

# Bloggers' Motivations and Behaviors: A Model

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During the past few years, there has been an exponential growth of blogs, and behind these blogs are numerous bloggers who create and manage them. It is widely expected that bloggers armed with their own blogs will make a tremendous impact on both mass communication media and marketers who rely on such media. However, given the widespread use of blogs, there has been little systematic analysis of the factors behind blogging activities. To serve as a stepping-stone, this article presents a model that addresses the relationships among blogging motivations and behaviors, and reports the empirical validation of the model.

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*But you cannot afford to close your eyes to them, because they are simply the most explosive outbreak in the information world since the Internet itself.*

—*BusinessWeek*, May 2, 2005

## INTRODUCTION

Blogs have been making more and more fanfare in the business press, partly owing to the exponential growth of the blogosphere, and partly owing to the threat as well as opportunities that blogs bring forth to various media-related industries. According to Technorati, an important blog search engine, by April 2007 there were over 70 million blogs that had surfaced on the service's radar screen. It is estimated that there are 1.6 million new postings per day in the ever-enlarging blogosphere, while each day sees around 120,000 new blogs mushrooming on the internet (Sifry, 2007). The growing momentum of blogs as grass-root, user-generated online media seems unstoppable.

Incumbents in media-related industries are puzzled not only by the sheer size of the gigantic blogosphere, but also by the very nature of blogging activities. A set of "postmodern" conditions (Firat and Venkatesh, 1995) has converged on blogging, by which bloggers engage in "multiple consumption experiences" relating to multiple types of information behavior and are actually "active producers of symbols and signs of consumption."

Other than pursuing pieces of information online either rationally or to the extent where self-consciousness disappears, bloggers also play the roles of communicator, producer, explorer, collector, and player in terms of their consumption of information. By its very nature, blogs are typical C2C platforms (Zhao, Fang, and Whinston, 2006).

To the mass media, especially the newspaper industry, the power of blogs leads to the erosion of their audience. Many major media players are trying every avenue to avoid being adversely affected by blogs. To advertising and public relations players who are still testing the waters of using commercial websites as a medium for marketing communication, blogs represent a new, interesting, but uncontrollable platform whose value is largely unproven. Various attempts to utilize blogs for marketing communication are indeed observed, such as commissioning new blogs for specific campaigns (Ives, 2004), buying advertising space on niche blogs with the view of target marketing (Mintz, 2005), inserting advertisements in RSS feeds from some blogs to other blogs that subscribe to them (*Nikkei Report*, 2005), morphing the print tradition of advertorials to the blogosphere (Ives, 2004), and so forth.

As marketers are seeking a proactive approach to the blogosphere, little has been done to systematically study bloggers' motivations and

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behaviors—the foundation of understanding the blogging phenomenon. The present study aims to present a model as a stepping-stone that will help practitioners and academics to further understand the factors behind blogging activities. In the following, we will first cover the literature related to bloggers' blogging motivations and behaviors. A conceptual model that consists of 10 hypotheses is presented next, followed by the report of an empirical study based on an online survey to validate the conceptual model. We then conclude by discussing the implications as well as future research directions of the study.

### BACKGROUND

#### What we know about bloggers

Blogs are personal journals on the internet arranged in reverse chronological sequence that facilitate interactive computer mediated communication through text, images, and audio/video objects. Although the earliest blogs date back to the late 1990s (Dearstyne, 2005), blogs have become a popular tool for interactive computer mediated communications during the past few years. Thanks to the emergence of various free, easy-to-use blogging services in the market, it is reported that the number of blogs has increased 100 times between mid-2003 and mid-2006 (Sifry, 2006). Behind these many young blogs are their creators, owners, and managers—a cohort of internet users who produce as well as consume content on the internet: the aptly named bloggers.

Beyond the usual, vague image of participants in "virtual communities" (Koh and Kim, 2003), who exactly are the bloggers and what do they do? According to a telephone survey conducted by Pew Internet & American Life Project, bloggers (those who own their own blogs) are still a minority of internet users—as of July 2006 only 8 percent of internet users keep a blog. More than half of the bloggers are under the age of 30, whereas 84 percent of bloggers keep their blogs as a hobby or pastime. The same survey also reveals that most bloggers are both heavy users of the internet and highly engaged with tech-based social interaction (Lenhart and Fox, 2006). Herring, Scheidt, Wright, and Bonus (2005) found that rather than "external-content-focused, densely interconnected journalistic or knowledge-sharing blogs" that have seen quite a few discussions in the early days, most bloggers actually use blogs for individualistic expression and communication—a finding supported by the Pew survey quoted above.

Other than descriptive statistics of bloggers' profiles directly derived from surveys, most efforts in the literature, just like in other cases when people first study a burgeoning phenomenon, are directed at classification. In this light, most research studies focus on blogs rather than bloggers. Blood (2002) distinguishes three types of blogs by their functions. Krishnamurthy (2002) proposes to classify blogs into four types by two dimensions of a blog's orientation: personal versus topical and community versus individual. Herring, Scheidt, Wright, and Bonus (2005) modify Krishnamurthy's categorization

and ascribes blogs into five categories. Dearstyne (2005) suggests five types of blogs by their uses. The only study we know of in the literature that focuses on bloggers rather than blogs and attempts to provide a classification scheme is Nardi, Schiano, Gumbrecht, and Swartz (2004), who propose five motivations for bloggers to blog.

Beyond all these investigations, little is known about the links between bloggers' motivations and their blogging activities. Although former studies have shed light on fractal pieces of the blog phenomenon, there is a vacuum in the literature that systematically analyzes why bloggers blog, how they blog, and to what extent bloggers with different blogging drives are different. The present study plans to fill in the gap by investigating the links between blogging motivations and behavior. The next sections present a brief literature review of the bloggers' motivations and behavior, followed by the specific research hypotheses to be tested in the empirical study.

#### Bloggers' motivations

To bloggers, a blog may function as a personal diary, a daily pulpit, a collaborative space, a political soapbox, a collection of links, or a set of memos to the world (Figueredo, 2005). Bloggers therefore are likely to blog out of heterogeneous motivations.

Although several surveys touch the base of bloggers' motivations (e.g., Blood, 2002; Blumenthal, 2005; Herring, Scheidt, Wright, and Bonus, 2005; Lenhart and Fox, 2006), Nardi, Schiano, Gumbrecht, and Swartz (2004) are the first to investigate the issue in depth. Through ethnographic interviews, Nardi, Schiano, Gumbrecht, and Swartz (2004) came to the conclusion that there are five blogging motivations: "to document their life experiences, to provide commentary and opinions, to express

deeply felt emotions, to articulate ideas through writing, and to form and maintain community forums." They also suggest that for a blogger, these motivations may not be mutually exclusive and may play out simultaneously.

We conducted a prior research by interviews with bloggers similar to Nardi, Schiano, Gumbrecht, and Swartz (2004) and found similar results. However, we saw through the interviews that "to express deeply felt emotions" and "to articulate ideas through writing" are intertwined; the line between the two is blurred. Both of them relate to self-expression and bring process gratifications to bloggers (Swanson, 1992). In the related literature discussing blogging or internet use (e.g., Blood, 2002; Herring, Scheidt, Wright, and Bonus, 2005; Zapfen, 2005), researchers also treated self-expression as a single, important driver. Therefore, in this study we look at self-expression as a blogging motivation by combing what Nardi, Schiano, Gumbrecht, and Swartz (2004) label as "to express deeply felt emotions" and "to articulate ideas through writing."

Through our interviews, we also found an important factor that has been neglected

so far in the discussion of blogging motivation: information seeking. By design, blogs allow bloggers to insert hyperlinks to other sites/blogs. Blogs also make information updating easy by the accommodation of information subscription services such as RSS feeds. These features, at least for some bloggers, help them to gather the information they need in a convenient way. To these bloggers, information searching is thus another motivation that drives them to create and manage their blogs.

Given Nardi, Schiano, Gumbrecht, and Swartz (2004) as the foundation, our own interviews and literature reviews discussed above therefore suggest that there are five major motivations for a blogger to blog (with which we focus in the following study): self-expression, life documenting, commenting, forum participating, and information searching. Table 1 gives examples of genres and representative blogs associated with these five motivations. It should be noted, however, that most bloggers may blog out of a mix of motivations rather than one single motivation. The five major motivations discussed here will serve as the basis for the empirical study on the motivation—behavior links.

### **Bloggers' behaviors**

Given bloggers' motivations, little has been discussed in the literature about blogging behavior, let alone a sensible categorization scheme. To us, such a scheme can be developed by referring to wider, related literature on people's information behavior. As all blogging activities evolve around information created and consumed by bloggers, there are basically two behavioral orientations of blogging: information search and social interaction, as discussed below.

First, following information economics as pioneered by Stigler (1961) and Nelson (1970), it can be assumed that bloggers are rational, adaptive, and calculating agents who maximize their utilities by searching for information in the blogosphere through links, RSS feeds, and blog search engines, etc. In this utilitarian sense, bloggers are likely to act like independent agents, who utilize every available design on their own blogs as well as on other blogs that can be reached from their own blogs to obtain content. The behavioral orientation underlying this "content" focus is information search.

Second, blogging is not limited to behaviors that can be satisfactorily explained by

**TABLE 1**  
Exemplary Blog Genres and Blogs out of Various Blogging Motivations

Motivation	Exemplary Genre	Exemplary Blog
Self-expression	Video blogs	<a href="http://www.youtube.com/profile?user=loneylgirl15">http://www.youtube.com/profile?user=loneylgirl15</a> , famous video blog created by Ramesh Flinders and Miles Beckett
Life documenting	Personal online diaries	<a href="http://brad.livejournal.com/">http://brad.livejournal.com/</a> , by Brad Fitzpatrick, a free software programmer and the creator of LiveJournal
Commenting	Political blog	<a href="http://www.politicalwire.com/">http://www.politicalwire.com/</a> , influential political blogs published by Taegan D. Goddard.
Community forum participation	Project blogs	Blogs to be found in <a href="http://www.whataproject.com/">http://www.whataproject.com/</a>
Information seeking	Aggregator blogs	<a href="http://jazter.com/ablog/">http://jazter.com/ablog/</a> , an investment-related aggregator blog

**There are five major motivations for a blogger to blog: self-expression, life documenting, commenting, forum participating, and information searching.**

utilitarian rationales. Just like Sherry's (1990) discussion of flea market activities, other than information search, blogging also relates to social embeddedness in the sense that the creation and consumption of content are embedded in social interaction. The social aspect of blogging thus relates to virtual communities consisting of various blogs. In such a digitally mediated social space, member-generated content is emphasized and integrated through communication (Hagel and Armstrong, 1997). In the current study, the behavioral orientation forming this "community" focus is social interaction.

The dichotomy of behavioral orientations introduced above is not absolutely new. Evans, Wedande, Ralston, and Hul (2001), for example, apply a similar dichotomy to look at the dynamics of consumer interaction in the virtual era. Of course, there may be more elaborate, more complicated schemes to categorize blogging behaviors, but as the first step in the attempt to link up the motivations and behaviors of blogging, we adopt the simple dichotomy of behavioral orientations with the aim to pave the ground of systematically understanding bloggers.

#### **Blog management**

How owning a blog is unique to bloggers is that, rather than merely drifting among the sea of websites managed by others, she or he has an online medium with a set of communication tools to manage. From various survey reports (e.g., Her-ring, Scheidt, Wright, and Bonus, 2005;

Lenhart and Fox, 2006; Sifry, 2006), it is apparent that bloggers differ widely in their efforts in blog management. In these recent surveys, such efforts are reflected by explicit, quantifiable measures such as the scope of interaction through blogroll links and the frequency of content update. Having described the distribution of these measures, however, former survey reports fail to explain the obvious heterogeneity in blogger's blog management efforts. Because the explanation of such heterogeneity may provide further insights into the blogging phenomenon, in this study we therefore include the possible direct/indirect influences that blogging behaviors and motivations may have on blog management efforts.

#### **HYPOTHESES**

One major mission of psychologists is to seek to explain the causes of overt human behaviors. Motivation is the major antecedent leading to actual behavior. It is the key driver of behavior that has attracted many research efforts in psychology. Early theories in psychology such as that of Maslow (1943) have attempted to build a general theoretical framework of the structure of human motivations, but there seems to be less literature than it deserves to address the links between motivation and behavior. One such framework is from Dugree, O'Connor, and Veryzer (1996). Their theory views motivations as originating from unfulfilled needs, wants, and desires. These unfulfilled needs produce psychological tension and drive that need to be reduced.

The tension and drive in turn lead to visible, goal-directed behavior that satisfies the unfulfilled needs and achieves individual goals.

This framework provides only a general picture of the links between motivation and behavior in the blogging context. The specific relationships between motivation and the resulting behavior may be different in different contexts. For instance, as illustrated above, in the blogosphere there is a variety of motivations for bloggers. Their blogging behaviors can be classified into a dichotomy. Exactly how these motivations are related to the blogging behavior is not clear from the general motivation theory discussed above. Thus, the present research investigates the relationships between blogging motivations and behavior. According to Dervin's (1983) sense making theory, the "meaning" of the blog to bloggers is shaped through blogging. Out of various motivations, bloggers accumulate knowledge about blogging through longitudinal use with regard to the fulfillment of various information needs. Consequently, they develop a cognitive model, a habitual hunting field, and an activity pattern in their blogging behavior.

Although it has been suggested that in many offline communities, extreme, individualistic self-expression is not favored by communities highlighting a sense of inclusion and interaction (Kozinets, 2002), for communication in the digital space it is found that the self-expression motivation helps explore individual and group identities, facilitating participation and enriching creative collaboration—all "for the purpose of building communities of shared interest" (Zappen, 2005). In this light, bloggers who have the motivation to express themselves through texts and multimedia content they create may not only blog for creation or expression sake, but are also likely to express themselves to obtain an identity for various social interaction

**As all blogging activities evolve around information created and consumed by bloggers, there are basically two behavioral orientations of blogging: information search and social interaction.**

activities. In other words, bloggers with the self-expression motivation are not just motivated to express themselves through blogging, but would also like to receive feedback from others about themselves. Therefore:

H1: The self-expression motivation leads to interaction-oriented blogging behavior.

For bloggers who blog to document their lives, the textual or multimedia records kept on their own blogs are one way to communicate with family and friends, to enrich the ongoing conversations those bloggers are interested in, and to establish an identity in the virtual communities they join. For some bloggers, blogging is even "a superior alternative to [sending] mass mail" (Nardi, Schiano, Gumbrecht, and Swartz, 2004). Exchanging information is more important than simply gathering information for these bloggers. Therefore:

H2: The life-documenting motivation leads to interaction-oriented blogging behavior.

Blogging provides an outlet for bloggers to express their opinions. More than just private chatting, bloggers may comment on issues in the public domain and can get quite serious on a topic (Nardi, Schiano, Gumbrecht, and Swartz, 2004). It has been pointed out that the 2004 U.S. presidential election was a catalyst in the explosive growth of the blogosphere (Perl-

mutter and McDaniel, 2005)—bloggers were urged to comment by the ease of blogging and became excited by the support and/or debate around certain opinions. As commentaries on blogs invited various responses, interactions are likely to be initiated by the commenting motivation. Therefore:

H3: The commenting motivation leads to interaction-oriented blogging behavior.

In the attempt to influence people by commenting on various topics, people seek more information to solidify their grounds and to elaborate their viewpoints (Lyons and Henderson, 2005). Bloggers who are motivated to comment by blogging would like to influence their readers. With the aim of influencing others, bloggers therefore are likely to gather content from the blogosphere in support of their arguments. Therefore:

H4: The commenting motivation leads to content-gathering-oriented blogging behavior.

For either altruistic or egoistic purposes, people who are motivated to participate in a forum have to interact with other people in the forum to get a sense of involvement. The internet provides some of its users with a sense of belonging to a given online social group upon participating in an ongoing forum (Hiltz and Wellman, 1997; Maignan and Lukas, 1997). The sense of belonging, in turn, is re-

inforced by online interactions made available by the internet. A blog, for people with a forum-participation motivation, is therefore a natural online platform to be involved in various forms of interactions, in which the reinforcement and mobilizing effects (Stanley and Weare, 2004) encourage interactions. Therefore:

H5: The forum-participation motivation leads to interaction-oriented blogging behavior.

To really participate in an ongoing forum, especially in a forum directed at a specific subject, a blogger need not only socialize with people in the blogosphere, but should also provide relevant information, opinions, or advice. For a blogger, one of the convenient avenues to prepare the material for contribution to a forum is to gather and/or refer to content from various blogs. Therefore:

H6: The forum-participation motivation leads to content-gathering-oriented blogging behavior.

In the information behavior literature, it is established that the information seeking motivation relates to goal-directed, situationally-bound constructing activities (e.g., Dervin, 1983; Savolainen, 1995; Wilson, 1999). Out of the information-seeking motivation, bloggers are more likely to explicitly gather content in the blogosphere. Therefore:

H7: The information seeking motivation leads to content-gathering-oriented blogging behavior.

In the blogosphere, interaction and content gathering are not necessarily independent of each other. Interactions for self-expression, commenting, and forum participation all can be enriched by the support of more information content. Gathering content can lead to more vibrant

social interactions in the virtual environment. On the other hand, content gathering can also be facilitated through advice coming from social interaction in the blogosphere. Therefore:

H8: Interaction-oriented blogging behavior is positively associated with content-gathering-oriented blogging behavior.

Bloggers blogging with the content gathering orientation may resort to many one-way solutions (e.g., search engines, RSS feeds, etc.) to get what they want. In contrast, blogging with the interaction orientation focuses on two-way communication with people the bloggers "know of" to a certain extent. The keener a blogger is to socialize by blogging, the more likely he or she "knows" and interacts with more people in the blogosphere. Therefore:

H9: Interaction-oriented blogging behavior positively corresponds to the scope of online interaction.

Few bloggers go back to their own blogs on a set schedule (Lenhart and Fox, 2006). However, for those who intensely communicate and interact with other people by blogging, their blogs are more likely to act like their "extended self" (Belk, 1988), and they are more likely to be frequently updated as a consequence. Therefore:

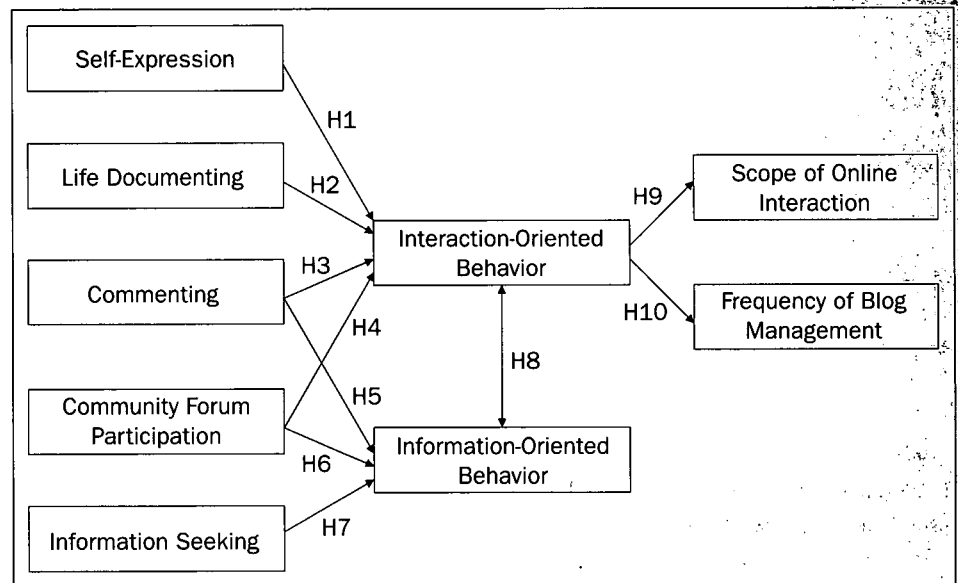
H10: Interaction-oriented blogging behavior positively corresponds to the frequency of blog management.

The set of hypothesized relationships thus constitutes our conceptual model, as Figure 1 illustrates.

## RESEARCH METHOD

### Sample

We tested the conceptual model on bloggers who kept their own blogs. A random



**Figure 1** The Model

sample of bloggers whose email accounts are revealed in their blogs serviced by the top-three Taiwanese blog service providers was surveyed to provide data for the empirical study. Of the 1,200 questionnaires administered via email, 323 responded. Among these, 311 had complete and internally-consistent information and they constitute the sample for our empirical research.

Table 2 compares the demographic and behavioral profile of the sample with other blogger samples that have been reported in the literature (Kumar, Novak, Raghavan, and Tomkins, 2004; Lenhart and Fox, 2006). Judged by the comparable statistics reported in Table 2, bloggers in our sample have similar profiles to those reported in other surveys.

### Measures

Multi-item measures were applied for all the constructs in the model. Tentative measures with a total of 48 items that are relevant to the current study were first developed and the measures were pre-tested on 26 bloggers. At this stage, the

measures were examined for low item-to-total correlations. Content validity was also reassessed by two researchers who are familiar with both the blogging phenomenon and scale development. The quality of the measurements thus defined was next assessed with confirmatory factor analysis performed on the sample. Only items that are loaded in excess of 0.5 were included in the final measures. The final measures were made up of 25 items for the 9 latent constructs. All paths in the measurement model are significant ( $p < 0.05$ ). Except for the two items measuring the scope of online interaction and another two measuring frequency of blog management, all the other 21 items are measured on 7-point Likert scales.

Table 3 summarizes the items and reports Cronbach's alphas.

## ANALYSIS AND RESULTS

### Analytical approach

Our hypotheses involve the relationships among the five blogging motivations, two blogging behaviors, and two dimensions concerning blog management efforts. To

**TABLE 2**

## Comparisons of Sample Characteristics between the Present Study and Former Surveys

Characteristics	Present Study	Former Surveys
Age	Mean = 23 years old; 70% of the respondents are between 16 and 24 years of age	Three out of four Livejournal bloggers are between 16 and 24 years of age (Kumar, Novak, Raghavan, and Tomkins, 2004)
Blogging history	Median = 1.1 years	Median around 1 year (Lenhart and Fox, 2006)
Number of hours per week spent working on the respondent's own blog	Median = 3 hours	Median = 2 hours (Lenhart and Fox, 2006)
Number of links on the blogroll	Median = 13	Median = 10 (Lenhart and Fox, 2006)

**TABLE 3**

## Survey Items and Cronbach Alpha Values of the Present Study

Construct	Items	Cronbach Alpha
Blogging for self-expressing	I use my blog to free my mind when I am moody. I express myself by writing in my blog. My blog is the place where I express what I feel.	0.86
Blogging for life documenting	I use my blog as my diary to document my life. By writing text and posting video/audio files, I keep a record of my life.	0.81
Blogging for commenting	I'm willing to comment on what other bloggers say. I'd like to respond to other blogs that I read (no matter if I know of the blogger or not). I'd like to receive people's comments on what I post on my blog.	0.73
Blogging for forum participating	Blogging helps me to make more like-minded friends. In my blogroll I have friends with whom I can share things. By blogging I interact with a set of blogs that have contents similar to what I put in my blog.	0.64
Blogging for information seeking	Blogging helps me extract information behind events that interest me. Blogging helps me explore more information about products and/or services. To me it is convenient to search for information by blogging.	0.85
Interaction by blogging	I'm used to setting up my blog for easy response to visitors' comments. I'm used to sharing what I think and feel on my blog. I'm used to discussing things that interest me by blogging.	0.72
Information search by blogging	I'm used to looking for information by exploring blogs in my blogroll. I'm used to looking for information by blog search engines such as Technorati and Google Blog Search. I'm used to looking for information by looking at classified articles in blogs that I visit. I'm used to looking for information by looking at blog articles that are frequently quoted.	0.79
Scope of online interaction	There are around ____ blogs in my blog's blogroll. My blog is included in around ____ blogs' blogroll.	0.85
Frequency of blog management	On average I update my blog every ____ days. I updated my blog ____ days ago.	0.78

**TABLE 4**  
Correlations among Constructs

	A	B	C	D	E	F	G	H	I
A. Interaction behavior	1								
B. Content gathering behavior	0.33	1							
C. Scope of online interaction	0.21	0.07	1						
D. Frequency of management	0.34	0.11	0.07	1					
E. Self-expression motivation	0.19	0.72	0.04	0.07	1				
F. Life documenting motivation	0.62	0.21	0.13	0.21	0.16	1			
G. Commenting motivation	0.65	0.25	0.13	0.22	0.20	0.54	1		
H. Forum participating motivation	0.46	0.55	0.09	0.16	0.45	0.38	0.41	1	
I. Information seeking motivation	0.33	0.62	0.07	0.11	0.58	0.31	0.36	0.65	1

verify the proposed model and related hypotheses simultaneously, a structural equation modeling (SEM) approach is applied for the analysis. The hypothesized model is presented by Figure 1 and is estimated by maximum likelihood estimation with LISREL 8, whereby the covariance matrix is an input. In model estimation, correlations between within-construct items are allowed. The fit indices ( $\chi^2$  with 244 degrees of freedom = 526.22; RMSEA = 0.061; GFI = 0.88; CFI = 0.92; IFI = 0.92) for the model indicate that the model captures the underlying relationships in the dataset to an acceptable degree. Table 4 reports correlations among the nine latent constructs as estimated by the structural model.

### Results

Table 5 reports the model estimates and *t*-values of the model. From most of the hypotheses, the corresponding model coefficients have the expected signs and are significant.

For H1, the hypothesis that the self-expression motivation leads to interaction by blogging is supported (coefficient =

0.34, *t*-value = 4.33). Hypothesis H2, which predicts that the higher the life-documenting motivation that a blogger has, the more likely he or she is to interact with people by blogging, is supported as well (coefficient = 0.41, *t*-value = 4.45). Hypothesis H3, which proposes that the commenting mo-

tivation leads to the engagement of online interaction by blogging, is confirmed (coefficient = 0.19, *t*-value = 2.32). Hypothesis H4 is also confirmed, which predicts that the commenting motivation also leads to interaction behaviors by blogging (coefficient = 0.19, *t*-value = 2.05). The only divergence from our expectation in this empirical analysis relates to the forum participation construct. We hypothesize that the forum participation motivation leads to both interaction (Hypothesis H5) and content gathering (Hypothesis H6) behaviors. The data, however, reveal that Hypothesis H5 is not empirically supported (coefficient = -0.051, *t*-value = -0.69), whereas Hypothesis H6 has marginal support (coefficient = 0.20, *t*-value = 1.73, and significant at the 0.1 level).

All of the remaining hypotheses find empirical support. The motivation for information seeking is found to positively correspond to content gathering behaviors (Hypothesis H7, coefficient = 0.52, *t*-value = 5.43). Looking at the two behavioral dimensions, interaction by blogging

**TABLE 5**  
Summary of Results of the Present Study

Hypothesis	Expected Sign	Path Coefficient (t-Value)	Remark
H1	+	0.34 (4.33)	Supported
H2	+	0.41 (4.45)	Supported
H3	+	0.19 (2.32)	Supported
H4	+	0.19 (2.05)	Supported
H5	+	-0.051 (-0.69)	Unsupported
H6	+	0.20 (1.73)	Marginally supported
H7	+	0.52 (5.43)	Supported
H8	+	0.082* (2.20)	Supported
H9	+	0.21 (3.15)	Supported
H10	+	0.34 (5.06)	Supported

\*Error covariance.



is found to be positively associated with content gathering by blogging (Hypothesis H8, validated by error covariance, coefficient = 0.082,  $t$ -value = 2.20). Furthermore, the hypotheses that more interaction by blogging leads to a larger scope of online interaction (Hypothesis H9, coefficient = 0.21,  $t$ -value = 3.15) and a higher frequency of blog management (Hypothesis H10, coefficient = 0.34,  $t$ -value = 5.06) are both empirically confirmed.

To further ensure that our conceptual model (Figure 1) does not miss any probable causal relationships among the constructs under the current analytical frame, we also fit a model with additional causal links. This alternative model is thus constructed so that each of the five motivations leads to the two blogging behavioral dimensions (i.e., with the addition of self-expression  $\rightarrow$  content gathering, life documenting  $\rightarrow$  content gathering, and information seeking  $\rightarrow$  interaction), whereas both of the blogging behavioral dimensions lead to the scope of online interaction and the frequency of blog management (i.e., with the addition of content gathering  $\rightarrow$  scope of online interaction and content gathering  $\rightarrow$  frequency of blog management).

We empirically find that none of the five additional relationships have significant coefficients (at the 0.05 level) in this alternative model. At the same time, the signs and levels of significance of coefficients do not change in this alternative model. Both AIC (692.79 for the alternative model versus 688.22 for the proposed model) and CAIC (1086.20 versus 1072.15) comparisons indicate that the proposed model, while losing no relevant information about the data, is more parsimonious.

## DISCUSSION

In this study we propose a conceptual model of bloggers' blogging activities.

## The current study proposes and empirically validates an analytical framework of blogging as a new mode of computer mediated communication.

Having clarified heterogeneous motivations and behaviors of blogging, a set of 10 hypotheses that relate the blogging motivations to blogging behaviors and usage patterns is proposed. An empirical study based on data from an online survey validates most of the hypotheses in the conceptual model. It is concluded that interaction by blogging is driven by the motivations of self-expression, life documenting, and commenting. On the other hand, content gathering by blogging is found to be driven by the motivations of commenting, forum participation, and information seeking. Furthermore, the intensity of the bloggers' interaction-oriented blogging behavior is found to positively influence their scope of online interaction and frequency of blog management.

## Implications

Maintained by bloggers' passions, blogs are expected to profoundly change the world of mass media (Baker and Green, 2005). To marketers, the emergence of blogging implies that there is no longer a scarcity of media, but an even more fractal media space. The media incumbents no longer control the shape and flow of the messages they provide to the market, and the "audience" who receives monologues from mass media can be itself a new web of media. Up to this stage, marketers recognize that blogging is an issue to be faced and a new platform to utilize, but the environment is mostly in a "wait-and-see" mode (Mintz, 2005) mainly because people have not yet figured out

what is working behind the mosaic of the blogosphere.

Most bloggers are admittedly ordinary people blogging for a very small audience (Nardi, Schiano, Gumbrecht, and Swartz, 2004), and the digital hinterland (Baker and Green, 2005) they build up shows a typical "long-tail" (Anderson, 2004) pattern in that the majority of blogs attract little attention. However, it has been quantitatively demonstrated in the recent literature (Huang and Lin, 2006) that even following the mass media, eye-ball-counting thinking, accommodating the "long tail" in an online media plan that can enhance a campaign's cost-effectiveness. Furthermore, as more and more people become bloggers, understanding the very nature of blogging activities is crucial for marketers to utilize their ever-growing blogosphere.

Our analysis provides insights into motivations and behaviors of blogging and may serve as the foundation for marketers to look for proactive utilizations of blogs. The five blogging motivations discussed in this study show directions for the exploration of new brand communication opportunities. A set of such opportunities is summarized in Table 6. From the results, it is obvious that different blogging motivations should be served by different communication strategies and tactics. Upon facing blog-related communication tasks, managers therefore are suggested to pay attention to heterogeneous motivations in addition to conventional demographic variables in market segmentation, target selection, positioning, and detailed message design and execution.

**TABLE 6****Managing Brand Communication via Blogs by Addressing Various Blogging Motivations**

<b>Blogging Motivations</b>	<b>Communication Opportunities for Brands</b>
Self-expression	<ul style="list-style-type: none"> <li>• Provide platforms (e.g., events, competitions) to encourage brand-related self-expressions.</li> <li>• Explore opportunities to link such self-expressions with the brand's communication messages for conventional media.</li> </ul>
Life documenting	<ul style="list-style-type: none"> <li>• Create brand-related experiences for bloggers to document.</li> <li>• Make bloggers' brand experiences a part of the brand's experiences (e.g., have a meta-blog run by the brand that empathetically documents brand-related personal anecdotes recorded by bloggers).</li> </ul>
Commenting	<ul style="list-style-type: none"> <li>• Locate the influential commentator blogs; subscribe to their RSS feeds so as to sense the pulses of the blogosphere.</li> <li>• Make quick and proactive responses to unfriendly comments.</li> <li>• Invite bloggers to join the brand's public relations activities.</li> </ul>
Forum participation	<ul style="list-style-type: none"> <li>• Encourage staff to participate in brand-related online communities.</li> <li>• Sponsor forums to discuss the brand.</li> <li>• Provide stimulating information for discussion to keep the dialogue ongoing.</li> </ul>
Information seeking	<ul style="list-style-type: none"> <li>• Pay attention to SEO (search engine optimization) on blog-specific search engines.</li> <li>• Provide rich information and easy-to-find paths for eyeballs to converge.</li> <li>• Synthesize internal and external pro-brand blogging activities on the brand's main website.</li> </ul>

Furthermore, the dichotomy of blogging behavioral dimensions and the drivers behind each dimension expounded by this study are also relevant for advertising and public relations practitioners. Coupled with the knowledge of the motivations leading to the two different blogging behaviors, our model suggests that for any online campaigns that attempt to attract bloggers' attention, one has to specify which behavioral dimension that the campaign is targeting. Execution and media planning for information-gathering-oriented bloggers should provide rich information and easy-to-find paths for bloggers' eyeballs to converge. Other than satiating the bloggers' urge for information seeking, the content provided in this direction should be handy for bloggers to refer to (for their commenting and forum participation motivations).

Execution and media planning targeted at interaction-oriented blogging activities may best attempt to get individual, nurturing empathy, and encourage self-expression by audience bloggers, which will keep the dialogue going. Practitioners should also pay attention to the conclusion that a blogger's scope of online interaction and frequency of blogging are determined by the degree of his or her interaction behaviors, and not by that of his or her content-gathering behaviors. If the purpose of a campaign in the blogosphere is to get a simple message diffused as quick and as far as possible, then the logical target should be bloggers who are blogging mainly to interact with other bloggers. Instead, if the campaign has more information to communicate and has a longer-term agenda, then a more balanced targeting plan or even

more emphasis on content-gathering-oriented bloggers will help maximize a campaign's effectiveness.

In terms of research implications, the current study proposes and empirically validates an analytical framework of blogging as a new mode of computer mediated communication (CMC). Our model addresses bloggers' motivations, behaviors, and management effort heterogeneity, and it also clarifies the relationships among them. Given the vacuum in the current literature that maps out why and how bloggers blog, the analytical framework serves as a stepping-stone for further understanding of the blogging phenomenon.

**Research limitations and future research**  
Our conceptual model consisting of a set of hypotheses is largely validated in the empirical analysis, except that in our

data the motivation of forum participation does not significantly correspond to the behavior of interaction by blogging. We are not able to provide a satisfying explanation for this relatively counterintuitive result at this stage. However, looking at the Cronbach alpha coefficient of the forum participation construct (Table 3), it is apparent that this construct has relatively low reliability versus other constructs under study. The alpha admittedly is lower than the threshold of 0.7 that Nunnally (1978, p. 245) recommends. We acknowledge that this low-reliability construct is the weak point in our empirical analysis and needs to be addressed in future studies.

The current study looks at five motivations of blogging, two behavioral dimensions of blogging, and two indications of efforts in blog management. Although the constructs under study are mostly discussed in the literature and are important in understanding the blogging phenomenon, they are not exhaustive. For example, in our prior study that interviewed bloggers, an informant explicitly proposed that "seeking help" and "giving help" are motivations that are important for him and some of his fellow bloggers to blog. Another informant revealed that to escape from the "real world" is why she blogs. Furthermore, the current study focuses solely on individual bloggers who blog for nonfinancial purposes without considering motivations and behaviors that relate to business or money making. These cases indicate that although our model accommodates the most common factors in the blogging phenomenon, the picture it provides is certainly not comprehensive.

Beyond these limitations, given the model presented here as the foundation, there are various directions for future research. First, the current study looks at bloggers rather than blogs. Future studies that link up the bloggers (their motivations and behaviors as addressed in this study) and their blogs

(e.g., content, direction of outbound hyperlinks in the blogrolls, etc.) may provide valuable insights into blogging activities. Second, as there are some attempts to categorize bloggers (e.g., Herring, Scheidt, Wright, and Bonus, 2005; Lenhart and Fox, 2006; Nardi, Schiano, Gumbrecht, and Swartz, 2004), they mostly focus on some single dimension of bloggers. The analytical framework in this study may help future research to arrive at a more elaborate and comprehensive categorization scheme to classify bloggers. Third, an interesting and potentially important question that has been neglected so far is that, because blogging is so easy, costs so little, and seemingly satisfies various information and noninformation needs, why do the majority of internet users up to this stage not keep a blog? There are people who own blogs, there is another group of internet users who do not own a blog, but read blogs, and there are internet users who are distant from the blogosphere. Future studies that provide explanations for such facts will benefit marketers in gaining a more realistic picture about the attractiveness of the blogosphere. Fourth, although the model presented in the current study clarifies the relationships between various blogging motivations and behavioral orientations, the modeling framework by its nature is not a segmentation tool. A managerially relevant extension of our model, given the motivations and behaviors identified, is to empirically apply the means-end chain model (e.g., Reynolds, 2006) so as to extract attributes, consequences and values of blogging in more details. Relevant decision segments can be produced in this way.

To conclude, the study herein is an attempt to objectively analyze the drivers and behaviors of blogging activities. Being preliminary in nature, we do not claim the model to be comprehensive. However, given the empirical validation reported above, we believe that the model

presented in this article provides a reasonable platform for further analysis of the blogging phenomenon. **JAR**

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## REFERENCES

- ANDERSON, C. "Long Tail." *Wired*, October 2004: [URL: <http://www.wired.com/wired/archive/12.10/tail.html>].
- BAKER, S., and H. GREEN. "Blogs Will Change Your Business." *BusinessWeek*, May 2, 2005.
- BELK, R. W. "Possessions and the Extended Self." *Journal of Consumer Research* 15, 2 (1988): 139-68.
- BLOOD, R. *The Weblog Handbook: Practical Advice on Creating and Maintaining Your Blog*. Cambridge, MA: Perseus Publishing, 2002.
- BLUMENTHAL, M. M. "Toward an Open-Source Methodology: What Can We Learn from the Blogosphere." *Public Opinion Quarterly* 69, 5 (2005): 655-68.
- DEARSTYNE, B. W. "Blogs: The New Information Revolution?" *Information Management Journal* 39, 3 (2005): 38-44.
- DERVIN, B. "An Overview of Sense-Making Research: Concepts, Methods, and Results to Date." Presented at the Annual Meeting of International Communication Association, May 1983: [URL: <http://communication.sbs.ohio-state.edu/sense-making/art/artdervin83.html>].
- DUGREE, J. F., G. C. O'CONNOR, and R. W. VERYZER. "Observations: Translating Values into Product Wants." *Journal of Advertising Research* 36, 6 (1996): 90-100.
- EVANS, M., G. WEDANDE, L. RALSTON, and S. HUL. "Consumer Interaction in the Virtual Era: Some Qualitative Insights." *Qualitative Market Research* 4, 3 (2001): 150-59.
- FIGUERO, P. "Blogs and Blog Advertising: Smart Online Marketing, or a Waste of Money?" *Target Marketing* 28, 3 (2005): 37.
- FIRAT, A. F., and A. VENKATESH. "Liberatory Postmodernism and the Reenchantment of Consumption." *Journal of Consumer Research* 22, 3 (1995): 239-67.
- HAGEL, J., and A. ARMSTRONG. *Net Gain: Expanding Markets through Virtual Communities*. Cambridge, MA: Harvard Business School Press, 1997.
- HERRING, S. C., L. A. SCHEIDT, E. WRIGHT, and S. BONUS. "Weblogs as a Bridging Genre." *Information Technology & People* 18, 2 (2005): 142-71.
- HILTZ, S. R., and B. WELLMAN. "Asynchronous Learning Networks as a Virtual Classroom." *Communications of the ACM* 40, 9 (1997): 44-49.
- HUANG, C., and C. LIN. "Modeling the Audience's Banner Ad Exposure for Internet Advertising Planning." *Journal of Advertising* 35, 2 (2006): 129-43.
- IVES, N. "Nike Tries a New Medium for Advertising: The Blog." *New York Times*, June 7, 2004.
- KOH, JOON, and YOUNG-GUL KIM. "Sense of Virtual Community: A Conceptual Framework and Empirical Validation." *International Journal of Electronic Commerce* 8, 2 (2003): 75-93.
- KOZINETS, R. V. "Can Consumers Escape the Market? Emancipatory Illuminations from Burning Man." *Journal of Consumer Research* 29, 1 (2002): 20-38.
- KRISHNAMURTHY, S. "The Multidimensionality of Blog Conversations: The Virtual Enactment of September 11." *Internet Research* 3.0, October 2002.
- KUMAR, R., J. NOVAK, P. RAGHAVAN, and A. TOMKINS. "Structure and Evolution of Blogspace." *Communications of the ACM* 47, 12 (2004): 35-39.
- LENHART, A., and S. FOX. "Bloggers: A Portrait of the Internet's New Storytellers." *Pew Internet & American Life Report*, July 19, 2006: [URL: <http://www.pewinternet.org/pdfs/PIP%20Bloggers%20Report%20July%2019%202006.pdf>].
- LYONS, B., and K. HENDERSON. "Opinion Leadership in a Computer-Mediated Environment." *Journal of Consumer Behaviour* 4, 5 (2005): 319-29.
- MAIGNAN, I., and B. A. LUKAS. "The Nature and Social Uses of the Internet: A Qualitative Investigation." *Journal of Consumer Affairs* 31, 2 (1997): 346-71.
- MASLOW, A. H. "A Theory of Human Motivation." *Psychological Review* 50, 4 (1943): 370-96.
- MINTZ, J. "Many Advertisers Find Blogging Frontiers Is Still Too Wild," *Wall Street Journal*, March 25, 2005.
- NARDI, B. A., D. J. SCHIANO, M. GUMBRECHT, and L. SWARTZ. "Why We Blog." *Communications of the ACM* 47, 12 (2004): 41-46.
- NELSON, P. "Information and Consumer Behavior." *Journal of Political Economy* 78, 2 (1970): 311-29.
- NIKKEI REPORT. "Large Companies Set Sights on Blog Ad Services Amid Growing Use," June 20, 2005.
- NUNNALLY, J. C. *Psychometric Theory*. New York: McGraw-Hill, 1978.
- PERLMUTTER, D. D., and M. MCDANIEL. "The Ascent of Blogging." *Nieman Report* 59, 3 (2005): 60-64.
- REYNOLDS, T. J. "Methodological and Strategy Development Implications of Decision Segmentation." *Journal of Advertising Research* 46, 4 (2006): 445-61.
- SAVOLAINEN, R. "Introduction to the Special Issue: Everyday Life Information Seeking: Approaching Information Seeking in the Context

of Way of Life." *Library and Information Science Research* 17, 3 (1995): 259-94.

SHERRY, J. F. "A Sociocultural Analysis of a Midwestern American Flea Market." *Journal of Consumer Research* 17, 1 (1990): 13-30.

SIFRY, D. "State of the Blogosphere, August 2006": [URL: <http://www.sifry.com/alerts/>].

———. "The State of the Live Web, April 2007": [URL: <http://www.sifry.com/alerts/>].

STANLEY, J. W., and C. WEARE. "The Effects of Internet Use on Political Participation: Evidence from an Agency Online Discussion Forum." *Administration & Society* 36, 5 (2004): 503-27.

STIGLER, G. J. "The Economics of Information." *Journal of Political Economy* 69, 3 (1961): 213-25.

SWANSON, D. L. "Understanding Audiences: Continuing Contributions of Gratifications Research." *Poetics* 21, 4 (1992): 305-28.

WILSON, T. D. "Models in Information Behaviour Research." *Journal of Documentation* 55, 3 (1999): 249-70.

ZAPPEN, J. P. "Digital Rhetoric: Toward an Integrated Theory." *Technical Communication Quarterly* 14, 3 (2005): 319-25.

ZHAO, XIA, FANG FANG, and ANDREW B. WHINSTON. "Designing On-Line Mediation Services for C2C Markets." *International Journal of Electronic Commerce* 10, 3 (2006): 71-93.

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