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2007

# Why People Blog? An Empirical Investigations of the Task Technology Fit Model

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### Recommended Citation

Shang, Rong-An; Chen, Yu-Chen; and Chen, Cheng-Min, "Why People Blog? An Empirical Investigations of the Task Technology Fit Model" (2007). *PACIS 2007 Proceedings*. 5.

<http://aisel.aisnet.org/pacis2007/5>

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## 17. Why People Blog? An Empirical Investigations of the Task Technology Fit Model

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### Abstract

*Blog has been one of the fastest growing applications in the Internet. Content provided by users has also been an important source of information. Current studies, however, can not explain well why people build their blog. Based on the Task-Technology Fit (TTF) model, this study examines both the impacts of task and technology characteristics on user evaluation of blog and blog usage. Task needs for using blog are described as self-presentation, self-orientation, and sociality need; technology characteristics refer to the perception of forward and backward social presence. Results of this study show that self-presentation, sociality need, and the perception of social presence can explain why people build their blog. Interactions between task and technology features also affect user evaluation and blog usage, as predicted by the TTF model.*

**Keywords:** Blog, Task-Technology Fit model, Self-presentation, Social presence theory, Self-orientation

### Introduction

Internet has changed how people communicate with the others and how information produces and distributes in society. Among numerous new applications developed for the Internet, blog may be one of them which grow fastest. A blog or weblog is a chronological listing of online postings, containing personal opinions, daily lives, or stories (Ip 2005). Since some blog services introduced in 2000, blog has been wide-spreading popular and become a new form of personal communication (Du and Wagner 2006; Perlmutter and McDaniel 2005; Rosenbloom 2004). Blog enables disintermediation in the publishing industry; writers can now publish their works and face their readers directly, without being controlled by the publishing companies (Choi et al. 1997; Gillmor 2006). Blog also leads the idea of Web2.0, in which we value abundant content provided by active users and technologies which aggregate them (Anderson 2006; Liang and Tanniru 2007; O'Reilly 2005).

To understand why blog has been so popular, especially among regular people, several studies have investigated factors that motivate people using blog (Nardi et al. 2004a; 2004b; Schiano et al. 2004). Theories of IT adoption suggest it's the fitness between task requirements and capabilities of technology that determines the performance of using the technology, for examples, the information processing model in the organizational level (Tushman and Nadler 1978), and the Task-Technology Fit (TTF) model in individual level (Goodhue 1995; Goodhue and Thompson 1995). Previous studies of communication technology also suggest both task and technology factors contribute to explain technology usage (Fulk et al. 1990; Nass and Mason 1990). Current studies of blog usage, however, seldom consider integrating task and technology perspective and focus only on personal motivations. Except for its easy to use, we are not sure what features of blog attract people to use it.

Because building blog is an individual behavior, this study based on the TTF model to examine both the impacts of users' motivations and characteristics of blog technology to explain why people build their blog. We use the theory of self-presentation and self orientation to describe personal motivations, and social presence theory to describe the characteristics of blog. Results of this study can help us understanding better about the cyberspace that primary build by active users.

### **Task Needs**

Communication technology usage is determined both by the characteristics of the technology and the needs of the users (Nass and Mason 1990). The TTF model suggests that a better fit between technology functionalities, task requirements, and individual abilities will lead to better performance. Goodhue and Thompson (1995) propose the technology-to-performance chain model and assert that for an information technology to have a positive impact on individual performance, the technology must be utilized, and the technology must be a good fit with the tasks it supports. Goodhue (1995) further argue that task-technology fit determines the performance of using information technology, and that users can reliably evaluate the task-technology fit.

TTF model has been widely used to explain variant information technology usages in organizational context, such as group support systems (Zigurs and Buckland 1998; Zigurs et al. 1999), and systems for managerial decision making (Dishawa and Strong 1999; Goodhue 1995; 1998; Goodhue and Thompson 1995; Staples and Seddon 2004). Recently, some researchers extend the model to examine behaviors in the Internet (D'Ambra and Wilson 2004; Kloppling and McKinney 2004; Wells et al. 2003). These systems, however, are all used for specific tasks. Blog is a general-purposed application. What's the task needs one desires to fulfill by using blog?

Ip (2005) proposes a TTF model to explain why and how people use blog. But she mixes writing and reading blog in the analysis. Schau and Gilly (2003) propose a model to describe why and how people construct their personal web sites. People build personal web site to communicate with somebody. At the beginning, it may be motivated by some triggering events, by the user desire for personal growth, or the user want to advocate something. Nardi et al. (2004b) suggest blogging as a social activity, a form of social communication in which blogger and audience are intimately related through the writing and reading of blogs. They indicate that people blog in order to update others on activities and where about, express opinions to influence others, seek others' opinions and feedback, think by writing, and release emotional tension. Nardi et al. (2004a) also argue that documenting one's life, providing commentary and opinions, expressing deeply felt emotions, articulating ideas through writing, and forming and maintaining community forums, are five major motivations for blogging.

The motivations proposed by Nardi and her colleagues are discovered from exploratory studies and lack of a theoretical base. According to their findings and Schau and Gilly's (2003) self presentation model, we propose self presentation, self growth or self orientation, and sociality as three major reasons for people to build their blog.

### ***Self-presentation***

Schau and Gilly (2003) suggest that personal web site is a conspicuous form of consumer self-presentation. Self-presentation is the intentional and tangible component of identity

(Goffman 1959). Social actors engage in the goal-directed activity of controlling information to influence the impressions formed by an audience about oneself (Schlenker and Wowra 2003). Consumers self-present by displaying sign, symbols, brands and practices to communicate their desired impression, as they select clothes, hair-styles, automobiles, logos, and so forth in their every living (Schau and Gilly 2003).

People acquire and display possessions as tangible symbols of identity; however, they may not be able to present the ideal values that they aspire to have but can't maintain in real life. On the other hand, web sites give consumers greater freedom to express their identities through digital association with limitless digital symbols, rather than ownership or proximity (Schau and Gilly 2003). Compare with people in the real life, because writers intentionally construct the whole web pages themselves, they can more easily control presented information and show more perfectly their desired impression in the cyberspace. Bloggers can also hide behind their blog to the point of self-attributed cowardice (Nardi et al. 2004b). Previous studies suggest advocacy, a desire for professional or personal self-promotion, a fulfillment of a fantasy, and expressing opinions or emotions can motivate people to blog (Nardi et al. 2004a; Nardi et al. 2004b; Schau and Gilly 2003); these motivations may all relate to peoples' self-presentation need.

Self-presentation could explain why people build their blog. TTF model argues that the more the technology can satisfy the task requirements of a goal-directed user, the more positive the user will evaluate the technology. TTF model also assumes users can evaluate the technology based on the perceived fitness between the technology and their task requirements. The measurement of the perceived task-technology fit, however, depends on specific task domain. If the technology is not used to accomplish some specific tasks, it may not be easy to describe well the task-technology fit. Therefore, instead of using task-technology fit, we redefine a user evaluation of the system as an assessment made by a user, along some continuum from positive to negative, about whether he/she believe it is worth to use the system to satisfy his/her personal needs. If blog can help users to present themselves, for people with more self-presentation need, they will have a more positive evaluation of blog. Therefore, we propose the hypothesis that:

*H1a: Users' self-presentation need positively affect their evaluation of blog.*

TTF model suggests users can perceive task-technology fit and the perceived fitness can further affect their usage and the performance of using the technology. Task-technology fit can explain the impacts of task and technology characteristics on the usage of the technology. For the user evaluation we proposed, we also propose hypothesis that:

*H1b: Users' self-presentation need positively affect their usage, and users' evaluation of blog mediates the impact of self-presentation need on blog usage.*

### ***Self Orientation***

Achievement goal theory is a major direction in motivational research (Midgley et al. 1998). The goals individuals are pursuing create the framework within which they interpret and react to events (Dweck and Leggett 1988). There are two major goals that individuals pursue in achievement situations: performance goals, in which individuals seek to gain positive judgments of their competence and avoid negative judgments of their competence; and learning goals, in which individuals seek to increase their ability or master new tasks (Dweck

1986; Elliott and Dweck 1988). Performance goals are associated with a vulnerability to challenge avoidance, as well as to negative ability attributions, negative affect, and low persistence in the face of difficulty. In contrast, learning goals relate to challenge seeking, as well as an effort/strategy focus, positive affect, and high persistence under difficulty (Dweck and Leggett 1988).

Schau and Gilly (2003) suggest people blog because they desire for personal growth, for examples, an educational endeavor, or an exercise in self-discovery. Nardi et al. (2004a; 2004b) also suggest people blog in order to articulate ideas through writing and seek others' opinions and feedback. Willing to seek for challenge to improve their ability is the main feature of learning goal orientation. Blog is a good place for a leaning oriented people to exercise writing or even producing creations, to master web techniques, to reflect what he/she has learned or experienced, and to look for feedbacks from others. Based on the TTF model discussed above, we propose the hypotheses that:

*H2a: Users' learning goal orientation positively affects their evaluation of blog.*

*H2b: Users' learning goal orientation positively affects their usage, and users' evaluation of blog mediates the impact of learning goal orientation on blog usage.*

Learning goal and performance goal orientation are not two polarities of a single continuum (Button et al. 1996). The impact of performance goal orientation on blogging is somewhat debatable. For performance oriented people with high confidence in building blog, blog can be useful for them to show their ability to a huge number of audiences. High confidence is necessary within a performance goal to support a mastery orientation; however, high confidence may be difficult to sustain within a performance goal (Dweck and Leggett 1988). Besides, blog is a new form of composition that a blogger needs to continuously write his/her diaries, journals, or stories to some unknown audiences. This is a challenging work for most people without sufficient practices before. Therefore, we also hypothesize that:

*H3a: Users' performance goal orientation negatively affects their evaluation of blog.*

*H3b: Users' performance goal orientation negatively affects their usage, and users' evaluation of blog mediates the impact of performance goal orientation on blog usage.*

### ***Sociality***

Sociality is an individual's tendency to associate with others and to form social groups. The sociality need refers to people's desire to feel keeping in touch with some others, and feel not being alone in the society. Sociality need relates to the love and belongingness need in Maslow's hierarchy of needs model. Baumeister and Leary (1995) suggest that the need to belong, that people have a pervasive drive to form and maintain lasting, positive, and significant interpersonal relationships, being a fundamental motivation of human beings. Humans generally need to feel belonging and acceptance, they also need to love and be loved by others. Blogging is a social activity, a form of social communication in which blogger and audience intimately connected through the writing and reading of blogs (Nardi et al. 2004b). Blog enables individuals to effectively inform others about his/her current status, to gain feedback from the others, and to form and maintain community. Sociality need may be a major reason why people build blog (Ip 2005). We also propose the hypotheses that:

*H4a: Users' sociality need positively affect their evaluation of blog.*

*H4b: Users' sociality need positively affect their usage, and users' evaluation of blog mediates the impact of sociality need on blog usage.*

### **Social Presence**

Studies of Computer-Mediated Communications (CMC) often use social presence theory to explain differences among communication medium. Social presence is the degree to which the medium facilitates awareness of the other person and interpersonal relationships during the interaction (Short et al. 1976). Due to narrow bandwidth and a lack of communication channels to transmit social cues in dialogue, previous studies usually suggest that CMC is a low social presence medium; less social presence communication is less friendly, emotional, or personal, and more serious, businesslike, or task oriented (Rice 1993; Short et al. 1976). Some researches, however, suggest CMC is not necessarily completely unemotional (Rice and Love 1987). Hiltz and Turoff (1978) contend that CMC is better thought out, better organized, and richer than natural conversation; experienced users develop an ability to express missing nonverbal cues in written form. Walther (1992) also suggests that communicators can develop individuating impressions of others through accumulated CMC messages.

The relationship between blogger and reader is asymmetrical (Nardi et al. 2004b). The degree to which a reader can perceive the blogger differences with the degree to which a blogger can perceive their readers. We named the former as forward social presence and the later as backward social presence. Blog combines the immediacy of up-to-the-minute posts, latest first with a strong sense of the author's personality, passions, and point of view (Nardi et al. 2004a). For the forward social presence, blog differences with traditional CMC in several ways: First, although blog is primarily text based, users can easily integrate pictures, audio, and video in their works. It may be the first time the individual user can appropriate the power of multimedia communication by him/herself. Second, the blogger usually post a series of his/her stories, instead of a bundle of isolated pieces of articles. Besides, these works will all be contained in the web. Following well organized stories, readers can feel familiar and intimate with the blogger, even more than in the face-to-face communication situation. On the other hands, unlike people in the fast-paced give-and-take interactions of face-to-face or media such as instant messaging, bloggers can more easily hide behind their blog and control what they want to show to their audiences (Nardi et al. 2004b).

Forward social presence, however, is a characteristic subjectively perceived by the user, instead of an objective feature of the blog technology. A user's ability and experience of using a multimedia channel to tell a good story determines how he/she perceived the forward social presence of blog. Forward social presence is about the belief that one has the capability to perform a particular job well. It relates to self-efficacy in the social cognitive theory (Bandura 1977, 1982). Studies of information systems often use self-efficacy to explain system usage (Compeau and Higgins 1995). Users who perceive blog as a high forward social presence medium may be more likely to feel blog can fit with their task need to communicate with the others, therefore will have a better evaluation of blog and use blog more. We propose the hypotheses that:

*H5a: Users' perceived forward social presence of blog positively affects their evaluation of blog.*

*H5b: Users' perceived forward social presence of blog positively affect their usage, and users' evaluation of blog mediates the impact of perceived forward social presence on blog usage.*

Blog is an interactive broadcast medium. Audiences can respond to the blogger in public or private. They can also comment on an article by citing it in their blog, and link them together so readers can trace back between them. It's important for a blogger to get feedbacks from their audiences, to know who are reading his/her articles, and how they think about them (Nardi et al. 2004b). Desire to meet readers' expectations, based on increased exposure to feedback and other web sites, may even be a major motivation for continuing developing the blog (Nardi et al. 2004b; Schau and Gilly 2003). Therefore, we also propose the hypotheses that:

*H6a: Users' perceived backward social presence of blog positively affects their evaluation of blog.*

*H6b: Users' perceived backward social presence of blog positively affect their usage, and users' evaluation of blog mediates the impact of perceived backward social presence on blog usage.*

The TTF model suggests that the impacts of information technology characteristics on user evaluations will depend upon how important the characteristics are, which determined by users' task needs. This argument corresponds exactly to the fit what Venkatraman (1989) categories as moderation. Therefore, Goodhue (1995) proposes that the interactions between tasks and technologies will affect user evaluations of task-technology fit and such interaction effects are the essence of what is meant by a "fit" relationship. Dishaw and Strong (1999) also suggest the interaction approach more directly corresponds the definition of task-technology fit as the matching of the capabilities of the technology to the demands of the task. For the four task and two technology characteristics we proposed, although it is not easy to attach theoretical meanings to all interaction terms (Venkatraman 1989), we also propose the following hypotheses for the exploratory purpose:

*H7a: The interactions between task and technology characteristics will affect users' evaluation of blog.*

*H7b: The interactions between task and technology characteristics will affect their usage, which mediated by users' evaluation of blog.*

## **Research Method**

We conducted a survey for bloggers to test the hypotheses we proposed and explain why they build their blog. Previous studies have proposed several dimensions for self-presentation (Hewitt et al. 2003; Roth et al. 1986). Self-presentation is sometimes called impression management and can be divided into the processes of impression motivation and impression construction (Leary and Kowalski 1990). Impression motivation is associated with the desire to create particular impressions in others' minds; impression construction decides what impression management tactic people adopt. Based on this two components model of impression management, Conroy et al. (2000) develop a questionnaire for self-presentation in exercise. We collected and revised descriptions and items of impression motivation in Leary and Kowalski (1990) and Conroy et al. (2000) to measure users' self-presentation need, resulting in 6 7-point Likert-type scale items.

Learning and performance orientations were assessed using two 8-item scales developed by Button et al. (1996). These scales have been widely used and shown good validities and reliabilities in past studies (Bell and Kozlowski 2002; Ford et al. 1998; Phillips and Gully 1997). Nine items measuring sociality need were developed in this study. We derived them from previous literatures on the need to belong (Baumeister and Leary 1995), and interpersonal communication motivation (Spitzberg and Cupach 1984). Social presence reflects the capacity of the medium to convey expressiveness and emotional content. Chidambaram and Jones (1993) and Burke and Chidambaram (1999) adopt the instrument proposed by Short et al. (1976) to measure the perception of social presence, by asking participants to evaluate the extent to which the medium allowed them to be personal, expressive, emotional, hot, close, humanizing, and sensitive. The result of pretest, however, indicates that after translation, the subjects may not understand what a humanizing and sensitive medium is. So these items were dropped from the instrument. Because we assumed the forward social presence of blog differ with the backward, we used two 5-item scales to measure the perceptions of both directions.

Finally, we developed scales to the measure users' evaluation of blog and of their usage. Because blogs are not used for solving specific tasks, we revised the definition of user evaluation as the evaluation of fitness between task and technology in TTF model, to redefine it as the users' subjective evaluation of whether writing blog is worth for them to satisfy their needs. It is measured by 7 items. Blog usage refers to only writing blogs in this study. It was measured by both self-perceived and self-recalled usage. The self-perception of blog usage is the bloggers' subjective perception of the time and efforts they spend in their blog. We used 6 items to measure subjective perceived blog usage. All the items mentioned above are in 7-point Likert-type scale. We also measured blog usage by asking subjects to recall how much time they spend in their blog and how often they write an article for their blog. Scales of the items measuring these self-recalled behaviors are shown in Table 1.

## **Results**

A principal components analysis was conducted to examine the measurement model. Nine factors with eigenvalues larger than one were extracted. The reversed items of sociality need were separated from the other items of sociality need and we dropped the factor of the reversed items. The items of performance orientation were also divided into two factors. Probably due to the translation problem, items asking if the subjects feel smart were loaded in a separated factor and we dropped this factor from further analyses. Items of user evaluation and self-perceived usage were loaded in the same factor. Utilization will reciprocally affect user evaluation through their impacts on performance (Goodhue and Thompson 1995). Besides, self-fulfillment effect can also cause self-perceived usage and user evaluation highly correlated. It may not be easy to distinguish between them in an one shot self-administrated survey. We treated them as two highly correlated variables for user evaluation and used self-recalled usage to measure blog usage in further analyses. Table 2 shows the Cronbach's  $\alpha$  of variables and correlations between variables. The Cronbach's  $\alpha$  of variables are all larger than 0.7.

Hierarchical regressions were applied to test our hypotheses with interaction effects. We used the centering mean, which subtracted the mean from each score, prior to transforming into the multiplicative term to avoid multicollinearity problem (Aguinis 1995; Cronbach



**Table 1. Demographics and Behaviors of Respondents**

		Sample		Percent (%)	
		Sample	Percent (%)		
		1.1.1.1. Sample		Percent (%)	
<b>Age</b>		<b>Occupation</b>			
Below 14	1	0.2	Students	282	60.3
15~19	20	4.3	Employees	137	29.5
20~24	241	51.5	liberal professions	27	5.8
25~29	188	40.2	Housewife/househusband	4	0.9
30~34	15	3.2	Others	18	3.6
35~39	2	0.4	<b>How much time in average do you spend in your blog per week (including writing, reading, and responding)?</b>		
Above 40	1	0.2	Less than 30 minutes	160	34.2
<b>Gender</b>					
Male	193	41.2	30 minutes to 1 hour	111	23.7
Female	275	58.8	1 to 1.5 hours	72	15.4
<b>Education</b>		<b>How often do you write an article for your blog?</b>			
Primary school or below	0	0	Less than once per month	84	17.9
Junior high school	2	0.4	About once per month	58	12.4
Senior high school	7	1.5	About twice per month	87	18.6
Undergraduate	303	64.8	About once per week	117	25.0
Graduate school	156	33.3	About 2-3 times per week	70	15.0
		More than three times per week			
		52			
		11.1			

**Table 2. Correlations between Variables**

	X1	X2	X3	X4	S1	S2	Y1	Y2	Y3
Self-presentation need (X1)	1.00								
Learning orientation (X2)	.26**	1.00							
Performance orientation (X3)	.36**	.29**	1.00						
Sociality need (X4)	.29**	.27**	.34**	1.00					
Forward social presence (S1)	.14**	.26**	.29**	.41**	1.00				
Backward social presence (S2)	.04	.18**	.11*	.18**	.54**	1.00			
User evaluation (Y1)	.19**	.23**	.21**	.47**	.66**	.44**	1.00		
Subjective usage (Y2)	.13**	.14**	.05	.34**	.45**	.41**	.77**	1.00	
Objective usage (Y3)	-.08	.07	.04	.20**	.28**	.17**	.48**	.50**	1.00
Cronbach's $\alpha$	.82	.91	.79	.82	.90	.91	.91	.88	.70

\*\*p&lt;0.01, \*p&lt;0.05

1987; Morris et al. 1986). We added male, age, education, and student in the models as four control variables because these variables may also influence the adoption of Blogs. Male and student are two dummy variables to measure gender and occupation. Results of the regression on user evaluation and self-perceived usage are shown in Table 3. The direct effects of technology and task characteristics on user evaluation and self-perceived usage were tested in Model 1 and Model 3.  $R^2$  in Model 1 and 2 show that our models explain more than half of the variances of user evaluation. For the technology characteristics, the perceptions of both the forward and backward social presence affect user evaluation and self-perceived usage. People who perceive blog as a higher social presence medium will evaluate blog higher, and also perceive they use blog more. For the task characteristics, sociality need is the major motivation for people to build their blog. The impacts of self-presentation,

learning orientation, and performance orientation on user evaluation are all insignificant. Performance orientation, however, negatively affects self-perceived usage. Bloggers who are high performance orientated do not evaluate blog lower. On the other hand, probably due to that they have a higher expectation about themselves, high performance oriented bloggers will perceive they use blog less often.

The hypotheses of interaction effects were tested in Model 2 and Model 4. Model 4 shows the hypothesis of interaction effect on self-perceived usage is not supported. But the interaction effects of sociality need and both the perception of forward and backward social presence on user evaluation are significant. It is interesting that while the interaction effect of sociality need and forward social presence is positive, the interaction effect of sociality need and backward social presence is negative. People with high sociality need will evaluate blog lower as they perceive blog to be a high backward social presence medium. This result supports the idea that limited interactivity may be a helpful feature for blog (Nardi et al. 2004b).

We added scores of the two questions about self-recalled usage as the variable measures using behavior. Results of the regressions on self-recalled usage are shown in Table 4. Model 5 tests the direct effects of task and technology characteristics; Model 6 tests the interaction effects and Model 7 tested the mediation effects of user evaluation. Results in Table 3 and Table 4 show the users' sociality need and the perception of forward social presence, fully mediated by their evaluation of blog, affect their blogging. On the other hand, although backward social presence affects user evaluation, its impact on usage is insignificant. The impact of performance orientation on usage is also insignificant, suggests the significant results in Model 3 and 4 are caused by that bloggers who are high performance orientated may have a higher expectation about themselves, but they may not truly blog less. Finally, although self-presentation does not affect user evaluation, it is found to negatively affect usage. This result suggests that people may not consciously aware of the goal of self-presentation, or the script used to accomplish the goal, but self-presentation is still a pervasive component of social activity (Schlenker and Wowra 2003). Further analyses indicated that self-presentation need shows a negative impact after the other independent variables being added in the regression model. The interactions between self-presentation need and forward and backward social presence also affect usage. It should also be noted that the interaction effect of self-presentation need and backward social presence is negative.

People with high self-presentation need will blog less as they perceive blog to be a high backward social presence medium. Finally, two control variables, male and age, were found to relate to blogging.

## **Conclusions**

This study examines both the impacts of users' motivations and technology characteristics of blog to explain why people build their blog. The core argument of TTF model indicates that task needs and technology characteristics can affect technology usage, through their impacts on user evaluation of the technology. For the four motivations we proposed, this study finds that the sociality need is a major reason for people to build their blog. Users' sociality need affects using behavior through its impact on users' evaluation of blog. On the other hand, self-presentation need was found to negatively affect blog usage, but does not affect users'

	Model 5		Model 6		Model 7	
	$\beta$	$t$	$B$	$t$	$\beta$	$t$
Male	-.13	3.03*	-.14	3.10**	-.14	3.37**
Age	-.18	-3.29*	-.18	-3.28**	-.15	-3.08**
Education	.01	.19	.02	.46	.02	.36
Student	.01	.14	.00	.07	.00	.06
Self-presentation need (X1)	-.15	-3.21*	-.17	-3.44**	-.20	-4.48**
Learning orientation (X2)	.04	.80	.05	1.10	.03	.62
Performance orientation (X3)	-.09	-1.77 <sup>+</sup>	-.09	-1.67 <sup>+</sup>	-.06	-1.21
Sociality need (X4)	.20	3.89*	.19	3.74**	.07	1.48
Forward social presence (S1)	.22	3.89*	.23	4.00**	-.03	-.52
Backward social presence (S2)	.03	.63	.04	.71	-.04	-.82
X1' × S1'			.14	2.52*	.15	2.92**
X2' × S1'			.04	.52	-.01	-.07
X3' × S1'			-.02	-.29	.00	.07
X4' × S1'			-.06	-1.02	-.11	-2.12*
X1' × S2'			-.14	-2.60*	-.12	-2.31*
X2' × S2'			.01	.18	-.01	-.08
X3' × S3'			.04	.77	.03	.56
X4' × S4'			-.06	-1.15	.03	.67
User Evaluation					.53	9.34**
$R^2$	.16		.19		.32	
$F(df1/df2)$	8.95(10/457)**		5.94(18/449)**		11.29(19/448)**	
$\Delta R^2$			.03 <sup>a</sup>		.13 <sup>a</sup>	
$F(df1/df2)$			1.98(8/449)*		87.16(1/448)**	

\*\* : p<0.01, \* : p<0.05, <sup>+</sup> : p<0.1

<sup>'</sup> : The centered mean

<sup>a</sup> : Compared with the previous model.

	Use Evaluation				Self-perceived Usage			
	Model 1		Model 2		Model 3		Model 4	
	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$B$	$t$
Male	-.00	.12	-.00	.03	.06	-1.57	.07	-1.72 <sup>+</sup>
Age	-.06	-1.44	-.05	-1.13	-.10	-2.00*	-.10	-1.96 <sup>+</sup>
Education	.01	.12	.01	.31	-.04	-.94	-.03	-.55
Student	-.00	-.014	.00	.03	-.03	-.64	-.03	-.67
Self-presentation need (X1)	.05	1.44	.06	1.66 <sup>+</sup>	.07	1.63	.07	1.51 <sup>+</sup>
Learning orientation (X2)	.02	.63	.05	1.33	.01	.25	.02	.41
Performance orientation (X3)	-.07	-1.77 <sup>+</sup>	-.05	-1.37	-.17	-3.68**	-.16	-3.39**
Sociality need (X4)	.25	6.48**	.23	5.80**	.23	4.91**	.22	4.67**
Forward social presence (S1)	.49	11.22**	.49	11.24**	.26	5.08**	.26	4.87**
Backward social presence (S2)	.13	3.29**	.15	3.65**	.24	5.17**	.25	5.12**
X1' × S1'			-.02	-.38			.04	.66
X2' × S1'			.08	1.46			.00	.03
X3' × S1'			-.04	-.87			-.02	-.26
X4' × S1'			.09	2.31**			.06	1.23
X1' × S2'			-.05	-1.19			-.01	-.25
X2' × S2'			.03	.62			.03	.48
X3' × S3'			.03	.63			-.04	-.77
X4' × S4'			-.18	-4.42**			-.06	-1.24
$R^2$	.50		.53		.31		.32	
$F(df1/df2)$	45.47(10/457)**		28.43(18/449)**		20.47(10/457)**		11.62(18/449)**	
$\Delta R^2$			.03 <sup>a</sup>				.01 <sup>a</sup>	
$F(df1/df2)$			4.07(8/449)**				.69(8/453)	

\*\* : p<0.01, \* : p<0.05, <sup>+</sup> : p<0.1

<sup>'</sup> : The centered mean

<sup>a</sup> : Compared with the previous model.

evaluation about blog. This result suggests the impact of self-presentation may be silent that people do not consciously aware of it. The negative impact of self-presentation need however, needs to be further confirmed in future studies.

Both the impacts of learning and performance orientation on blogging are insignificant. Performance orientation negatively affects users' subjective perception of their usage; however, this impact may be caused by that users with high performance orientation will have a higher expectation about themselves. Learning orientation was found to be not related to the evaluations and usage of blog. Compared with traditional personal webpage, blog may be very easy to use that users believe using blog need not to be learned. Besides, most users may not get enough helpful feedbacks from their blog. Therefore, they do not perceive blog as helpful for them to practice their writing.

For the technology characteristics, this study empirically shows the differences between the perceptions of forward and backward social presence, both in the measurement and in the casual model. The perception of forward social presence is the major technical reason for users building blog. It affects user evaluation and their self-perceived and self-recalled usage. The interaction of sociality need and forward social presence affects user evaluation positively, and so does the interaction of forward social presence and self-presentation need on blogging behavior. This finding consist with the social presence theory that people who perceive blog as a high forward social presence medium will evaluate blog higher and for their interpersonal interactions, and blogging more for self-presentation. On the other hand, backward social presence affects only user evaluation and their self-perceived usage. It should be noticed that the interaction effects of backward social presence and sociality need on user evaluation, and interaction effects of backward social presence and self-presentation need on blogging, are both negative. The lack of social cues and asynchronous in the computer-mediated communication environment may facilitate people control over their self-presentation and interaction with others (Walther 1995, 1996). Backward social presence may not be a beneficial feature for users to satisfy their sociality and self-presentation needs that bloggers may prefer a medium in which the interaction they can control (Madell and Muncer 2007; Nardi et al. 2004b).

Finally, because it is not easy to acquire bloggers to participate in the survey, we used several convenience samples in this study. Motivations of bloggers with different occupations or in different age may not be the same. Many subjects in our sample are students. This is a limitation of this study and it should be noticed that whether results of this study can be generalized into other populations.

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