Exploring the Key Factors of Knowledge Sharing via Employee Weblogs

1Saeed Rahimi Moghadam, 2Harihodin Selamat and 3Shahin Moosavi
1, 2Advanced Informatics School, University Technology Malaysia, Malaysia
3Department of Psychology, International Islamic University Malaysia, Malaysia

Abstract: In this study, two dependent variables of individual's intention and attitude have been defined for knowledge sharing via the employee weblog and independent variables have been determined in 3 groups of social influence factor, technology acceptance factor and social cognitive factor with subset variables including the subjective norm, social identity, group norm (first group), perceived usefulness, perceived ease of use, perceived enjoyment (second group), self-efficacy, personal outcome expectation, altruism and trust (third group). This research reviews the previous studies in the field of knowledge sharing via the employee weblog. The main difference of this research with other studies is to collect and complete a full set of factors affecting the knowledge sharing according to the factors raised in previous studies. Finally the suggestions have been provided for conducting the statistical studies in Iran.

Keywords: Employee weblog, knowledge distribution, knowledge sharing

INTRODUCTION

In contemporary knowledge based economy, knowledge sharing has emerged as a crucial determinant of an organization’s competitive advantage (Alavi and Leidner, 2001). Enabling an effective knowledge sharing process, it is needed to be aware of three important conditions: social, organizational and technological (Van Den Brink, 2001). Since true asset of an organization is the brainpower of its workforce, information technology facilitates knowledge sharing in organizations only if employees have desire to externalize their knowledge (Nonaka and Von Krogh, 2009), which is the most difficult part of the process (Gee Woo and Young-Gul, 2002). Weblogs as a new media increasingly become popular among different groups of users (Kwai Fun and Wagner, 2008; Lu and Hsiao, 2007) and has used to share knowledge (Chai and Kim, 2010), but it is still need to be investigated in terms of attitude and intention of individuals.

To comprehend behavioral intent, which is known as the key determinant of behavior, TRA looks at individual attitudes toward that behavior as well as the subjective norms of influential people and community that might influence those attitudes (Fishbein and Ajzen, 1975). By focusing on attitudes and subjective norms, TRA provides a framework for recognizing and measuring the underlying reasons for a person's intent to perform (or not) a certain action. In this case, we employ TRA to examine how important are the effect of the social and technological factors on attitude and intention of employees to share knowledge via weblogs. Papadopoulos et al. (2013) divided such factors into three categories as Social Influence factors, Technology Acceptance factors and Social Cognitive factors. We have grounded our study on his research and modify it by adding trust as a new factor. First, we need to have a glance on the related model and theories, which are Technology Acceptance Model, Social Influence Theory and Social Cognitive Theory. Then, we build our model based on the extant literature.

MATERIALS AND METHODS

Significance of the study: Citing the growing significance of knowledge sharing to the success of knowledge management and to organizational survival, several researchers have called for further investigation of the factors that shape knowledge sharing behaviors in the organizational context. On the other hand, Blogs are used more and more by employees for both individual and organizational purpose. So, the study in this area is essential to understand what is going on. It may lead to beneficial suggestions to facilitate knowledge sharing among employees.

The significance of the study in the context of Iran is twofold: firstly, according to the latest official census report (2011), Iran has faced with youth population swelling phenomenon, which means a remarkable portion of the population, 31% are aged between 15-29 years old. If we suppose Blogging is a habit starting in teen or early twenties ages (Efimova and Grudin, 2007), it is expected that the number of bloggers in organizations is increasing noticeably. Iran is one of the most tech-savvy societies in the developing world, with an estimated 28 million Internet users, led by youth.
Studies reveal that the rate of using weblog among Iranian is relatively high; more than one-fifth of Iranians have own weblog (Bhatia, 2012; Kelly and Etling, 2008; Simmons, 2005). Using social networking websites, especially for employees, is officially prohibited in Iran due to some political and national security issues. This may motive people to use weblogs instead of social networking websites. As a result, this research becomes more important in the context of Iran.

The weblog: A weblog (blog for short) is a hyperlink-driven site typically containing a mixture of hyperlinks, commentary, personal thoughts and essays. The weblog is essentially an online journal that permits the author to write about any given topic as frequently as he or she desires. Entries to the blog are presented in reverse chronological order and at times are archived by the blogger. In addition to the hyperlinks found within the entries, it is typical to see a permanent list of links to other blogs and websites commonly referred to as a blog roll. Weblog subject matter ranges dramatically from the serious to less serious. Unlike mainstream print media (newspaper, magazine) blogs can be updated in real-time creating an inherently greater dynamics of the medium. In addition, the structure of 3687 blog and blogosphere creates potential for conversation internally (if permitted by the blogger) and externally (demonstrated by the interlinking between blogs). Predated by various forms of online communities, the term “weblog” was first used in 1997 by Jorn Barger, one of the first bloggers. In 1999, the first hosted weblog tools were developed, sparking the blogging phenomenon.

Though corporate weblogs are different from personal weblogs, the organization’s attention is arrested by such weblogs written by employees. This study aims to investigate motives of employee weblog regarding to knowledge sharing.

RESULTS

Conceptual model of research: As previously mentioned, the dependent and independent variables of research have been determined in the form of groups which hare presented in Fig. 1 as follows:

- This study will take both a non-empirical (literature) and an empirical research approach. The non-empirical (literature review) will be conducted to structure and execute the empirical research activities. The research is descriptive in nature as it describes certain characteristics of a particular population.
- This research measures different hypotheses through the use of a survey questionnaire which can be explained by numbers and measurements and is therefore quantitative in nature. The Likert scale will be used.
- This study will be used a mainly deductive approach as empirical observation is used.
- Due to the nature of this study (quantitative), the research paradigm is objective in nature. Also, the data will be primary.

![Conceptual model of research](image_url)
Purposive sampling method will be used for collecting data; therefore, the sampling method will be a non-probability type.

The scope of study is the Iranian employees who use employee weblogs hosted by three most used Iranian Blog service providers (Blogfa.com, Mihanblog.com and Blogsky.com).

The unit of analysis will be employee (individual).

LITERATURE REVIEW

Social influence theory: Individuals do not live in vacuum since others influence them in daily relationship. In organization, employees are affected by colleagues and managers conscious or unconsciously. Defining this, the Social Influence Theory categorizes three different modes of social influence: Compliance, Internalization and Identification. Compliance means to act in accordance with someone else’s wish regardless of being agreed with or not. Identification reflects an individual’s identification with the community such as senses of belongingness and membership. Internalization reflects the congruence of a person’s values with those of other members. We employ subjective norm, social identity and group norm to represent compliance, identification and internalization, respectively, according to the existing literature. So, considering these concepts lead us to:

H1: Subjective norm has a positive influence on the intention of an individual to share knowledge in employee weblogs.

Numerous studies have been conducted in the field of variable Subjective norm. Fishbein and Ajzen (1975) defined the Subjective norm in 1975. According to their theory, (TRA), an individual view of understanding the importance is what the other individuals think about the implementation or not implementation of a certain behavior. Ajzen (1991) provided 1657 Subjective norm for the perceived social pressure in order to perform or not perform a particular behavior in the Theory of Planned Behavior (TPB). Both theories of (TRA) and (TPB) consider the variable Subjective norm as a critical factor in predicting the individual's intention to perform a particular behavior. Most of the studies have investigated the influence of subjective norms on the behavior and different situations including the adoption of electronic services. Some of these studies are conducted by Hsu and Chiu (2004) in the field of electronic services; Lu et al. (2009) in the field of instant messages; Lu and Hsiao (2009) in the field of blogging; Van Raaij and Schepers (2008) in the field of electronic learning; Lu et al. (2008) in the field of mobile services; Lee (2009) in the field of online games and so on. The relationship between the Subjective norm and the individual behavior intention has been determined in previous studies by Lee (2009). Beyond this, few studies have been conducted by Van Raaij and Schepers (2008) in the field of positive impact of individual's perception of the IT applications.

H2: Social identity has a positive influence on the intention of an individual to share knowledge in employee weblogs.

According to the theory by Kelman (1974), the social influence variable suggests that the people's behavior is determined by the compliance, identification and internalization. According to Mr. Zhou's viewpoint in 2011, the compliance means that each individual needs to be matched with the viewpoint by the other individuals, with who is interacting and play the important role for him. Identification means that the individuals introduce themselves as a part of community in the process of recognition. Internalization means that the individual considers himself as a member of that community with respect to the homogeneity and the value of that group. According to the viewpoint by Zhou (2011) these attributes determine the subjective norm, social identity and group norm, respectively. According to Hsu and Lin (2008) the variable, social identity has a positive influence on the intention of an individual to share knowledge in employee weblogs as a communicational identification.

H3: Social identity has a positive influence on the attitude of an individual to share knowledge in employee weblogs.

Social identity has a positive influence on the attitude of an individual to share knowledge in employee weblogs. According to Shen et al. (2011) the norm of group has been defined as the consensus of members in a community according to the common expectations and goals.

Zhou (2011) claims that if people act equally in sharing their goals with other people in the same group, they are probably participating in the group. Ellemers et al. (2002) believe that the social identity consists of three dimensions: cognitive, emotional and evaluation in which the role of attitude is included as the individuals' social environment. Moreover, Hsu and Lin (2008) suggest that the social identity is not associated with the attitude toward knowledge sharing. Moreover, Mr. Zhou claimed in 2011 that based on the results, obtained from the independent samples in the t test, it is indicated that the weblog writers and readers' viewpoints are different on the social identity.

H4: Group norm has a positive influence on the attitude of an individual to share knowledge in employee weblogs.
According to Shen et al. (2011), the norms of group as the consensus of the members in the community are defined according to the common expectations and goals. According to Preece (2000) the concept of group norm is not associated with the attitude towards the knowledge sharing. For instance, the personnel may share the meaningless information on the weblog in order to enjoy, while the organization may prefer for cooperation to use the face to face negotiation via the employee weblogs instead of using the traditional methods.

To make clear, this example may help: an employee considers the manager’s wish to visit or a certain website (Subjective norm). After a while, he accepts and believes that visiting the website is a good idea (Group norm). Finally, he finds himself as a fan of the website (Social identity).

Technology Acceptance Model (TAM): TAM is an adoption of Theory of Reasoned Action in information system field. It explains why individuals accept new systems. Originally, TAM included two factors: perceived usefulness and perceived ease of use. In organization, employees welcome new systems if they find them useful and not difficult to use. So, according to huge recent researches, influences of these two factors will be examined on the employees’ attitude toward using weblogs for sharing knowledge. Since using the Internet, as well as usefulness, is fun, perceived enjoyment could be an important factor that encourages employees to use weblogs. So, considering these concepts lead us to:

H5: Perceived usefulness influences positively the attitude of an individual towards knowledge sharing in employee weblogs.

Technology and knowledge sharing have a close relationship with each other because the technology make it possible to have the easier and faster search in order to retrieve the knowledge and communication and collaboration among the employees. Similarly, the public perception of the blogging technology expands their participation. Mr. Davis's research (1989) indicates that the technology acceptance model (TAM) is used in the acceptance of blogging technology with two main structures of understanding (usefulness and ease of use). In general, whether the people have accepted or not, doing the best work by them is related to the weblog. This matter has been understood and defined as usefulness. Perceived usefulness also refers to this believe that the blogging technology helps the users in performing their tasks. The usefulness has been defined as the ability to use advantageously.

H6: Perceived ease of use influences positively the attitude of an individual towards knowledge sharing in employee weblogs.

Davis et al. (1992) has calculated the Theory of Reasoned Action by developing two key beliefs which is specifically used for the IS. The perceived usefulness has been used for the first time as a degree under which a person believes that he would be able to enhance his own performance or work by a particular system; it was used for the second time as a degree which a person believes that he would be able to abandon the attempt by using a particular system. Moreover, TAM included all external variables such as the system particular features, which were completely as the mediums for these two key believes, in the theory. Adams et al. (1992) repeated a simplified version of TAM without the attitude and intension structures. They tested a model for using the Email and voice mail systems and this model is used for all three types of administrative systems. Their result was inconsistent about the relationship between the ease of use and usage of information. On the contrary, Taylor and Todd (1995) examined the Technology Acceptance Model and two models derived from the Theory of Planned Behavior (TPB).

H7: Perceived enjoyment influences positively the attitude of an individual towards knowledge sharing in employee weblogs.

Davis et al. (1992) introduced the Perceived enjoyment. Perceived enjoyment has been defined as a limitation which the activity of using the computer is supposed to be enjoyable apart from any performance consequences which may be forecasted. Perceived enjoyment test was done through two studies. The first one was related to the adaptation with word processing program by 200 university students and the other was related to the adaptation with a graphics program by 40 university students. The results confirmed a very strong relationship between the user's efficiency and objective (B = 0.68 for Study 1, β = 0.79) for the second study and a weaker relationship between the enjoyment and intension (B = 0.16 for Study 1, β = 0.15) for the second study. Atkinson and Kydd (1997) used a sample of 162 students for testing a model which investigated the relationship of applying WWW with the usefulness and enjoyment. They found that there is a significant perceived enjoyment for the effect of using WWW for entertainment purposes (B = 0.308), while the usage had no significant relationship. Teo et al. (1999) conducted a web-based study in order to assess the impact of its ease of use, usefulness and enjoyment in using the Internet. Their findings, obtained from 1370 usable responses, indicate that the respondents use the Internet both for perceived enjoyment and usefulness. Moon and Kim (2001) used a sample of 152 Korean students in order to test the usefulness and playfulness on the web. They found that there is a considerable support for the attitude and intention in using the Web.

Social cognitive theory: Social cognitive theory presents a framework for understanding, predicting and changing individual’s behavior. It posits that an individual’s behavior is partially formed and controlled by the influences of environmental factors and the individual’s cognition; it states that a person will take an action that has personal cognition in a social context. Social cognitive theory includes two key notions, which are self-efficacy and outcome expectation. Self-efficacy reflects the individual’s judgment of their capability to perform a particular behavior. This leads us to:

H8: Self-efficacy has a positive influence on the attitude of an individual to share knowledge in employee weblogs.

Luthans (2002) defined the positive organizational behavior as "the study and positive application of human resources strengths and psychological capacities, which can be measured, developed and used effectively for improving the performance". Luthans et al. (2007b) utilized this definition in 2007 for the psychological structure which was eligible to enter the scientific study of self-efficacy, optimism, hope and resilience. The self-efficacy concept suggests that the employees have the confidence and are making the necessary effort to succeed in facing the challenges. The concept of optimism refers to the workers' positive and realistic preferences and trends about the success in now and future. The concept of hope expresses the option which by responding to it the individual prefers the strength for the objectives and if necessary, changing the way towards the goal for winning. The concept of resilience refers to the individual's tendency towards maintaining and bouncing back and even beyond it while facing the difficulties. Nemeth et al. (2009) found the value of knowledge in the prospect of "resilience engineering", which can be responsive to the organizational level, for assessing the impact between the individual and organizational resilience.

H9: Self-efficacy has a positive influence on the intention of an individual to share knowledge in employee weblogs.

Bandura (1986) examined the self-efficacy by sing the social cognitive theory. Constant et al. (1996) stated that the self efficiency indicates the individuals' self-confidence to share knowledge with others. Vijayasarathy (2004) showed in his research that there is a strong relationship between the self-efficacy and using the Web-based technologies. Lu and Hsiao (2007) found that these factors directly affect the attitude towards knowledge sharing. Chen et al. (2002) acknowledged the inadequacy of existing literature in addressing both text and individual factors for knowledge sharing. Thus they suggested testing a model which indicates the importance of mutual relationships and personal trust in using the knowledge and developing the society. Lin et al. (2009) expressed that Chen et al. (2002) had not studied the accepted role of technology in the positive effect of knowledge share. Lin et al. (2010) indicated that it seems that there is a negative mutual relationship between the behavior and the knowledge sharing, but it significantly enables the trust structure to affect the knowledge sharing and positive effect of behavior. However, the factors of technology acceptance seem to be ignored. Lin et al. (2010) indicated that it seems that the mutual negative behavior has a relationship with knowledge sharing behavior, but it significantly has a relationship with the trust structure which affects the knowledge sharing and positive effect of behavior in sharing the knowledge. However, the factors of technology acceptance seem to be ignored.

H10: Personal outcome expectation has a positive influence on the attitude of an individual to share knowledge in employee weblogs.

Unexpectedly, Chao-Min et al. (2011) defined the personal outcome expectation as a social attitude and an altruism which causes the people to help each other without expecting the profits. Barachini (2009) stated that although it seems that the unconditionally affection can be considered as the aim of altruism, it should be noted that it can be used as an intrinsic reward for a man to gain the understanding. In recent research like the research by Papadopoulos et al. (2013), the role of altruism in sharing knowledge, especially via the Internet, has attracted more attention.

H11: Personal outcome expectation has a positive influence on the intention of an individual to share knowledge in employee weblogs.

Bandura (1977) defined the personal outcome expectation as a result of the perceived outcome of an action which can have the positive or negative effect. He expressed the samples of expectations of a positive outcome including the self satisfaction pride, self-esteem and self-value and pointed out the negative expectations which refer to the low spirit, low self-esteem and dissatisfaction. Compeau et al. (1999) stated that the outcome expectation has been classified more into the personal expectations and the expectations associated with the performance. Kankanhalli et al. (2005) and Hsu and Lin (2007) stated that the personal outcome expectations refer to the expectations of changing the imagination or situation or the expectation of reward, while the results of performance are seen in those who are seeking to improve the job performance along with the specific behavior. Previous studies have indicated that the
personal outcome expectations affect the individuals' intentions in using the information systems and knowledge-sharing. Similarly, Lee et al. (2006) have expressed that the people tend to share the information on the weblogs, but they expect the reward or appreciation by the managers at work. Although the individual factor of intention to share the knowledge was via the weblogs, the only altruism and personal outcome expectation with the intention of knowledge sharing was founded via the weblog. The results of studies, conducted by Hsu et al. (2007), Lin (2007) and Wasko and Faraj (2000), indicate that the authorities' participation in the weblog of organization is according to the personal interest in helping the others and expectation of a positive outcome. This intrinsic interest in helping others along with knowledge sharing confirms the previous findings.

H12: Altruism has a positive influence on the intention of an individual to share knowledge in employee weblogs.

Smith et al. (1983) suggested an organizational citizenship behavior based on a two-dimensional framework consisting of altruism (specific aim to help the people) and the general compliance (behavior of reflected compliance with the rules, norms and public expectations). The altruistic behavior typically includes helping a colleague or manager. Later, Organ (1988) provided a five-dimensional model of organizational citizenship behavior including the altruism, civic virtue, conscience, goodwill and sportsmanship. Organ considered the organizational citizenship behavior as a personal behavior which is optional and is not created with a formal reward system. After Organ, (Podsakoff et al., 1997) proposed a three-dimensional model. In later studies, conducted by Lievens and Anseel (2004) and MacKenzie et al. (1993) and many others, the conscience was eliminated and the combination of altruism with the goodwill was added to the behavior dimensions for making the help. The organizational citizenship behavior was measured by a scale (Podsakoff and MacKenzie, 1989). This scale was modified in 1990. Recently in 2009, a scale was introduced by Alam et al. (2009) in order to measure the knowledge sharing.

H13: Discussion, conclusion Trust has a positive influence on the attitude of an individual to share knowledge in employee weblogs.

Polanyi (1966) classified the knowledge into two groups of objective and tacit knowledge. Tacit knowledge can be modified and transferred by the official language of a country. Bartol and Srivastava (2002) stated that the tacit knowledge has difficulties for transferring in the official language and its understanding is typically done for a specific person. He also stated that the objective knowledge can be shared through the verbal communication and the tacit knowledge through the social communication. Tobin (1998) stated that transferring the tacit knowledge requires the individuals' extensive and effective contact and trust. McDermott (1999) stated that the knowledge is tacit when its documented results are seen in clear objective knowledge. Trust is considered as an aspect of competition. Studies, conducted by Knapp (1998), Conner and Prahalad (1996), support this proposition that if an organization has the trust and knowledge sharing culture, it will improve learning and innovation. The studies by McEvily et al. (2003) have determined that the individual and organizational trust can improve the open channels of information. In a research on the culture of trust, Mayer et al. (2003) have argued that the seeds of trust culture among people is cultivated and supported by the management. Research, conducted by Scheipers and Van Den Berg (2007) and Willem and Scarbrough (2006), indicates that the organizational climate, which raises the individual competition, can be a barrier to the knowledge sharing. In contrast, the organization, which develops the collaborative teams, can build the trust and increase the knowledge-sharing. McNeish and Singh Mann (2010) expressed that the trust, at the basis level, serves as an alternative to the ability to verify the information and also strengthen the relationships which, in turn, increases the trust.

CONCLUSION

Papers and literature, collected in this study, have been created by focusing on the weblogs and combination of technological, social and individual factors for the study and investigation of employees' intention to share the knowledge according to the conceptual model. In this study, the factors affecting the intention to share the knowledge via the employee's weblog have been presented. This study proposes the research model based on the social influence, technology acceptance and social cognitive theory. The results of previous studies indicate that there is a relationship between the social influences factors and the intention to share the knowledge. The research results, which are based on the quantitative studies and theories raised in previous years, indicate that there is a positive relationship between the perceived interest in blogging and the individual's attitude to share the knowledge, despite the fact that the individuals, who are seeking to obtain the knowledge via the employees weblog in the organizations, may have different viewpoints from the weblog authors. A part of previous studies for doing the statistical tests has been established based on the relationship between some of the variables with the knowledge distribution via the employee weblog. Since the cultural and social features and the citizens' views in each country are different from the other countries, the statistical population of above research also included these terms and this
research is not based on the results of such studies. Providing the coefficients of correlation, which have been presented in the findings of researchers in previous years, can express the basis of conditions governing the effective variables in knowledge sharing via the employee weblog. Moreover, the quantitative variables of research in previous studies do not cover all variables presented in the research. Therefore, the results of conducted studies have been only presented for conclusion in this study. The main objective of this research is to study and review the literature governing the key factors governing of knowledge distribution via the employee weblog.

The main purpose of this study is based on the continuation of scientific study by Papadopoulos et al. (2013) in an study in the International Journal of Information Management entitled as "Exploring the determinants of knowledge sharing via employee weblogs" and according to the conceptual model of research, the variable of trust has been added to the cognitive factor of Society. Despite not addressing the statistical study in the field of factor "Trust" in this study, the previous studies have been presented in the relevant section in this regard. It should be noted that the further studies in other countries can create the understanding of cultural differences in the users who use the employee weblog. Thus the following suggestions have been provided in order to continue the study and carry out the scientific study on the basis of statistical studies.

**RECOMMENDATIONS**

- To study and investigate the significant relationship of variables in this study in Iranian organizations which share the knowledge via the employee weblog.
- To compare the results, obtained from the statistical studies, with the similar results from other countries and perform the gap analysis of results.
- To search and introduce the new factors affecting the knowledge-sharing via the employee weblog according to the cultural conditions of Iran and do the statistical tests similar to the Article 2 and provide the results.

**REFERENCES**


