

FROM KNOWLEDGE SHARING PERSPECTIVE TO EXPLORE THE INTENTION OF BLOG USAGE

Tsuang Kuo, TAIWAN¹, Iuan-Yuan Lu, TAIWAN², Jyung-Yau Chen, TAIWAN^{3*}
Shu-Hui Ko, TAIWAN⁴

^{1, 2, 3, 4} Dept. of Business Management, National Sun Yat-sen University, TAIWAN

*Email Address of Contact Author: d944010003@student.nsysu.edu.tw

Abstract

Fast and easy online communication enabled versatile applications for blog. It can also extend to a multi-function platform for management and education. However, the factors that influence the intention to use this technology are still unclear. This paper examines the factors which influence the intention to use blog. Based on the theory of planning behavior (TPB) [1], we proposed a model undertaking an empirical study by using structural equation modeling (SEM). The model is used for validating a measurement scale of blog usage. 373 questionnaires were filled out and 364 of them were valid. This study suggests that enjoyment is the key factor which enhance user attitude than improve bloggers' intention, while subjective norm has only a slight effect. Hence, it is suggested that enjoyable content is essential for blogs. Furthermore, blogs can be developed beyond individuals' mutual interface, and they can thus become a powerful tool for management applications and E-learning platforms.

Keywords: Blog (Weblog), Theory of Planning Behavior (TPB), Structural Equation Modeling (SEM)

1. Introduction

Weblog, often shortened to blog, are used by many organizations and individuals quickly and easily publish their ideas, and they have become a significant feature of the Internet. Moreover, these online forums have become an important knowledge and information sharing platform.

Traditional website is a unidirectional process, while blogs allow a two-way online process. This new technology behind blogging and the growing popularity of blogs have created another means of sharing information and knowledge with target audiences [2]. Hence, users' intention to use blog will be affected by knowledge sharing. There are some factors which will affect knowledge sharing, such as

expected reciprocal benefit, reputation, and altruism [3, 4], and all of these factors are based on trust.

However, despite their rising importance, the factors which affect the users' intention are still not clear, and thus deserve more attention. To this end, this paper uses the Theory of Planning Behavior (TPB) [1] to examine the antecedent factors of user intention in a blog context, as well as the relations among these.

2. Related Literature

There are two factors: PU (perceived usefulness) and PEOU (perceived ease-of-use) that will affect the users' attitude and then affect the intention of users [5]. Legris et al. [6] claimed that it needs to include other factors such as "perceived enjoyment" to better explain IT adoption. More specifically, Venkatesh et al. [7] had highlighted the importance of "perceived enjoyment" should be included motivational perspectives. In research on the acceptance of internet-based learning media [8, 9, 10], it had been found that perceived enjoyment significantly and directly impacts users' attitudes and further intentions. Furthermore, blogging might have a hedonic benefit derived from an experience of entertainment, excitement, happiness, or warm feelings during the interaction in the internet [11].

Wasko and Faraj [12] found that people use advanced information and communication technologies to exchange knowledge primarily out of community interest, generalized reciprocity and pro-social behavior. In addition, individuals will be satisfied by contributions that occur without regard to expectations of reciprocity from others or high levels of commitment to the network [13]. Although blog users may not anticipate any returns from such activity, there may be responses from others from time to time. Obviously, blog users will be positively affected by expected reciprocal benefits.

In the virtual environment, blog user can easily get acquainted with many people and share their information. Moreover, they can build a reputation from their contribution of valuable knowledge. Reputation is a personal outcome and it is an extrinsic factor which can be defined as the performance of an activity [14]. For the extrinsic factors, we considered personal outcome expectations, because it is perceived to be instrumental in achieving valued outcomes that are distinct from the activity itself [15]. It is found that personal outcome expectations, such as reputation, significantly influence individuals' intention to share information [9, 13].

Knowledge can also be considered a public good, owned and maintained by a community. Knowledge exchange is motivated by moral obligations and community interest rather than by narrow self-interest [9]. Knowledge sharing is thus an altruistic activity.

Blogs break the barriers of time and location, and provide a great platform for individual knowledge sharing. Hence, the motivations of blog users will be enhanced. However, people would not share knowledge with those they do not trust [16]. Trust is the fundamental factor for individuals to share knowledge. The concept of trust has been applied in many fields for explaining the consumer behavior [17]. Trust makes people believe in each other and establish connections. Trust will be broken if the knowledge providers engage in supplying illegitimate or counterfeit information. Thus, Trust is an essential factor that drives the virtual internet [17].

Besides, expected relations are also important for blog users. If individuals believe they can improve relationships with others by offering their knowledge, they will develop a more positive attitude towards knowledge sharing [18].

Ajzen [1] proposed TPB claims that individual behavior is the result of behavioral intention (BI), and BI is affected by attitude (AT), subjective norms (SN) and perceived behavioral control (PBC). Intention refers to a person's subjective probability that they will perform some behavior [19]. In addition, a person's actual behavior will be strongly affected by their behavioral intention.

3. Research Framework & Hypotheses

Since perceived usefulness, perceived ease of use and perceived enjoyment all affect attitude which we have reviewed in last section. Hence, they become the antecedent of attitude. Consequently, we have the following hypotheses:

H1: Perceived usefulness has a significant positive effect on blog users' attitude.

H2: Perceived ease of use has a significant positive effect on blog users' attitude.

H3: Perceived enjoyment has a significant positive effect on blog users' attitude.

Davenport and Prusak [3] claimed that knowledge sharing occurs in knowledge markets in which there are buyers, sellers and brokers. In the knowledge market requires trust to ensure the orderly procedure of activities. Hence, trust will be an important antecedent factor of blog users' attitude. Therefore, we propose the fourth hypothesis.

H4: Trust has a significant positive effect on blog users' attitude.

Wasko and Faraj [12] claimed that knowledge exchange is motivated by moral obligation and community interest rather than by narrow self-interest. It is obvious that sharing knowledge is an altruistic activity that will be intensified by the individuals' surrounding influential people. In addition, Bock et al. [20] pointed out that individuals can improve relationships with others by offering their knowledge. Hence, expected relationship will be an antecedent factor of subjective norm. Therefore, we assume the following hypotheses.

H5: Altruism has a significant positive effect on blog users' subjective norm.

H6: Expected Relationship has a significant positive effect on blog users' subjective norm.

Pennebaker and Beall [21] had also pointed out that writing about our personal experiences can help us to understand ourselves more deeply and mitigate major problems or conflicts. The more they benefit from the blog, the more they will feel satisfaction and this will then enhance their belief in their own perceived behavior control. Therefore, expected reciprocal benefit will be an antecedent factor of perceived behavioral control.

Furthermore, individuals' sharing their useful knowledge with others not only earns reciprocal benefits, but also can help people to get respect from others. Therefore, individuals will perceive that they can enhance their reputation by sharing more valuable knowledge or information, and thus reputation will be an antecedent of perceived behavioral control. Thus, we present another two hypotheses, as follows.

H7: Expected reciprocal benefit has a significant positive effect on blog users' perceived behavior control.

H8: Reputation has a significant positive effect on blog users' perceived behavior control.

By Ajzen's TPB [1], we know that attitude is the evaluation of the self-performance of individuals' particular behavior. Their evaluation will affect individuals' intention for a particular behavior. In addition, subjective norm is an individual's perception of social normative pressures from significant others that he or she should or should not perform a particular behavior. As for perceived behavioral control, it is an individual's perceived ease or difficulty in performing a particular behavior. It will also affect individuals' intention for particular behaviors.

Intention is an indication of performing a given behavior. It is antecedent factor of behavior. For the intention of blog usage, it is naturally based on the attitude toward the behavior, subjective norm, and perceived behavioral control. Hence, we have the following hypotheses.

H9: Attitude has a significant positive effect on blog users' intention.

H10: Subjective norm has a significant positive effect on blog users' intention.

H11: Perceived behavior control has a significant positive effect on blog users' intention.

4. Method

Further, we examined the causal relations of hypotheses and the conceptual framework by Structural Equation Modeling (SEM). And, a questionnaire was developed for this purpose. Before the formal survey was undertaken, the study had a pretest by sending out 50 pretest questionnaires and received 47 effective responses

(effective feedback rate of 94%). Then, using SPSS for item analysis and reliability estimation, the Cronbach's α value of every individual construct was greater than 0.7 and that of the total framework was 0.95. Therefore, the questionnaire was acceptable for further analysis [22].

5. Results

Questionnaires were delivered by hand in person or through the Internet. We sent out 373 questionnaires and had a total effective sample of 364 (response rate 97.6%). The percentage of female respondents was 70.1%, and most of the sample were aged between 21 and 40, and had an education level of college/bachelor degree.

5.1 Tests of the Measurement Model

Measurement model is a confirmatory factor analysis (CFA), which is used to measure the reliability and validity of the variable items [23, 14]. First, the reliability and convergent and discriminate validity of the measurement model were tested. The results of the factor loading, average variance extracted (AVE), and composite reliability are calculated.

Convergent validity is the degree to which examine multiple measure to the same construct. Following suggestions in Fornell and Larcker [24] and Hair et al. [25], the convergent validity was evaluated by two criteria. The first is that all the factor loadings on respective constructs should be greater than 0.5, and the second is that the AVE for every construct should exceed the threshold value of 0.5. In this study these requirements were all met, and thus the convergent validity was verified.

As for reliability, it can be assessed by computing the value of the composite reliability. Following the suggestions of Hair et al. [25], an acceptable value of composite reliability is above the benchmark of 0.7. In this paper, this requirement was also reached, and thus the reliability was verified.

The discriminate validity can be verified through the average variance extracted for each construct. When the value exceeded the squared correlation between any pair of distinct constructs [25], it can be implied that the constructs were empirically distinct. And, the results of this paper were all met, and confirmed the discriminate validity.

5.2 Test of the Structural Model

By testing the goodness of fit of the research framework that this paper proposed, we can test whether each hypothesis is true or not. Following the suggestion of Bagozzi and Yi [26] and Hair et al. [25], the overall model fit can be identified by the absolute fit indices, relative indices and parsimonious fit indices. By using AMOS, we had absolute fit measurement, incremental fit measurement and parsimonious

measurement. Consequently, those important indices that obtained from the AMOS are all fulfilled the criterion [25, 26], and thus this model is acceptable.

6. Conclusions

From the empirical analysis, we find that our research framework is properly fit. However, the regression coefficients of some paths are not significant. Therefore, several hypotheses are not valid, namely H2, H8 and H11, while the other hypotheses are all true. The final results are summarized in Figure 1.

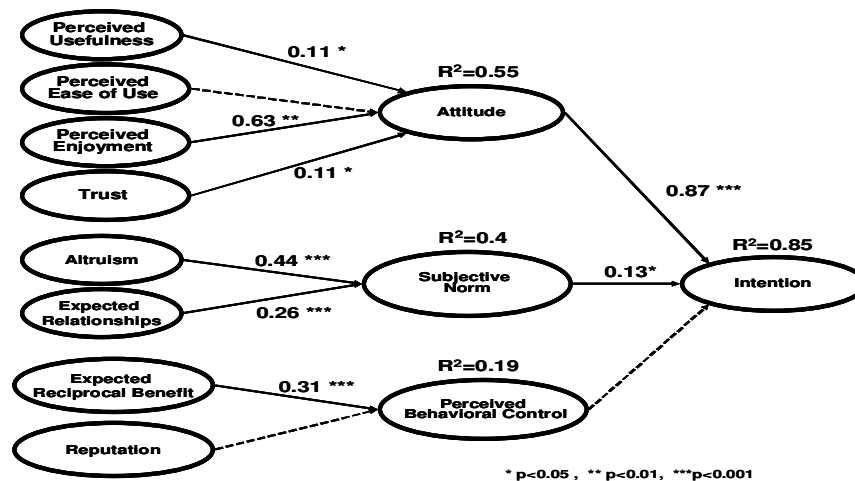


Figure 1 — Result of SEM analysis

Perceived enjoyment is the most important factor that will affect attitude, while attitude is the most important factor that affects intention. Most people are exhausted from their work or studies, and so they want to relax. Therefore, perceived enjoyment will be deeply affect individuals' attitude and to their intention to use a novel technology.

Obviously, trust is a basic requirement for linking each individual, and this will also affect the users' attitudes. However, in the virtual world there exist many traps and dangers, and people might already be wary of strangers online. Hence, blog users would be watchful for suspicious behaviors, and since they are already cautious in using blogs, trust is a minor factor with regard to their attitude.

Subjective norm is a force from someone who makes blog users be deeply concerned. Obviously, this will strongly affect the intention to use a blog, and this is reflected in the results of this paper. However, its effect is not as strong to attitude. For the antecedents of subjective norm, altruism is more important than expected relationship.

Although expected reciprocal benefit has a significant effect on perceived behavior control, perceived behavior control effect on blog users' intention is not significant.

This means that individuals lack self controlling power online, and thus, this factor of perceived behavior control is meaningless for blog users.

Moreover, blogs should not be limited to individuals' mutual interface. Organizations can extend blogs for advancing management applications, and E-learning platforms to enhance their performance. It is suggested that establishing organization's own blogs in their trusting environment with an enjoyable content, would be an effective tool for knowledge sharing and learning.

7. References

1. Ajzen I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
2. Singh R.P. & Singh L.O. (2008). Blogs: Emerging Knowledge Management Tools for Entrepreneurs to Enhance Marketing Efforts. *Journal of Internet Commerce*, 7, 470–484.
3. Davenport T. H. & Prusak L. (1998). *Working knowledge: How organizations manage what they know*. Boston: Harvard Business School Press.
4. Blau P. M. (1964). *Exchange and Power in Social Life*. New York: Wiley.
5. Davis F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13, 319–340.
6. Legris P., Ingham J., and Collette P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information & Management*, 40, 1–14.
7. Venkatesh V., Speier C., and Morris MG. (2002). User acceptance enablers in individual decision making about technology: toward an integrated model. *Decision Sciences*, 33, 297–316.
8. Lee M.K.O., Cheung C.M.K., and Chen Z. H. (2005). Acceptance of Internet-based learning medium: the role of extrinsic and intrinsic motivation. *Information & Management*; 42, 1095–1104.
9. Hsu C.L. & Lu H.P. (2007). Consumer behavior in online game communities: a motivational factor perspective. *Computers in Human Behavior*. 23, 1642–59.
10. Chen C., Wu J., and Yang S. C. (2008). Accelerating the Use of Weblogs as an Alternative Method to Deliver Case-Based Learning. *International JI on E-Learning*, 7, 331–349.
11. Huang L. S., Chou Y. J., and Lin C. H. (2008). The Influence of Reading Motives on the Responses after Reading Blogs. *CyberPsychology & Behavior*, 11, 351– 355.
12. Wasko M. M. & Faraj S. (2000). It is what one does: why people participate and help others in electronic communities of practice. *Journal of Strategic*

- Information Systems*, 9, 155-173.
13. Wasko M. M. & Faraj S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, 29, 35– 57.
 14. Lu H. P. & Hsiao K. L. (2007). Understanding intention to continuously share information on weblogs. *Internet Research*, 17, 345–361.
 15. Teo T. S. H., Lim V. K. G., and Lai R. Y. C. (1999). Intrinsic and extrinsic motivation in Internet usage. *Omega*, 27, 25–37.
 16. Hendriks P. (1999). Why Share Knowledge? The Influence of ICT on the Motivation for Knowledge Sharing. *Knowledge and Process Management*, 6, 91–100.
 17. Chen Y. H., Chien S. H., Wu J. J., and Tsai P.Y. (2010). Impact of Signals and Experience on Trust and Trusting Behavior. *CyberPsychology, Behavior, and Social Networking*, 13, 539–546.
 18. 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, 4–21.
 19. Fishbein M. & Ajzen I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*, M.A: Addison-Wesley Reading.
 20. Bock C.W., Zmud R.W., and Kim Y.G. (2005). Behavioral intention formation in knowledge sharing: examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 29, 87–111.
 21. Pennebaker J. W. & Beall S. K. (1986). Confronting a traumatic event: Toward an understanding of inhibition and disease. *Journal of Abnormal Psychology*; 95, 274–281.
 22. Nunnally J.C. (1978). *Psychometric Theory* (2nd Ed.), New York: McGraw-Hill.
 23. Gefen D., Straub D.W., and Boudreau M.C. (2000). Structural Equation Modeling & Regression: Guideline for Research Practice. *Communications of the Association for Information Systems*, 4, 1–77.
 24. Fornell C. & Larcker D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.
 25. Hair J. F., Anderson R. E., Tatham R. L. and Black W. C. (1998). *Multivariate Data Analysis* (5th ed.), New Jersey: Prentice Hall.
 26. Bagozzi R. P. & Yi Y. (1988). On the Evaluation of Structural Equation Models. *Academy of Marketing Science*, 16, 76–94.