for updates and the remaining 63 (25.20%) of the bloggers utilised blogs to share their knowledge. In addition, from the data collected a total of 229 (91.60%) respondents visit other blogs; with a majority stating that they visit these blogs at least once every week (38.00%). According to the respondents, the main purpose for them to visit these blogs is to check the updates done by the respective bloggers (48.40%). As for the rest, the reasons given were leisure (40.40%) and knowledge sharing purposes (11.60%). It is good to discern that a maximum of 24.80% of the respondents ranked 'better' as a response to a question based on their understanding of the term 'knowledge-sharing'. Other responses given are 'slightly better' (21.20%), 'higher' (18.40%), 'slightly higher' (16.40%), 'little' (8.40%), 'much more' (7.20%), 'slightly little' (2.00%), and 'more higher' (1.60%).

**Table 2: Respondents' Internet and Blog Usage**

Respondents' Internet and Blog Usage		Frequency			Percentage (	
How often do you use the Internet in a week?	None at all	0	23		0.00	9
	Once a week	25	17	46	10.00	6.80
	2 to 3 times per week	139			18.40	55.60
	3 to 5 times per week					
	Once a day					
	Several times a day					
How many hours do you spend on the	Almost never	0	23		0.00	
	1 hour	33	88		9.20	
	1 - 4 hours	10	27	69	13.20	35.20
	Less than 6 - 10					

Internet every week?	hours hours 16 - 20 hours More than 20 hours	11 - 15				4.00	10.80	27.60
Where do you frequently access the Internet?	Home School Office Cafe		150 45	36 9	10	60.00 18.00 3.60	14.4	4.00
Computer and network facilities available at home:	Have no computer computer but cannot connect to the Internet Dial up LAN	Have Broadband	3 11 101		43 92	1.20 4.40 40.40	17.20 36.8	
How many years have you been blogging?	Never than 1 year years 5 - 10 years More than 10 years	Less 1 - 4	0 96	123 22	9	0.00 49.20 38.40 8.80	3.60	
Which blog site are you registered to? (Please choose the most used blog site)	Blogger.com	Yes No	96	154		38.40	61.6	
	Twitter	Yes No	45	205		18.00	82.0	
	Open Diary	Yes No	1	249		0.40 99.60		
	Others	Yes No	10	240		4.00 96.00		
How often do you blog in a week?	None at all week 2 to 3 times per week 3 to 5 times per week day Several times a day	Once a 3 to 5 Once a Several times a day	13 40 3 22	103 69		5.20 41.20 16.00 1.20 8.80	27	
What is the main reason for you to blog?	To share knowledge For leisure To check for updates Others		63 96 91 0			25.20 38.40 36.40	0.0	
Do you visit other blogs?	Yes No		229 21			91.60	8.40	
If 'Yes', how often do you visit these blogs in a week?	None at all week 2 to 3 times per week 3 to 5 times per week day Several times a day	Once a Once a	24 5 28	95 41	36	9.60 38.00 14.40 11.20	16.40 2.00	
What is the main purpose for you to access other blogs?	To share knowledge leisure updates Others	For To check for	29 100 121 0			11.60 40.00 0.00	48.40	
To what extent do you understand the term 'Knowledge-sharing' through blogs?	Little little More more Better Higher higher higher	Slightly Much Slightly Slightly More Great	21 0 62 41	5 18 53 4	46 0	8.40 2.00 0.00 21.20 18.40 16.40 1.60	7. 24.80	0.0

#### 4.1. Reliability Analysis

Reliability analysis was conducted on all the five (5) independent variables in this study: KSE, POE, SN, FB, and ICTU; one (1) dependent variable i.e. KS. The outcome of the reliability test is illustrated in Table 3. The overall results indicates that there is a relatively high reliability within the items constructed as compared to the lower acceptance limit for Cronbach's Alpha (reliability) which is 0.70 (Hair et al, 2009). KSE have the highest Cronbach's Alpha of 0.879, whereas POE and FB measured through five (5) questions each have a Cronbach's Alpha of 0.862 and 0.841 respectively. Due to the high reliability and consistency obtained, no items were dropped in this analysis.

**Table 3: Summary of Means, Standard Deviations, and Reliability Analysis of Critical Factors Affecting Knowledge-sharing (KS) among Bloggers**

Critical Factors					
No.	Variables	Mean	Standard Deviation	$\alpha$	No. of item
1.	Knowledge Self-efficacy (KSE)	4.580	1.234	0.879	5
2.	Personal Outcome Expectations (POE)	4.898	1.286	0.862	5
3.	Subjective Norms (SN)	4.596	1.355	0.831	5
4.	Feedback (FB)	4.861	1.250	0.841	5
5.	ICT Usage (ICTU)	5.247	1.202	0.804	5
Knowledge-sharing (KS) among Bloggers					
1.	Knowledge-sharing (KS)	4.991	1.557	0.748	6

Table 3 indicates the mean and standard deviation of the five (5) critical factors i.e. KSE, POE, SN, FB, and ICTU that influence KS among bloggers. Among the five (5) independent variables tested, POE has the highest mean of 4.898 with the standard deviation of 1.286. This demonstrated that bloggers truly believed that their relationships with other bloggers can be improve through KS, hence building a more favourable and encouraging approach towards KS (Bock & Kim, 2002; Moshabbaki & Jaha'nyan, 2009). Therefore, bloggers who believe that KS would amplify the extent and intensity among bloggers would tend to share knowledge (Bock & Kim, 2002; Moshabbaki & Jaha'nyan, 2009). Also, both variables i.e. FB and SN have the mean score of 4.861 and 4.596 respectively, with the standard deviation score of 1.250 and 1.355 each. With this, it is proven that regular feedback is vital when it comes to sharing of knowledge between bloggers in blogs (Abdullah et al, 2009). Besides, through subjective norms, the opinions from bloggers will also help to create an environment that makes possible the earnestness of bloggers to join and participate in blogs to not only acquire, but also to apply knowledge with the rest of the blogging community (Chen et al, 2009). Moreover, the results reveal that the overall mean and standard deviation score for KS among bloggers (i.e. dependent variable) is 4.991 and 1.557 respectively.

#### 4.2. Hypothesis Testing

Table 4 shows the result of Multiple Linear Regression (MLR) between 1) KSE, 2) POE, 3) SN, 4) FB, and 5) ICTU (Independent Variables) with KS (Dependent Variable).

**Table 4: Multiple Linear Regression Analysis between Independent Variables and Dependent Variable**

Independent Variables	B	Std. E	Beta	t	Sig.
Knowledge Self-efficacy (KSE)	0.069	0.063	0.069	1.100	0.273
Personal Outcome Expectations (POE)	0.215	0.061	0.220	3.521	0.001
Subjective Norms (SN)	0.079	0.060	0.082	1.321	0.188
Feedback (FB)	0.063	0.067	0.061	0.934	0.351
ICT Usage (ICTU)	0.129	0.072	0.115	1.795	0.074

The coefficient of determination  $R^2$  (R-square) shows a value of 0.116, indicating that 11.6% of the variance of dependent variable i.e. KS is explained by the five independent variables i.e. KSE, POE, SN, FB, ICT tested in this study. The F-value of 6.429 ( $p$ -value <0.01) is statistically significant at the 1% significance level, implying that the estimated regression is reliable for prediction.

As indicated by the computed t statistics, the estimated (unstandardized) coefficients of only one out of the expected five critical factors effect KS since it is statistically significant at the 1% level of significance ( $p$ -value < 0.01) and that all the critical factors exert a positive impact on KS. Since, only POE is found to significantly affect KS, hence, null hypothesis  $H_2$  is rejected. With this, it is indicated that there is a significant relationship between personal outcome expectations (POE) and knowledge-sharing (KS) among bloggers. However, KSE, SN, FB, and ICTU have no significant association with KS. For this reason, the null hypotheses  $H_1$ ,  $H_3$ ,  $H_4$ , and  $H_5$  are not rejected.

The results indicate that POE has the most effect on KS among bloggers. Bloggers are more likely to participate in KS behaviours if they expect that they will be rewarded (Lu & Hsiao, 2007). Similarly, if a bloggers anticipate praises or rewards, he or she will continue to share knowledge while blogging (Lee et al, 2006). The results had revealed that POE would significantly and directly affect bloggers' plans to update their blogs (Compeau & Higgins, 1995a, 1995b; Lu & Hsiao, 2007; Shih, 2006).

## 5. Conclusion And Recommendation

As blogs become increasing popular nowadays, there are many potential opportunities that allow bloggers to share knowledge in blogs. This study is able to understand and determine the critical factors that affect KS behaviour towards blogs. As a matter of fact, this study aims to understand the critical factors that influence KS among bloggers due to the importance of finding and exploring the reasons in encouraging bloggers to share knowledge. The reliability test indicates the proof that all the items of measurement are reliable. Also, the study has identified and examined the five (5) major factors that affect KS among bloggers. All four (4) independent variables i.e. KSE, POE, SN, FB, and ICTU are positively correlated with the dependent variable i.e. KS among bloggers. Personal outcome expectations (POE) have the highest significant relationship with KS. Bloggers that participate in the sharing of knowledge by blogging will be widely recognised, and further helps to build the blogger's reputation. By participating in blogs, it helps to enrich bloggers' knowledge, besides allowing an inherent sense of enjoyment and happiness in bloggers.

## 6. Limitations And Future Studies

The convenience sampling design was applied given that the subjects chosen in this study are bloggers and the information obtainable from these members of the population is conveniently available. Even though the targeted participants i.e. bloggers consist mostly of the Malaysians, some of the respondents which had participated in this study were from others countries too. For this reason it is thus considered as a drawback in which these bloggers might be providing their own personal perceptions of KS based on their country's social and technological blogging perspective. Therefore the results provided by these bloggers may not be applicable in Malaysia's social and technical context. Even though this study was conducted several states in Malaysia such as Kuala Lumpur, Selangor, Melaka, and Johor, it does not however constitutes the entire population from all the states in Malaysia, especially those from Sabah and Sarawak. Due to this, the data collected from the respondents may not represent the entire blogging community in Malaysia. As a matter of fact, the results obtained from 250 questionnaires that were managed to be collected would be more reliable and accurate if a higher number of participants were taken into consideration. Without a doubt, a larger sample may require sophisticated statistical analysis tools that need to be made available. Lastly, self-reporting biases may occur whereby it is possible that the participants may misreport their views and opinions when responding to the questionnaires in making themselves look better in a socially acceptable manner.

Due to the cross-sectional nature of this study, it is therefore difficult to measure bloggers' reactions over time. Hence, future research should focus on the findings that require additional research efforts to evaluate the validity of the model concerned. With this, longitudinal evidence would help predict bloggers' behaviours over time and enhance the understanding of the causality and interrelationships between the variables concerned i.e. the critical factors: Knowledge self-efficacy; Personal outcome expectations; Subjective norms; Feedback; ICT usage; in affecting KS among bloggers. Future research should also be performed on other countries including Asia. In view of the fact that this would provide a concentrated and meaningful observation for future researchers by being able to identify the different KS practices coming from other countries besides Malaysia. In addition, upcoming studies could be extended to include the diverse ethnics in Malaysia. This would be interesting due to Malaysia's multi-cultural races such as Kadazan, Melanau, Bidayuh, Iban, etc. Finally, the scope of age in this study can be further expanded to other age groups besides the cluster being studied (i.e. 17 till 37 years old) so as to obtain the necessary findings needed from other age groups when it comes to understanding and determining KS through blogs.

## 7. References

- Abdullah, H. S., Hassim, A. A., & Chik, R. (2009). Knowledge sharing in a knowledge intensive organisation: Identifying the enablers *International Journal of Business and Management*, 4(4), 115-123.
- Adar, E., & Adamic, L. A. (2005, April 14th, 2011). *Tracking information epidemics in blogspace*. Paper presented at the Proceedings of the 2005 IEEE/WIC/ACM International Conference on Web Intelligence, Compiègne, France.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Springer series in social psychology* (pp. 11-39). Berlin: Springer.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ashbee, E. (2003). The Lott resignation, 'blogging' and American conservatism. *Political Quarterly*, 74(3), 361-370.
- Baker, J. R., & Moore, S. M. (2008). Blogging as a social tool: A psychosocial examination of the effects of blogging. *Cyberpsychology & Behavior*, 11(6), 747-749.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, N J: Prentice-Hall.
- Barr, S. H., & Conlon, E. J. (1994). Effects of distribution of feedback in workgroups. *Academy of Management Journal*, 37(3), 641-655.
- Bock, G. W., & Kim, Y. G. (2002). Breaking the myths of rewards: An exploratory study of attitudes about knowledge sharing. *Information Resources Management Journal*, 15 (2), 14-21.
- Butler, B., & Sproull, L. (2002). Community effort in online groups: Who does the work and why? In S. Weisband & L. Atwater (Eds.), *Leadership at a Distance*.

- Chang, M. K. (1998). Predicting unethical behavior: A comparison of the theory of reasoned action and the theory of planned behaviour. *Journal of Business Ethics*, 17(16), 1825-1834.
- Chen, I. Y. L., Chen, N.-S., & Kinshuk. (2009). Examining the factors influencing participants' knowledge sharing behavior in virtual learning communities. *Educational Technology & Society*, 12(1), 134-148.
- Chenail, R. J. (2011). Qualitative researchers in the blogosphere: Using blogs as diaries and data. *The Qualitative Report*, 16(1), 249-254.
- Cheung, W., Chang, M., & Lai, V. (2000). Prediction of Internet and World Wide Web usage at work: A test of an extended Triandis model. *Decision Support Systems*, 30(1), 83-100.
- Chiu, C. M., Hsu, M. H., & Wang, E. T. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, 42(3), 1872-1888.
- Chyan, Y., & Chen, L. C. (2007). Can organizational knowledge capabilities affect knowledge sharing behavior. *Journal of Information Science*, 33(1), 95-109.
- Compeau, D. R., & Higgins, C. A. (1995a). Application of social cognitive theory to training for computer skills. *Information Systems Research*, 6(2), 118-143.
- Compeau, D. R., & Higgins, C. A. (1995b). Computer self-efficacy: development of a measure initial test. *MIS Quarterly*, 19 (2), 189-211.
- Compeau, D. R., Higgins, C. A., & Huff, S. (1999). Social cognitive theory and individual reactions to computing technology: a longitudinal study. *MIS Quarterly*, 23(2), 145-158.
- Constant, D., Sproull, L., & Kiesler, S. (1996). The kindness of strangers: The usefulness of electronic weak ties for technical advice. *Organization Science*, 7(2), 119-135.
- Dretske, F. (1981). *Knowledge and the flow of information*. Cambridge, MA: MIT Press
- Drucker, P. F. (1995). *Managing in a time of great change*. Oxford: Butterworth-Heinemann.
- Ellahi, A., & Mushtaq, R. (2011). Probing factors affecting knowledge sharing behaviour of Pakistani bloggers. *The Electronic Journal of Information Systems in Developing Countries*, 45(6), 1-14.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Han, B. M., & Anantatmula, V. S. (2007). Knowledge sharing in large IT organizations: a case study. *VINE*, 37(4), 421 - 439.
- Hasan, B. (2006). Delineating the effects of general and system-specific computer self-efficacy beliefs on IS acceptance. *Information & Management*, 43(5), 565-571.
- Hendriks, P. (1999). Why share knowledge? The influence of ICT on the motivation for knowledge sharing. *Knowledge and Process Management* 6(2), 91-100.
- Hodkinson, P. (2007). Interactive online journals and individualization. *New Media & Society*, 9(4), 625-650.
- Hsu, C.-L., & Lin, J. C.-C. (2008). Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation. *Information & Management* 45(1), 65-74.
- Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science*, 2(1), 88-115.
- Huffaker, D. (2005). The educated blogger: Using weblogs to promote literacy in classroom. *Association for the Advancement of Computing in Education Journal*, 13(2), 91-98.
- Ives, B., & Watlington, A. (2005). Using blogs for personal KM and community building: Refining the global knowledge marketplace. *Knowledge Management Review*, 8(3), 12-15.
- Karahanna, E., & Straub, D. (1999). The psychological origins of perceived usefulness and perceived ease-of-use. *Information & Management*, 35(4), 237-250.
- Karimi, F., & Danny, C. C. P. (2009). *Personal and external determinants of medical bloggers' knowledge sharing behavior*. Paper presented at the Thriving on Diversity - Information Opportunities in a Pluralistic World Vancouver, British Columbia, Canada.
- Kelleher, T., & Miller, B. M. (2006). Organizational blogs and the human voice: Relational strategies and relational outcomes. *Journal of Computer-Mediated Communication*, 11(2), 395-414.
- Kolekofski, K. E., & Heminger, A. R. (2003). Beliefs and attitudes affecting intentions to share information in an organizational setting. *Information and Management*, 40(6), 521-532.

- Kulviwat, S., Cuo, C., & Engchanil, N. (2004). Determinants of online information search: A critical review and assessment. *Internet Research, 14* (3), 245-253.
- Kurland, N. B. (1995). Ethical intentions and the theories of reasoned action and planned behavior. *Journal of Applied Social Psychology, 25*(4), 297-313.
- Larsson, A. O., & Hrastinski, S. (2011). Blogs and blogging: Current trends and future directions. *First Monday, 16*(3).
- Lee, M. K., Cheung, C. M., & Sia, C. L. (2006). Understanding customer knowledge sharing in web-based discussion boards. *Internet Research, 16*(3), 289-303.
- Liao, S., Shao, Y., Wang, H., & Chen, A. (1999). The adoption of virtual banking: An empirical study. *International Journal of Information Management, 19*(1), 63-74.
- Liker, J., & Sindi, A. (1997). User acceptance of expert systems: A test of the theory of reasoned action. *Journal of Engineering and Technology Management, 14*(2), 147-173.
- Lin, H.-F. (2007). Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. *Journal of Information Science, 33*(2), 135-149.
- Lu, H.-P., & Hsiao, K.-L. (2007). Understanding intention to continuously share information on weblogs. *Internet Research, 17*(4), 345-361.
- Machlup, F. (1980). *Knowledge: Its creation, distribution, and economic significance*. Princeton, NJ: Princeton University Press.
- Mathieson, K. (1991). Predicting user intentions: Comparing the technology acceptance model with the theory of planned behavior. *Information Systems Research, 2*(3), 173-191.
- Moshabbaki, A., & Jaha'nyan, S. e. (2009). A trust-based model for knowledge sharing In ERP adopting organizations. *Journal of Knowledge Management Practice, 10*(1).
- Nahl, D. (1996). Affective monitoring of internet learners: perceived self-efficacy and success. *Journal of American Society for Information Sciences, 33*, 100-109.
- Nahl, D. (1997). User-centered assessment of two web browsers: errors, perceived self-efficacy, and success. *Journal of American Society of Information Sciences, 2*, 89-97.
- Nelson, K. M., & Coopridge, J. G. (1996). The contribution of shared knowledge to IS group performance. *MIS Quarterly, 20*(4), 409-429.
- Olaru, D., Purchase, S., & Letch, N. (2010). *Behavioural clusters in online learning*. Paper presented at the Australian and New Zealand Marketing Academy (ANZMAC) Conference 2010, Christchurch, New Zealand.
- Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management, 9*(3), 18-35.
- Sandhu, M. S., Jain, K. K., & Ahmad, U. K. (2011). International Journal of Public Sector Management. *Knowledge sharing among public sector employees: evidence from Malaysia, 24*(3), 206-226.
- Schiano, D. J., Nardi, B. A., Gumbrecht, M., & Swartz, L. (2004). Blogging by the rest of us. *2004 Conference on Human Factors and Computing Systems, 1*, 143-141, 146.
- Schmidt, J. (2007). Blogging practices: An analytical framework. *Journal of Computer-Mediated Communication, 12*(4).
- Shih, H. P. (2006). Assessing the effects of self-efficacy and competence on individual satisfaction with computer use: an IT student perspective. *Computers in Human Behavior, 22*(6), 1012-1026.
- Stone, R. W., & Henry, J. W. (2003). The roles of computer self-efficacy and outcome expectancy in influencing the computer end-user's organizational commitment. *Journal of End User Computing, 15*(1), 38-53.
- Sweetser, K. D., & Metzgar, E. (2007). Communicating during crisis: Use of blogs as a relationship management tool. *Public Relations Review, 33*(3), 340-342.
- Syed-Ikhsan, S., & Rowland, F. (2004). Knowledge management in a public organization: A study on the relationship between organizational elements and the performance of knowledge transfer. *Journal of Knowledge Management, 8*(2), 95-111.
- Taylor, S., & Todd, P. (1995). Understanding information technology usage: A test of competing models. *Information Systems Research, 6*(2), 144-176.
- Thompson, R. L., Higgins, C. A., & Howell, J. M. (1991). Personal computing: Toward a conceptual model of utilization. *MIS Quarterly, 15*(1), 125-143.
- van den Hooff, B., Elving, W., Meeuwssen, J. M., & Dumoulin, C. (2003). Knowledge sharing in knowledge communities. *Communities and Technologies, 119-141*.

- Vance, D. M. (1997, August). *Information, knowledge and wisdom: The epistemic hierarchy and computer-based information system*. Paper presented at the Proceedings of the Third Americas Conference on Information Systems, Indianapolis.
- Vijayasarathy, L. R. (2004). Predicting consumer intentions to use on-line shopping: the case for an augmented technology acceptance model. *Information & Management*, 41(6), 747-762.
- Wallsten, K. (2007). Agenda setting and the blogosphere: An analysis of the relationship between mainstream media and political blogs. *Review of Policy Research*, 24(6), 567-587.
- Yeh, Y. J., Lai, S. Q., & Ho, C. T. (2006). Knowledge management enablers. *Industrial Management & Data Systems*, 106(6), 793-810.
- Yi, M. Y., & Hwang, Y. (2003). Predicting the use of web-based information systems: Self-efficacy, enjoyment, learning goal orientation, and the technology acceptance model. *International Journal of Human-Computer Studies*, 59(5), 431-449.
- Zack, M. H. (1999). Developing a knowledge strategy. *California Management Review*, 41(3), 125-145.
- Zawawi, A. A., Zakaria, Z., Kamarunzaman, N. Z., Noordin, N., Sawal, M. Z. H. M., Junos, N. M. (2011). The study of barrier factors in knowledge sharing: A case study in public university. *Management Science and Engineering*, 5(1), 59-70.
- Zhang, Y., & Hiltz, S. R. (2003). *Factors that influence online relationship development in a knowledge sharing community*. Paper presented at the Proceedings of the Ninth American Conference on Information Systems.

---

**About the Authors:**

*Christine Nya Ling TAN* is a lecturer of Knowledge Management in the Knowledge Management, Economics & Quantitative Analysis (KMEQA) Department from the Faculty of Business and Law, Multimedia University, Melaka. Her research interest includes knowledge management specifically in the field of knowledge sharing; e-business; and human resource management.

Christine Nya Ling TAN, Knowledge Management, Economics & Quantitative Analysis (KMEQA) Department, Faculty of Business and Law, Multimedia University, Jalan Ayer Keroh Lama, 75450 Melaka, Malaysia; Tel: +606-252 3642; Fax: +606-231 8869; Email: nltan@mmu.edu.my.

*Tuan Hock NG* is a lecturer at the Faculty of Business and Law, Multimedia University, Melaka. His research interest includes risk management and corporate governance.

Tuan Hock NG, Faculty of Business and Law, Multimedia University, Jalan Ayer Keroh Lama, 75450 Melaka, Malaysia; Tel: +606-252 3633; Fax: +606-231 8869; Email: thng@mmu.edu.my.

*Ying San LIM* is a lecturer at the Faculty of Business and Law, Multimedia University, Melaka. Her research interest includes consumer behavior and online marketing.

Ying San LIM, Faculty of Business and Law, Multimedia University, Jalan Ayer Keroh Lama, 75450 Melaka, Malaysia; Tel: +606-252 3528; Email: lim.ying.san@mmu.edu.my.

---