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# Corporate blogs : what factors influence blog readers and comment providers to continue using blogs

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**CORPORATE BLOGS:**
**WHAT FACTORS INFLUENCE BLOG READERS AND COMMENT**
**PROVIDERS TO CONTINUE USING BLOGS**

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**B.Sc. Academy of Economic Studies, 2008**

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**Abstract**

As blogs have become a new and significant way of distributing information, businesses

and organizations have started looking for ways to exploit corporate blogs. With their

recent evolution, little research has been conducted on the factors that influence blog

readers and comment providers to continue engaging in corporate blogging activities. In

this study, we analyze IT corporate blog users' motivations to continue using blogs based

on an integrated technology acceptance model (TAM) and expectation confirmation

model for the information technology domain (ECM-IT). Our findings suggest that

confirmation, perceived usefulness, information quality and social norms are the main

determinants of satisfaction, attitude and continued blog usage intention. Moreover,

results indicate that some of the factors that influence users to continue using personal

blogs do not apply to corporate blog visitors. Overall, our model explains 71% of the

variance of continued blog usage intention.

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## Introduction

The emergence of web 2.0 has created new ways for users to interact with software systems and each other. These changes have made possible an entirely new online experience, including e-commerce applications, social media applications, blogs and many others, and also opened up new possibilities for research (Bouhlel, Mzoughi, Ghachem, & Negra, 2010; Hsu & Lin, 2008; K.-Y. Wang, Chih, & Jhong, 2009). Of these, blogs have only recently started attracting the attention of the academic community, as well as businesses and other organizations. Originally used as online writing tools to help users keep track of their own online records, blogs have evolved into powerful communication tools. According to Hsu and Lin (2008) blogs "attract tremendous attention and exert great influence on society" (p. 65).

The number of blogs has grown significantly in the past few years. Similarly, the number of companies that have launched public blogs to reach out to blog readers as potential customers, or to keep in touch with a wide range of stakeholders, has grown as well (Liu & Ji, 2010). The blog has become an important and significant channel to distribute information among people and organizations. Moreover, previous studies (e.g., Shiau, Huang, & Shih, 2011) found that Internet users visit blogs on a regular basis and return to their chosen blogs frequently. Organizations are starting to take advantage of these characteristics and use blogs for marketing, public relations, knowledge sharing and other purposes. These company-managed blogs have created a new category, called corporate blogs (He & Zhu, 2007).

Despite their growing popularity, only a few studies have focused on blog visitors' behavior and motivations, and how blogs impact the way information travels in an online

environment (Hsu & Lin, 2008; C.-Y. Wang, Chou, & Chang, 2010; S.-M. Wang & Lin, 2011). These studies used well-known theories, including the theory of reasoned action (TRA) (Hsu & Lin, 2008; C.-Y. Wang et al., 2010) , the technology acceptance model (TAM) (Bouhlel et al., 2010; S. I. Hong, Lee, & Kim, 2009; Hsu & Lin, 2008; Pookulangara & Koesler, 2011), the DeLone and McLean information systems (IS) success model (Hsieh, Kuo, Yang, & Lin, 2010; S.-M. Wang & Lin, 2011) and expectation confirmation theory (Shiau et al., 2011; Shiau & Luo, 2010).

These studies have analyzed different sets of possible factors that might influence people to visit blogs. However, they have focused on personal blogs, largely ignoring corporate blog visitors. While it is possible that some of the same factors will also apply to those visiting corporate blogs, research is required to confirm them, as well as identify possible additional factors. This requires an integrated conceptual framework, beginning with the factors that have been proposed by studies on personal blogs and determining their effect in a corporate blogging environment.

Previous studies have identified two categories of blog users, bloggers and blog visitors, and two categories of blog visitors, readers and comment providers (Hsu & Lin, 2008; S.-M. Wang & Lin, 2011). Bloggers create and maintain the content of their blogs. On the other hand, blog readers are visitors who only read the information posted on the blog, while comment providers also actively engage in communicating with the blogger and other blog visitors by posting comments on the blog (S.-M. Wang & Lin, 2011).

Bloggers in the corporate environment represent the interests of the company and are usually its employees (He & Zhu, 2007). Therefore, their job requires them to

continue using the blog. On the other hand, blog visitors can freely decide whether to continue using a corporate blog or not. Since companies are interested in keeping their existing visitors and attracting new ones (He & Zhu, 2007; Liu & Ji, 2010), the factors that influence blog readers and comment providers to continue using the blog have a higher practical significance for the company compared to the factors that influence bloggers to continue blogging. Therefore, our study will focus solely on the two types of blog visitors, readers and comment providers.

Some factors may influence both readers and comment providers, while others might influence only one of these categories of blog users. For example, a comment provider's intention to continue using a corporate blog might be influenced by her/his desire to interact with the blog's community. On the other hand blog readers, who do not post comments on the corporate blog, would not be affected in this way. Therefore, the major questions that will form the basis of our study are:

(a) What factors influence blog readers and comment providers to continue engaging in blogging activities (reading and commenting) in a corporate blog?

(b) Are blog readers and comment providers influenced by different factors to continue engaging in blogging activities (reading and commenting) in a corporate blog?

Our study will contribute to understanding the corporate blogging phenomenon, as well as blogging in general. First, to our knowledge, this study is the first to focus solely on corporate blogs and the factors that influence people to continue visiting, and

sometimes interacting with, these blogs. This should provide an important contribution for practitioners, as our findings can be used to inform companies that manage their own blogs on the factors that influence blog visitors to continue engaging (reading and commenting) in their blog.

Second, since a corporate blog is different from a personal one, we expect that the factors that influence corporate blog visitors to engage in blogging activities are different as well. Our research will attempt to answer this question by looking at personal blog studies, and applying the key factors found there to the corporate environment.

Third, as discussed above, blog visitors can be divided into blog readers and comment providers. Based on the research conducted by Chai and Kim (2010), readers and comment providers are hypothesized to have different factors influencing their blog usage intention. Our research will determine whether there are different factors influencing these two categories to continue using a corporate blog.

Fourth, the factors that influence whether a blog visitor is likely to post comments on the blog or just read it have not been studied in the blog literature. Our study intends to address this question by applying the opinion seeking versus opinion leadership theoretical lens in the field of corporate blogs (Childers, 1986; Reynolds & Darden, 1971).

Fifth, our study provides a number of theoretical and methodological refinements to earlier research. These are represented in our integrated research model framework and will be discussed in detail in the model and methodology sections.

This study consists of an online survey conducted on corporate blog visitors. Access to the respondents was obtained by first identifying a sample of corporate blogs, and inviting them to participate in the study by posting a link to the online survey on their blog. Six corporate blogs from the information technology (IT) sector agreed to participate in the survey. The collected data was imported into SPSS and Amos. The main statistical technique used was structural equation modeling (SEM).

Our results indicate that some of the factors that influence users to continue using personal blogs do not apply to corporate blog visitors. For example, ease of use, enjoyment, and credibility were not found to have a significant impact on satisfaction, attitude, or continued blog usage intention. The factors that were found to have a significant impact on the blog visitor's intention to continue using the blog were confirmation, perceived usefulness, information quality and social norms. We will expand on these findings in the results and discussion sections.

This thesis is structured into six chapters. In the literature review, we define the concepts of blogs and corporate blogs, analyze the relevant literature on them, and discuss why this research is important for academics and practitioners. In the third chapter, we discuss our theoretical lens, and present our chosen constructs and research model. Chapter four includes information about our methodology, study population, accessing our sample and data collection. The fifth chapter presents the results of our statistical analysis. The paper will conclude with a discussion section and a brief overview of our research's contributions, limitations, and opportunities for further studies.

## Literature Review

The purpose and scope of the literature review is to analyze the existing literature on blogs and corporate blogs, define blogs, and look at the factors that have been previously hypothesized to influence continued blog usage intention. The emphasis will be on corporate blogs because they are the focus of our study.

### Overview of Blogs

The term 'blog' was first introduced by Barger (1999), who briefly described blogs as "webpages where a weblogger (sometimes called a blogger, or a pre-surfer) 'logs' all the other webpages she/he finds interesting" (p. 1). Since then, blogs have evolved rapidly, encouraged by the appearance of new blogging tools making blog technology easier to use (Hsieh et al., 2010).

Huang et al. (2007) defined blogs as "personal journals on the Internet arranged in reverse chronological sequence that facilitate interactive computer mediated communication through text, images, and audio/video objects" (p. 473). However, this definition is sometimes considered too restrictive regarding the structure of a blog, as the blog's content does not have to be arranged in a reverse chronological sequence. C.-Y. Wang et al. (2010) classified blogs more broadly as tools that "(make) it easier for people to express their opinions" (p. 1657) and noted that "blogging on the Internet has become a primary and popular way to distribute information" (p. 1657). From an IS perspective, S.-M. Wang and Lin (2011) defined blogs as "a kind of information system which people use to gather or share information" (p. 51).

We believe that previous definitions are either too restrictive or too broad in the delimitation of blogs. Blogs can be organized based on topic, relevance of particular terms, or the priority of the discussion. Moreover, while the blogger usually initiates the discussion, two-way communication is encouraged, allowing those who visit the blog to respond as comment providers through posting comments, or through other methods that are available on the blog (i.e., voting in polls). However, the blogger can control whether a particular comment is shared with other visitors or not.

Therefore, we have clarified the definition of blogs, while encompassing the characteristics presented in previous definitions. From an IS perspective, we define a blog as a public information system, or website, where the system's content manager, also referred to as the blogger, can communicate and share information with the blog's visitors through posts and comments. At the same time, visitors can choose to participate in the blog's activity and interact amongst each other by providing comments on the blog's posts, subject to approval of the blogger. However, blog visitors can limit their participation to only reading the information presented in the blog.

**Overview of Corporate Blogs**

Corporate blogs have evolved from personal blogs and therefore share many of their characteristics. This category of blogs has several names: corporate blogs (He & Zhu, 2007; S. Lee, Hwang, & Lee, 2006), business blogs, company blogs and enterprise blogs (Liu & Ji, 2010). However, all of these names refer to the same concept. Because it is the most commonly used term, we refer to this category as corporate blogs.

With the evolution of web 2.0 technologies, continuous and up-to-date communication between companies and their stakeholders is now expected. Corporate blogs offer a platform to facilitate this process, as they can now be integrated with social communication platforms and be used with mobile technology (He & Zhu, 2007).

One of the main differences between a personal and a corporate blog is that a personal blog is published by an individual to present personal opinions or to further personal goals. On the other hand, a corporate blog represents the views of a company and is used as a communication tool to its stakeholders to further the company's goals and objectives (He & Zhu, 2007). While the blog's content is still managed by the blogger, this individual (or group) is supposed to represent the company's perspective. Moreover, while personal blogs generally use graphical ads and paid links to generate revenue, corporate blogs rarely link to sites outside their organization to generate ad revenue.

Thus, a corporate blog can be defined as a blog in which one or more bloggers, on behalf of an organization they represent, share company-related information with the blog's visitors. As with any blog, visitors can choose to participate in the blog's activity and interact amongst each other by providing comments on the blog's posts, subject to approval of the blogger. Corporate blogs do not include personal blogs that use corporate web space. Nor do they include corporate blogs that are only used internally by the company; we define a corporate blog as accessible to all Internet users.

Corporate blogs also share a number of characteristics with microblogs. Microblogs are essentially small blogs that focus on reduced and concise content such as short sentences, usually up to 140 characters, or individual images (Kaplan & Haenlein,

2011). Facebook and Twitter are well-known examples of sites on which companies have created microblogs. While microblogs evolved from blogs, because of their limited message content and emphasis on social media interaction they are not considered to be corporate blogs. However, Kaplan, and Haenlein (2011) note that microblogs can be used together with external resources, such as the company's corporate blog, to enhance the company's overall reputation through different social media channels.

**Benefits of corporate blogs.** Corporate blogs provide a communication tool that can help stakeholders engage in a dialogue, build relationships and form long-term online communities (Puschmann, 2010). As a direct communication channel, corporate blogs allow the company to provide and receive feedback to and from their stakeholders. This helps companies better understand the needs of stakeholders.

According to Jackson at al. (2007), the benefits of corporate blogging for the company and blog users can be classified into three general types: (1) informational, (2) social and (3) other. Informational benefits include getting and sharing information, problem solving, and obtaining feedback. Social benefits include community building, improving communication and collaboration, and networking, as well as managing and developing a reputation. Other benefits include increased efficiency by using blog technologies to manage the content and community interaction.

Readers and comment providers can both obtain information they need concerning a company or business from its blog. Corporate blogs "can be used to offer product support, give expert advice, update the community on company activities" (Cox, Martinez, & Quinlan, 2008, p. 5). Additionally, comment providers can engage in a

dialogue with the company to help solve related problems or request additional information. Corporate blogs can be used to target specific audiences (Ramos, Li, Kim, & Joseph, 2006) or "to target other business or individual consumers" (Cox et al., 2008, p. 6). Moreover, the information can be filtered by the blog's visitor based on relevant categories, keywords (also known as tags), or specific dates, thus allowing the visitor to focus on the content that interests them. Overall, these characteristics can help the company build a bigger online community by bringing new users.

Another important factor to consider when using corporate blogs is that the set up costs are minimal. This is especially important when a small business wants to grow, but does not have enough resources for an advertising company (Wood, Behling, & Haugen, 2006).

**Number of corporate blogs.** The number of corporate blogs is difficult to estimate, mainly because a delimitation of corporate blogs from personal ones is not available. Two studies were conducted by the Technorati website, which help us better understand the increase in numbers of corporate blogs. Sobel (2010), after conducting a survey on over 7000 bloggers, estimated that, of the total number of active blogs on the Internet, 1% were corporate blogs. A more recent survey (State of Blogosphere, 2011), reported that the proportion of corporate blogs had increased to 8% in 2011.

Other recent studies also suggest an increase in the number of corporate blogs. S. Lee et al. (2006) found in 2005 that, of Fortune 500 companies, only 18 had corporate blogs. In 2006, He and Zhu (2007) conducted research on corporate blogs using a sample of Fortune 500 companies blogs and found that 40 companies had corporate blogs. A

more recent study, conducted by Liu and Ji (2010) in 2009, found 78 corporate blogs

from Fortune 500 companies. Thus, in the case of Fortune 500 companies, the number of

corporate blogs has grown considerably in recent years. Moreover, reports from the blog

directory Technorati suggests that the overall number of corporate blogs have increased

as well (State of Blogosphere, 2011).

**Overview of Blog Research**

The following table contains a summary of blog research studies, as well as their

main findings.

**Table 1. Previous Blog Technology Research.**

| No | Author | Topic | Study Summary | Main Findings |
|----|--------|-------|---------------|---------------|
| 1 | Miura and Yamashita (2007) | Continued blog usage intention | Analyzed the psychological and social factors motivating users to continue using the blog | "benefits to self, relationships with others, and skill in handling information had significant positive effects on the intention to continue" (p. 1452) using the blog |
| 2 | Baker and Moore (2008) | Intention to use blogs | Analyzed the psychosocial variables that influence users to engage or not in blogging | Psychological distress, self-blame and venting will influence users to engage in blogging activities |
| 3 | Guadagno, Okdie, and Eno (2008) | Intention to use blogs | "examined whether the different Big Five traits predict the action of blogging" (p. 1993) | "personality factors impact the likelihood of being a blogger and have implications for understanding who blogs" (p. 1993) |
| 4 | Hsu and Lin (2008) | Intention to use blogs | Analyzed the factors that "motivate people to participate in blog activities" (p. 65) | "ease of use, enjoyment, altruism and reputation were positively related to attitude toward blogging" (p. 65) |

**Table 1. Previous Blog Technology Research.**

| No | Author | Topic | Study Summary | Main Findings |
|---|---|---|---|---|
| 5 | S. I. Hong, Lee, and Kim (2009) | Intention to use blogs | "considered perceived usefulness, perceived ease of use, reputation, reciprocity, enjoyment of helping, social identity as the determinants of influencing the intention of blog usage" (p. 1) | "perceived usefulness, perceived ease of use, reciprocity, social identity affected directly the intention of blog usage. Also social identity has moderate effect via reciprocity and enjoyment of helping on blog usage" (p. 1) |
| 6 | K.-Y. Wang, Chih, and Jhong (2009) | Intention to use blogs | Examined "the factors that impact the intention to use blog from a social cognitive perspective" (p. 360) | "self-efficacy, positive outcome expectations, and negative outcome expectations significantly and directly influence people's intention to use blog" (p. 358) |
| 7 | Bouhlel, Mzoughi, Ghachem, and Negra (2010) | Attitude toward the blog and intention to purchase | Analyzed "consumers' attitude toward the blog and the effect of the blog on the purchase intention" (p. 37) | "credibility, usefulness and ease of use of the blog generate a positive attitude toward the blog" (p. 37); "attitude toward the blog had a positive impact on the purchase intention" (p. 37) |
| 8 | Hsieh, Kuo, Yang, and Lin (2010) | Blog – User Satisfaction | By integrating IS success and marketing, the authors analyzed the "linkage between blog quality (information quality and system quality) and blog user satisfaction" (p. 1434) | information quality and system quality of the blog "contributed significantly to the overall satisfaction" (p. 1441) |
| 9 | Shiau and Luo (2010) | Continued blog usage intention | Examined the "factors that affect Blog continuance intention" (p. 856) | "user involvement and satisfaction are the strongest predictors of continuance intention of Blog users, followed by perceived enjoyment" (p. 864) |

**Table 1. Previous Blog Technology Research.**

| No | Author | Topic | Study Summary | Main Findings |
|---|---|---|---|---|
| 10 | C.-Y.Wang, Chou, and Chang (2010) | Intention to use blogs | Analyzed "how an individual's intention to use blogs is influenced by social, motivational and individual factors" (p. 1656) | "personal innovativeness in the domain of IT, perceived usefulness and perceived enjoyment have direct impact on a person's intention to use blogs" (p. 1656) |
| 11 | Shiau, Huang, and Shih (2011) | Continued blog usage intention | Analyzed "the factors that influence bloggers' continuance intentions" (p. 309) | "confirmation, perceived usefulness, flow, challenge, and arousal positively affected bloggers' satisfaction with using blogs; perceived usefulness, satisfaction, and flow also positively influenced bloggers' intentions to continue using blogs" (p. 306) |
| 12 | S.-M. Wang and Lin (2011) | Intention to use blogs | Proposed a conceptual framework to investigate technical and social factors that influence bloggers' usage intention | "information quality, system quality and blogging function quality influence bloggers' usage intention" (p. 50) |

There are several limitations in many of the previous studies. First, several used students as a representative sample for both bloggers and blog visitors (Guadagno et al., 2008; C.-Y. Wang et al., 2010), or used only one blog to gather their respondents (Baker & Moore, 2008; Bouhlel et al., 2010; Miura & Yamashita, 2007). This limits the generalizability of their results to the entire blog population. As an indicator that students are not a representative sample of the blogosphere, Hsu and Lin (2008) found that over 80% of their blog user respondents had completed an undergraduate or graduate degree.

More importantly, in the case of C.-Y. Wang et al. (2010), respondents were not voluntarily visiting the blog as they were doing so as part of their school assignment.

Second, previous studies focused on personal blogs, which means that their findings are not necessarily transferable to the corporate environment. As discussed in the overview of corporate blogs, a corporate blog is used to further the company's goals and objectives. However, the company's goals can often be different from the blogger's personal goals. This difference may affect the type of content available on the blog; while corporate blogs focus on presenting information related to their products or services, personal blogs put more emphasis on user enjoyment by posting jokes and minigames, or by posting articles on a variety of unrelated topics. Previous research (Hsu & Lin, 2008) suggests that personal blog visitors use these blogs mainly for enjoyment. On the other hand, corporate blog visitors may use the blog for their professional needs and thus only be interested by the usefulness and quality of the information found and how easy it is to access, while disregarding enjoyment altogether. Therefore, it can be expected that people will visit personal and corporate blogs for different reasons.

Only a few studies have focused on corporate blogs (e.g., Brecht, Cudreasova, & Zhou, 2010; He & Zhu, 2007; Liu & Ji, 2010). While they analyzed corporate blogs from several perspectives that help us better understand the corporate blogging phenomenon, they are mostly exploratory in nature and do not provide a set of quantitative measures that can be used for studying corporate blogs. For example, He and Zhu (2007) analyzed 40 Fortune 500 company blogs focusing on the corporate blogs' distribution, categorization, and characteristics. The main scope of this study was to "lay some research foundation for future exploration and analysis of corporate blogs" (He & Zhu,

2007, p. 55). Their findings suggest that companies can use corporate blogs to increase corporate online visibility, build a powerful communication channel with customers and provide instant feedback on the company's specific topics of interest (e.g., products, ideas).

Liu and Ji (2010) used a sample of 78 corporate blogs from Fortune 500 companies. After conducting a content analysis on each of the blogs, the authors concluded that companies are using corporate blogs to better engage with their employees, customers and business partners. Moreover, companies can achieve business value in a competitive market by incorporating surveys, online feedback, and ability to comment into the corporate blog. Brecht et al. (2010) analyzed 31 companies from the consumer goods industry that were using corporate blogs, concluding that the number of visitors is influenced by the quality of the content, as well as its relevance and update frequency.

The following sub-sections contain an overview of the constructs that have been analyzed in previous quantitative studies, as well as a discussion of their results. We will group these constructs based on the taxonomy created by Hsu and Lin (2008): 1) technology acceptance factors; 2) knowledge sharing factors; 3) social influence factors; and 4) technical factors.

**Technology acceptance factors**. Previous research has shown that the user's perceptions and beliefs about an information system can have a significant impact on the user's intention to use or to continue using that system (Davis, 1989). The most widely researched constructs in the blog literature are perceived usefulness (Bouhlel et al., 2010;

Hsu & Lin, 2008), perceived ease of use (Bouhlel et al., 2010; Hsu & Lin, 2008) and perceived enjoyment (Hsu & Lin, 2008; C.-Y. Wang et al., 2010). All three were found to have a positive effect on the blog user's attitude towards using a blog.

Perceived usefulness has been studied mainly as the user's belief that using a blog can provide a number of personal benefits, such as increased performance (Bouhlel et al., 2010; Hsu & Lin, 2008). In one of the first studies on personal blogs, Hsu and Lin (2008) found that perceived usefulness did not have a significant impact on the attitude towards using a blog. However, more recent studies on the intention to use blogs (S. I. Hong et al., 2009; C.-Y. Wang et al., 2010) found that perceived usefulness does have a significant influence on the intention to use blogs. We believe this discrepancy to be caused by the different reasons blog users may have for using different types of blogs. For example, we expect users of a personal blog that is focused on entertainment to be influenced more by enjoyment than by usefulness, whereas users of a technology blog will be influenced more by usefulness. We also expect the second example to apply more in the corporate environment, where we expect usefulness to be more important than entertainment. Moreover, our informal review of corporate blog sample revealed little or no content designed for entertainment.

Perceived ease of use has been studied mainly as how easy or how free of effort using the blog was for its users (Bouhlel et al., 2010; Hsu & Lin, 2008). This concept was mostly operationalized as how easily blog users can find information on the blog. Studies on personal blogs have found that ease of use has a positive impact on the attitude or the intention to use a blog (Bouhlel et al., 2010; Hsu & Lin, 2008). However, since corporate blog users may use the blog professionally and are thus expected to be somewhat more

experienced users of Internet applications than personal blog users, finding information on the blog should not pose a significant challenge if the blog is properly organized for searching.

Perceived enjoyment has been studied as the pleasure gained from using the blog (Hsu & Lin, 2008; C.-Y. Wang et al., 2010). Studies including enjoyment have found that it has a positive effect on the user's attitude towards the blog. More importantly, Hsu and Lin (2008) have found perceived enjoyment explains more of the variance in the attitude towards using a blog than perceived ease of use or perceived usefulness (non-significant). As discussed above, we believe this can be explained by the fact that users of personal blogs are more motivated by the enjoyment or pleasure gained from visiting the blog, than by the ease of use or usefulness of the blog. Another related explanation is that personal blogs are more designed for enjoyment than corporate blogs.

**Knowledge sharing factors.** Knowledge sharing was identified by Hsu and Lin (2008) as a set of factors that represents the transfer of information between blog users. Expected reciprocal benefits (S. I. Hong et al., 2009; Hsu & Lin, 2008), reputation (S. I. Hong et al., 2009; Hsu & Lin, 2008), trust (Bouhlel et al., 2010; Hsu & Lin, 2008), and expected relationships (Hsu & Lin, 2008) were all analyzed in relationship to attitudes towards blogs (Bouhlel et al., 2010; Hsu & Lin, 2008) or to the intent to use a blog (S. I. Hong et al., 2009).

Reciprocal benefits and reputation were studied by both Hsu and Lin (2008) and S. I. Hong et al. (2009). While expected reciprocal benefits were found to have a significant effect on the dependent variable in both studies, reputation had a significant

effect only in the study conducted by Hsu and Lin (2008). Since both these factors require the blog user to participate in discussions on the blog, they will only be relevant to comment providers.

Expected relationships is defined as "the degree to which a person believed he or she could obtain an improved mutual relationship through knowledge sharing" (Hsu & Lin, 2008, p. 68). The authors found the effect of expected relationships on attitude toward using a blog to be insignificant, and no other recent study has included this construct. However, for corporate blogs, these improved relationships could have significant economic and professional impact on the comment provider. For example, active comment providers on the blog may be offered a position in the company or may be hired as a blogger themselves. Therefore, expected relationships could be important when studying corporate blogs.

**Social influence factors.** The relationship between social influence factors and behavioral intention was analyzed in previous studies (Hsu & Lin, 2008; C.-Y. Wang et al., 2010; S.-M. Wang & Lin, 2011). Social norms were defined as "the the degree to which a user perceived that others approved of their participating in the blog" (Hsu & Lin, 2008, p. 67). The results showed a weak relationship between social norms and the intention to use blogs, but this may be influenced by the fact that the authors did not distinguish among bloggers, readers and comment providers. Community identification was defined as "the perception of belonging to a blogging community" (Hsu & Lin, 2008, p. 68) and it was found to have a positive influence on the intention to use blogs.

In the case of social influence factors, the results have been mixed. While some studies found a significant influence on the intention to use blogs (S. I. Hong et al., 2009; Hsu & Lin, 2008; S.-M. Wang & Lin, 2011), others found no such effect (C.-Y. Wang et al., 2010). However, these results may be explained by the fact that C.-Y. Wang et al. (2010) used a student sample, while the other studies involved actual blog users. Because comment providers are actively engaged in discussing topics in the blog, we expect social factors to influence them more than blog readers.

**Technical factors**. Information quality, system quality and blog function quality are the technical factors hypothesized by S.-M. Wang and Lin (2011) to influence blog usage intention. Their study brings a significant contribution to the blog literature, because bloggers (blog writers) and blog users were studied separately. This helps us better understand the differences in factors that influence the two categories. While a blogger can appreciate the technical quality of the blogging platform, or system, the visitor does not manage or administer the blog and should not be influenced by blog system or features intended for the blogger.

Information quality was defined as the blog users' "general perception of the collective content quality of blogs in a specific blog service provider" (S.-M. Wang & Lin, 2011, p. 52). As theorized in the DeLone and McLean (1992) IS Success Model, information quality should influence user satisfaction, intention to use a system and actual system usage. System quality was used in the blogs context as "the general performance that users perceive when interacting with the blogging system" (S.-M. Wang & Lin, 2011, p. 53). The third technical factor was blog function quality which was defined as the amount and usefulness of the blog's available functions (S.-M. Wang &

Lin, 2011). The blog function quality factor was hypothesized to positively influence the blog users' usage intention. The authors' results showed that information quality, system quality and blog function quality significantly affect the blog users' usage intention.

**Opinion leadership versus opinion seeking.** Previous studies on blogs identified two types of blog visitors: blog readers and comment providers (Hsu & Lin, 2008). Blog readers are visitors who only read the information posted on the blog, while comment providers engage in information sharing activities such as posting comments. Based on these differences, Hsu and Lin (2008) suggested that there may be different factors affecting these two types of blog users. For example, since blog readers do not post comments, it is less likely that they will be motivated by factors such as reciprocal benefits, reputation and expected relationships. This difference between these two groups may also explain the inconsistent results obtained by different blog studies (i.e., S. I. Hong et al., 2009; Hsu & Lin, 2008).

While differentiating between blog readers and comment providers can be done based on the number of comments the user has posted on the blog, the factors that influence this behavior have not been analyzed in the blog literature. From a marketing perspective, we suggest that this difference can be explained by a user's opinion seeking or opinion leadership behavior (Childers, 1986; Reynolds & Darden, 1971).

Opinion leadership has its origins in the multi-step flow theory, which was first introduced by Katz and Lazarsfeld (1955). One of the most commonly used definitions for opinion leadership comes from Arndt (1967). The author defined opinion leaders as "individuals who exert considerable personal influence because other people seek

information from them and/or because others accept the advice volunteered by these leaders" (Arndt, 1967, p. 217). On the other hand, opinion seekers have received less attention. According to Flynn, Goldsmith, and Eastman (1996), a person is considered to be an opinion seeker when she/he attempts to satisfy a need by searching for information (e.g., information regarding specific products to aid in a purchase decision or subsequent use).

Since blogs encourage communication between the blog's community through post and comments, they can be used to express opinions on different topics, as well as to seek information. Because blog readers do not participate in posting comments on the blog and only read the information posted by others, it can be theorized that they exhibit opinion seeking behavior. On the other hand, comment providers actively post comments and share information to others. Therefore, it can be theorized that they exhibit opinion leadership behavior. Moreover, opinion leaders are also opinion seekers, and thus they are expected to actively read the blogs as well as post comments.

**Theoretical Models**

The technology acceptance model (Bouhlel et al., 2010; Hsu & Lin, 2008; Pookulangara & Koesler, 2011), DeLone and McLean IS success model (Hsieh et al., 2010; S.-M. Wang & Lin, 2011), social cognitive theory (K.-Y. Wang et al., 2009), and expectation-confirmation theory (Shiau et al., 2011; Shiau & Luo, 2010) have all been used in blog research studies in the last four years. Research using these theoretical lenses in studying blogs is summarized in Table 2.

**Table 2. Previous Blog Technology Research – Theoretical Lens.**

| No | Author | Theoretical background | Sample | Type of blog user studied |
|---|---|---|---|---|
| 1 | Miura and Yamashita (2007) | Personality traits and IT satisfaction | Self-selected convenience sample Hatena diary – Japan 1434 personal blog authors | Bloggers |
| 2 | Baker and Moore (2008) | Psychological distress and coping strategies | Myspace.com – UK, US and Australia 134 respondents | Bloggers, non-bloggers |
| 3 | Guadagno, Okdie, and Eno (2008) | Big five traits – psychology | Study 1: 89 students from a southeastern university (U.S.) Study 2: 278 students from a southeastern university (U.S.) | Bloggers, non-bloggers |
| 4 | Hsu and Lin (2008) | Theory of reasoned action Technology acceptance model | 212 blog participants from popular blogs in Taiwan | Bloggers, readers and comment providers |
| 5 | S. I. Hong, Lee, and Kim (2009) | Technology acceptance model Motivation theory | 342 users from popular blogs in Korea The sample was selected from OK Cashbag | Bloggers, readers and comment providers |
| 6 | K.-Y. Wang, Chih, and Jhong (2009) | Social cognitive theory | 348 blog users from popular blogs in Taiwan | Bloggers, readers and comment providers |
| 7 | Bouhlel, Mzoughi, Ghachem, and Negra (2010) | Technology acceptance model Trust | www.lebloggadget.com 245 tunisian blog users | Readers and comment providers |
| 8 | Hsieh, Kuo, Yang, and Lin (2010) | DeLone and McLean IS success model Expectation – disconfirmation paradigm | Travel blog from Wrecht 506 usable responses | Users of social networks |

**Table 2. Previous Blog Technology Research – Theoretical Lens.**

| No | Author | Theoretical background | Sample | Type of blog user studied |
|---|---|---|---|---|
| 9 | Shiau and Luo (2010) | Expectation - confirmation theory | 430 blog users online survey – Taiwan | Blog users |
| 10 | C.-Y. Wang, Chou, and Chang (2010) | Theory of reasoned action IS motivation theory Social cognitive theory Innovation diffusion theory | Students from the business school at a university of science and technology in Taiwan 283 respondents | Bloggers, readers and comment providers |
| 11 | Shiau, Huang, and Shih (2011) | Expectation - confirmation theory | 303 bloggers online survey in Taiwan | Bloggers |
| 12 | S.-M. Wang, Lin (2011) | DeLone and McLean IS success model | Forum and website Taiwan 613 participants | Blog readers and blog writers separately |

The following subsections contain a brief overview of the most frequently used models in blog research, the expectation confirmation theory and technology acceptance model.

**Expectation confirmation theory.** Expectation confirmation theory (ECT), also known as expectation disconfirmation theory (EDT), comes from the marketing and consumer behavior literature (Oliver, 1977, 1980). The theory posits that the level of satisfaction will be greater when positive expectations are met (confirmation) and less when they are not (disconfirmation).

However, our interest is to study the users' intention to continue using an information system or, more specifically, the intention to continue using a blog. To

analyze this continuance intention, we focused our attention on the extension of the

expectation confirmation model (ECM) for the IT domain. In the extended ECM,

Bhattacherjee (2001) theorizes that perceived usefulness and confirmation influence

satisfaction while satisfaction influences IS continuance intention (Figure 1).

Additionally, confirmation influences perceived usefulness, which in turn has a direct

influence on IS continuance intentions.
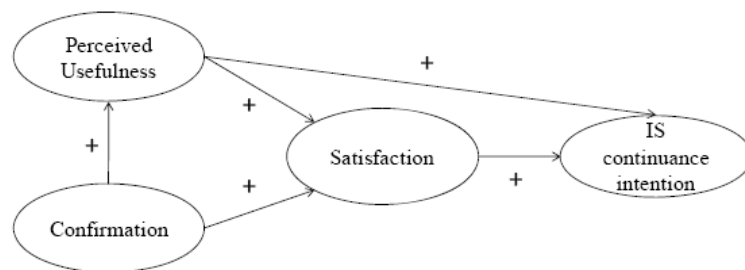


*Figure 1*. Post-Acceptance Model of IS Continuance (Bhattacherjee, 2001).

In terms of blog research, Hsieh et al. (2010) used the expectation disconfirmation

paradigm to study the connection between blog quality and blog user satisfaction. Their

results showed that both information quality and system quality have a significant impact

on blog user satisfaction.

Two blog studies using extended ECM of IT continuance (EECM-IT) were

conducted by Shiau and Luo (2010) and Shiau et al. (2011). In the first study, the authors

analyzed the factors that influence blog users to continue using blogs (Figure 2). The

subjects of the study, individuals accustomed to using blogs, completed an online survey.

The authors found that "user involvement and satisfaction are the strongest predictors of

continuance intention of Blog users, followed by perceived enjoyment" (Shiau & Luo,

2010, p. 864). In the second study it was found that "confirmation, perceived usefulness,

flow, challenge, and arousal positively affected bloggers' satisfaction with using blogs;

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perceived usefulness, satisfaction, and flow also positively influenced bloggers' intentions to continue using blogs" (Shiau et al., 2011, p. 306). The model used by Shiau et al. (2011) is presented in Figure 3. The models presented in Figures 2 and 3 represent the structural models, after the analysis was complete. All hypothesized paths were found to be significant (Shiau et al., 2011; Shiau & Luo, 2010).

Both studies have found a number of factors that influence the continued blog usage intention of its users. Together with the research conducted by Hsu and Lin (2008), these studies form the basis of our study as they provide a validated set of constructs that should be transferable to a corporate environment.
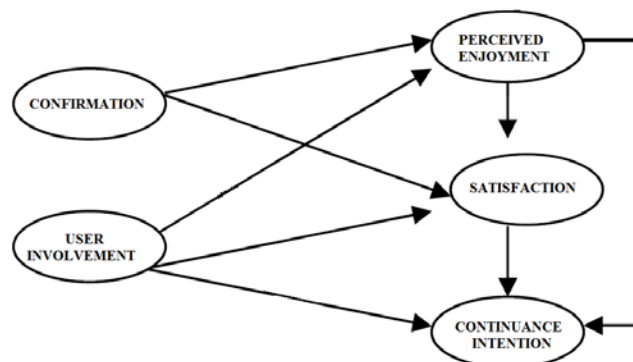


*Figure 2.* Research Model (Shiau & Luo, 2010).
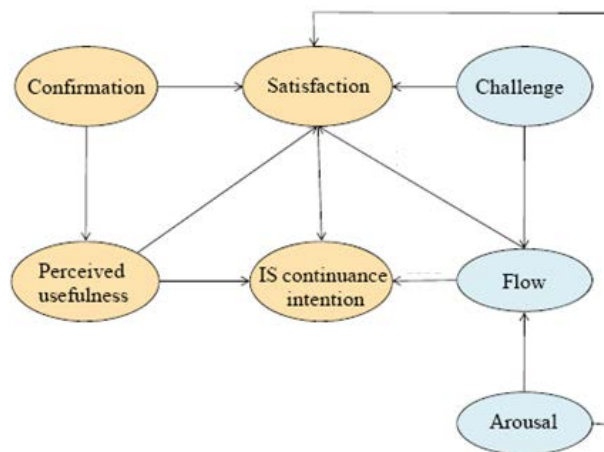


*Figure 3.* Research Model (Shiau et al., 2011).

**Technology acceptance model.** The technology acceptance model (TAM)

(Davis, 1989) is one of most widely used models to study usage of (or intention to use) a

new technology (Figure 4). TAM is actually an extension of the theory of reasoned action

(TRA) adapted for the IS field. The model hypothesizes that perceived usefulness and

perceived ease of use determine an individual's intention to use a system, with intention

to use commonly serving as a proxy for actual system use.
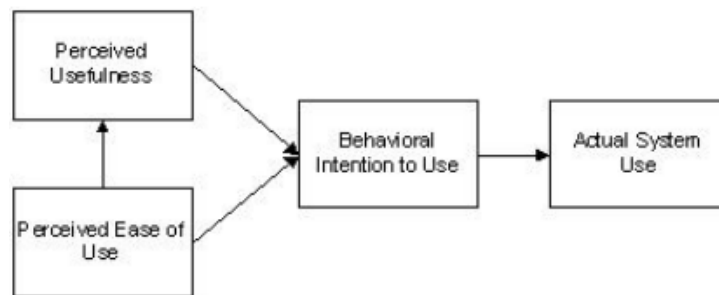


*Figure 4.* Technology Acceptance Model (Davis, 1989).

Following the original TAM, additional research was conducted to improve the

validity of the instrument proposed by Davis (1989). After TAM had been used in a

variety of settings and samples, a meta-analysis reported that the scales for perceived

usefulness and perceived ease of use were reliable and valid and could be extended over

different populations of users and software choices (King & He, 2006).

TAM was originally used to measure the intention to use technology which had

not yet been adopted by its users. However, other studies have shown that TAM can also

be used in a post-adoption scenario (Bhattacherjee, 2001). In our case, we want to know

whether someone currently visiting a blog intends to continue doing so. There are several

reasons for this choice, but probably the most important one is related to the feasibility of

the study: it is difficult to target and to access Internet users who have not viewed a blog.

TAM was and still is widely used to explain "both initial and continued IT adoption" (S.-J. Hong, Thong, & Tam, 2006, p. 1819). It is important for companies to know not only which factors influence users to adopt a new technology, but also what determines continued IT use (S.-J. Hong et al., 2006). Moreover, TAM and the usage intention in a post-adoption scenario have already been studied and validated in the blogging environment (Bouhlel et al., 2010; S. I. Hong et al., 2009; Hsu & Lin, 2008).

For example, Hsu and Lin (2008) used the TRA and TAM to understand the factors that contribute to blog usage (Figure 5). The results showed that ease of use and perceived enjoyment appear to be important variables in the context of blogs. Moreover, of the knowledge sharing factors, reputation was found to have a significant impact on the user's attitude towards blogs.
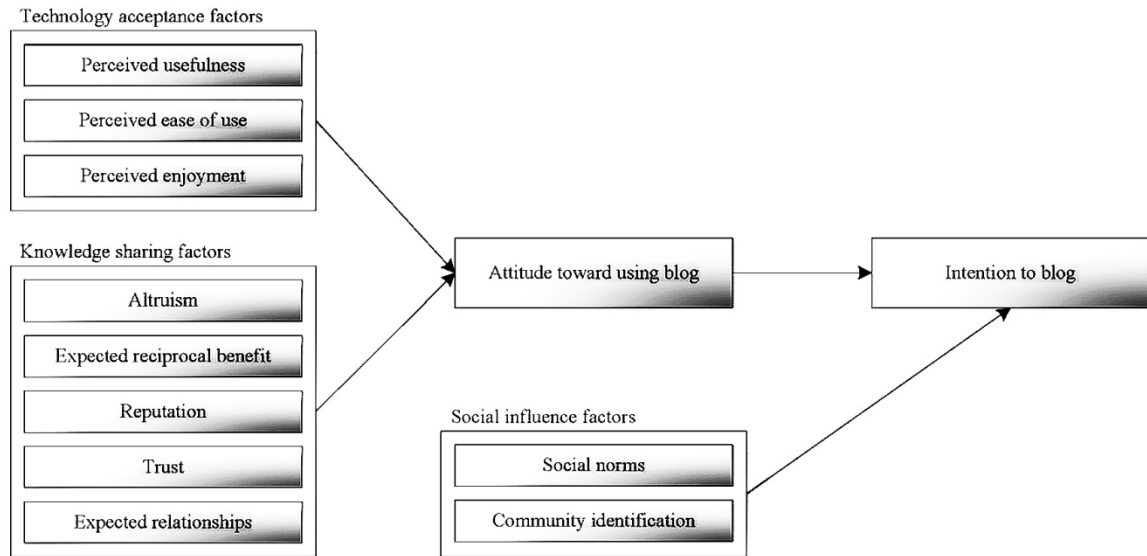


*Figure 5*. Research Model (Hsu & Lin, 2008).

**TAM and ECM of IT continuance (EECM-IT).** A model combining TAM and ECM of IT continuance was proposed by S.-J. Hong et al. (2006). The authors proposed

an integrated model because TAM and ECM -IT have common constructs, including

perceived usefulness and the dependent variable, continued IT usage intention (Figure 6).

In this integrated model, perceived usefulness, perceived ease of use and confirmation are

hypothesized to have a positive effect on satisfaction. Furthermore, satisfaction together

with perceived usefulness and ease of use have a positive effect on the continued IT

usage intention. The results showed that in the EECM-IT, "TAM accounted for more

variance in user intention to continue IT usage than ECM-IT (TAM: 63%, EECM-IT:

50%)" (S.-J. Hong et al., 2006, p. 1828).
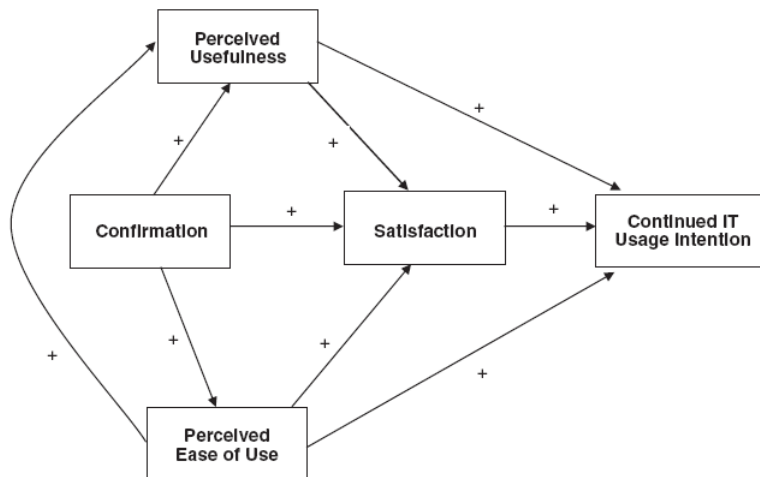


*Figure 6.* Extended ECM-IT (S.-J. Hong et al., 2006).

M.-C. Lee (2010) has also proposed extending EECM-IT with an integrative

model "to explain users' intention to continue using e-learning" (p. 506). While this

model carries the same name as the one developed by S.-J. Hong et al. (2006), there are a

number of differences. M.-C. Lee (2010) also included constructs from the theory of

planned behavior (TPB) and flow theory (Figure 7). In their integrated model, perceived

usefulness is expected to have a positive influence on satisfaction, attitude, and continued

IT usage intention. Other studies (Bouhlel et al., 2010; Shiau et al., 2011; C.-Y. Wang et

al., 2010) have also found that perceived usefulness is a strong predictor of these three constructs. Moreover, the flow factors will influence the attitude towards the system and continued IT usage intention. Also, the authors consider that social norms and perceived behavioral control have a direct positive effect on the continued IT usage intention. The results showed that this extended model explains "a relatively high proportion of variation of continued intention to use" (M.-C. Lee, 2010, p. 513).
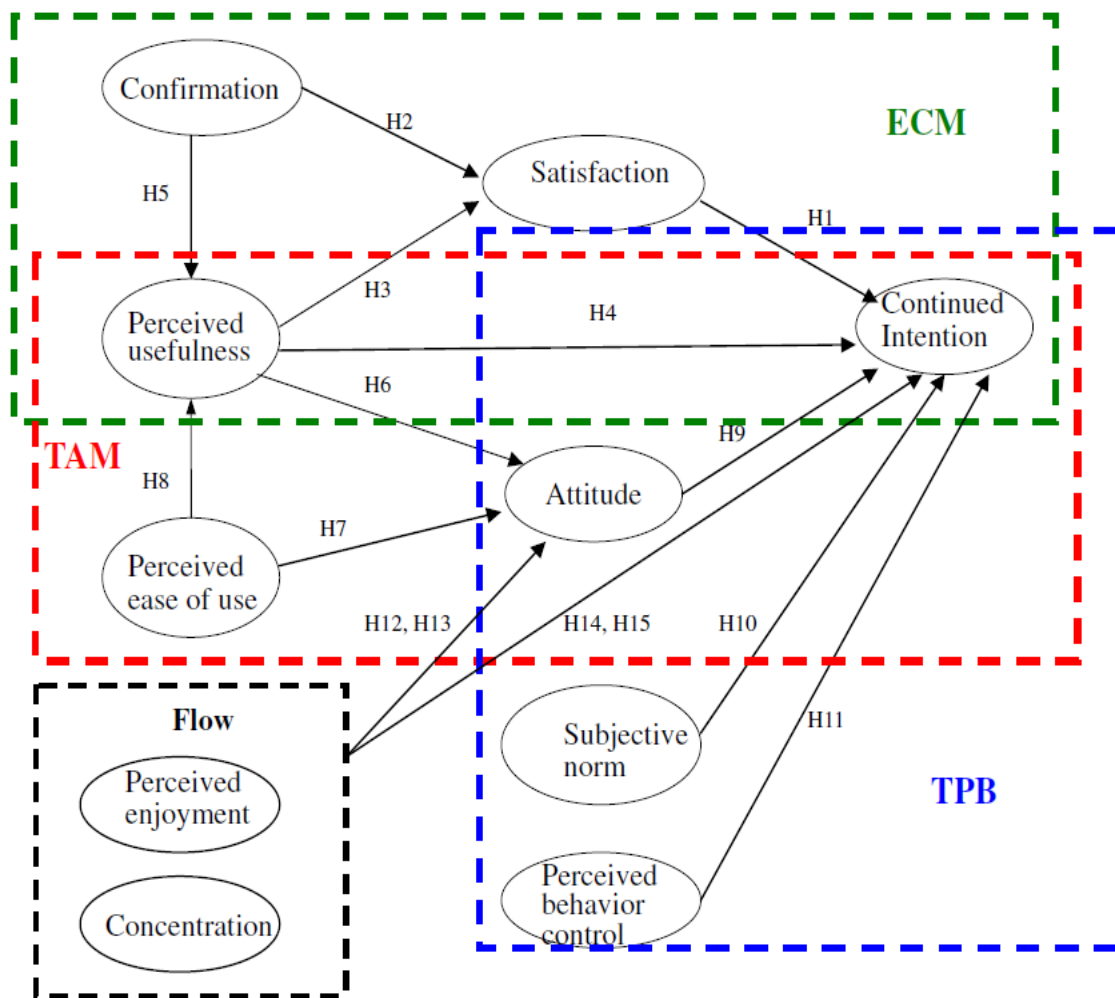


*Figure 7*. Research Model (M.-C. Lee, 2010).

**Research Opportunities**

As we discussed in this chapter, "blogs can bring significant benefits to the businesses willing to adopt this technology" (Ojala, 2005, p. 269). Personal blogs have so far received more attention because they are more often easier to reach and analyze. Another reason why there are fewer studies on corporate blogs could be because there are fewer of them. However, businesses and companies that want to utilize blogs create corporate, not personal, blogs. Since the number of blogs has increased significantly and more and more Internet users are engaged in blogging activities, accessing corporate blog visitors has become easier. A study that analyzes the factors that influence blog visitors to continue engaging with a company's blog should provide a significant benefit for practitioners.

Another aspect of blogging that must be taken into consideration is that corporate blogs are different from personal blogs and target a different audience. First, corporate blogs represent the views of a company and are used as a communication tool to existing and prospective stakeholders: customers, suppliers, competitors, shareholders, business partners, etc. As such, they usually cater to a mature audience, which typically does not include students. Second, corporate blogs focus on the content and information presented to stakeholders and less on trying to be entertaining. Third, since corporate blog readers and comment providers are often existing or prospective stakeholders, they usually have a financial or professional interest in the corporation. Therefore, results from personal blog studies may not all transfer to corporate blogs. Thus, a study is required to determine what these factors are. Additionally, it is possible that some factors that were found non-significant in personal blogs could have a significant impact on corporate blog usage. For

example, the usefulness of a corporate blog and the information contained there could be more important to visitors than its perceived enjoyment or ease of use.

We need to differentiate between the categories of participants in a blog (bloggers, readers and comment providers) because they may return for different reasons. Although these three categories of blog users are distinct, previous studies have combined all three categories for analysis (Guadagno et al., 2008; Hsu & Lin, 2008; C.-Y. Wang et al., 2010; K.-Y. Wang et al., 2009). For corporate blogs, these categories should be analyzed separately. Bloggers who maintain corporate blogs are usually employed by the company, which controls what they write on the blog. Therefore, their use of blogs is mandatory and may not reflect their personal views. On the other hand, blog visitors (readers and comment providers) can decide freely whether to continue using the blog. Combined with the fact that these two categories usually represent the stakeholders of the company, they present a higher level of interest for businesses rather than bloggers. Moreover, by analyzing each category separately, a study would be able to determine if there are key differences in the factors that influence blog readers and comment providers to continue using blogs.

While differentiating between blog readers and comment providers can be done based on the number of comments the user has posted on the blog, the factors that influence this behavior have not been analyzed in the blog literature. In the marketing literature, opinion leadership and opinion seeking theoretical lens has been used to explain an individual's behavior to share or search for information (Childers, 1986; Reynolds & Darden, 1971). Since the factors that influence blog visitors to become either readers or comment providers have not been studied in the blog literature, a study that

analyzes what factors influence this behavior would bring a significant practical and theoretical contribution. For practitioners, these results could be used to understand what factors influence blog visitors to engage in posting comments blog, thus providing important feedback for the company.

By answering our research questions, our study will provide further insight into the factors that influence users to use corporate blogs, the differences between blog readers and comment providers, and the differences between personal and corporate blogs. Our theoretical model, methodology and findings will be discussed in the following sections.

## Model, Constructs and Hypotheses

**Initial Model**

As discussed in the literature review, several theories and models have been used to analyze continued usage intention. Two of the most widely used models, TAM and ECM, share a number of characteristics, which led to the creation of an integrated TAM and ECM model (M.-C. Lee, 2010). This integrated model is suggested to have better explanatory power than each of the individual models, while not increasing model complexity significantly. Moreover, since we are interested in understanding the antecedents of continued usage intention, increasing the explanatory power of the model is our primary goal. For these reasons, we intend to use an integrated TAM and ECM model, based on the integrated IS continuance model used by M.-C. Lee (2010). This integrated TAM and ECM model, a subset of Figure 7, is presented in Figure 8.

Our research model extends the work of Shiau et al. (2011), Shiau and Luo (2010), and Hsu and Lin (2008), who studied the intention to use personal blogs. While the frameworks we intend to use have been validated separately in previous studies on blogs, the integrated version of the TAM and ECM models has only been validated in an e-learning scenario. Apart from discovering the antecedents of continued blog usage intention, we consider validation of this integrative view of TAM and ECM in the context of blogs to be one of our academic contributions to the literature.
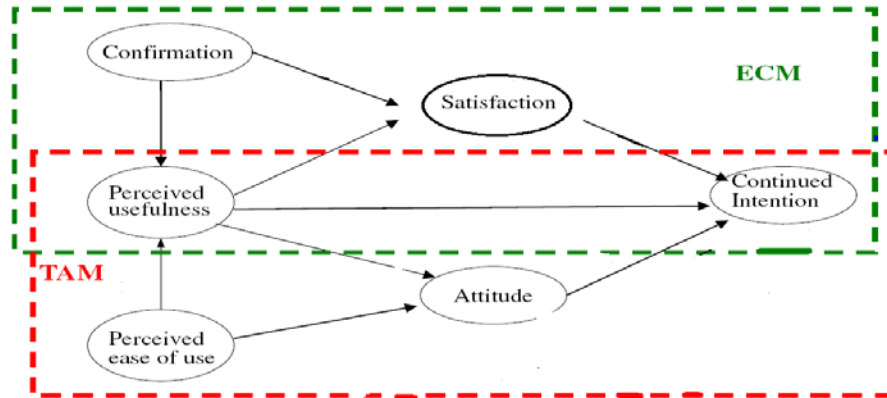
*Figure 8.* Research Model - TAM and ECM Constructs (M.-C. Lee, 2010).

This integrated model seems to have the best balance between model parsimony and explanatory power (M.-C. Lee, 2010). Given the reasons above and the suggestions of previous blog studies (Hsu & Lin, 2008; Shiau et al., 2011; Shiau & Luo, 2010), using an integrative model allows us to compare the results of our study to those of previous studies that have used either TAM or ECM-IT. Moreover, validation of the integrated TAM and ECM-IT model in the context of corporate blogs would be a significant academic contribution.

### Constructs and Hypotheses

Based on the literature review, a number of possible antecedents of the user's attitude, satisfaction and continued blog usage intention were identified. These include perceived enjoyment, reciprocal benefits, personal reputation, expected relationships, credibility, information quality, and social norms. Each of these constructs is discussed in this section.

**Expectation and confirmation model of IT continuance (ECM-IT).** ECT (Oliver, 1980) was extended to the IS field by Bhattacherjee (2001) to explain IS continuance intentions. In the extended ECT, perceived usefulness and confirmation

influence satisfaction while satisfaction influences IS continuance intention. Additionally, confirmation influences perceived usefulness, while perceived usefulness has a direct impact on IS continuance intentions.

Confirmation was defined as the "users' perception of the congruence between expectation of information system use and its actual performance" (Bhattacherjee, 2001, p. 359). The author found that confirmation has a positive effect on satisfaction and on perceived usefulness, as did M.-C. Lee (2010).

Perceived usefulness was defined by Hsu and Lin (2008) as the "degree to which a person believed that using a blog enhanced his or her performance" (p. 67). Previous research findings suggest that perceived usefulness has a positive effect on satisfaction and on IS continuance intention (Shiau et al., 2011).

Satisfaction was defined by Shiau and Luo (2010) as "user's affect with (feelings about) blogs use" (p. 861). Previous studies found that satisfaction influences the user's continued blog usage intention. Continued blog usage intention was defined by Shiau and Luo (2010) as "the individual's intention to continue use the blogs" (p. 861). Previous studies found that satisfaction, perceived usefulness and attitude have a positive effect on the blog usage intention (Hsu & Lin, 2008; M.-C. Lee, 2010; Shiau & Luo, 2010). Based on previous research and findings we propose the following hypotheses:

**H1:** User satisfaction (SA) is positively related to continued blog usage intention (CBUI).

**H2:** Confirmation (CF) is positively related to user satisfaction (SA).

**H3:** Perceived usefulness (PU) is positively related to user satisfaction (SA).

**H4:** Perceived usefulness (PU) is positively related to continued blog usage intention (CBUI).

**H5:** Confirmation (CF) is positively related to perceived usefulness (PU).

**Technology acceptance model.** TAM was introduced by Davis (1989) to explain the user acceptance of a new technology. The author proposed that perceived usefulness and perceived ease of use will influence the attitude towards using a technology and attitude will have a positive influence on actual use. Hsu and Lin (2008) used TAM to study the user's intention to use personal blogs. While their results indicated that perceived usefulness did not have an impact on the intention to blog, this can be explained by the differences between personal and corporate blogs. As discussed in the literature review, corporate blog users are expected to be interested more in usefulness than entertainment and ease of use. Perceived usefulness and continued blog usage intention are included in both ECM-IT and TAM (Figure 8).

Attitude towards the blog was defined as the user's favorable or unfavorable evaluation when using a specific blog (Hsu & Lin, 2008). The authors found that attitude towards the blog has a highly positive effect on the intention to use blogs. While their results showed no direct effect of perceived usefulness on attitude in the case of personal blogs, we expect different results in with corporate blogs.

While not part of ECM, Melone (1990) suggested that satisfaction can also influence the user's attitude towards an information system. For example, a blog user who

is satisfied with her/his experiences on the blog can be expected to have a positive attitude towards the blog.

Hsu and Lin (2008) defined perceived ease of use "as the degree to which a person believed that using a blog was free of effort" (p. 67). Perceived ease of use was found to have a strong influence on attitude and perceived usefulness (Hsu & Lin, 2008; M.-C. Lee, 2010). Since our study focuses on corporate blogs, we expect usefulness to have a higher impact on the user's attitude towards the blog than ease of use, as the main purpose of using a corporate blog will be related to its usefulness and not to perceived ease of use or enjoyment.

**H6:** User satisfaction (SA) is positively related to attitude towards the blog (AT).

**H7:** Perceived usefulness (PU) is positively related to attitude towards the blog (AT).

**H8:** Perceived ease of use (PEOU) is positively related to attitude towards the blog (AT).

**H9:** Perceived ease of use (PEOU) is positively related to perceived usefulness (PU).

**H10:** Attitude towards the blog (AT) is positively related to continued blog usage intention (CBUI).

**Perceived enjoyment.** Hsu and Lin (2008) defined perceived enjoyment as the degree to which "an Internet user would be likely to participate in blog activity because the interacting process yields fun" (p. 67). The authors found that perceived enjoyment

has a positive influence on the user's attitude towards the blog. Moreover, Shiau and Luo (2010) found that perceived enjoyment is a predictor for satisfaction and intention to continue using the IS. In the e-learning environment, M.-C. Lee (2010) found that perceived enjoyment has a significant impact on attitude, but not on continued usage intention.

While we expect perceived enjoyment to play a lesser role in the case of corporate blogs, for the purpose of comparing our results with studies on personal blogs, we will include it in our study. We will study the influence of perceived enjoyment on satisfaction and on the attitude towards the blog:

**H11:** Perceived enjoyment (PE) is positively related to attitude towards the blog (AT).

**H12:** Perceived enjoyment (PE) is positively related to user satisfaction (SA).

**Reciprocal benefits.** Expected reciprocal benefits was defined by Hsu and Lin (2008) as "the degree to which a person believed he or she could obtain mutual benefits through knowledge sharing" (p. 68). This factor is only relevant for comment providers since only those who participate in knowledge sharing on the blog can obtain such benefits. Expected reciprocal benefits should influence comment providers' attitudes towards the blog. However, Hsu and Lin's (2008) study utilized the original TAM model, which did not include the construct of satisfaction. Based on the suggestions of Melone (1990), the constructs of attitude and satisfaction are similar in that they are both influenced by the user's perceptions of the system. As such, we included the impact of

reciprocal benefits on satisfaction because obtaining mutual benefits can be expected to increase the user's satisfaction with the blog. Therefore:

**H13:** Reciprocal benefits (RB) are positively related to attitude towards the blog (AT).

**H14**: Reciprocal benefits (RB) are positively related to user satisfaction (SA).

**Personal reputation.** Another previously identified factor that could influence the users' attitude towards a blog is personal reputation (Hsu & Lin, 2008). The authors define personal reputation as "the degree to which a person believed that participation could enhance personal reputation through knowledge sharing" (Hsu & Lin, 2008, p. 68). As with reciprocal benefits, personal reputation on the blog requires the user to actively participate and thus be a comment provider. As discussed in the reciprocal benefits construct, Hsu and Lin's (2008) study did not include satisfaction. Similar to the above discussion on the suggestions provided by Melone (1990), we analyzed the impact of personal reputation on satisfaction and attitude because enhancing personal reputation can be expected to increase the user's satisfaction and attitude towards the blog. Therefore:

**H15:** Personal reputation (PR) is positively related to attitude towards the blog (AT).

**H16:** Personal reputation (PR) is positively related to user satisfaction (SA).

**Expected relationships.** Hsu and Lin (2008) studied expected relationships as an antecedent to the users' attitude towards a blog. The construct was defined as "the degree

to which a person believed he or she could obtain an improved mutual relationship through knowledge sharing" (Hsu & Lin, 2008, p. 68). Expected relationships were found to have a positive impact on the user's attitude toward the blog. Similar to reciprocal benefits and personal reputation, expected relationships should only affect blog users who actively post comments and participate in knowledge sharing. Similarly, we decided to analyze the impact of expected relationships on satisfaction because obtaining improved mutual relationships can be expected to increase the user's satisfaction with the blog. Therefore:

**H17:** Expected relationships (ER) are positively related to attitude towards the blog (AT).

**H18:** Expected relationships (ER) are positively related to user satisfaction (SA).

**Credibility.** Credibility was defined by Bouhlel et al. (2010) as the degree to which "an individual considers the information in his data processing and wonders about the degree of credibility of its sources" (p. 39). The authors studied the effect of credibility on the attitude towards the blog in the context of online purchase intention in personal blogs. They found that perceived credibility has a significant positive influence on the attitude towards the blog. Thus, we will analyze the effect of credibility on the attitude towards the blog.

**H19**: Credibility (CY) is positively related to attitude towards the blog (AT).

**Information quality.** DeLone and McLean (1992) theorized that information quality has an effect on user satisfaction and intention to use a system. S.-M. Wang and Lin (2011) found that information quality has a positive effect on intention to continue

using a blog platform. They defined information quality as "the bloggers' general perception of the collective content quality of blogs" (S.-M. Wang & Lin, 2011, p. 52). The relationship between information quality and user satisfaction has already been studied and found significant. While for a blogger, information quality was found to be less important than system quality and blog function quality (S.-M. Wang & Lin, 2011), the visitor does not manage or administer the blog and should not be influenced by system quality or blog function quality. In the context of corporate blogs, users who find the information from the posts up to date, correct and complete should have a more positive attitude towards the blog and be more satisfied.

**H20:** Information quality (IQ) is positively related to attitude towards the blog (AT).

**H21:** Information quality (IQ) is positively related to user satisfaction (SA).

**Social norms.** Social factors, such as social norms, were found to influence blog users' behavior (Hsu & Lin, 2008; S.-M. Wang & Lin, 2011). In the context of e-learning, these factors were also found to influence continued usage intention (M.-C. Lee, 2010). In the blog literature, social norms were defined as "the degree to which a user perceived that others approved of their participating in the blog" (Hsu & Lin, 2008, p. 68). Social norms are expected to have a positive influence on the continued blog usage intention. Therefore:

**H22:** Social norms (SN) are positively related to continued blog usage intention (CBUI).

**Research Model**

Based on the constructs that were presented previously and the integrative view of

the TAM and ECM model, our research model is presented in Figure 9.
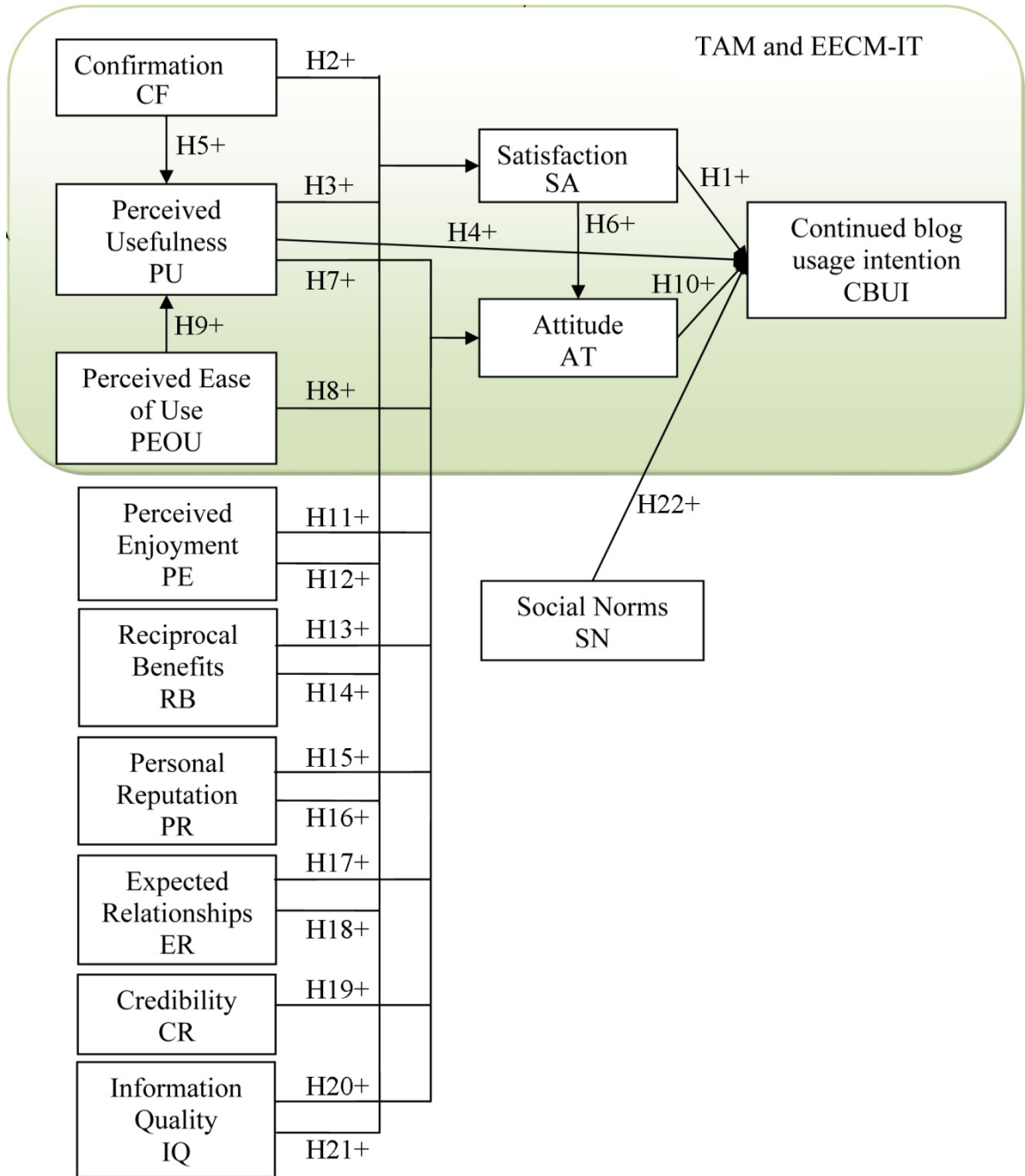


*Figure 9*. Research Model.

**Opinion Leadership versus Opinion Seeking**

As discussed in the literature review, the factors that influence blog visitors to be blog readers or comment providers can be explained by a user's opinion seeking or opinion leadership behavior (Childers, 1986; Reynolds & Darden, 1971). Opinion leaders are defined as individuals who tend to give information about a topic to others. On the other hand, opinion seekers seek out information or advice from others on a particular topic (Reynolds & Darden, 1971). Since blog readers do not participate in posting comments on the blog and only read the information posted by others, they can only exhibit opinion seeking behavior.

In addition to reading the blog, comment providers post comments which are shared with others. While posting comments and exhibiting opinion leadership behavior share a number of similarities, posting comments on the blog does not necessarily imply opinion leadership behavior. For example, comment providers can use the comments section to ask questions of the blog's community. This does not imply opinion leadership behavior, as the blog visitor is not sharing any information but rather seeking it. Thus, we consider opinion leadership behavior to be distinct from comment providing behavior. Providing comments is a necessary, but not sufficient, condition for someone to exhibit opinion leadership behavior. Therefore, as suggested by Feick, Price, and Higie (1986), comment providers can exhibit opinion leadership behavior as well as opinion seeking behavior.

Results of previous studies (e.g., Flynn et al., 1996) suggest that opinion leadership can be expressed either on the analyzed medium (i.e., the corporate blog) or outside of it (i.e., discussions outside the blog). Therefore, we included two factors:

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opinion leadership on the IT blog and opinion leadership outside the IT blog based on information discussed on the blog. Therefore:

**H23:** Opinion leadership on the blog (OL) behavior is positively related to a blog user's comment providing (CP) behavior.

**H24:** Opinion seeking (OS) behavior is positively related to a blog user's comment providing (CP) behavior.

**H25:** Opinion leadership outside the blog, based on information obtained from the blog, (OLO) behavior is positively related to a blog user's comment providing (CP) behavior.

Since the dependent variable for these constructs is the type of blog user (reader versus comment provider) it requires a separate model and analysis from the research model in Figure 9. The research model for the opinion seeking versus opinion leadership behavior is presented in Figure 10.
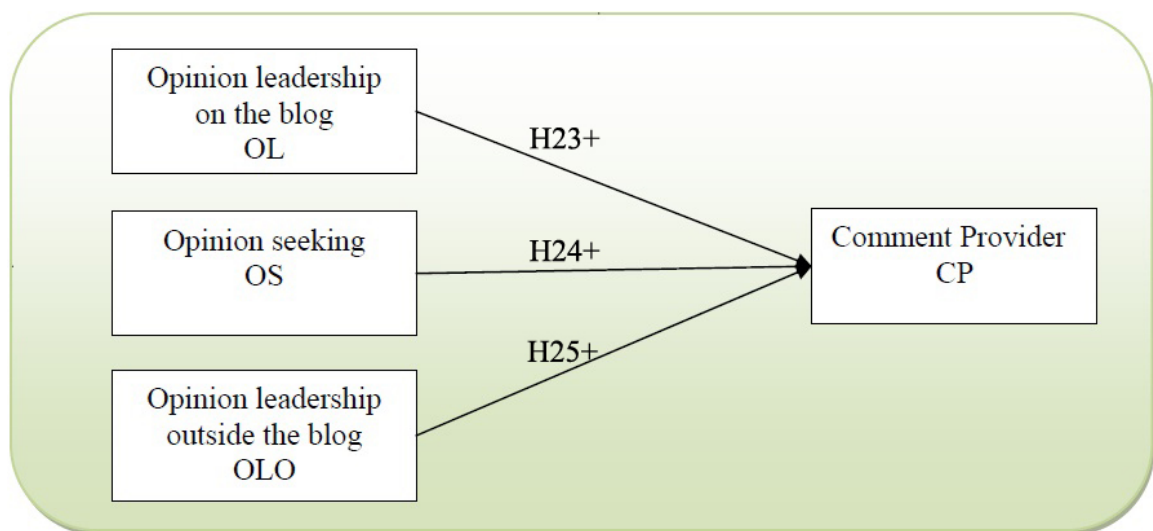


*Figure 10*. Opinion Leadership versus Opinion Seeking Research Model.

## Methodology

### Overview

This section presents our methodology and research design; discusses our study population, procedure, sample, operationalization and measurement; and outlines our planned statistical techniques. Based on our research questions and because corporate blog users can be best accessed through the Internet, a cross-sectional online survey is appropriate.

To increase the validity of the study, we decided to study actual corporate blogs and their users instead of using a student sample. Additionally, by using a convenience sample instead of purchasing a panel of blog users, we are able to focus on a particular group of blogs and their users. This convenience sample also allows us to perform an analysis on the content of the blog and, by asking all visitors of a particular blog to participate, differences between blog readers and comment providers should be easier to analyze. The generalizability of the results can be increased by including several blogs and by comparing the responses coming from each to see if there are significant differences between the users in each blog. For example, including several blogs would allow us to filter out any usage intention differences caused by the content or focus of the blog.

Corporate blogs were selected based on their industry and ratings in the Technorati blog directory. These blogs were then invited to participate in our research by posting a link to the survey on their websites. The criteria for selecting the blogs will be discussed in the sample section.

**Sample**

The research population is comprised of all those who visit IT corporate blogs. Each IT corporate blog focuses on its own specific business sector (e.g., software development, networking, consulting, cloud computing, gaming) and the industry they are in (in this case, IT). We focused on blogs from the IT industry that have content related to technology, gadgets, software, and mobile applications. Selecting corporate blogs from a single industry mitigates any possible moderation effect that the industry might have on the continued usage intention. Game companies (e.g., Activision, Electronic Arts) were excluded as their visitors might be more motivated by enjoyment than for typical corporate blogs. Thus, we tried controlling for the possible moderating effects of the industry variable and focused on other factors that could influence continued usage intention. Moreover, in their study of Fortune 500 companies, He and Zhu (2007) found that the majority of companies that had corporate blogs were from the IT industry (over 35%). Therefore, we expect to increase the practical significance of our study by focusing on this area.

We began by using Technorati to obtain information about blogs of IT companies and to generate our sample. Technorati is one of the largest blog directories on the Internet and is also the publisher of the State of the Blogosphere reports that provide yearly information on the status and trends of the blogosphere (State of Blogosphere, 2011).

As of March 2013, Technorati contained information on more than 1.3 million blogs, both personal and corporate. Their IT blog directory listed over 41,000 blogs, and the business directory over 35,000 blogs. However, since IT corporate blogs are not listed

separately from IT personal blogs, we cross-referenced the IT blog directory with the business blog directory. Since Technorati's old application program interface (API) was discontinued and the new API was under construction, we had to manually cross-reference each blog.

The sample was selected using a stratified sampling approach based on Technorati's authority score and our intention to include small, medium, and large blogs and businesses. Technorati's authority score is an index calculated based on a website's content, update frequency, and the number of links and comments on other websites that reference it. As of March 2013, this index had a range of 1 up to around 900, with higher numbers indicating larger and more authoritative blogs. Since the top 100 IT blogs had a score between 500 and 900, we labeled them as high authority blogs. The lower end of the top 500 IT blogs had scores around 100, so we labeled blogs that had a score between 100 and 499 as medium authority blogs. Low authority blogs had scores of less than 100.

We used a stratified sampling method to try to distribute the number of blogs evenly across each category. This would allow visitors from each level of blog to be represented. Moreover, this would allow us to test if there are any differences based on the blog's authority score. The selection process was terminated after identifying 100 IT corporate blogs. Overall, 34 high authority blogs were selected, as well as 33 medium authority and 33 low authority blogs.

**Procedure**

After obtaining the sample, each blog was visited to determine the frequency of posts, number of comments and main topics addressed in the posts and to obtain the blogger's contact information.

An e-mail was then sent to the contact person identified in each blog to invite them to participate in our study. In the e-mail, bloggers were asked to participate by posting a link to our survey on their blog (see Appendix A). After the initial e-mail, a reminder was sent the following week. This was done to increase the response rate and to reduce possible non-response bias.

An online survey was created using Qualtrics, which is an online survey service provider. The survey was approved by the Human Subjects Committee at the University of Lethbridge. According to standard ethical procedures, all responses were confidential and respondents were given the option to withdraw at any time. To further protect their privacy, at the end of the survey, respondents were asked if they wanted to discard their answers. The consent letter is provided in Appendix B.

**Measurement**

One specific issue that we needed to address while conducting this research was deciding whether the respondents should be asked about their motivation to continue using all corporate IT blogs they have read, their favorite, or the one blog from which they accessed our survey. We chose the last option because focusing on the last accessed blog should increase the respondent's recollection of the experiences with the blog. Moreover, this also avoids the ceiling effect of responding based on the favourite blog.

Respondents were also given an optional question to indicate the name of the blog they came from. The question was used to help track the blogs and the number of respondents that came from each blog. This was not done automatically because of ethics regulations, which do not allow us to collect this type of data before obtaining the user's consent.

Our instruments are largely based on the work of Shiau et al. (2011), S.-M. Wang and Lin (2011), Bouhlel et al. (2010), Shiau and Luo (2010), and Hsu and Lin (2008). We used previously validated instruments, with minor refinements made to the constructs and items to suit the context of a specific corporate blog. Constructs specific to comment providers, including reciprocal benefits, personal reputation and expected relationships, were only displayed to respondents who indicated they had posted more than five comments on the blog. This is consistent with the recommendation of Hsu and Lin (2008), who indicated that comment providers should be analyzed separately after providing a number of comments on the blog. Moreover, most items, except for one social norms question, are not specific to IT or technology and should therefore be usable for corporate blogs across different industries. The instrument used in the survey is presented in Appendix C and the original items and our modifications are presented in Appendix D.

While differentiating between blog readers and comment providers can be done based on the number of comments posted on the blog, the factors that influence commenting behavior have not been analyzed in the blog literature. As presented in the opinion leadership versus opinion seeking research model (Figure 10), the tendency of blog users to post comments on the blog may be explained by their opinion leadership or opinion seeking behavior (Childers, 1986; Reynolds & Darden, 1971). Thus, we adapted

the items developed by Childers (1986) and Reynolds and Darden (1971) to the corporate

blogging environment. As Flynn et al. (1996) mention in their review of the literature,

"the most common self-report scale used to measure opinion leadership is Childers's

version" (p. 138) of the instrument. Since previous studies (e.g., Feick et al., 1986) found

that opinion leaders also exhibit opinion seeking behavior, we decided to show all

opinion leadership and opinion seeking questions to both readers and comment providers.

The items for attitude towards blogs (AT), expected relationships (ER), perceived

usefulness (PU), personal reputation (PR) and reciprocal benefits (RB) were adapted

from Hsu and Lin (2008) with minor modifications. The items for confirmation (CF)

were adapted from Shiau, Huang, and Shih (2011) and Shiau and Luo (2010).

For continued blog usage intention (CBUI), the first two items (CBUI1-2) were

adapted from Shiau and Luo (2010), while the third item (CBUI3) was adapted from

Shiau, Huang, and Shih (2011). Similarly for satisfaction (SA), the first two items (SA1-

2) were adapted from Shiau, Huang, and Shih (2011) and the third item (SA3) from Shiau

and Luo (2010).

The items for credibility (CY) were adapted from Bouhlel et al. (2010), while for

perceived ease of use (PEOU) we adapted the first two items (PEOU1-2) from Hsu and

Lin (2008) and the last one (PEOU3) from Bouhlel et al. (2010). The perceived

enjoyment (PE) construct adapted two items (PE1-2) from Hsu and Lin (2008) and one

(PE3) from Shiau and Luo (2010). The items for information quality (IQ) were all

adapted from S.-M. Wang and Lin (2011). For the last construct, social norms (SN), the

first two items (SN1-2) were adapted from Hsu and Lin (2008) and the last one (SN3) from S.-M. Wang and Lin (2011).

Each item was measured using a five point Likert scale, ranging from "strongly disagree", with a value of 1, to "strongly agree", with a value of 5. To combat response bias, we configured the survey to randomize the order of questions within Sections III, IV, and V, so that each respondent would see a random version of the survey (Appendix C). Common method bias will also be addressed in the statistical analysis. To get a better understanding of the general characteristics of our respondents, we also added several demographic items covering gender, age, education, and occupation.

**Statistical Analysis**

The main statistical technique used to test our hypotheses is structural equation modeling (SEM). This technique was selected because it allows us to analyze both components of our causal model, the measurement model and the structural model. Moreover, SEM has the advantage of allowing us to simultaneously analyze multiple dependence relationships, thereby providing a clearer picture of the impact of each factor in the model (Hair, Black, Babin, & Anderson, 2009). Additionally, SEM has been used extensively in the TAM literature, and has also been used for studying blogs (Hsu & Lin, 2008). Therefore, by utilizing SEM, we will be able to compare the results of our research with those of previous blog studies, and future studies and meta-analyses will be able to easily understand and compare our results.

For the opinion leadership versus opinion seeking research model, our measurement contains 10 continuous independent variables and one dichotomous

dependent variable. The main statistical techniques will be a factor analysis to determine

the dimensionality of measured variables and a discriminant analysis or binary logistic

regression to analyze the impact of each construct on the dependent variable (Hair et al.,

2009). While both discriminant analysis and binary logistic regression techniques provide

similar results, discriminant analysis requires a smaller sample size, but is more easily

influenced by non-normal data (Hair et al., 2009).

## Results

Out of the 100 invitations sent to IT corporate blogs, we received 16 responses. Of those, 6 declined to participate while 10 expressed interest and requested additional information. After answering their questions and undergoing their management review, six blogs agreed to participate in the study and post the survey link on their blog. For privacy and confidentiality reasons, we will be referring to them as blogs 1 through 6. In terms of the Technorati authority rating, we had one high authority, two medium authority, and three low authority blogs (Table 3).

Each blog had posts discussing the company's products and services, as well as industry-specific best practices that can be used together with their product/service. Other content available on these blogs included company events and information from events that the company attended, as well as customer showcases.

Since Technorati's authority score takes into consideration factors such as the number of posts and comments within each blog, as well as the update frequency, we were able to see major differences between blogs in each category. For example, the high authority blog had several hundred posts and was posting on a daily basis. The medium authority blogs were posting a few (e.g., two or three) new articles per week, while the low authority blogs were posting a new article every week, or every two weeks. Thus, blog activity during the data collection period and preceding months appears consistent with the Technorati ratings.

The number of comments for each post also varied based on the blog's authority level. The high authority blog had between 4 and 50 comments per post, with most posts

having more than 10-15 comments per post. The medium authority blogs usually had less than five comments per post, with some posts having a larger number of comments. The low authority blogs usually had a few or no comments per post.

In terms of the content of the comments, most of them contained positive or negative feedback provided by comment providers on the company's products and services. Others were questions in which blog visitors were asking regarding the company's product/service functionality, or regarding company events. While not a full content analysis, these findings provide some evidence that comment providers are seeking information as well as providing it.

The links were kept active on the blogs for a period of three weeks and were usually displayed in the blog's sidebar. The survey was accessed 263 times and 192 usable responses were recorded. The answers were then imported into SPSS and AMOS. Based on the user consent letter, five respondents requested at the end of the survey that their responses be discarded. From the remaining 187 responses, six responses had the same answer checked throughout the survey sections III, IV, and V and were removed. This left us with a total of 181 usable responses. The authority level and the number of respondents that came from each blog is presented in Table 3.

**Table 3. Respondents from each Blog.**

| Name | Authority Level | Frequency | Percent |
|---|---|---|---|
| Blog 1 | Medium | 16 | 8.9 |
| Blog 2 | Medium | 27 | 15.1 |
| Blog 3 | Low | 5 | 2.8 |
| Blog 4 | High | 114 | 63.7 |
| Blog 5 | Low | 8 | 4.5 |
| Blog 6 | Low | 9 | 5.0 |
| Unspecified | - | 2 | - |

Since our respondents came from the links posted on corporate blogs, it is impossible to determine traditional response rates. Given the complexity of our model and based on the recommendations of Hair et al. (2009) for conducting SEM, a subject-to-variable (STV) ratio of five is desired, as well as an overall sample size exceeding 150 respondents. Our sample exceeds these thresholds and should therefore be adequate for conducting SEM.

**Missing Value Analysis**

A missing value analysis was conducted based on the recommendations of Hair et al. (2009). Based on the authors' classification, missing data can be divided into ignorable and non-ignorable missing data. Ignorable missing data represents missing data that is part of the research design. In our case, the comment provider questions are an example of ignorable missing data, since they were only shown to respondents who indicated posting more than five comments on the blog.

Non-ignorable missing data represents data that, according to the research design, should have been gathered or filled in by the respondent (Hair et al., 2009). In our case, this is represented by the questions that respondents did not answer, or where they selected "don't know" as their answer.

Hair et al. (2009) indicated that, for conducting SEM, non-ignorable missing data up to 10% is acceptable and values can be inserted based on any imputation technique. None of the items had non-ignorable missing data exceeding the 10% threshold, so mean substitution was used to input the missing values for the non comment-provider items. The 10 survey items with the highest levels of non-ignorable missing responses are

presented in Table 4, while the number of missing responses for every item is listed in

Appendix E, Panel E.1.

**Table 4. Top 10 Variables with Missing Data.**

| Variable | N | Mean | Std. Deviation | Missing | |
|---|---|---|---|---|---|
| | | | | Count | Percent |
| CY1 | 167 | 3.69 | 0.813 | 14 | 7.7 |
| CY3 | 169 | 3.78 | 0.694 | 12 | 6.6 |
| SN1 | 169 | 3.14 | 1.043 | 12 | 6.6 |
| PEU2 | 170 | 3.99 | 0.581 | 11 | 6.1 |
| PE3 | 170 | 2.86 | 0.991 | 11 | 6.1 |
| IQ3 | 170 | 3.81 | 0.682 | 11 | 6.1 |
| SN2 | 170 | 3.12 | 1.150 | 11 | 6.1 |
| PEU1 | 171 | 3.96 | 0.598 | 10 | 5.5 |
| IQ1 | 171 | 3.88 | 0.658 | 10 | 5.5 |
| PU2 | 172 | 4.09 | 0.656 | 9 | 5.0 |
| PEU3 | 172 | 3.95 | 0.682 | 9 | 5.0 |

**Descriptive Statistics**

Since no cases were removed during the missing value analysis, our sample size

remained at 181 responses. As discussed above, six corporate blogs agreed to participate

in our survey. For confidentiality reasons, we have renamed these blogs as blog 1 through

6. The number of respondents from each blog is listed in Table 3.

As can be seen in Table 3, the results indicate that most of the respondents come

from blog 4 (63%). This can attributed to the blog's size and Technorati's authority score,

which are significantly higher than for the other blogs. Only two respondents did not

indicate the blog from which they accessed the survey. Of the 181 respondents, 158 can

be classified as blog readers, while only 23 are comment providers (Table 5).

**Table 5. Blog Readers and Comment Providers.**

| Blog | Readers | Comment Providers | Total |
|---|---|---|---|
| Blog 1 | 16 | 0 | 16 |
| Blog 2 | 24 | 3 | 27 |
| Blog 3 | 5 | 0 | 5 |
| Blog 4 | 95 | 19 | 114 |
| Blog 5 | 7 | 1 | 8 |
| Blog 6 | 9 | 0 | 9 |
| Unspecified | 2 | 0 | - |

In terms of age and gender, most respondents were males between 36 and 45 years of age. While the majority of our respondents indicated they had obtained at least a college or university degree (80%), 47% indicated that they have had no specific IT training. When asked about the industry in which they are currently working, most respondents indicated that they are working in the IT industry (57%). However 30 to 43 participants did not provide information on their education, IT education, and industry. These results are presented in Tables 6 to 10.

**Table 6. Age.**

| Age group | Frequency | Percent |
|---|---|---|
| 18 – 25 | 13 | 7.2 |
| 26 – 35 | 49 | 27.2 |
| 36 – 45 | 83 | 46.1 |
| 46 – 55 | 30 | 16.7 |
| 56 – 65 | 5 | 2.8 |
| Prefer not to say / Missing | 1 | - |

**Table 7. Gender.**

| Gender | Frequency | Percent |
|---|---|---|
| Male | 127 | 72.6 |
| Female | 48 | 27.4 |
| Prefer not to say / Missing | 6 | - |

**Table 8. Education.**

| Education | Frequency | Percent |
|---|---|---|
| High school or below | 3 | 2.0 |
| Trade School / Technical Training | 2 | 1.3 |
| College / University | 122 | 80.8 |
| Post Graduate (e.g., MSc, MA or PhD) | 24 | 15.9 |
| Prefer not to say / Missing | 30 | - |

**Table 9. IT Education.**

| IT Education | Frequency | Percent |
|---|---|---|
| None/ No specific IT training | 69 | 46.9 |
| Certificate / Diploma | 41 | 27.9 |
| College / University | 35 | 23.8 |
| Post Graduate (e.g., MSc, MA or PhD) | 2 | 1.4 |
| Prefer not to say / Missing | 34 | - |

**Table 10. Industry.**

| Industry | Frequency | Percent |
|---|---|---|
| Automotive | 1 | 0.7 |
| Building & Construction | 11 | 8.0 |
| Education | 14 | 10.1 |
| Entertainment | 5 | 3.6 |
| Finance | 9 | 6.5 |
| Government | 1 | 0.7 |
| Healthcare | 3 | 2.2 |
| Industrial & Manufacturing | 2 | 1.4 |
| Information Technology | 78 | 56.5 |
| Retail | 6 | 4.3 |
| Transportation & Logistics | 7 | 5.1 |
| Utilities & energy | 1 | 0.7 |
| Prefer not to say / Missing | 43 | - |

Most respondents first accessed the blog at least four months ago (65%). When asked how often they access the blog, most said several times a month (46%) or at least once per week (20%). Moreover, all of the comment providers indicated that they visited the blog at least several times a month. In terms of the reasons for visiting the blog, most respondents indicated that they came to obtain specific information of interest (56%), to

obtain information for research, work, or school (25%), or to gain access to expert

opinion and knowledge (20%). Only 4.4% of respondents indicated that they visited the

blog to share knowledge and less than 2% came to comment/participate. These results are

presented in Tables 11 through 13.

**Table 11. First Access Date.**

| First Access | Frequency | Percent |
|---|---|---|
| This is my first access | 16 | 9.4 |
| 0 – 3 months | 42 | 24.7 |
| 4 – 6 months | 76 | 44.7 |
| 7 – 12 months | 33 | 19.4 |
| 13 – 24 months | 3 | 1.8 |
| Don't know | 11 | - |

**Table 12. Access Frequency.**

| Access Frequency | Readers | Comment Providers | Total |
|---|---|---|---|
| Less than once a month | 5 | 0 | 5 |
| Once a month | 35 | 0 | 35 |
| Several times a month | 70 | 11 | 81 |
| Once a week | 27 | 9 | 36 |
| Several times a week | 1 | 3 | 4 |
| Don't know | 4 | 0 | 4 |

**Table 13. Reasons for Visiting the Blog.**

| Reason | Frequency | Percent |
|---|---|---|
| Specific information of interest | 102 | 56.4 |
| Information for research/work/school | 45 | 24.9 |
| Gain access to expert opinion/knowledge | 36 | 19.9 |
| Purchase product | 21 | 11.6 |
| Prospective/current employee | 19 | 10.5 |
| Sense of community | 9 | 5.0 |
| Share knowledge | 8 | 4.4 |
| Personal enjoyment | 4 | 2.2 |
| Improve reputation | 4 | 2.2 |
| Comment/participate | 3 | 1.7 |
| Express my opinions | 1 | 0.6 |
| Prefer not to say | 2 | 1.1 |

**Normality.** Data normality checks were performed using SPSS (histograms, scatter plots, etc.). Skewness was within the recommended range ($\pm2$). For some variables, kurtosis was beyond the recommended value ($\pm 3$), but below the critical threshold ($\pm5$). By taking into consideration the ceiling affect and sample size, data did not require any transformations (Hair et el., 2009). Items with high kurtosis are presented in Table 14, while the skewness and kurtosis values for all items can be found in Appendix E, Panel E.2.

**Table 14. Skewness and Kurtosis.**

| Variable | N | Skewness | | Kurtosis | |
|---|---|---|---|---|---|
| | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| CF3 | 181 | -1.261 | .181 | 4.560 | .359 |
| PEU1 | 181 | -1.030 | .181 | 4.564 | .359 |
| PEU2 | 181 | -0.948 | .181 | 4.989 | .359 |
| CP_PR3 | 23 | -1.579 | .481 | 4.364 | .935 |

**Independent samples t-tests.** Independent samples t-tests were performed to determine if any unrelated subgroups are present. The presence of unrelated subgroups indicates that data cannot be pooled together for the SEM analysis. Moreover, performing this analysis on early versus late respondents also provides evidence that response bias does not affect our results (Hair et al., 2009).

Tests were performed on early versus late respondents, comment versus non-comment providers, male versus female respondents, and by blog (e.g., blog 1 versus the rest, blog 2 versus the rest) on each of the dependent variables. The results indicated no significant differences between the groups. Moreover, it is important to note that the results did not indicate any differences based on the blog's Technorati authority score.

The results are presented in Appendix E, Panel E.3. To conserve space, only the results on CBUI1 are included.

**Comment providers.** Hair et al. (2009) recommend a subject to variable (STV) ratio of at least 5 for performing SEM or multiple regression analysis. While each blog had a comments section after each post, only 23 comment provider responses were recorded, distributed among only three of the six blogs. This number is insufficient to conduct either SEM or multiple regression analysis. Therefore, we were unable to include the comment provider specific variables in the SEM analysis.

**Measurement Model**

Based on the recommendations of Hair et al. (2009), we conducted SEM in two stages, the measurement model and the structural model. The measurement model is used to analyze the relationships between constructs and variables, establish model validity and provide evidence of construct validity.

Model validity was established by using Amos to compute goodness-of-fit (GOF) measures and by comparing these indices with recommended values from Hair et al. (2009). Based on their recommendation, we used at least one absolute fit index, incremental fit index, and parsimony fit index. Since all values were above recommended values, we accepted the measurement model and proceeded to establish construct validity. The measurement model GOF indicators and recommended values are presented in Table 15.

**Table 15. Measurement Model.**

| Fit Index | Recommended Value | Result |
|---|---|---|
| $x^2$/d.f. | <3.0 | 1.275 |
| GFI | >0.8 | 0.857 |
| AGFI | >0.8 | 0.816 |
| TLI | >0.9 | 0.964 |
| CFI | >0.9 | 0.970 |
| PCFI | >0.8 | 0.803 |
| RMSEA | <0.08 | 0.039 |

Construct validity is established by demonstrating convergent and discriminant validity. Convergent validity was established based on factor loading above the 0.7 threshold, by having the average variance extracted (AVE) above the 0.5 value, and by having composite reliability (CR) > AVE (Hair et al., 2009). These values can be found in Table 17.

Discriminant validity was established by calculating the maximum shared squared variance (MSV) and the average shared squared variance (ASV) and by comparing them with the AVE indicator. If both MSV and ASV values are smaller than the AVE value, then discriminant validity is established (Hair et al., 2009). These indicators can be found in Tables 16 and 17.

Reliability was established by comparing CR against the 0.7 recommended threshold (Hair et al., 2009). The relevant indicators are presented in Table 17.

Since all indicators were between recommended thresholds, construct validity was established and no modifications were made to the measurement model.

## Table 16. Correlations and Squared AVE.

|      | CBUI  | CF    | PU    | PEOU  | PE    | CY    | IQ    | SA    | AT    | SN    |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| **CBUI** | 0.809 |       |       |       |       |       |       |       |       |       |
| **CF**   | 0.620 | 0.841 |       |       |       |       |       |       |       |       |
| **PU**   | 0.713 | 0.687 | 0.818 |       |       |       |       |       |       |       |
| **PEOU** | 0.516 | 0.598 | 0.577 | 0.784 |       |       |       |       |       |       |
| **PE**   | 0.005 | 0.214 | 0.061 | 0.263 | 0.889 |       |       |       |       |       |
| **CY**   | 0.051 | 0.316 | 0.045 | 0.220 | 0.452 | 0.708 |       |       |       |       |
| **IQ**   | 0.478 | 0.554 | 0.286 | 0.323 | 0.365 | 0.575 | 0.709 |       |       |       |
| **SA**   | 0.721 | 0.655 | 0.534 | 0.510 | 0.318 | 0.329 | 0.649 | 0.833 |       |       |
| **AT**   | 0.772 | 0.644 | 0.594 | 0.488 | 0.260 | 0.273 | 0.609 | 0.773 | 0.788 |       |
| **SN**   | 0.481 | 0.331 | 0.609 | 0.147 | 0.045 | 0.161 | 0.104 | 0.262 | 0.391 | 0.906 |

*diagonal contains squared AVE

## Table 17. Convergent and Discriminant Validity.

|      | CR    | AVE   | MSV   | ASV   |
|------|-------|-------|-------|-------|
| **CBUI** | 0.849 | 0.654 | 0.596 | 0.304 |
| **CF**   | 0.878 | 0.707 | 0.472 | 0.291 |
| **PU**   | 0.859 | 0.670 | 0.508 | 0.268 |
| **PEOU** | 0.827 | 0.615 | 0.358 | 0.189 |
| **PE**   | 0.919 | 0.790 | 0.204 | 0.070 |
| **CY**   | 0.751 | 0.501 | 0.331 | 0.100 |
| **IQ**   | 0.751 | 0.502 | 0.421 | 0.221 |
| **SA**   | 0.872 | 0.695 | 0.598 | 0.310 |
| **AT**   | 0.831 | 0.622 | 0.598 | 0.318 |
| **SN**   | 0.932 | 0.821 | 0.371 | 0.110 |

## Structural Model

**Hypothesized model.** The structural model represents the second stage of SEM. In this stage, we created the hypothesized, or initial, structural model to evaluate our hypothesized relationships. Based on the recommendations of Hair et al. (2009), the structural model was created by altering the measurement model to specify each dependence relationship from our hypothesized model.

Similar to the measurement model, we first analyzed the GOF indicators of the model and compared them to recommended thresholds (Hair et al., 2009). Since all

indicators were within recommended values, model fit was established. The GOF

indicators for the hypothesized structural model are presented in Table 18.

**Table 18. Hypothesized (Initial) Structural Model.**

| Fit Index | Recommended Value | Initial |
|-----------|-------------------|---------|
| $x^2$/d.f. | <3.0 | 1.440 |
| GFI | >0.8 | 0.839 |
| AGFI | >0.8 | 0.800 |
| TLI | >0.9 | 0.943 |
| CFI | >0.9 | 0.951 |
| PCFI | >0.8 | 0.817 |
| RMSEA | <0.08 | 0.049 |

After establishing model fit, we proceeded to test our hypothesized relationships.

This was done by analyzing the p-values of the regression weights in Amos. The results

indicate that all integrated TAM and EECM-IT hypotheses were supported, with the

exception of the theorized impact of perceived ease of use on attitude. As discussed in

previous chapters, we believe this to be caused by the greater importance of usefulness

over ease of use in the context of corporate blogs. This is supported by the fact that

perceived enjoyment was not found to have a significant impact on satisfaction or

attitude. Additionally, the high levels of education and IT education suggest that

respondents are experienced users of Internet applications. Thus, navigating and finding

information on the blog should not pose a significant challenge (see Appendix C, Section

III).

This finding is different from the results of studies on personal blogs (Hsu & Lin,

2008), which indicate that perceived enjoyment and ease of use have a significant impact

on continued usage intention.

Another interesting result is that the user's perception of the blog's credibility does not have an impact on her/his attitude towards the blog. One possible explanation is that users already consider the corporate blog as an authoritative source of information and therefore do not question the credibility of the company. This argument is supported by the fact that the mean of each credibility item was above 3.7 out of a maximum of 5.

As discussed above, the number of comment provider respondents was insufficient to include these constructs in the SEM analysis. As such, the effects of reciprocal benefits, personal reputation and expected relationships on satisfaction and attitude could not be tested (H13 - H18).

The results of the hypothesis testing are presented in Table 19.

**Table 19. Hypothesis Testing.**

| Hypothesis | Relationship | | | Estimate | Standardized Estimate | P-value | Supported |
|---|---|---|---|---|---|---|---|
| H1 | SA | ---> | CBUI | 0.176 | 0.238 | 0.031 | Yes |
| H2 | CF | ---> | SA | 0.275 | 0.262 | 0.022 | Yes |
| H3 | PU | ---> | SA | 0.212 | 0.233 | 0.021 | Yes |
| H4 | PU | ---> | CBUI | 0.201 | 0.298 | *** | Yes |
| H5 | CF | ---> | PU | 0.658 | 0.571 | *** | Yes |
| H6 | SA | ---> | AT | 0.451 | 0.48 | *** | Yes |
| H7 | PU | ---> | AT | 0.21 | 0.245 | 0.009 | Yes |
| H8 | PEOU | ---> | AT | 0.048 | 0.042 | 0.613 | No |
| H9 | PEOU | ---> | PU | 0.314 | 0.233 | 0.011 | Yes |
| H10 | AT | ---> | CBUI | 0.29 | 0.368 | 0.003 | Yes |
| H11 | PE | ---> | AT | 0.003 | 0.004 | 0.957 | No |
| H12 | PE | ---> | SA | 0.07 | 0.092 | 0.174 | No |
| H19 | CY | ---> | AT | -0.097 | -0.099 | 0.287 | No |
| H20 | IQ | ---> | AT | 0.328 | 0.268 | 0.022 | Yes |
| H21 | IQ | ---> | SA | 0.502 | 0.385 | *** | Yes |
| H22 | SN | ---> | CBUI | 0.064 | 0.135 | 0.019 | Yes |

*** $p < 0.001$

**Revised model.** Based on the results of the initial model, several of our

hypotheses were not supported. As recommended by Hair et al. (2009), if paths in the

original model are found non-significant, researchers should use model respecification to

improve model fit and its explanatory power.

To refine the model, we went through a number of iterations. For each step, we

dropped one of the non-significant relationships and analyzed the resulting model and

GOF indicators. Based on the results of the hypothesized model, we excluded perceived

enjoyment and credibility. Then, we removed the dependence relationship between

perceived ease of use and attitude. All of the other hypothesized relationships were

significant and no additional dependence relationships were created. The GOF indicators

of the revised model are presented in Table 20.

**Table 20. Revised Structural Model.**

| Fit Index | Recommended Value | Revised Model |
|---|---|---|
| $x^2$/d.f. | <3.0 | 1.567 |
| GFI | >0.8 | 0.856 |
| AGFI | >0.8 | 0.815 |
| TLI | >0.9 | 0.942 |
| CFI | >0.9 | 0.951 |
| PCFI | >0.8 | 0.806 |
| RMSEA | <0.08 | 0.056 |

Therefore, we can conclude that the main predictors of satisfaction ($R^2$=.59) are

confirmation, perceived usefulness and information quality. Attitude ($R^2$=.68) is mainly

determined by perceived usefulness and information quality. The dependent variable,

continued blog usage intention ($R^2$=.71), is influenced by perceived usefulness,

satisfaction, attitude, as well as by social norms. Together, these predictors explain

around 71% of the variance in the continued blog usage intention. The results are presented in Appendix E, Panels E.4 and E.5; the revised model is shown in Figure 11.
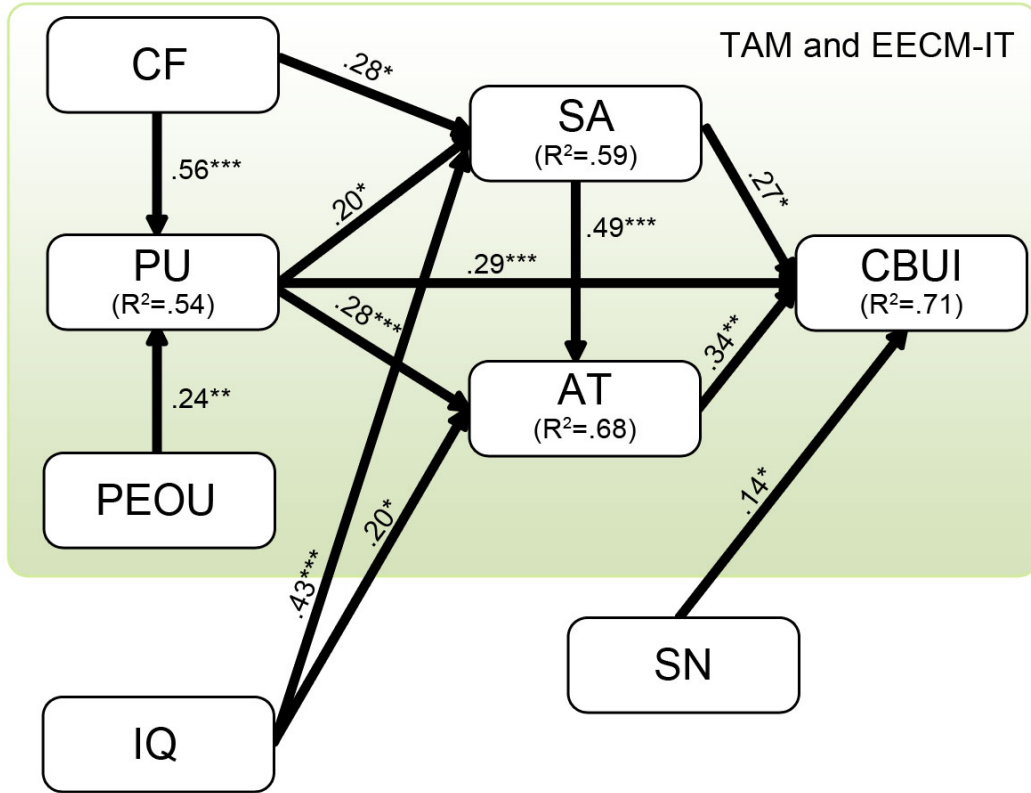


*Figure 11*. Revised Research Model.

**Opinion Leadership versus Opinion Seeking**

While the number of comment providers (23) was insufficient to include comment provider-specific constructs in the SEM analysis, our study also aimed to analyze whether opinion leader and opinion seeking behavior affects whether respondents are comment providers. Since our measurement contained 10 continuous independent variables and one dichotomous dependent variable (comment provider), our available statistical techniques are limited to discriminant analysis and binary logistic regression (Hair et al., 2009). While both techniques provide similar results there are key differences

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in their assumptions. Discriminant analysis usually requires a subject-to-variable (STV) ratio between 10 and 20, which is considerably smaller than the 20 or more STV requirement of binary logistic regression. On the other hand, binary logistic regression usually is a more robust technique, which is not influenced by non-normal data (Hair et al., 2009).

However, both statistical techniques require a sample size of at least 20 respondents for both the predictor and holdout groups (Hair et al., 2009). Because we only have 23 comment providers, our analysis is limited to: 1) an independent samples t-test to determine if there are significant differences between blog readers and comment providers on the opinion leadership and opinion seeking variables and 2) an exploratory factor analysis (EFA) to analyze the dimensionality of the opinion leadership and opinion seeking variables (Hair et al., 2009).

The results of the independent samples t-tests indicate significant differences between blog readers and comment providers on each of the opinion leadership and opinion seeking variables. Therefore, we can conclude that comment providers exhibit different opinion leadership and opinion seeking behaviors to blog readers. These results are presented in Appendix F, Panel F.1. However, finding that comment providers are more likely to exhibit opinion leadership on the blog is almost tautological as someone who is only a reader has no way of expressing opinion leadership on the blog. On the other hand, it is possible for a blog reader to exhibit opinion leadership behavior outside the blog. Additionally, it is not necessary for comment providers to exhibit opinion leadership behavior; if their contributions are mostly questions, they are better viewed as opinion seekers.

To analyze the dimensionality of the opinion leadership and opinion seeking constructs, an exploratory factor analysis was conducted in SPSS. Based on the conceptualization of Childers (1986) and Reynolds and Darden (1971), the 10 items used to measure opinion leadership and opinion seeking behavior were expected to load on three constructs: 1) opinion leader (OL) on the blog; 2) opinion seeker (OS) on the blog; and 3) opinion leader outside the blog (OLO), based on the information read on the blog. The results of the analysis indicated that the best fit to data is a three-factor model and that each variable loads highly on its respective construct. Competitive fit on one-factor, two-factor and four-factor models was also tested by specifying the number of extracted factors in SPSS. Based on the recommendations of Hair et al. (2009) the interpretation of the results of the eigenvalues and the factor loadings suggested that the three-factor model provided the best fit to the data. The exploratory factor analysis is presented in Appendix F, Panels F.2 and F.3.

Since the sample size was not sufficient to conduct either a discriminant analysis or a binary logistic regression, the last step of the opinion leadership versus opinion seeking analysis consisted of examining the correlation matrix. Based on the recommendations of Hair et al. (2009), a point biserial correlation coefficient can be used to calculate correlations when one of the variables in the correlation is dichotomous. In SPSS, this is handled through Pearson's correlation coefficient. The results indicate that all correlations were significant at the .01 level and .001 levels respectively. The highest correlation can be observed between the opinion leadership construct and the comment provider variable (.852). While the sample size is small, this suggests that opinion leadership is the main factor affecting comment provider behavior. While statistically

significant, all of the other correlations with the comment provider variable are below .3, which suggests that opinion seeking and opinion leader outside the blog, based on the information read on the blog, have low direct effects on the comment provider variable. The correlation matrix is presented in Table 21.

**Table 21. Correlations Matrix.**

| Variable | Mean | S.D. | OL | OS | OLO | CP |
|----------|------|------|--------|---------|---------|-----|
| OL | 2.30 | 1.69 | | | | |
| OS | 5.57 | 0.97 | .295*** | | | |
| OLO | 4.65 | 1.32 | .352*** | .449*** | | |
| CP | - | | .852*** | .203** | .272*** | |

** p < .01, *** p < .001

In summary, our analysis indicates significant differences between blog readers and comment providers on the opinion leadership and opinion seeking variables and confirms the hypothesized dimensionality of each construct. However, since we lacked the adequate number of comment providers required to conduct discriminant analysis or binary logistic regression, we could not assess the impact of each of these constructs on whether the respondent is a comment provider.

<center>**Discussion**</center>

**Main Findings**

As blogs have become a new and significant way of distributing information, businesses and organizations have increased their use of corporate blogs (He & Zhu, 2007; Liu & Ji, 2010). With their recent evolution, little research has studied the factors that influence corporate blog readers and comment providers to continue engaging in blogging activities. It is not enough to bring users to a corporate blog; it is also important to understand what makes users continue using the blog. By ensuring visitors return to their blog, companies can improve their public image, market products, and obtain feedback on their products and services (Cox et al., 2008). This feedback distinguishes blogs from traditional print or web page communication and helps companies better understand the needs of their stakeholders and improve their position in the market.

Our findings suggest that for IT corporate blogs, the user's continued blog usage intention is mainly determined by satisfaction, attitude, perceived usefulness and social norms. In turn, satisfaction is mainly influenced by the blog's information quality, as well as the user's perception of the usefulness of the blog and the confirmation between the expectation and performance of the blog. The user's attitude towards the blog is mainly influenced by the user's perception of the usefulness of the blog, as well as the blog's information quality.

Second, it has been suggested that results from personal blog studies may not be transferable to corporate blogs (Chai & Kim, 2010). While our findings show that some of the factors (i.e. confirmation, information quality) are transferrable from personal

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blogs, other factors are not. Corporate blog readers appear to be looking for different things when deciding whether to continue using a typical corporate blog.

Our study could not find evidence that user's perceived enjoyment with the blog influenced their intention to continue visiting the blog. As previously discussed, corporate blog visitors seem to visit these blogs for their professional needs and thus are mainly interested in the usefulness and quality of the information found. However, none of the blogs in the sample appeared to offer any entertainment value. If there are no differences among the blogs on enjoyment, then it is more difficult to measure the impact of efforts to make the blog enjoyable.

Similarly, the perception of credibility in the information presented in the blog had no significant impact on any of the dependent variables. As discussed in the results section, one possible explanation is that users already consider the corporate blog as an authoritative source of information and therefore do not question the credibility of the blog. This argument is supported by the fact that the mean of each credibility item was above 3.7 out of a maximum of 5. But, as with enjoyment, there may not be much variation in credibility across the six blogs studied. The variation in credibility among personal blogs should be much greater, with most bloggers being either anonymous or someone the visitor knows little about.

Although previous studies on personal blogs (Hsu & Lin, 2008) found that perceived ease of use had an impact on the user's attitude toward the blog, in our study this hypothesis was not supported. Moreover, Hsu and Lin (2008) found that perceived usefulness does not have a significant impact on attitude or blog usage intention for

personal blogs. In contrast, our study found perceived usefulness has a significant impact

on attitude, satisfaction, and continued blog usage intention. One possible reason is that

in the case of corporate blogs the usefulness of the blog, primarily the usefulness of the

information presented in the blog, is more important than perceived enjoyment or ease of

use. Moreover, ease of use may not be a concern for our respondents, as IT corporate

blog readers can be reasonably expected to be experienced Internet users. This argument

is also supported by the fact that the majority (80%) of our respondents had a college or

university degree. Therefore, we can conclude that IT corporate blog users are indeed

influenced by a different set of factors than personal blog users.

Third, based on Hsu and Lin's (2008) study limitations, it is important to

differentiate between the different blog user categories, as they can be influenced by

different factors to continue using a corporate blog. Although previous research identified

blog readers and comment providers as distinct groups (e.g., Hsu & Lin, 2008), studies in

the blog literature analyzed these groups together (e.g., Guadagno et al., 2008; C.-Y.

Wang et al., 2010; K.-Y. Wang et al., 2009). Analyzing these groups separately is

important, because comment providers might have additional factors influencing them to

continue using a corporate blog. Unfortunately, due to the limited number of comment

provider respondents, we were not able to fully test the constructs that might influence

only that group. As such, the impact of reciprocal benefits, personal reputation and

expected relationships on the dependent variables could not be tested. However, we

believe that our study provides a contribution to the literature in the conceptualization

and initial pre-testing of these constructs.

Fourth, while differentiating between blog readers and comment providers can be done based on the number of comments the user has posted on the blog, the factors that influence this behavior have not been analyzed in the blog literature. Our study intended to bridge this gap by applying the opinion seeking versus opinion leadership theoretical lens in the field of corporate blogs (Childers, 1986; Reynolds & Darden, 1971). To our knowledge, this is the first attempt to utilize the opinion leadership and opinion seeking theoretical lens to analyze the factors that influence blog visitors to become readers or comment providers.

Opinion leaders can be defined as individuals who have a tendency to give information about a topic to others. On the other hand, opinion seekers seek out information or advice from others on a particular topic (Reynolds & Darden, 1971). Since blog readers do not participate in posting comments on the blog and only read the information posted by others, it can be assumed that they exhibit opinion seeking behavior. As noted earlier, our results indicate that they are not visiting the blog for enjoyment. Comment providers actively post comments and some share information with others. Therefore, those who share information seem to exhibit opinion leadership behavior.

While our comment provider sample size (23) was insufficient to conduct a discriminant analysis or a binary logistic regression, the independent samples t-tests indicated significant differences between blog readers and comment providers on the opinion leadership and opinion seeking variables (Appendix F, Panel F.1). Moreover, the exploratory factor analysis supported the hypothesized dimensionality of the three factors analyzed (Appendix F, Panel F.3).

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Fifth, our study brings a number of theoretical and methodological refinements. Apart from discovering the antecedents of continued blog usage intention, we consider validation of this integrative view of TAM and ECM in the context of corporate blogs to be one of our theoretical contributions to the literature. Moreover, the inclusion of constructs from other theories, such as the social norms construct, as well as the opinion leadership versus opinion seeking constructs provide an important contribution to both TAM and ECM research.

**Practical Significance**

As previously discussed, businesses and organizations are looking for new ways to exploit corporate blogs as communication tools to reach potential stakeholders (He & Zhu, 2007; Liu & Ji, 2010). Corporate blogs are a web 2.0 technology that enables interaction between an organization and its stakeholders. From a management perspective, companies are interested in the evolution of corporate blogs, because of the interaction component that this new technology offers and other technologies do not. Therefore, knowing what factors influence their visitors to continue visiting their blog gives companies important information as to what aspects of the blog they should focus on.

Overall, confirmation, perceived usefulness, information quality and social norms are the main determinants of the blog visitor's satisfaction, attitude and continued blog usage intention. As such, companies that want to increase their blog visitor's continued blog usage intention should first focus on the quality of the information in the blog and on the blog's usefulness.

Second, companies should take into consideration that there are different factors influencing blog visitors to continue visiting a corporate blog versus a personal one. For example, our study could not find evidence that the visitor's perceived enjoyment on the blog impacts satisfaction, attitude, or continued blog usage intention. Moreover, perceived ease of use was found to only influence the blog visitor's perception of usefulness of the blog, but not the visitor's satisfaction or attitude towards the blog. An informal analysis of the participating blogs suggests that while each blog had a clean, user-friendly interface and was easy to use. Additionally, none of them had content that could be categorized as enjoyable, as all of the content was related to the company and their products or events. Therefore, perceived enjoyment and the ease of use of the blog should be treated as secondary to the quality of information on the blog and its usefulness.

Third, companies should also take into consideration the impact of social norms on a visitor's intention to continue visiting the blog. Our findings suggest that people who are important to the blog visitor or who have the same technology interests as the visitor can influence the blog visitor to continue using the corporate blog. As well as focusing on the quality of the blog's content, companies should also attempt to build their community. This can be achieved by giving blog visitors the opportunity to provide feedback on certain aspects of the blog or company products. Additionally, companies should look into providing options for visitors to share relevant content with their friends (e.g. share and send to friend buttons), as well as social media integration options.

Fourth, our independent samples t-tests did not find any statistical evidence of differences in the continued blog usage intention based on the blog's Technorati authority

level. However, it is important to note that most of our respondents came from a high authority level blog. While updating the blog frequently should theoretically encourage blog visitors to continue using the blog, it is possible that once a blog reaches a certain number of posts per week, update frequency is no longer a determining factor. On the other hand, information quality and perceived usefulness should be determining factors independent of the blog's update frequency. Therefore, companies should focus more on these factors, while ensuring that they regularly post high quality content on their blog.

Overall, these factors explain 71% of the variance in the continued blog usage intention. Therefore, by following these recommendations a company should be able to increase their blog visitors' intentions to continue visiting the company's corporate blog.

**Limitations and Future Research**

Based on the previous discussion, our study has a number of limitations, while also providing a number of research opportunities. First, our study is limited by the sample size and the number of IT corporate blogs that participated. Unfortunately, due to the limited number of comment provider respondents, we were not able to test the constructs that might influence only their group. As such, the impact of reciprocal benefits, personal reputation and expected relationships on the dependent variables could not be tested. While comment providers seem to be a small percentage of total visitors (around 13% for our study), they seem much more likely to respond to survey requests.

Second, we lacked the adequate number of comment providers required to analyze whether the opinion leadership and opinion seeking behavior on the blog, as well as the opinion leadership behavior outside the blog based on information on the blog,

impacts whether the blog visitor is a comment provider. We would like to recommend that future studies to continue analyzing this theory.

Third, our findings suggest that corporate IT blog users are indeed influenced by a different set of factors than personal blog users. While we have uncovered some of the antecedents of the continued blog usage intention, we would like to suggest that further studies should take a closer look at additional factors that might influence the user's attitude, satisfaction and continued blog usage intention for corporate blogs. For example, TAM 3 (Venkatesh & Bala, 2008) contains a number of antecedents of perceived usefulness and ease of use (e.g., user experience, computer self-efficacy, objective usability) that could help increase the explanatory power of our model.

Fourth, our study was focused on corporate IT blog users. Further research should be conducted on other sectors, such as finance, advertising, and healthcare, as well as companies in the entertainment industry whose visitors might have different expectations. These results could then be compared to those from our study to determine if users from different sectors may have different factors influencing their continued blog usage intention. There might also be an opportunity for some innovative companies to attempt to make their blogs a bit more entertaining to see what effect this has on visitors' behavior.

Fifth, further studies should consider the social media and microblogging phenomenon. While microblogs are essentially small blogs that focus on reduced and concise content such as short sentences or individual images, anecdotal evidence suggests that they are widely used by companies on both Facebook and Twitter (Kaplan &

Haenlein, 2011). Since microblogs have evolved from blogs, a study comparing whether the factors that affect blog users are transferable to them would bring a significant contribution to the blog literature and for practitioners.

Sixth, additional studies could focus on integrating the IS perspective with additional theories. One such concept that can explain the individual's intention to use blogs is gratification. Similarly to the user's satisfaction with the system, the basic concept of gratification refers to the positive reaction felt by an individual when fulfilling a need or a goal. This assumes that individuals have certain needs and will actively seek to fulfill them (Blumler & Katz, 1974). The uses and gratification theory builds upon this concept and helps explain why individuals actively seek media and media content, such as blogs, for gratification purposes.

While the initial research on gratification focused mostly on traditional media channels, researchers have also emphasized the importance of analyzing new technologies and media channels. With the evolution of the Internet and web 2.0, new technologies and forms of media usage have appeared. Blogs represent one of the latest media channels available to users, as they can fill both the need of traditional information gathering and knowledge sharing. From a traditional media perspective, blogs can be considered as an evolution of traditional newspapers, with the added ability of users to communicate and take part in the content creation process. With the purpose of understanding what needs are fulfilled from using the blogs medium, there is a need for studies to analyze how the gratification, satisfaction and use paradigms apply to blogs and corporate blogs.

From a gratification paradigm, the blog user's beliefs, attitudes and individual characteristics can influence the individual's intention to use blogs. Furthermore, social and psychological components may also affect gratification, satisfaction and the usage intention.

Finally, there are opportunities for other research approaches such as a longitudinal study looking at the behavior of visitors over time. For example, it's possible that users' intention to continue visiting a corporate blog can vary based on whether they find the content of the latest articles useful. Moreover, users that have read a corporate blog for a period of time, but dislike recent blog articles or comments made by the community, may decide to stop visiting the blog for a while, but return after a while to check if the usefulness of the blog's content has improved. Conducting this study would require close cooperation with the company's bloggers, who might well be engaged in this kind of analysis themselves.

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**Appendix A - Invitation E-mail for Bloggers**

University of
Lethbridge

Dear Blogger,

### Introduction

My name is Livia Negrutu, a _Graduate Student_ currently enrolled in the Master of Science in Management Program at the University of Lethbridge, Alberta, Canada. I am currently working on my thesis under the supervision of Dr. Brian Dobing. The main purpose of my study is to find out **_what influences blog readers and comment providers to continue visiting and participating in corporate blogs_** maintained by IT companies, such as your <URL/name> blog.

### Request

I am sending you this e-mail to ask you to _participate in my study_. **Your participation does not require a financial commitment, it only requires a few minutes of your time to** _post a link to my survey on your blog_**.** All precautions will be taken to respect the confidentiality and anonymity of your visitors and access to the data will only be granted to my research committee and me. The link itself will bring users directly to the survey, which has been created with the Qualtrics Survey tool.

If you would like to see the survey now, click here [the survey link will be inserted here]. No advertisements or commercial materials will be presented to your visitors.

### Benefits

My research should make a significant contribution to our understanding of the blogging phenomenon and will also help you as a blogger to better understand what motivates your visitors to continue visiting and enjoying your blog. After the analysis is complete, you will be able to use the results of my study to better target your desired audience and to engage more people in blogging activities.

Upon completion of my study, I will send you free of charge the results of the analysis, the factors that influence visitors to engage in blogging activities and a set of practical guidelines for attracting new users and keeping your existing ones interested in your blog. Moreover, if there are at least 10 complete responses from your blog, I will

also send you a summary of these responses and how they compare to the overall results. This minimum number has been selected to ensure we meet ethical standards of respondent anonymity.

**Benefits for participants**

To ensure participants are rewarded for their effort, each survey respondent will be given the opportunity to enter a draw for a $500 Visa gift card.

**Next steps**

Please respond to this e-mail if you are interested in participating in my study and are willing to post the survey link on your blog.

If you require any additional information, please feel free to contact me or my supervisor, Dr. Brian Dobing.

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**Appendix B - User Consent**

Dear Participant,

You are invited to participate in a research study on the use of IT corporate blogs. This research will require about 15 - 20 minutes of your time. The purpose of this study is to help researchers and bloggers better understand what factors and blog characteristics are important for you to continue visiting and utilizing corporate blogs. In addition, we are offering you the possibility of winning a $500 Visa gift card.

All information you provide in this survey will be confidential. We will not ask for your name or other identifying information and, unless you choose to answer the question yourself, will not track the website from which you accessed the survey. However, at the end of the survey you have the option of entering your e-mail address. If you decide to do so, we will use it to enter you in the draw for the $500 Visa gift card and / or to send you the results of the study. Your e-mail address will not be used for any other purpose, and will be destroyed afterwards. **Please note that if you win, you will have to respond to the e-mail informing you that you won within seven (7) calendar days. If the winner does not respond within seven (7) calendar days, then a new draw will be held and a new winner selected**. This is done to ensure that the prize can be successfully awarded.

In terms of the data collected, only my supervisory committee and I will have access to the raw data. For reporting, only aggregated data will be used. Individual responses to this questionnaire will not be given, sold or made accessible to any third parties. They will be kept on a secure system for no more than five years **to be used only for research purposes** and then destroyed.

Your participation in this study is completely voluntary and you may **withdraw without consequence** at any time. If you choose to do so, all information from you will be destroyed. You may choose not to answer any questions. Moreover, at the end of the survey, you can choose to discard your answers. If you select this option, we will discard all answers to the questions that you've provided up to that point. However, you will still be able to enter the draw.

The Faculty of Management Research and Ethics Committee at The University of Lethbridge has reviewed this project to ensure its compliance with acceptable research practices, including confidentiality of data.

If you have any questions, feel free to contact me at livia.negrutu@uleth.ca or my supervisor Dr. Brian Dobing at brian.dobing@uleth.ca. If you have any other questions regarding your rights as a participant in this research, you may also contact the Office of Research Services at the University of Lethbridge at 403-329-2747 or research.services@uleth.ca.

The results of the study will be sent to you upon request by providing your email at the end of the survey or by sending me an e-mail to livia.negrutu@uleth.ca. Thank you very much for taking the time to participate. I appreciate your effort and cooperation!

Livia Negrutu
Master of Science Candidate

**User Consent:** By clicking next, you understand your rights as a participant and agree to participate in this study.

**Appendix C - Questionnaire**

## I. Blog information

**Instructions:** When answering the following questions, please think only about the blog where you accessed the survey. The purpose of this section is to get a better understanding of your thoughts on that blog. Please rest assured that no identifying information will be communicated to the blog or to anyone else outside our research team.

1. How old are you?
   - Under 18 *
   - 18 – 25
   - 26 – 35
   - 36 – 45
   - 46 – 55
   - 56 – 65
   - 66 +
   - Prefer not to say

* If respondents select the "Under 18" option, they will get the following message: "Sorry, you do not qualify for this survey!" after which the survey will end.


2. From which blog did you access this survey? We would like you to answer subsequent questions with this blog in mind even if it is the first time you've visited it.

   - Blog A
   - Blog B
   - Etc. (in alphabetical order – once participants are determined)
   - Other, please specify:_____
   - Unspecified (If you select this option, all references to the blog will be referred to as "Unspecified" in the remaining questions)


## II. Blog information

**Instructions:** When answering the following questions, please think only about the blog where you accessed the survey. The purpose of this section is to get a better understanding of your thoughts on that blog. Please rest assured that no identifying information will be communicated to the blog or to anyone else outside our research team.

3. How long ago did you first access the [LABEL] blog?
   - o This is my first access
   - o 0 – 3 months
   - o 4 – 6 months
   - o 7 – 12 months
   - o 13 – 24 months
   - o 25 – 36 months
   - o More than 36 months
   - o Don't know
   - o Prefer not to say

4. How frequently do you visit the [LABEL] blog? (this question is skipped if the respondent selects "This is my first access" in Q2)
   - o Less than once a month
   - o Once a month
   - o Several times a month
   - o Once a week
   - o Several times a week
   - o Once a day
   - o Several times a day
   - o Don't know
   - o Prefer not to say

5. Approximately, how many comments of yours have been posted on the [LABEL] blog in the last two months?
   - o Never attempted to make a comment
   - o Have offered a comment(s) but never had one published
   - o 1-5
   - o 6-10
   - o 11-15
   - o 16-20
   - o 21-25
   - o 26-30
   - o 31+
   - o Prefer not to say/ Don't know

6. What are the main reasons you visit the [LABEL] blog? (you may check more than one)

☐ Specific information of interest
☐ Information for research/work/school
☐ Prospective or current employee or investor in the company
☐ Gain access to expert opinion/knowledge in company's area of expertise
☐ Purchase a product (customer or potential customer of company)
☐ Share knowledge with the community
☐ Personal enjoyment
☐ Improve my reputation and/or my company's reputation (through posted comments)
☐ Participate (commenting) in the dialogue between blogger/s and those who comment
☐ Sense of community/ networking/social connections
☐ Express my opinions
☐ Prefer not to say
☐ Other, please specify:_____

**Opinion leader on the IT corporate blog:**

7. In discussions on the [Label] blog, you give information to others:

Never                                                            Very Frequently

      **1        2        3        4        5        6        7**

8. In discussions on the [Label] blog, you give advice to others:

Never                                                            Very Frequently

      **1        2        3        4        5        6        7**

**9.** In discussions on the [Label] blog, you are a resource for others:

Never                                                            Very Frequently

      **1        2        3        4        5        6        7**

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**Opinion seeker on the IT corporate blog:**

10. In discussions on the [Label] blog, you get information from others (blogger and/or other comment providers):

Never                                                    Very Frequently

     **1**       **2**       **3**       **4**       **5**       **6**       **7**

11. In discussions on the [Label] blog, you get advice from others (blogger and/or other comment providers):

Never                                                    Very Frequently

     **1**       **2**       **3**       **4**       **5**       **6**       **7**

12. In discussions on the [Label] blog, others (blogger and/or other comment providers) are a resource for you:

Never                                                    Very Frequently

     **1**       **2**       **3**       **4**       **5**       **6**       **7**

**Opinion leader outside of the IT corporate blog, based in part on the information gained from the blog:**

13. In general, you talk with others (such as your work contacts, friends, and neighbors) about IT topics you have read on the [Label] blog:

Never                                                    Very Frequently

     **1**       **2**       **3**       **4**       **5**       **6**       **7**

14. In discussions about IT topics outside the [Label] blog, you give information to others:

Never                                                                    Very Frequently

    **1**      **2**      **3**      **4**      **5**      **6**      **7**

15. In discussions about IT subjects outside the [Label] blog, you give advice to others:

Never                                                                    Very Frequently

    **1**      **2**      **3**      **4**      **5**      **6**      **7**

16. discussions about IT subjects outside the [Label] blog, you are a resource to others:

Never                                                                    Very Frequently

    **1**      **2**      **3**      **4**      **5**      **6**      **7**

### III. Blog users motivations (readers and comment providers)

| The following statements are about **your personal beliefs** about **your selected blog [Label]**.<br><br>Please indicate your degree of agreement / disagreement with each statement by clicking the button that best reflects your answer. | | Strongly disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly agree | Prefer not to respond |
|---|---|---|---|---|---|---|---|
| CF1 | I generally get what I want from the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| CF2 | The [Label] blog meets my expectations. | 1 | 2 | 3 | 4 | 5 | |
| CF3 | I generally get what I expect from the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| PU1 | Using the [Label] blog can improve my performance (personal or professional). | 1 | 2 | 3 | 4 | 5 | |
| PU2 | Using the [Label] blog can enhance my knowledge. | 1 | 2 | 3 | 4 | 5 | |
| PU3 | Using [Label] blog enables me to accomplish my tasks more quickly (personal or professional). | 1 | 2 | 3 | 4 | 5 | |
| PEU1 | It is easy to search for information on the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| PEU2 | It is easy to navigate through the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| PEU3 | It is easy to use the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| PE1 | The process of participating (reading or commenting) in the [Label] blog is enjoyable. | 1 | 2 | 3 | 4 | 5 | |
| PE2 | I enjoy using the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| PE3 | Using the [Label] blog is pleasant. | 1 | 2 | 3 | 4 | 5 | |
| CY1 | The [Label] blog fairly represents the company. | 1 | 2 | 3 | 4 | 5 | |
| CY2 | The [Label] blog is a credible source representing the company. | 1 | 2 | 3 | 4 | 5 | |
| CY3 | This [Label] blog represents the company well. | 1 | 2 | 3 | 4 | 5 | |
| IQ1 | The [Label] blog provides correct information. | 1 | 2 | 3 | 4 | 5 | |
| IQ2 | The [Label] blog provides up-to-date information. | 1 | 2 | 3 | 4 | 5 | |
| IQ3 | The information provided in the [Label] blog is complete. | 1 | 2 | 3 | 4 | 5 | |
| SN1 | People who are important to me think that I should participate (read or comment) in the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| SN2 | People who influence my behavior encourage me to participate (read or comment) in the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| SN3 | People who have the same technology interests as me encourage me to participate (read or comment) in the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |

## IV. Blog users motivations (only comment providers)

| The following statements are about **your personal beliefs** about **your selected blog [Label]**.<br><br>Please indicate your degree of agreement / disagreement with each statement by clicking the button that best reflects your answer. | | Strongly disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly agree | Prefer not to respond |
|---|---|---|---|---|---|---|---|
| RB1 | Commenting on the [Label] blog can be advantageous to me. | 1 | 2 | 3 | 4 | 5 | |
| RB2 | When I share my knowledge on the [Label] blog, I expect to receive knowledge in return. | 1 | 2 | 3 | 4 | 5 | |
| RB3 | When I share my knowledge on the [Label] blog, I believe that my future requests for knowledge will be answered. | 1 | 2 | 3 | 4 | 5 | |
| RB4 | Commenting on the [Label] blog can provide reciprocal benefits to me and other blog participants. | 1 | 2 | 3 | 4 | 5 | |
| PR1 | I earn respect from others by commenting on the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| PR2 | Commenting on the [Label] blog establishes/ enhances my personal reputation on the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| PR3 | Commenting on the [Label] blog will establish/ improve my status in the blog's community. | 1 | 2 | 3 | 4 | 5 | |
| ER1 | Commenting on the [Label] blog strengthens my ties with other blog users. | 1 | 2 | 3 | 4 | 5 | |
| ER2 | Commenting on the [Label] blog helps me make new friends/contacts. | 1 | 2 | 3 | 4 | 5 | |
| ER3 | Commenting on the [Label] blog helps me create relationships with others (e.g. blogger and/or other comment providers) who have common interests. | 1 | 2 | 3 | 4 | 5 | |

## V.    Dependent variables

| The following statements are about **your personal beliefs** about **your selected blog [Label]**.<br><br>Please indicate your degree of agreement / disagreement with each statement by clicking the button that best reflects your answer. | | Strongly disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly agree | Prefer not to respond |
|---|---|---|---|---|---|---|---|
| SA1 | I am satisfied with my decision to read (and, if applicable, comment on) the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| SA2 | My decision to visit the [Label] blog was a wise one. | 1 | 2 | 3 | 4 | 5 | |
| SA3 | My experience with visiting the [Label] blog is satisfactory. | 1 | 2 | 3 | 4 | 5 | |
| AT1 | I like participating (reading or commenting) in the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| AT2 | I feel good about participating (reading or commenting) in the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| AT3 | Overall, my attitude towards the [Label] blog is favorable. | 1 | 2 | 3 | 4 | 5 | |
| CBUI1 | If I require similar information, I intend to continue using the [Label] blog. | 1 | 2 | 3 | 4 | 5 | |
| CBUI 2 | I will keep using the [Label] blog as regularly as I do now. | 1 | 2 | 3 | 4 | 5 | |
| CBUI 3 | I intend to participate (read or comment) on the [Label] blog more from now on. | 1 | 2 | 3 | 4 | 5 | |

### VI.  General information

**Instructions:** The purpose of this section is to get some general information about you as a blog user. Rest assured that your anonymity is protected and that none of this information will be used to identify you.

17. What is your gender?
     - o   Male
     - o   Female
     - o   Prefer not to say

18. What is the highest level of education that you have completed?
     - o   High school or below
     - o   College / University
     - o   Post Graduate (e.g., MSc, MA or PhD)
     - o   Trade School / Technical Training
     - o   Other / Please specify _____
     - o   Prefer not to say

19. What is the highest level of IT education that you have completed?
     - o   None/ No specific IT training
     - o   Certificate / Diploma
     - o   College / University
     - o   Post Graduate (e.g., MSc, MA or PhD)
     - o   Other / Please specify _____
     - o   Prefer not to say

20. What is your current occupation? (please check all that apply)
     - ☐   Student
     - ☐   Employed part-time
     - ☐   Employed full-time
     - ☐   Self-Employed
     - ☐   Retired
     - ☐   Not Employed
     - ☐   Full-time homemaker
     - ☐   Other / Please specify _____
     - ☐   Prefer not to say

21. If you are currently employed, what is the industry in which you are working or, if you are not employed, in what industry did you last work, if any?

     - o   Agriculture
     - o   Automotive
     - o   Biotechnology & Pharmaceuticals
     - o   Building & Construction

- o Education
- o Engineering
- o Entertainment
- o Finance
- o Food & Beverage
- o Government
- o Healthcare
- o Industrial & Manufacturing
- o Information Technology
- o Non-profit organisations
- o Retail
- o Transportation & Logistics
- o Travel
- o Utilities & energy
- o Other / Please Specify _____
- o Prefer not to say

### VII.    Open-ended questions

What do you like most about the [LABEL] blog?

_____
_____
_____

What would really improve the blog's usefulness to you?

_____
_____
_____

Thank you very much for your responses so far. If you have any comments / questions regarding this survey, please write them in the box below and we will do our best to answer you.

_____
_____
_____

As presented in the User Consent letter, you can choose to discard your answers. If you select this option, we will discard all answers to the questions that you've provided so far. However, you will still be able to enter the draw.

&#9744;    Do NOT include my views in this research project

**VIII.  Draw**


**The following section is used for entering you in the draw. All individuals are eligible to be entered in a draw for a $500 visa gift card.  Please write your email address below if you would like to be entered into the draw and/ or receive the results of the study.** Winners will be randomly selected from all respondents who provided their e-mail. We will use the e-mail address to contact you if you win the $500 visa gift card. Your e-mail address will not be used for any other purposes without your consent.

**Check all that apply:**

☐  draw for the $500 visa gift card
☐  send me the results of the study

**Email address:** _____


**Thank you very much for participating!**


**"Submit" Survey Button**

## Appendix D - Constructs, Original Items, Adapted Items, and Sources

| Construct | Source | Item | Original Item | Adapted Item |
|---|---|---|---|---|
| Confirmation - CF | Shiau, Huang, and Shih (2011) | CF1 | I generally get the level of service I expect from my blog. | I generally get what I want from the [Label] blog. |
| | | CF2 | The products and services that my blog provider recommends meet my expectations. | The [Label] blog meets my expectations. |
| | Shiau and Luo (2010) | CF3 | I generally get what I expected from blogs. | I generally get what I expect from the [Label] blog. |
| Perceived usefulness – PU | Hsu and Lin (2008) | PU1 | Using blog would improve my work/learning/life performance. | Using the [Label] blog can improve my performance (personal or professional). |
| | | PU2 | Using blog would enhance my work/learning/life | Using the [Label] blog can enhance my knowledge. |
| | | PU3 | Using blog enables me to accomplish my work/ learning/ life more quickly. | Using [Label] blog enables me to accomplish my tasks more quickly (personal or professional). |
| Perceived ease of use - PEU | Hsu and Lin (2008) | PEU1 | It is easy to search information. | It is easy to search for information on the [Label] blog. |
| | | PEU2 | Learning to operate a blog is easy | It is easy to navigate through the [Label] blog. |
| | Bouhlel et al. (2010) | PEU3 | Overall, I believe blog is easy to use. | It is easy to use the [Label] blog. |
| Perceived enjoyment – PE | Hsu and Lin (2008) | PE1 | The process of participating in blogs is enjoyable. | The process of participating (reading or commenting) in the [Label] blog is enjoyable. |
| | Shiau and Luo (2010) | PE2 | I have fun using blog. | I enjoy using the [Label] blog. |
| | | PE3 | Using Blogs is pleasant. | Using the [Label] blog is pleasant. |
| Credibility – CY | Bouhlel et al. | CY1 | This blog is fair. | The [Label] blog fairly represents the company. |

| Construct | Source | Item | Original Item | Adapted Item |
|---|---|---|---|---|
| | (2010) | CY2 | This blog is objective. | The [Label] blog is a credible source representing the company. |
| | | CY3 | This blog is neutral. | This [Label] blog represents the company well. |
| Information quality - IQ | S.-M. Wang, Lin (2011) | IQ1 | This blog provides correct information. | The [Label] blog provides correct information. |
| | | IQ2 | This blog provides up-to-date information. | The [Label] blog provides up-to-date information. |
| | | IQ3 | The information provided in this is complete. | The information provided in the [Label] blog is complete. |
| Reciprocal benefits - RB | Adapted from Lin (2007) | RB1 | I find my participation in blogs can be advantageous to me and other bloggers. | Commenting on the [Label] blog can be advantageous to me. |
| Comment provider | Hsu and Lin (2008) | RB2 | When I share my knowledge with colleagues, I expect to receive knowledge in return when necessary. | When I share my knowledge on the [Label] blog, I expect to receive knowledge in return. |
| | | RB3 | When I share my knowledge with colleagues, I believe that my future requests for knowledge will be answered. | When I share my knowledge on the [Label] blog, I believe that my future requests for knowledge will be answered. |
| | | RB4 | I think that participating in blog can improve reciprocal benefits. | I think that commenting in the [Label] blog can provide reciprocal benefits to me and other blog participants. |
| Personal Reputation – PR | Hsu and Lin (2008) | PR1 | I earn respect from others by participating in blog. | I earn respect from others by commenting on the [Label] blog. |

| Construct | Source | Item | Original Item | Adapted Item |
|---|---|---|---|---|
| Comment provider | | PR2 | Participating in blog activity would enhance my personal reputation in the blog. | Commenting on the [Label] blog establishes/enhances my personal reputation on the [Label] blog. |
| | | PR3 | Participating in blogs would improve my status in the blog. | Commenting on the [Label] blog will establish/improve my status in the blog's community. |
| Expected relationships – ER<br><br>Comment provider | Hsu and Lin (2008) | ER1 | Sharing my knowledge on blogs would strengthen the tie between other users and me. | Commenting on the [Label] blog strengthens my ties with other blog users. |
| | | ER2 | Sharing my knowledge on blogs would create new relationships with new friends on blogs. | Commenting on the [Label] blog helps me make new friends/contacts. |
| | | ER3 | My knowledge sharing would create strong relationships with members who have common interests in blogs. | Commenting on the [Label] blog helps me create relationships with others (e.g. blogger and/or other comment providers) who have common interests. |
| Social norms - SN | Hsu and Lin (2008)<br><br>S.-M. Wang and Lin (2011) | SN1 | People who are important to me think that I should participate in blogs. | People who are important to me think that I should participate (read or comment) in the [Label] blog. |
| | | SN2 | People who influence my behavior encourage me to participate in blogs. | People who influence my behavior encourage me to participate (read or comment) in the [Label] blog. |
| | | SN3 | People who have the same interest as me encourage me to participate in blogs. | People who have the same technology interests as me encourage me to participate (read or comment) in the [Label] blog. |

| Construct | Source | Item | Original Item | Adapted Item |
|---|---|---|---|---|
| Satisfaction – SA | Shiau, Huang, and Shih (2011) | SA1 | I am satisfied with my decision to use blog. | I am satisfied with my decision to read (and, if applicable, comment on) the [Label] blog. |
| | Shiau and Luo (2010) | SA2 | My decision to use my blog was a wise one. | My decision to visit the [Label] blog was a wise one. |
| | | SA3 | My experience with using my blog is very unsatisfactory. | My experience with visiting the [Label] blog is satisfactory. |
| Attitude towards blogs – AT | Hsu and Lin (2008) | AT1 | I like participating in blogs. | I like participating (reading or commenting) in the [Label] blog. |
| | | AT2 | I feel good about participating in blogs. | I feel good about participating (reading or commenting) in the [Label] blog. |
| | | AT3 | Overall, my attitude towards blogging is favorable. | Overall, my attitude towards the [Label] blog is favorable. |
| Continued blog usage intention – CBUI | Shiau and Luo (2010) | CBUI1 | If I could, I would like to continue my use of Blogs. | If I require similar information, I intend to continue using the [Label] blog. |
| | Shiau, Huang, and Shih (2011) | CBUI2 | I will keep using my blog as regularly as I do now. | I will keep using the [Label] blog as regularly as I do now. |
| | | CBUI3 | I will try to use Blogs in my daily life. | I intend to participate (read or comment) the [Label] blog more from now on. |

## Appendix E - Statistical Analysis

**Panel E.1. Missing Value Analysis**

| Variable | N | Mean | Std. Deviation | Missing Count | Percent |
|---|---|---|---|---|---|
| CF1 | 175 | 3.83 | 0.673 | 6 | 3.3 |
| CF2 | 175 | 3.87 | 0.695 | 6 | 3.3 |
| CF3 | 177 | 3.86 | 0.634 | 4 | 2.2 |
| PU1 | 173 | 3.90 | 0.783 | 8 | 4.4 |
| PU2 | 172 | 4.09 | 0.656 | 9 | 5.0 |
| PU3 | 174 | 3.92 | 0.771 | 7 | 3.9 |
| PEU1 | 171 | 3.96 | 0.598 | 10 | 5.5 |
| PEU2 | 170 | 3.99 | 0.581 | 11 | 6.1 |
| PEU3 | 172 | 3.95 | 0.682 | 9 | 5.0 |
| PE1 | 175 | 2.89 | 0.909 | 6 | 3.3 |
| PE2 | 172 | 2.87 | 0.909 | 9 | 5.0 |
| PE3 | 170 | 2.86 | 0.991 | 11 | 6.1 |
| CY1 | 167 | 3.69 | 0.813 | 14 | 7.7 |
| CY2 | 173 | 3.76 | 0.784 | 8 | 4.4 |
| CY3 | 169 | 3.78 | 0.694 | 12 | 6.6 |
| IQ1 | 171 | 3.88 | 0.658 | 10 | 5.5 |
| IQ2 | 173 | 4.10 | 0.790 | 8 | 4.4 |
| IQ3 | 170 | 3.81 | 0.682 | 11 | 6.1 |
| SN1 | 169 | 3.14 | 1.043 | 12 | 6.6 |
| SN2 | 170 | 3.12 | 1.150 | 11 | 6.1 |
| SN3 | 173 | 3.19 | 1.080 | 8 | 4.4 |
| CP_RB1 | 23 | 3.83 | 0.717 | 158 | 87.3 |
| CP_RB2 | 23 | 3.83 | 0.834 | 158 | 87.3 |
| CP_RB3 | 21 | 3.95 | 0.740 | 160 | 88.4 |
| CP_RB4 | 23 | 3.96 | 0.706 | 158 | 87.3 |
| CP_PR1 | 23 | 3.74 | 0.810 | 158 | 87.3 |
| CP_PR2 | 20 | 3.90 | 0.718 | 161 | 89.0 |
| CP_PR3 | 22 | 3.82 | 0.588 | 159 | 87.8 |
| CP_ER1 | 23 | 3.78 | 0.736 | 158 | 87.3 |
| CP_ER2 | 22 | 3.82 | 0.664 | 159 | 87.8 |
| CP_ER3 | 23 | 3.96 | 0.767 | 158 | 87.3 |
| SA1 | 177 | 3.97 | 0.673 | 4 | 2.2 |
| SA2 | 178 | 3.93 | 0.710 | 3 | 1.7 |
| SA3 | 180 | 4.01 | 0.625 | 1 | 0.6 |
| AT1 | 178 | 3.93 | 0.673 | 3 | 1.7 |
| AT2 | 180 | 3.93 | 0.657 | 1 | 0.6 |
| AT3 | 179 | 4.08 | 0.669 | 2 | 1.1 |
| CBUI1 | 181 | 4.28 | 0.599 | 0 | 0.0 |
| CBUI2 | 181 | 4.23 | 0.665 | 0 | 0.0 |
| CBUI3 | 181 | 4.16 | 0.769 | 0 | 0.0 |

**Panel E.2. Skewness and Kurtosis**

| Variable | N | Skewness | | Kurtosis | |
|---|---|---|---|---|---|
| | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| CF1 | 181 | -.731 | .181 | 1.888 | .359 |
| CF2 | 181 | -.890 | .181 | 2.138 | .359 |
| CF3 | 181 | -1.261 | .181 | 4.560 | .359 |
| PU1 | 181 | -.476 | .181 | 0.552 | .359 |
| PU2 | 181 | -.826 | .181 | 2.968 | .359 |
| PU3 | 181 | -.512 | .181 | 0.677 | .359 |
| PEU1 | 181 | -1.030 | .181 | 4.564 | .359 |
| PEU2 | 181 | -.948 | .181 | 4.989 | .359 |
| PEU3 | 181 | -.752 | .181 | 2.233 | .359 |
| PE1 | 181 | .031 | .181 | -0.304 | .359 |
| PE2 | 181 | .290 | .181 | 0.014 | .359 |
| PE3 | 181 | .372 | .181 | -0.118 | .359 |
| CY1 | 181 | -.278 | .181 | -0.241 | .359 |
| CY2 | 181 | -.616 | .181 | 0.690 | .359 |
| CY3 | 181 | -.286 | .181 | 0.193 | .359 |
| IQ1 | 181 | -.670 | .181 | 1.349 | .359 |
| IQ2 | 181 | -.675 | .181 | 0.307 | .359 |
| IQ3 | 181 | -.361 | .181 | 0.392 | .359 |
| SN1 | 181 | -.138 | .181 | -0.578 | .359 |
| SN2 | 181 | -.075 | .181 | -0.636 | .359 |
| SN3 | 181 | -.114 | .181 | -0.709 | .359 |
| CP_RB1 | 23 | -.538 | .481 | 0.878 | .935 |
| CP_RB2 | 23 | -.163 | .481 | -0.509 | .935 |
| CP_RB3 | 23 | -.789 | .481 | 1.819 | .935 |
| CP_RB4 | 23 | -.789 | .481 | 1.819 | .935 |
| CP_PR1 | 23 | -.028 | .481 | -0.447 | .935 |
| CP_PR2 | 23 | -.904 | .481 | 2.433 | .935 |
| CP_PR3 | 23 | -1.579 | .481 | 4.364 | .935 |
| CP_ER1 | 23 | -.374 | .481 | 0.407 | .935 |
| CP_ER2 | 23 | -.909 | .481 | 2.152 | .935 |
| CP_ER3 | 23 | -.585 | .481 | 0.665 | .935 |
| SA1 | 181 | -.762 | .181 | 2.273 | .359 |
| SA2 | 181 | -.680 | .181 | 1.544 | .359 |
| SA3 | 181 | -.564 | .181 | 1.473 | .359 |
| AT1 | 181 | -.452 | .181 | 0.464 | .359 |
| AT2 | 181 | -.517 | .181 | 0.833 | .359 |
| AT3 | 181 | -.951 | .181 | 2.706 | .359 |
| CBUI1 | 181 | -.514 | .181 | 1.104 | .359 |
| CBUI2 | 181 | -.634 | .181 | 0.761 | .359 |
| CBUI3 | 181 | -.654 | .181 | 0.049 | .359 |

**Panel E.3. Independent Samples t-tests**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Diff. | Std. Error Diff. |
| Early versus Late | Equal variances assumed | .806 | .370 | -.516 | 179 | .607 | -.055 | .108 |
| | Equal variances not assumed | | | -.484 | 58 | .631 | -.055 | .115 |
| Comment versus Non-Comment Provider | Equal variances assumed | .031 | .861 | -.565 | 179 | .573 | -.076 | .134 |
| | Equal variances not assumed | | | -.588 | 30 | .561 | -.076 | .129 |
| Gender | Equal variances assumed | 2.495 | .116 | -.773 | 173 | .441 | -.079 | .102 |
| | Equal variances not assumed | | | -.745 | 79 | .458 | -.079 | .105 |
| IT versus no IT education | Equal variances assumed | .178 | .673 | .427 | 170 | .670 | .034 | .079 |
| | Equal variances not assumed | | | .422 | 140 | .674 | .034 | .080 |
| Blog 1 vs Rest | Equal variances assumed | 1.369 | .244 | .658 | 179 | .511 | .103 | .157 |
| | Equal variances not assumed | | | .719 | 19 | .481 | .103 | .144 |
| Blog 2 vs Rest | Equal variances assumed | .010 | .922 | -.484 | 179 | .629 | -.061 | .125 |

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | |
|---|---|---|---|---|---|---|---|---|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Diff. | Std. Error Diff. |
| | Equal variances not assumed | | | -.516 | 38 | .609 | -.061 | .117 |
| Blog 3 vs Rest | Equal variances assumed | .453 | .502 | 1.067 | 179 | .288 | .290 | .272 |
| | Equal variances not assumed | | | .907 | 4 | .414 | .290 | .319 |
| Blog 4 vs Rest | Equal variances assumed | 1.660 | .199 | -.225 | 179 | .822 | -.021 | .092 |
| | Equal variances not assumed | | | -.235 | 157 | .815 | -.021 | .089 |
| Blog 5 vs Rest | Equal variances assumed | 1.207 | .273 | .153 | 179 | .879 | .033 | .217 |
| | Equal variances not assumed | | | .195 | 8 | .850 | .033 | .170 |
| Blog 6 vs Rest | Equal variances assumed | .272 | .603 | -.264 | 179 | .792 | -.054 | .205 |
| | Equal variances not assumed | | | -.314 | 9 | .761 | -.054 | .173 |

**Panel E.3. Independent Samples t-tests**

### Panel E.4. Revised Model Regression Weights

| Relationship | | | Estimate | Standardized Estimate | p |
|---|:---:|---|:---:|:---:|:---:|
| CF | ---> | PU | 0.647 | 0.564 | *** |
| PEOU | ---> | PU | 0.325 | 0.243 | 0.009 |
| CF | ---> | SA | 0.294 | 0.282 | 0.015 |
| PU | ---> | SA | 0.185 | 0.204 | 0.044 |
| IQ | ---> | SA | 0.529 | 0.427 | *** |
| SA | ---> | AT | 0.466 | 0.492 | *** |
| PU | ---> | AT | 0.237 | 0.276 | *** |
| IQ | ---> | AT | 0.230 | 0.195 | 0.049 |
| SA | ---> | CBUI | 0.203 | 0.273 | 0.014 |
| PU | ---> | CBUI | 0.198 | 0.294 | *** |
| AT | ---> | CBUI | 0.266 | 0.339 | 0.006 |
| SN | ---> | CBUI | 0.065 | 0.137 | 0.017 |

*** $p < 0.001$

### Panel E.5. Revised Model Squared Multiple Correlations ($R^2$)

| Construct | Estimate |
|:---:|:---:|
| PU | 0.543 |
| SA | 0.587 |
| AT | 0.682 |
| CBUI | 0.713 |

# Appendix F - Supplemental Analysis

## Panel F.1. Independent Samples t-tests

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | |
|---|---|---|---|---|---|---|---|---|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Diff. | Std. Error Diff. |
| Opinion_ Give_Info | Equal variances assumed | 3.215 | .075 | -21.555 | 179 | .000 | -4.415 | .205 |
| | Equal variances not assumed | | | -22.581 | 30 | .000 | -4.415 | .196 |
| Opinion_ Give_Adv ice | Equal variances assumed | 7.484 | .007 | -20.997 | 179 | .000 | -4.335 | .206 |
| | Equal variances not assumed | | | -23.765 | 32 | .000 | -4.335 | .182 |
| Opinion_ Resource | Equal variances assumed | 4.071 | .045 | -16.975 | 179 | .000 | -4.226 | .249 |
| | Equal variances not assumed | | | -21.232 | 35 | .000 | -4.226 | .199 |
| Opinion_ Get_Info | Equal variances assumed | 5.408 | .021 | -2.988 | 179 | .003 | -.720 | .241 |
| | Equal variances not assumed | | | -4.069 | 39 | .000 | -.720 | .177 |
| Opinion_ Get_Advi ce | Equal variances assumed | 3.060 | .082 | -2.160 | 179 | .032 | -.505 | .234 |

**Panel F.1. Independent Samples t-tests**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | |
|---|---|---|---|---|---|---|---|---|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Diff. | Std. Error Diff. |
| | Equal variances not assumed | | | -2.875 | 38 | .007 | -.505 | .176 |
| Opinion_ Others | Equal variances assumed | 5.309 | .022 | -2.488 | 179 | .014 | -.543 | .218 |
| | Equal variances not assumed | | | -3.371 | 39 | .002 | -.543 | .161 |
| Opinion_ G_Talk_O thers | Equal variances assumed | .920 | .339 | -3.509 | 179 | .001 | -1.042 | .297 |
| | Equal variances not assumed | | | -3.638 | 30 | .001 | -1.042 | .286 |
| Opinion_ G_Give_I nfo | Equal variances assumed | 3.141 | .078 | -2.800 | 179 | .006 | -.828 | .296 |
| | Equal variances not assumed | | | -3.135 | 31 | .004 | -.828 | .264 |
| Opinion_ G_Give_ Advice | Equal variances assumed | 3.588 | .060 | -3.920 | 179 | .000 | -1.227 | .313 |
| | Equal variances not assumed | | | -4.513 | 32 | .000 | -1.227 | .272 |

**Panel F.1. Independent Samples t-tests**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | |
|---|---|---|---|---|---|---|---|---|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Diff. | Std. Error Diff. |
| Opinion_G_Resource | Equal variances assumed | 2.389 | .124 | -4.033 | 179 | .000 | -1.200 | .298 |
| | Equal variances not assumed | | | -4.183 | 30 | .000 | -1.200 | .287 |
| Avg_OL_Blog | Equal variances assumed | 4.929 | .028 | -21.806 | 179 | .000 | -4.32563 | .19837 |
| | Equal variances not assumed | | | -24.048 | 31 | .000 | -4.32563 | .17988 |
| Avg_OS_Blog | Equal variances assumed | 2.643 | .106 | -2.776 | 179 | .006 | -.58907 | .21216 |
| | Equal variances not assumed | | | -4.001 | 42 | .000 | -.58907 | .14722 |
| Avg_OL_Outside | Equal variances assumed | 2.399 | .123 | -3.786 | 179 | .000 | -1.07430 | .28372 |
| | Equal variances not assumed | | | -4.085 | 30 | .000 | -1.07430 | .26299 |

**Panel F.2. Factor Analysis - Total Variance Explained**

| Factor | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % Var. | Cum.% | Total | % Var. | Cum. % | Total | % Var. | Cum.% |
| 1 | 5.275 | 52.750 | 52.750 | 5.275 | 52.750 | 52.750 | 3.539 | 35.386 | 35.386 |
| 2 | 2.064 | 20.637 | 73.387 | 2.064 | 20.637 | 73.387 | 2.838 | 28.380 | 63.766 |
| 3 | 1.616 | 16.156 | 89.543 | 1.616 | 16.156 | 89.543 | 2.578 | 25.778 | 89.543 |
| 4 | .243 | 2.432 | 91.975 | | | | | | |
| 5 | .219 | 2.190 | 94.165 | | | | | | |
| 6 | .193 | 1.934 | 96.099 | | | | | | |
| 7 | .130 | 1.297 | 97.396 | | | | | | |
| 8 | .112 | 1.124 | 98.520 | | | | | | |
| 9 | .096 | .962 | 99.482 | | | | | | |
| 10 | .052 | .518 | 100.000 | | | | | | |

**Panel F.3. Factor Analysis - Rotated Component Matrix**

| Variable | Component | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| Opinion_Give_Info | | .961 | |
| Opinion_Give_Advice | | .951 | |
| Opinion_Resource | | .928 | |
| Opinion_Get_Info | | | .879 |
| Opinion_Get_Advice | | | .887 |
| Opinion_Others | | | .899 |
| Opinion_Outside_Talk_Others | .883 | | |
| Opinion_Outside_Give_Info | .924 | | |
| Opinion_Outside_Give_Advice | .921 | | |
| Opinion_Outside_Resource | .916 | | |