A motivational model of blog usage

Chechen Liao
*Department of Information Management, National Chung Cheng University,
Chiayi, Taiwan*

Pui-Lai To
*Department of Management Information Systems, National Chiayi University,
Chiayi, Taiwan, and*

Chuang-Chun Liu
*Department of Information Management,
Shu-Zen College of Medicine and Management, Kaohsiung, Taiwan*

Abstract

Purpose – There has been an explosive growth of blog usage recently. However, little research has explored the forces motivating people to engage in blog activities. The purpose of this paper is to suggest that the driving forces to engage in blog participation not only includes utilitarian motivation (i.e. perceived usefulness) and hedonic motivation (i.e. perceived playfulness) but also habitual behaviour and social identity (blog identification). The quality of the blog is included as an antecedent to perceived usefulness and perceived playfulness.

Design/methodology/approach – In total, 225 valid questionnaires were collected from blog users. Structural equation modelling was used to test the research hypothesis.

Findings – The results show that blog users' intentions to participate in blogs are determined by all four key drivers: habit, perceived playfulness, blog identification, and perceived usefulness. Blog quality has an effect on perceived usefulness and perceived playfulness.

Research limitations/implications – Previous studies emphasise the importance of perceived usefulness as the key determinant for user acceptance of technology. However, in the blog context this study finds habit, perceived playfulness, and blog identification have more significant effects on users' intention than perceived usefulness.

Practical implications – Blog hosts should encourage habitual blog usage (habit), pay more attention to the hedonic nature of the blog (perceived playfulness) and establish a stronger sense of blog identification among participants, in order to retain active users.

Originality/value – This study articulates and empirically validates a motivational research model of blog usage, helping researchers to better understand such behaviour.

Keywords Blogs, User studies, Motivation (psychology), Blog quality, Perceived usefulness, Perceived playfulness, Habit, Blog identification, Blog usage

Paper type Research paper

Introduction

Blogs have grown explosively in popularity. Blog users can be divided into two categories: blog readers and blog owners. According to a recent survey, over 346 million people read blogs (Pew Research Center, 2011). In 2011 53.5 per cent of internet users read blogs (eMarketer, 2011) and 30 per cent of internet users had created or worked on their own blog (Pew Research Center, 2011). Today blogs are increasingly

attracting people to share their daily activities with their peers and maintain existing relationships (Ip and Wagner, 2008). Businesses and organisations have also begun to recognise blogs' potential value (Du and Wagner, 2006; Zhang *et al.*, 2009). Several large firms such as Google, Nike and Paramount Pictures advertise through selected blogs as a new way to reach potential customers. The subject-focused nature of blogs has allowed online shoppers with similar interests to form groups, which in turn makes it easier for retailers to target customers (Hsu and Lin, 2008). Moreover, ads can be paired with the content of an individual blog and the blog host can earn money whenever visitors click on those ads.

Despite the increased attention the blogging phenomenon has received, most blogs will never achieve wide readership (Du and Wagner, 2006). Many blogs are abandoned soon after their creation (Hsu and Lin, 2008). Past empirical studies focusing on the motivations of blog usage are limited. Hsu and Lin (2008) developed a model including technology acceptance, social influence and knowledge sharing as the major factors in blog usage. Park *et al.* (2010) found that seeking entertainment and information are the major blogging motivations and flow mediates blogging motivations and blogging behaviour. Shen and Chiou (2009) concluded that perceived usefulness, specific asset investment, and community identification are the major factors influencing attitude toward using a blogging community. Lu and Lee (2010) found that blog quality and perceived social influence are the antecedents of blog stickiness. While previous studies might involve utilitarian, hedonic, or social influence factors, habit – which is a critical factor in blog usage – is left out. This study attempts to develop an integrative model to explore the motivations of blog usage from four different perspectives: utilitarian motivation, hedonic motivation, social influence, and habit. Factors representing the four perspectives were surveyed through the literature and reported as follows.

Perceived usefulness has been extensively investigated by other researchers and is generally confirmed to be an important factor affecting system usage (Teo *et al.*, 1999). Prior studies have focused on the utility of systems, or perceived usefulness, as the principal motivating factor determining whether a system will be adopted by users (Davis, 1989; Taylor and Todd, 1995; Igbaria *et al.*, 1996). In recent years information systems (IS) researchers identified the importance of the role of playfulness as another determinant of whether a system will achieve widespread use (Ahn *et al.*, 2007; Cheong and Park, 2005; Chu and Lu, 2007; Lin *et al.*, 2005; Moon and Kim, 2001). Hedonic motivation is defined as fun, fantasy, arousal, sensory stimulation, and enjoyment (Hirschman and Holbrook, 1982). In contrast, utilitarian motivation is defined as mission critical, rational, decision effective, and goal oriented (Batra and Ahtola, 1991; Hirschman and Holbrook, 1982; To *et al.*, 2007). Therefore, perceived usefulness could be regarded as a form of utilitarian motivation and perceived playfulness viewed as a form of hedonic motivation. Blogs are used for both utilitarian and hedonic reasons, i.e. for enhancing work/learning/life performance and engaging in fun/entertainment. Thus, one focus of this study is to determine the extent to which these two motivators – perceived usefulness and perceived playfulness – influence the intended use of a blog.

Habit has been extensively studied by researchers in varied research fields. The concept of habit was introduced by James (1890), who was probably the first to point out the importance of habit in managing our daily lives. Habit has been examined in social psychology, health sciences, food consumption, marketing/consumer behaviour,

and organisational behaviour, but it has been given only limited attention in information systems literature (Limayem and Hirt, 2003; Limayem *et al.*, 2007). Habit is a significant predictor of the future use of information technology (IT) (Gefen, 2003; Limayem and Hirt, 2003; Limayem *et al.*, 2007). Recently Limayem *et al.* (2007) discussed prior works on habit in general, with a special focus on the nature of habit and its relationship to intention and actual behaviour in the context of continued IS usage. In a study investigating users' rationale for conducting transactions on a particular B2C website, Gefen (2003) defined habit as a pattern of tendency and preference. Limayem *et al.* (2007, p. 709) described "habit in the context of IS usage as the extent to which people tend to perform behaviours (use IS) automatically because of learning". Habit reflects automatic behaviour tendencies developed during the history of an individual (Limayem and Hirt, 2003). When behaviour is repeated and becomes habitual, it is guided by automated cognitive processes rather than by elaborate decision processes (Aarts *et al.*, 1998). Many blog participants have become accustomed to using blogs and they read/write blogs regularly. Habit becomes an important driver of blog participants' subsequent blogging behaviour.

The role of blog identification is also considered in the study. Recently, blogs have become prominent type of social media on the internet that enable users to meet others who share common interests, and maintain ties with peers (Stefanone and Jang, 2007). Blogs have created fast growing social networks on the internet (Fu *et al.*, 2007). Blogs may also allow bloggers to reinforce their social identity (Hodkinson, 2006). The identification of participants plays an important role in the blog community (Moon *et al.*, 2006; Shen and Chiou, 2009). If blog participants feel a strong sense of blog identification, they may be more strongly compelled to continue blog usage. Therefore, examining the effect of habit and blog identification on behavioural intention can improve the understanding of blog adoption.

It is imperative for bloggers to expend time and effort to maintain a high quality blog since participants are more likely to visit blogs that exhibit high quality attributes. Blog quality is an important factor which influences both user perceptions and subsequent blogging behaviour (Lu and Lee, 2010; Saeed *et al.*, 2003). Maintaining active blogs requires bloggers to provide high quality features such as appearance, content, and technical adequacy. Blog quality could act as a stimulus affecting cognitive and emotional states (Ethier *et al.*, 2006). Providing an attractive and well-designed blog may enhance the perception of its usefulness and playfulness resulting in a positive cognitive appraisal. The higher the quality of blog, the more positive the users' affect should be. Prior studies indicate that investigating the relationships between blog quality, perceived usefulness, and playfulness is critical (Ahn *et al.*, 2007; Hwang and Kim, 2007).

The success of a blog depends on blog users actively participating and frequently interacting with each other. The purpose of this study is to investigate the four different perspectives underlying blog usage and to investigate the relative importance of these four aspects identified in previous studies:

(1) perceived usefulness;

(2) perceived playfulness;

(3) habit; and

(4) blog identification.

How blog quality influences perceived usefulness and perceived playfulness is also examined. An integrated model for blog usage motivation is formulated and the relative importance of each of the motivators is also examined in the study.

Literature review
Blog
The term weblog (since shortened to blog) was first coined by Jorn Barger in 1997 and defined as "a web page where a blogger 'logs' all the other web pages he/she finds interesting" (Blood, 2004, p. 54; Bausch *et al.*, 2002). Others describe a blog as a "site [consisting] of dated entries" (Du and Wagner, 2006, p. 790). Blogs are a relatively new personal communication and collaboration tool, and blogging a new form of publishing and media (Rosenbloom, 2004). Blog participants can navigate, search, publish content, and comment on blogs. A typical blog is a personal online diary, which can be edited by an end-user with few web publication skills (Ip and Wagner, 2008). To participate in a blog, one needs to be willing to use blogging tools provided by hosting services such as Blogger, Wordpress and LiveJournal. Alexa (2010) reported that in February 2010, Blogger received on average 115 million daily visits; Wordpress, 47 million; and LiveJournal, 10 million. Although blogs were only first introduced a few years ago, their functionality, usage patterns and social norms have already achieved a high level of sophistication (Ip and Wagner, 2008). More and more people are using blogs on a day-to-day basis.

Blog quality
Blog quality refers to the extent to which the blog meets users' needs and the overall excellence of the blog site. The design of the blog is important for attracting and retaining users. A high quality blog can attract more users and boost user participation. A poor quality blog can cause users to lose interest, eventually bringing about the demise of the blog. Aladwani and Palvia (2002) suggested that web appearance, web content and technical adequacy are three major aspects of web quality. Although several studies on web quality exist (Aladwani and Palvia, 2002; Liao *et al.*, 2006; Ahn *et al.*, 2007), few have attempted to explore the effect of blog quality on usage belief and usage intention. Moreover the links between blog quality, perceived usefulness, and perceived playfulness have not been clearly specified. It is important to gain a better understanding of how blog quality affects users' perceptions about the blog, which may in turn lead to behavioural intention to use.

Blog identification
Social identity is a psychological state and refers to an individual's ability to identify themselves as part of a larger group. A person comes to view themselves as a member of the community, as "belonging" to it (Dholakia *et al.*, 2004). Social identity can be developed in the virtual world as well as the physical world (Bergami and Bagozzi, 2000; Dholakia *et al.*, 2004). Previous studies of virtual communities have considered and proved social identity to be an important determinant of members' participation in the community (Bagozzi and Dholakia, 2002; Dholakia *et al.*, 2004). Identifying with a virtual community motivates individuals to expand their own social networks (Bagozzi and Dholakia, 2002). Blogs are viewed as one kind of virtual community (Blood, 2004; Lin *et al.*, 2007). Blogging enhances social interactions among participants and assists in the creation of a new type of social identity: blog identification (Moon *et al.*, 2006). In

this study blog identification refers to the perception of belonging to a blogging community. Blog identification may be heightened when people in the group identify themselves as members and treat others as kindred spirits (Hsu and Lin, 2008).

Research model and hypotheses

A research model which seeks to examine the impact of utilitarian motivation, hedonic motivation, habit, and blog identification on user intention to engage in blog usage is depicted in Figure 1. The model suggests that perceived usefulness (a form of utilitarian motivation), perceived playfulness (a form of hedonic motivation), blog identification (a social influence factor), and habit may have a direct impact on blog usage. The model also proposes that blog quality may affect user intention to engage in blog usage indirectly via perceived usefulness and perceived playfulness. The model has seven hypotheses. The justifications for each hypothesis are discussed next.
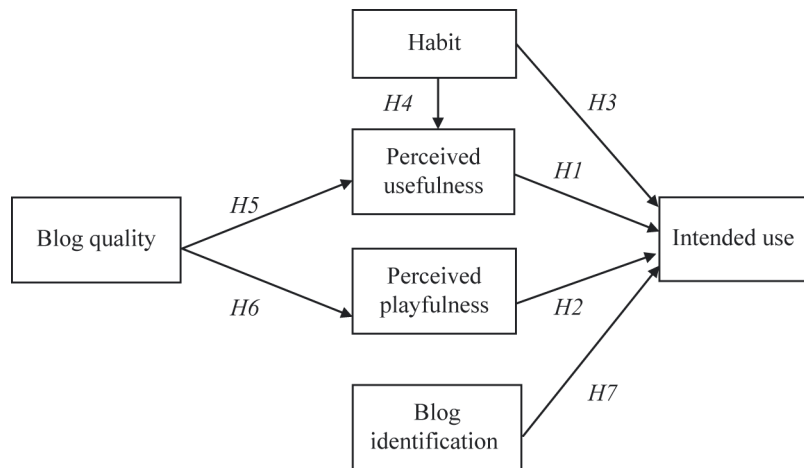
Perceived usefulness

Davis (1989) developed the Technology Acceptance Model to explain the phenomena of IS adoption. He proposed perceived usefulness as a key factor influencing the intended use of an information system. The underlying logic is based on the context of extrinsic motivation or utilitarian motivation. Some ancillary benefits, such as improved work performance, could be expected after useful system-user interaction is perceived by users (Van der Heijden, 2004). Thus, perceived usefulness focuses on utilitarian motivation. In the blog context, perceived usefulness refers to the degree to which a user believes that using a blog would enhance his or her work/learning/life performance. Perceived usefulness is considered to be one of the key factors influencing intentions to use a blog:

H1. Perceived usefulness has a positive impact on intended use of a blog.

Perceived playfulness

Perceived playfulness refers to the extent to which the individual perceives that their attention is focused on the interaction with the WWW, is curious during the interaction, and finds the interaction intrinsically enjoyable or interesting (Ahn *et al.*,

Figure 1.
Research model

2007; Moon and Kim, 2001). Playfulness is considered an intrinsic belief or motive which is shaped by the individual's experiences with the environment (Lin *et al.*, 2005; Moon and Kim, 2001). Perceived playfulness specifies the extent to which fun can be derived from using the system. Hedonic motives focus on an element of fun and entertainment derived from the experiences of the individual (Childers *et al.*, 2001; Sherry, 1990). Thus, perceived playfulness focuses on hedonic motivation. Hedonic motivation in the online context has received increasing attention in recent years. Some studies have focused on perceived playfulness (Ahn *et al.*, 2007; Cheong and Park, 2005; Chu and Lu, 2007). Ahn *et al.* (2007) noted that playfulness has an important role in enhancing user attitudes and behavioural intentions to use a website. A user would be likely to participate in a blog activity if the interactive process is fun and enjoyable (Park *et al.*, 2010). Individuals who have a positive playfulness belief in the blog should view the blog more positively. Thus perceived playfulness should be an important factor influencing the user's intention to engage in blog usage:

H2. Perceived playfulness has a positive impact on the intended use of a blog.

Habit

Habit refers to situation-behaviour consequences that are or have become automatic, so that they occur without self-instruction (Triandis, 1980). Habit is a behavioural disposition to repeat previous actions that have developed through frequent performance in a stable context (Ouellete and Wood, 1998). Habit leads to future behaviour. The intention to continue with habitual behaviour is an automated cognitive process (Aarts *et al.*, 1998). Indeed, when habit is strong, people rely much more on habit than they do on external information and on choice strategies (Gefen, 2003). Through habitual usage of a specific information technology, users learn more about the technology, including how to manipulate the system and how to gain advantages over others. Such knowledge should result in greater awareness of the potential usefulness of the technology. Experienced IT users are more likely to recognise the value of a particular technology than those users with only limited experience using the technology (Karahanna *et al.*, 1999). Therefore, once the use of a specific blog becomes routine, users would become aware of the usefulness of the blog and have intentions to continue using the blog:

H3. Habitual usage has a positive impact on the intended use of a blog.

H4. Habitual usage has a positive impact on the perceived usefulness of a blog.

Blog quality

Blog quality refers to the extent to which the blog meets users' needs and the overall excellence of the blog. The quality of a website is a matter of human judgement. Web quality is an important driver of user perception and subsequent online behaviour (Saeed *et al.*, 2003). Ahn *et al.* (2007) believe that web quality has positive impacts on perceived usefulness and perceived playfulness. Aladwani and Palvia (2002) suggest that web quality could be improved by focusing on three major aspects: appearance, content, and technical adequacy. Naturally, good blog design can enhance the perceptions of usefulness and playfulness among users. If blog participants consider a blog to be of high quality, it is more likely that usefulness and playfulness are also perceived by users. Hence, the following hypotheses are proposed:

H5. Blog quality has a positive impact on the perceived usefulness of a blog.

H6. Blog quality has a positive impact on the perceived playfulness of a blog.

Blog identification
Social identity refers to an individual's ability to identify themselves as part of a larger group. The individual comes to regard themselves as a member of the community, as belonging to it (Dholakia *et al.*, 2004). Bagozzi and Dholakia (2002) suggested that social identity plays an important role in determining virtual community participation. People will be motivated to engage in behaviours needed to maintain their relationships with other virtual community members. An important part of maintaining this relationship with the group is to actively participate in online interactions (Dholakia *et al.*, 2004). Blog identification has been defined as an individual's sense of belonging to a blogging community (Hsu and Lin, 2008). When group members have a strong identification with a community, they are more likely to perceive an obligation to participate in it (Coleman, 1990). Since identification requires an individual to maintain a positive, self-defining relationship with other blog members, he/she will be motivated to engage in behaviours needed to do so (Hogg and Abrams, 1988). Blog identification instigates group-oriented blogging behaviours. Users' willingness to participate in the blog is influenced by blog identification. Blog identification has great influence on intention to participate in blog activities (Dholakia *et al.*, 2004). Thus we hypothesised that:

H7. Blog identification has a positive impact on the intended use of a blog.

Research methodology
Measurement development
To ensure the selection of reliable and valid scales, constructs were developed based on prior research (see the Appendix). Measures for perceived usefulness were adapted from Davis (1989). Scales for habit were adapted from Gefen (2003). The scale items for blog quality were adapted from McKnight *et al.* (2002); items for perceived playfulness were adapted from Moon and Kim (2001); items for blog identification were adapted from Ashforth and Mael (1989); and items for intended use were adapted from Suh and Han (2003). All items in the questionnaire were represented by a seven-point Likert scale, with 1 representing total disagreement and 7 representing total agreement. The preliminary questionnaire of the study was pretested on three researchers to check for the suitability of wording and format. A total of 40 graduate students, who were experienced blog participants, were used as the sample for the pilot study. The results of the pilot study showed that Cronbach's α value of each construct met the standard of 0.7 suggested by Nunnally (1978). Table I shows the reference studies for each construct and the operational definition used in this study.

Participants
This study attempts to explore the viewpoints of experienced blog users. Though blog users may include bloggers and readers, many blog users play both roles. In this study "blog users" refers to individuals who participate in other people's blogs. We tried to get viewpoints from experienced blog users and therefore, both bloggers and readers were included as the participants in this study. Data for this study were collected

Construct	Operational definition	Source
Perceived usefulness	The degree to which the user believed that using a blog would enhance his or her work/learning/life performance	Davis (1989)
Habit	The pattern of tendency and preference for using a specific blog in the past	Gefen (2003)
Blog quality	The extent to which a blog meets users' needs and reflects overall excellence of the blog site	Aladwani and Palvia (2002)
Perceived playfulness	The strength of one's belief that interacting with the blog will fulfil intrinsic motives	Moon and Kim (2001)
Blog identification	An individual's sense of belonging to a blogging community	Ashforth and Mael (1989)
Intended use	The possibility for a user to use a specific blog	Suh and Han (2003)

through online questionnaires. Announcements were made on several popular blog sites in Taiwan, such as Yahoo! Kimo blog (http://tw.blog.yahoo.com/), Wretch blog (www.wretch.cc/blog/), Yam blog (http://blog.yam.com/), Xuite blog (http://blog.xuite.net/), MSN blog (http://home.spaces.live.com/), and PChome blog (http://mypaper.pchome.com.tw/) to invite blog users to fill out the questionnaire. An incentive of 30 cash prizes of NT$300, approximately US$10, were awarded by lottery at the completion of the survey. A total of 236 questionnaires were received. After eliminating duplicate copies, copies with missing values, and other invalid copies, a total of 225 questionnaires were regarded as valid. All valid respondents had blog usage experience. Regarding the demographic distribution of the samples, 47.4 per cent of the respondents were male, and 52.6 per cent were female (see Table II). Around half of the respondents (52.9 per cent) were aged 20 to 29 years. According to data collected by Sysomos (2010) – a social media analytics company – 49.1 per cent of blog participants are male, and 50.9 per cent are female. The majority of the bloggers (53.3 per cent) are between 21 and 35 years-of-age. It seems that the demographic distribution used in this study is closely comparable with the actual global demographics of blog usage.

Data analysis and results
Measurement model assessment
For data analysis this study used the partial least squares (PLS) method of structural equation modelling (SmartPLS) which has the ability to handle highly complex predictive models. Table III shows the number of items, composite reliability, average variance extracted (AVE), square root of the AVE, and correlations between the constructs. As shown in Table III the composite reliability ranges from 0.86 to 0.96, the constructs' average variance extracted ranges from 0.58 to 0.90, and the constructs' average variance extracted from each latent variable is over 0.6, which represents sufficient convergent validity (Hair *et al.*, 1998). Discriminant validity is shown when the square root of each construct's average variance extracted is larger than its correlation with other constructs (Fornell and Larcker, 1981). The square roots of the

Item	Category	n	%
Gender	Male	107	47.4
	Female	118	52.6
Age	<20	30	13.3
	20-29	119	52.9
	30-39	56	24.9
	>40	20	8.9
Years of internet usage	<3	6	2.7
	3-5	28	12.4
	5-7	83	36.9
	>7	108	48.0
Most frequently used blog	Wretch	50	22.3
	Yahoo! Kimo	47	14.2
	Yam	34	20.9
	Xuite	32	15.1
	MSN	32	14.2
	PChome	30	13.3
Years of blog usage	<3	13	5.8
	3-5	54	24.0
	5-7	83	36.9
	>7	75	33.3

Table II.
Descriptive statistics of respondents

Construct	No. of items	Composite reliability	AVE	Correlations PU	H	WI	WQ	PP	IU
PU	3	0.86	0.68	0.82					
H	4	0.90	0.69	0.58	0.83				
BI	3	0.95	0.87	0.35	0.34	0.93			
BQ	3	0.91	0.78	0.53	0.54	0.29	0.88		
PP	9	0.92	0.58	0.44	0.46	0.17	0.45	0.76	
IU	3	0.96	0.90	0.55	0.60	0.38	0.44	0.54	0.95

Table III.
Descriptive statistics and correlations

Notes: Diagonals represent the square root of the average variance extracted, while the other matrix entries represent the correlations. PU: Perceived usefulness; H: Habit; BI: Blog identification; BQ: Blog quality; PP: Perceived playfulness; IU: Intended use

AVE were larger than their correlations with the other constructs, therefore discriminant validity was achieved in the study (see Table III).

*Structural model assessment and hypotheses testing*
The standardised PLS path coefficients for testing the structural model are shown in Figure 2. The factors significantly influencing intended use are led by habit, followed by perceived playfulness, blog identification, and perceived usefulness. Therefore, *H1*, *H2*, *H3*, and *H7* are all supported. Perceived usefulness is significantly influenced by habit; therefore *H4* is supported. Blog quality significantly influences both perceived

usefulness and perceived playfulness; therefore *H5* and *H6* are supported. The variances of intended use, perceived usefulness, and perceived playfulness are 55 per cent, 41 per cent, and 30 per cent, respectively. The measure of the variance explanation shows that the model has sufficient explanatory power and therefore can predict the intended use of a blog.

Discussion and implications

There have been few prior studies concerning the motivations of blog usage, which is odd considering the explosive growth of blogs. This study attempts to gain an understanding of the forces motivating blog users to participate in the blogosphere. Personal intention to use a blog is affected by both utilitarian (i.e. perceived usefulness) and hedonic (i.e. perceived playfulness) motivations. Simultaneously, intention to use a blog is also significantly related to habit and blog identification. The results also suggest that user beliefs (perceived usefulness and perceived playfulness) are related to blog quality.

Intention to participate in a blog depends on both perceived usefulness and perceived playfulness. In particular, perceived playfulness was found to have greater influence on intention. Although usefulness is thought to be an important factor in traditional IS environments, playfulness has a more important role in blog usage. Blogs are mostly used for expressing feelings rather than productivity-oriented applications (Deng and Yuen, 2011; Nardi *et al.*, 2004). Users tend to participate in blog activity because the interaction brings fun and enjoyment. The findings of the study confirm that if users did not perceive blogging as fun, they would be less likely to engage in it, which is hardly surprising. Overall, users are not purely utilitarian, valuing only efficiency and efficacy; they also enjoy blogging enough to become frequent users.
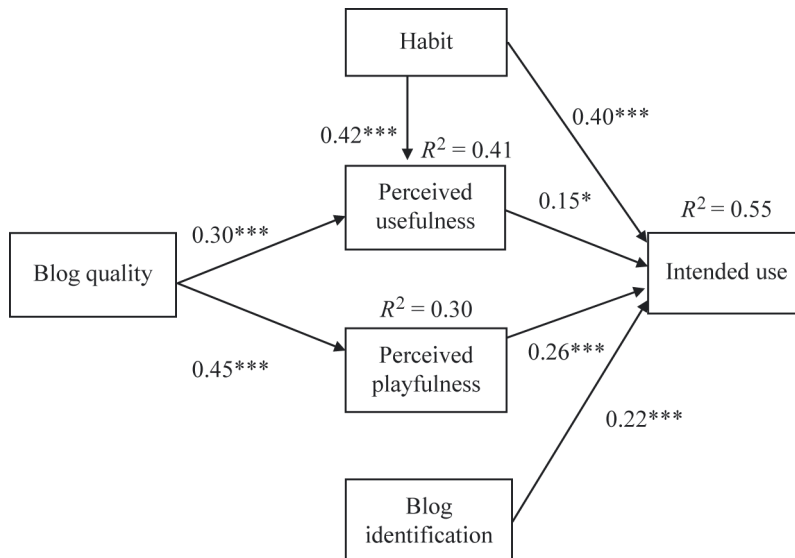
Notes: *p* < 0.05; **p* < 0.01; ***p* < 0.001

Figure 2.
Results of PLS analysis

The results of the study show that habit is a major predictor of intention to use a blog. Habit has a direct effect, as well as an indirect effect on intention to use a blog. If the participants are familiar with and habitually use the blog they tend to find the blog useful and intend to participate regularly. The results of this study are also commensurate with the results of other studies regarding the role of habit. Previous studies indicate that habit has both a direct effect and indirect effect on continuance intention in the e-commerce environment (Gefen, 2003; Liao *et al.*, 2006). This study found that habit operates in a similar way in the blog environment. Once bloggers become loyal users, habit is the most important driver influencing intention to blog.

The study found that blog identification has a significant effect on intended use of blogs. When blog members have a strong sense of belonging to a group, they become more willing to participate in the blog. Blogs often attract large groups of members because blogging provides a conduit for information sharing and socialising. Participating in blogs could provide members with a good opportunity to meet others who share common interests. Blog members develop and establish relationships with other members through continuous participation, and positive experiences are accumulated by members during this interaction. Ultimately, the members are drawn to use the blog to experience this strong sense of belonging.

The results indicate that a sense of group membership provides a major impetus for intention to engage in blog usage. The desire to obtain a sense of belonging may be analogous to a desire to receive recognition from other members. Blog participants place great importance on social ties and social connectivity networks. This result is somewhat different from those of previous studies (Hartwick and Barki, 1994; Hsu and Chiu, 2004; Karahanna *et al.*, 1999; Taylor and Todd, 1995). Prior studies indicated that social influence is rather insignificant in the IT or e-commerce environment. The perception of other people or people important to them (i.e. subjective norm) has no significant effect on experienced IT users (Karahanna *et al.*, 1999; Taylor and Todd, 1995) and e-service users (Hsu and Chiu, 2004). Experienced IT or e-service users are more likely to rely on their attitude toward blog usage and no longer seeks approval from others (Hartwick and Barki, 1994). However, this study finds that blog identification, which is a form of social influence, plays an important role in the blog setting.

The study also found blog quality to be an antecedent to user perceptions of usefulness and playfulness. Blog quality refers to the overall excellence of the blog. Users can enhance their work/learning/life performance and generate joyful experiences by participating in a high quality blog. Thus creating a high quality blog is imperative for blog success.

There are several practical implications for blog-hosting service providers and bloggers. First bloggers should make an effort to arouse participants' hedonic motivations by providing an enjoyable and fun atmosphere on their blog page. Creating a high quality blog is important for inducing participants' engagement. Aladwani and Palvia (2002) suggest that web appearance, web content and technical adequacy are three major aspects of web quality. Bloggers should stress the appearance-related features in the design of blogs, e.g. the layout, use of colours, fonts, graphics, multimedia (cf. audio, video), etc. Blog success also largely depends upon the content value, such as the type of content provided, the frequency and volume of posting, and the presentation and organisation of the content (Du and Wagner, 2006). Supplying the desired information in an easily navigated interface is critical for

boosting the content value. Bloggers should strive to create and manage blog contents well. Bloggers need to make sure blogs work well technically. Bloggers can use search engines to help participants navigate or provide interactive features (cf. Instant Messaging, Really Simple Syndication, etc.) to increase interactions between readers. Continuously updating technologies and ensuring requisite functionality is important. Improving blog design and providing a high level of blog quality is vital to entice blog participants to return frequently and create blog success.

Second hedonic motivation is more important than utilitarian motivation in terms of intention to engage in blog usage. This result is different from the results of the previous research regarding online usage behaviour. Prior studies showed that online shopping is mostly driven by utilitarian motivations rather than hedonic motivations (Alba *et al.*, 1997; Blake *et al.*, 2005; Ghosh, 1998; Keeney, 1999; Morganosky and Cude, 2000; To *et al.*, 2007; Verhoef and Langerak, 2001) due to the fact that online shopping is unable to offer diverse sensations as physical shopping does (To *et al.*, 2007). Online shoppers tend to be practical and are motivated by utilitarian purposes. However, blogs are designed to operate in a Web 2.0 environment and therefore belong to a completely different category than online shopping websites. Web 2.0 technologies provide a variety of different features which include an increased emphasis on user generated content, content sharing, online collaboration, and new ways of interacting with web-based applications. The emergence of Web 2.0 helps users to engage in pleasant diversions and fulfil their entertainment needs. Blogs in the Web 2.0 environment emphasise hedonic motivation. Users provide commentary on their life experiences, values, and attitudes in the blogs. By creating, sharing, and collaborating, blog users are active creators, owners, and managers of information. Blog users who spread information or share life experiences with others perform an important role in creating the blog phenomenon. Fun and enjoyment is experienced by users which in turn stimulates more blog participation. Thus, it is reasonable that perceived playfulness is more relevant for promoting blog usage than utilitarian motives.

Third, this study found that habit has the most significant effect on intended use of blogs. Blog-hosting service providers and bloggers should try to encourage active and habitual blog users to spend a considerable amount of time using their blogs. People are likely to form favourable intentions about acts they have frequently performed in the past (Ouellette and Wood, 1998). Users may continue to use a blog unconsciously or choose the same blog out of habit, instead of conducting further thinking about or rational analyses of their behaviour. Bloggers should try to constantly strengthen the habitual use of existing readers and actively reinforce relationships with them. On the other hand, if bloggers want to attract readers who are frequent readers of other blogs, they must change the readers' habits which were cultivated elsewhere. To overcome the force of habit, bloggers have to provide favourable incentives and higher value content to encourage readers to switch. Readers may alter their habitual behaviour only if greater benefits and values are acquired.

Finally, blog identification is an important factor in blogging from a social influence viewpoint. Participants in a blog gain a sense of belonging. Blog-hosting service providers and bloggers should strive to encourage people to share general information and information about their social lives. A reward mechanism could be established, such as awarding virtual points for participation or knowledge-sharing. The rewards could be used as a positive motivator for boosting user participation. Blog-hosting

service providers could establish a billboard of the top 100 blogs and build a sense of honour among participants who are members of prestigious blogs. To enhance the stickiness of blogs, bloggers could hold regular meetings with blog members who share common interests. Assigning ranks or positions to active members could also be used for generating a sense of honour. Participants may establish a sense of responsibility and a feeling of unity through the interaction process. By employing blogs as a vivid communication channel to share information and social lives, blog-hosting service providers can help members to maintain close relationships with others and ultimately enhance blog usage.

Limitations and future research

This study has several limitations. First, sample bias may exist due to the fact participants were self-selected. However, the demographics of the respondents in this study were comparable to the blog participants profile described in the research of Sysomos (2010), so sample bias may not be an issue in this study. Second, this study is a preliminary study regarding the motivations for blog usage. In its aim to explore the holistic views of blog participants, this study does not try to differentiate the variety of participation roles, i.e. bloggers and readers. Future research could be conducted to investigate the differentiated roles of blog participants. The relationships between individual characteristics of blog participants and blog usage could also be examined in the future. Finally, the study investigated the motivations for blog usage in Taiwan. Future studies could explore the impact of cultural differences on blog usage behaviour.

This study provides theoretical foundations for future research. First, to the best of our knowledge, this is the first study to theoretically articulate or empirically test the influence of the four motivators on blog usage. Future research could explore and incorporate other motivation factors in this model. Second, contrary to prior studies in electronic commerce settings, this study found that hedonic motivation is more important than utilitarian motivation in terms of intention to blog. Prior literature indicates that utilitarian motivation is the major predictor of online shopping intention (To *et al.*, 2007). With the emergence of Web 2.0 applications and a new generation of internet-based services, the influence of the hedonic motivation has become more important. Further research could be conducted to better understand the different impacts of hedonic and utilitarian motivations on blogs or other Web 2.0 applications. Third, this study considers the major forms of hedonic and utilitarian motivation, i.e. perceived playfulness and perceived usefulness. Other factors related to hedonic and utilitarian motivation may also affect blog usage and can be investigated in future research. Fourth, the study found that social influence, or the desire to receive recognition from others, is important in blogging. While previous studies indicates that the perception of others, i.e. subjective norm, has no significant effect on experienced e-service users (Hsu and Chiu, 2004), this study found that blog identification, which could be regarded as a form of social influence, plays an important role in the blog setting. Future research could be conducted to investigate the impact of social influence on behavioural intention in different web settings. Finally, little research has focused on the effects of habit or blog quality on blog usage intentions. Further research on this topic should be worth exploring.

References

Aarts, H., Verplanken, B. and van Knippenberg, A. (1998), "Predicting behavior from actions in the past: repeated decision making or a matter of habit?", *Journal of Applied Social Psychology*, Vol. 28 No. 15, pp. 1355-1374.

Ahn, T., Ryu, S. and Han, I. (2007), "The impact of web quality and playfulness on user acceptance of online retailing", *Information & Management*, Vol. 44 No. 3, pp. 263-275.

Aladwani, A.M. and Palvia, P.C. (2002), "Developing and validating an instrument for measuring user-perceived web quality", *Information & Management*, Vol. 39 No. 6, pp. 467-476.

Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A. and Wood, S. (1997), "Interactive home shopping: consumer, retailer, and manufacture incentives to participate in electronic marketplaces", *Journal of Marketing*, Vol. 61 No. 3, pp. 38-53.

Alexa (2010), "Site information", available at: www.alexa.com/search?q=2010+blog&r=site_screener&p=bigtop (accessed 12 February 2012).

Ashforth, B.E. and Mael, F.A. (1989), "Social identity theory and the organization", *Academy of Management Review*, Vol. 14 No. 1, pp. 20-39.

Bagozzi, R.P. and Dholakia, U.M. (2002), "Intentional social action in virtual communities", *Journal of Interactive Marketing*, Vol. 16 No. 2, pp. 2-21.

Batra, R. and Ahtola, O.T. (1991), "Measuring the hedonic and utilitarian sources of customer attitudes", *Marketing Letters*, Vol. 12 No. 2, pp. 159-170.

Bausch, P., Haughey, M. and Hourihan, M. (2002), *We Blog, Publishing Online with Weblogs*, Wiley Publishing, Indianapolis, IN.

Bergami, M. and Bagozzi, R. (2000), "Self-categorization, affective commitment, and group self-esteem as distinct aspects of social identity in the organization", *British Journal of Social Psychology*, Vol. 39 No. 4, pp. 555-577.

Blake, B.F., Neuendorf, K.A. and Valdiserri, C.M. (2005), "Tailoring new websites to appeal to those most likely to shop online", *Technovation*, Vol. 25 No. 10, pp. 1205-1214.

Blood, R. (2004), "How blogging software reshapes the online community", *Communications of the ACM*, Vol. 47 No. 12, pp. 53-55.

Cheong, J.H. and Park, M. (2005), "Mobile internet acceptance in Korea", *Internet Research*, Vol. 15 No. 2, pp. 125-140.

Childers, T.L., Carr, C., Peck, J. and Carson, S. (2001), "Hedonic and utilitarian motivations for online retail shopping behavior", *Journal of Retailing*, Vol. 77 No. 4, pp. 511-535.

Chu, C.W. and Lu, H.P. (2007), "Factors influencing online music purchase intention in Taiwan: an empirical study based on the value-intention framework", *Internet Research*, Vol. 17 No. 2, pp. 139-155.

Coleman, J.S. (1990), *Foundations of Social Theory*, Belknap Press, Cambridge, MA.

Davis, F.D. (1989), "Perceived usefulness, perceived ease of use, and user acceptance of information technology", *MIS Quarterly*, Vol. 13 No. 3, pp. 319-339.

Deng, L. and Yuen, A.H.K. (2011), "Towards a framework for educational affordances of blogs", *Computers & Education*, Vol. 56 No. 2, pp. 441-451.

Dholakia, U., Bagozzi, R. and Pearo, L. (2004), "A social influence model of consumer participation in network- and small-group-based virtual communities", *International Journal of Research in Marketing*, Vol. 21 No. 3, pp. 241-263.

Du, H.S. and Wagner, C. (2006), "Weblog success: exploring the role of technology", *International Journal of Human-Computer Studies*, Vol. 64 No. 9, pp. 789-798.

eMarketer (2011), "Quick stat: 53.5% of internet users will read blogs this year", available at: www.emarketer.com/Article.aspx?R=1007941&dsNav=Rpp:25,Ro:15,N:880&view= compact (accessed 12 February 2012).

Ethier, J., Hadaya, P., Talbot, J. and Cadieux, J. (2006), "B2C web site quality and emotions during online shopping episodes: an empirical study", *Information & Management*, Vol. 43 No. 5, pp. 627-639.

Fornell, C.R. and Larcker, F.F. (1981), "Structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-51.

Fu, F., Liu, L. and Wang, L. (2007), "Empirical analysis of online social networks in the age of Web 2.0", *Physica A: Statistical Mechanics and its Applications*, Vol. 387 Nos 2-3, pp. 675-684.

Gefen, D. (2003), "TAM or just plain habit: a look at experienced online shoppers", *Journal of End User Computing*, Vol. 15 No. 3, pp. 1-13.

Ghosh, S. (1998), "Marketing business sense of the internet", *Harvard Business Review*, Vol. 76 No. 2, pp. 126-136.

Hair, J.F., Anderson, R.E., Tatham, R.L. and Black, W.C. (1998), *Multivariate Data Analysis*, 5th ed., Prentice Hall, Englewood Cliffs, NJ.

Hartwick, J. and Barki, H. (1994), "Explaining the role of user participation in information systems use", *Management Science*, Vol. 40 No. 4, pp. 440-465.

Hirschman, E.C. and Holbrook, M.B. (1982), "Hedonic consumption: emerging concepts, methods and propositions", *Journal of Marketing*, Vol. 46 No. 2, pp. 92-101.

Hodkinson, P. (2006), "Subcultural blogging? Online journals and group involvement among UK goths", in Bruns, A. and Jacobs, J. (Eds), *Uses of Blogs*, Peter Lang, New York, NY, pp. 187-198.

Hogg, M.A. and Abrams, D. (1988), *Social Identifications: A Social Psychology of Intergroup Relations and Group Processes*, Routledge, London.

Hsu, C.L. and Lin, J.C.C. (2008), "Acceptance of blog usage: the roles of technology acceptance, social influence and knowledge sharing motivation", *Information & Management*, Vol. 45 No. 1, pp. 65-74.

Hsu, M.H. and Chiu, C.M. (2004), "Internet self-efficacy and electronic service acceptance", *Decision Support Systems*, Vol. 38 No. 2, pp. 369-381.

Hwang, Y. and Kim, D.J. (2007), "Customer self-service systems: the effects of perceived web quality with service contents on enjoyment, anxiety, and e-trust", *Decision Support Systems*, Vol. 43 No. 3, pp. 746-760.

Igbaria, M., Parasuraman, S. and Baroudi, J.J. (1996), "A motivational model of microcomputer usage", *Journal of Management Information Systems*, Vol. 13 No. 1, pp. 127-143.

Ip, R.K.F. and Wagner, C. (2008), "Weblogging: a study of social computing and its impact on organizations", *Decision Support Systems*, Vol. 45 No. 2, pp. 242-250.

James, W. (1890), *The Principles of Psychology*, Henry Holt & Co., New York, NY.

Karahanna, E., Straub, D.W. and Chervany, N.L. (1999), "Information technology adoption across time: a cross-sectional comparison of pre-adoption and post-adoption beliefs", *MIS Quarterly*, Vol. 23 No. 2, pp. 183-213.

Keeney, R.L. (1999), "The value of internet commerce to the customer", *Management Science*, Vol. 45 No. 4, pp. 533-542.

Liao, C., Palvia, P. and Lin, H.N. (2006), "The roles of habit and web site quality in e-commerce", *International Journal of Information Management*, Vol. 26 No. 6, pp. 469-483.

Limayem, M. and Hirt, S.G. (2003), "Force of habit and information systems usage: theory and initial validation", *Journal of the Association for Information Systems*, Vol. 4 No. 3, pp. 65-97.

Limayem, M., Hirt, S.G. and Cheung, C.M.K. (2007), "How habit limits the predictive power of intention: the case of information systems continuance", *MIS Quarterly*, Vol. 31 No. 4, pp. 705-737.

Lin, C.S., Wu, S. and Tsai, R.J. (2005), "Integrating perceived playfulness into expectation-confirmation model for web portal context", *Information & Management*, Vol. 42 No. 5, pp. 683-693.

Lin, J., Halavais, A. and Zhang, B. (2007), "The blog network in America: blogs as indicators of relationships among US cities", *Connections*, Vol. 27 No. 2, pp. 15-23.

Lu, H.P. and Lee, M.R. (2010), "Demographic differences and the antecedents of blog stickiness", *Online Information Review*, Vol. 34 No. 1, pp. 21-38.

McKnight, D.H., Choudhury, V. and Kacmar, C. (2002), "Developing and validating trust measures for e-commerce: an integrative typology", *Information Systems Research*, Vol. 13 No. 3, pp. 334-359.

Moon, J., Li, J., Jo, S. and Sanders, G. (2006), "Improving quality of life via blogs and development of a virtual social identity", *Journal of Information Technology Management*, Vol. 17 No. 3, pp. 26-37.

Moon, J.W. and Kim, Y.G. (2001), "Extending the TAM for a World-Wide-Web context", *Information & Management*, Vol. 38 No. 4, pp. 217-230.

Morganosky, M.A. and Cude, B.J. (2000), "Consumer response to online grocery shopping", *International Journal of Retail & Distribution Management*, Vol. 28 No. 1, pp. 17-26.

Nardi, B.A., Schiano, D.J., Gumbrecht, M. and Swartz, L. (2004), "Why we blog", *Communications of the ACM*, Vol. 47 No. 12, pp. 41-46.

Nunnally, J.C. (1978), *Psychometric Theory*, McGraw-Hill, New York, NY.

Ouellette, J.A. and Wood, W. (1998), "Habit and intention in everyday life: the multiple processes by which past behavior predicts future behavior", *Psychological Bulletin*, Vol. 124 No. 1, pp. 54-74.

Park, B., Ahn, S. and Kim, H.J. (2010), "Blogging: mediating impacts of flow on the motivational behavior", *Journal of Research in Interactive Marketing*, Vol. 4 No. 1, pp. 6-29.

Pew Research Center (2011), "The social side of the internet", available at: http://pewinternet.org/Reports/2011/The-Social-Side-of-the-Internet.aspx/ (accessed 12 February 2012).

Rosenbloom, A. (2004), "The blogosphere", *Communications of the ACM*, Vol. 47 No. 12, pp. 31-33.

Saeed, K.A., Hwang, Y. and Yi, M.Y. (2003), "Toward an integrative framework for online consumer behavior research: a meta-analysis approach", *Journal of End User Computing*, Vol. 15 No. 4, pp. 1-26.

Shen, C.C. and Chiou, J.S. (2009), "The effect of community identification on attitude and intention toward a blogging community", *Internet Research*, Vol. 19 No. 4, pp. 393-407.

Sherry, J.F. (1990), "A sociocultural analysis of a midwestern flea market", *Journal of Consumer Research*, Vol. 17 No. 1, pp. 13-30.

Stefanone, M.A. and Jang, C.Y. (2007), "Writing for friends and family: the interpersonal nature of blogs", *Journal of Computer-Mediated Communication*, Vol. 13 No. 1, pp. 123-140.

Suh, B. and Han, I. (2003), "The impact of customer trust and perception of security control on the acceptance of electronic commerce", *International Journal of Electronic Commerce*, Vol. 7 No. 3, pp. 135-161.

Sysomos (2010), "Inside blog demographics", available at: www.sysomos.com/reports/bloggers/ (accessed 12 February 2012).

Taylor, S. and Todd, P. (1995), "Understanding information technology usage: a test of competing models", *Information Systems Research*, Vol. 6 No. 2, pp. 144-176.

Teo, T.S.H., Lim, V.K.G. and Lai, R.Y.C. (1999), "Intrinsic and extrinsic motivation in internet usage", *OMEGA International Journal of Management Science*, Vol. 27 No. 1, pp. 25-37.

To, P.L., Liao, C. and Lin, T.H. (2007), "Shopping motivations on internet: a study based on utilitarian and hedonic value", *Technovation*, Vol. 27 No. 12, pp. 774-787.

Triandis, H.C. (1980), "Values, attitudes, and interpersonal behavior", in Howe, H.E. Jr and Page, M.M. (Eds), *Nebraska Symposium on Motivation, 1979: Beliefs, Attitudes, and Values*, University of Nebraska Press, Lincoln, NE, pp. 195-259.

Van der Heijden, H. (2004), "User acceptance of hedonic information systems", *MIS Quarterly*, Vol. 28 No. 4, pp. 695-704.

Verhoef, P.C. and Langerak, F. (2001), "Possible determinants of consumers' adoption of electronic grocery shopping in the Netherlands", *Journal of Retaining and Consumer Services*, Vol. 8 No. 5, pp. 275-285.

Zhang, K.Z.K., Lee, M.K.O., Cheung, C.M.K. and Chen, H. (2009), "Understanding the role of gender in bloggers' switching behavior", *Decision Support Systems*, Vol. 47 No. 4, pp. 540-546.

Appendix. Survey instrument

Blog quality

Visually, the blog resembled other blogs I think highly of.

The blog was simple to navigate.

On this blog, it was easy to find the information I wanted.

Habit

The blog is where I usually go.

This is my preferred blog.

When I need to use a blog, this is where I go first.

I often use the blog.

Perceived usefulness

Using the blog enables me to accomplish my work/learning/life more quickly.

Using the blog would improve my work/learning/life performance.

Using the blog would enhance my work/learning/life effectiveness.

Perceived playfulness

When interacting with the blog, I do not realise the time elapsed.

When interacting with the blog, I am not aware of any noise.

When interacting with the blog, I often forget the work I must do.

Using the blog makes my work enjoyable.

Using the blog makes my work fun.

Using the blog keeps me happy in my work.

Using the blog stimulates my curiosity.

Using the blog leads to my exploration.

Using the blog arouses my imagination.

Blog identification

Participating in blogs would enhance my chances to meet members who have common interests.

Members of blogs keep close ties with each other, which is a communication channel to share social lives and information.

Members in the blog have a strong feeling of being in one group.

Intended use

I intend to continue using the blog in the future.

I expect my use of the blog to continue in the future.

I will frequently use the blog in the future.

About the authors
Chechen Liao is a Professor in the Department of Information Management at National Chung Cheng University in Taiwan. He received his PhD in MIS from the University of Memphis. He currently serves as Associate Editor for *The Journal of Global Information Technology Management*. His current research interests focus on e-commerce, knowledge management, e-supply chain management, and the impacts of information technology on organisations and individuals. His research has been published or is forthcoming in journals such as *Computers in Human Behaviour*, *Electronic Commerce Research and Applications*, *Electronic Markets*, *International Journal of Human-Computer Studies*, *International Journal of Information Management*, *Journal of Computer Information Systems*, *Journal of Database Management*, *Journal of Business Research*, *Journal of Business Ethics* and *Technovation*.

Pui-Lai To is a Professor in the Department of Management Information Systems at National Chiayi University in Taiwan. She received her PhD in MIS from the University of Memphis. Her current research interests focus on e-commerce, customer relationship management, and the impacts of information technology on organisations and individuals. Her papers have appeared or have been accepted for publication in the *International Journal of Information Management*; *Journal of Database Management*; *Journal of Business Research*; *Technovation*; *Computer Standards & Interfaces*; *Cyberpsychology, Behavior, and Social Networking*, and other refereed journals and conference proceedings. Pui-Lai To is the corresponding author and can be contacted at: plto@mail.ncyu.edu.tw

Chuang-Chun Liu is an Assistant Professor in the Department of Information Management at Shu-Zen College of Medicine and Management in Taiwan. She received her PhD from National Chung-Cheng University, Taiwan. Her current research interests include e-commerce, online consumer behaviour, internet marketing and e-business. Her papers have appeared or have been accepted for publication in the *International Journal of Information Management*; *Electronic Commerce Research and Applications*; *Cyberpsychology, Behavior and Social Networking*; *Journal of e-Business* and other refereed journals and conference proceedings.