

การประเมินคุณภาพของเว็บบล็อกจากมุมมองผู้ใช้

User-Centered Evaluation of the Quality of Blogs

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Abstract

Blogs have become a tool for web-based communication, collaboration, and knowledge sharing. However, due to the wide variety of format and content of blogs, qualities are diverse. It is crucial to evaluate the quality of blogs in order to retain their effectiveness as a medium of communication and an information exchange platform. Yet, quality is a matter of perception and difficult to measure objectively. It should be judged by receivers. This study was conducted to address the issue of blog evaluation and to identify criteria and indicators blog users consider important for assessing the quality of blogs; a literature analysis and a user survey were performed. Results from exploratory factor analysis (EFA) demonstrated that the data set supported 4 blog quality criteria with 35 indicators. The users' perceptions of quality criteria are content quality, usability, authority, and blog credibility.

บทคัดย่อ

บล็อกได้กลายเป็นเครื่องมือสำหรับการสื่อสารบนเว็บ การทำงานร่วมกัน และการแบ่งปันความรู้ อย่างไรก็ตาม ความหลากหลายของรูปแบบและเนื้อหาทำให้คุณภาพของบล็อก

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มีความหลากหลาย การประเมินคุณภาพของบล็อกจึงเป็นสิ่งสำคัญเพื่อรักษาประสิทธิภาพในการเป็นสื่อกลางการสื่อสารและการแลกเปลี่ยนสารสนเทศ กระนั้นคุณภาพเป็นการรับรู้ของบุคคลและคุณภาพควรจะต้องตัดสินโดยผู้รับ งานวิจัยชิ้นนี้จึงได้ศึกษาการประเมินบล็อกในด้านเกณฑ์และตัวชี้วัดที่ผู้ใช้เห็นว่ามีความสำคัญในการประเมินคุณภาพของบล็อก โดยใช้การวิเคราะห์วรรณกรรมและการสำรวจผู้ใช้เป็นวิธีดำเนินการวิจัย ผลจากการวิเคราะห์ตัวแปรเชิงสำรวจพบว่า เกณฑ์ที่ใช้ในการประเมินคุณภาพของบล็อกสามารถจำแนกได้เป็น 4 กลุ่ม (35 ตัวชี้วัด) ได้แก่ คุณภาพของเนื้อหา (content quality) การใช้งาน (usability) ความเชื่อถือได้ (authority) และความน่าเชื่อถือของบล็อก (blog credibility)

คำสำคัญ: บล็อก คุณภาพของบล็อก การประเมินบล็อก การประเมินคุณภาพ การประเมินจากมุมมองผู้ใช้

Keywords: Blog; Quality of Blog; Blog Evaluation; Quality Evaluation; User-centered evaluation

Introduction

A blog (short for weblog) is a user-generated content, containing entries and comments on certain topics displayed in reverse chronological order. Each blog consists of a set of blog posts or a series of entries. Indeed, the number of posts varying significantly from one blog to another.

Blogs serve different purposes, resulting in several types of blogs. In fact, types of blogs can be classified by several approaches, such as blog purposes, motivations, and blog contents. For example, Nardi; et al. (2004) identified five major blog types: life records, comments, emotion expression, thought clearing, and idea exchange. De Moor & Efimova (2004) categorized blog posts regarding purposes of blogs (what blog is created for), consisting of four types of blog posts: 1) opinion posts, where a topic is defined with related links; 2) vote posts, where bloggers agree or disagree with one another; 3) reaction posts, where a blogger responds to a post on another site; and 4) summation posts, where a blogger summarizes other blogs.

Blogs have become a tool for web-based communication, collaboration, and knowledge sharing. Obviously, blogs are an important source of information; blogs are invaluable sources of insight into bloggers' opinions towards important world and local events. However, due to the wide variety of format and content of blogs, their qualities are diverse. The content of most blogs can be questionable and disqualified for being an important source of information. In fact, blogs make the Internet problem of information quality more intense (Kargar; et al., 2008) because of their coverage and reliability. Some bloggers focus on generating a high number of posts (Chang & Yeh, 2008; Kargar; et al., 2008), meaning they might publish impetuous, ill-considered messages, or even contents plagiarized from other bloggers (Chang & Yeh, 2008). Undoubtedly, the power of blogging not only affects bloggers' lives but it also affects people, companies, and products connected to the bloggers. Therefore, it is crucial to evaluate the quality of blogs in order to identify quality blogs.

In terms of quality evaluation, blogs are different from other types of web pages; they need specific criteria and indicators for assessing their quality. This article discusses criteria and indicators for evaluating the quality of blogs.

Evaluation of quality of blogs

In terms of quality assessment of internet resources, different approaches have been used to evaluate either information quality or resource quality. Actually, content quality, credibility of information and sources, and usability are the three highest dimensions that several previous studies used to assess the quality of Internet resources, particularly the quality of websites. For example, Eysenbach, Powell, Kuss & Sa (2002), Wathen & Burkell (2002), and Bernstam; et al. (2005) focus on only the quality of health-related websites. Hu; et al. (2007); Lim; et al. (2006); and Dalip, Goncalves, Cristo, & Calado (2009) developed an automatic model that measured only the quality of Wikipedia articles. Fogg; et al. (2001) used

an online user survey to explore the credibility of websites. This study applied these three dimensions to blog quality evaluation.

Even though rich sets of quality assessment frameworks, tools, dimensions and indicators for evaluating other types of website are relatively available, there are still no specific quality assessment criteria or indicators for evaluating the quality of blogs since blogs are unique from websites; they provide regularly updated information and personal comments about a particular topic. Only few studies have been conducted on blog evaluation. Some existing research studies focus on the quality of blog content or information, using information quality dimension to assess the quality of content. For example, Kargar; et al. (2008) introduced a framework for evaluating the quality of information on blogs. However, for users of social media, content quality assessment alone is not enough to determine the quality of blogs since blogs are user-generated content. Researchers also used credibility as a metric to evaluate a blog content credibility and overall credibility. Sriphaew, Takamura & Okumura (2008) used credibility indicators as clues for identifying “cool blogs,” i.e. blogs with interesting or noteworthy contents. Several previous studies used link analysis, which assumes that a blog with a reasonable amount of links has a high quality (Shen; et al., 2008; Bihun; et al., 2005). Moreover, usability is vital for evaluating the quality of websites; however, no prior work has been conducted on the usability of blogs. As can be seen, there are no specific criteria or indicators for evaluating the quality of blogs, previous studies used only minimal criteria, such as credibility and information quality, to evaluate blogs.

Nevertheless, the judgment of quality may use different evaluative criteria depending on community values and context and audience in particular (Kargar; et al., 2008; Yang, 2007) as well as the attributes of quality can vary, Kargar; et al. (2008) suggested that quality should be judged by receivers—in this case, blog readers or consumers—because quality is a matter of perception and difficult to measure objectively. Besides, the current accepted view for assessing infor-

mation resource quality involves understanding it from the user's point of view. Therefore, the study to address the issue of blog evaluation and to identify criteria and indicators those people consider important for assessing the quality of blogs was conducted.

User-centered framework for evaluating quality of blog

The perceived quality of a blog is based on the user's opinion regarding the blog's ability to fulfill his or her expectations based on characteristics of blogs and performance. To obtain a user-centered framework for assessing the quality of blogs, a literature analysis and a user survey were performed.

The literature analysis on the quality of information resources; 19 existing related frameworks (e.g. website and online information resources evaluation) has been completed in order to compile a list of dimensions and indicators of quality. Conceptual filtering was conducted, so the selected quality criteria are reasonable (published criteria used by other studies), understandable (clear, objective), measurable, and observable (Wang & Liu, 2007). Criteria are at the concept level, so it is crucial to concretely operationalize the definition in order to make quality more measurable. Thus, indicators of quality which are concrete, easily recognizable, and useful for making quality judgments were identified.

Next, criteria and indicators were turned into statements and were verified by conducting a user survey. The online questionnaire was employed to ask 364 faculty members in the University of North Texas to rate the importance of indicators from the proposed criteria and indicators on a five point scale ranging from 1 (*not important at all*) to 5 (*extremely important*). Exploratory factor analysis was conducted to discover the pattern of intercorrelations among variables. The result of the exploratory factor analysis helped identify a representation of variables by components and which variables should be retained as individual variables.

Results from exploratory factor analysis (EFA) demonstrated that the data

set supported 4 blog quality criteria with 35 indicators. The users' perceptions of quality criteria are content quality, usability, authority, and blog credibility. Each criterion has a different numbers of indicators as shown in Figure 1. However, quality is related to human perception and there are individual differences, the personal characteristics (gender, education level, age, profession, purposes of use, and specific interests) affected the users' choices of criteria for evaluating the quality of blogs.

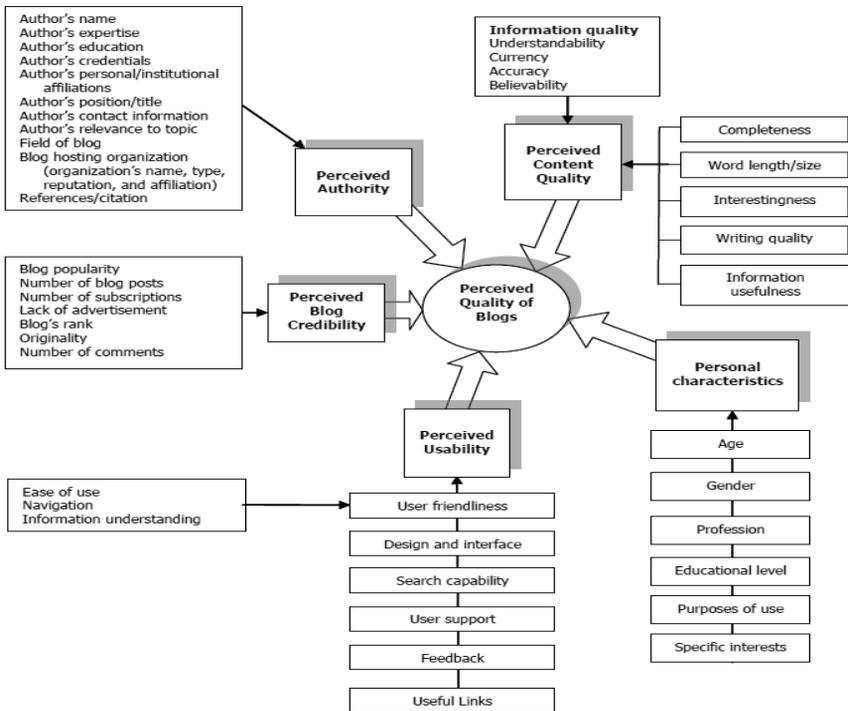


Figure 1. A User-Centered Framework for Evaluating the Quality of Blogs.

Content quality

For blog users, the blog content is the most important criterion for the quality of blogs. Content quality is the quality of information; therefore, information quality is the main factor to determines the quality of blog content. Information quality is widely defined as the information's fitness for use. The Treasury Board of Canada Secretariat (2004) defined quality information as the characteristics of information that lead readers/users to trust it so "bloggers should be mindful [of] what information they publish online" (Viégas, 2005). In fact, higher content quality means higher blog quality. The indicators to measure information quality for blogs are shown in Table 1.

Table 1 Content quality indicators for assessing the quality of blogs

Sub-Criteria/Indicators	Description
Information quality	
Understandability	easy to understand
Currency	up-to-date
Accuracy	accurate
Believability	able to be believed, credible
Completeness	sufficient detail
Word length	appropriate word length
Interestingness	keeps the reader's attention
Writing quality	no spelling or grammatical errors
Information usefulness	usefulness or helpfulness of information to the user's quests

Usability

Usability tests the quality of use. Usability should be measured in terms of effectiveness, efficiency, and satisfaction to achieve quality of use. Perceived ease of use is the degree to which a person believes that using a blog is effortless (Hsu & Lin, 2008). Aesthetic appeal and appropriate use of graphics, color, and icons contribute to the usability. The usability indicators measuring the quality of blogs are shown in Table 2.

Table 2 Usability indicators for assessing the quality of blogs

Sub-Criteria/Indicators	Description
User friendliness	Ease of use Navigation Information understanding easy ; to use in terms of convenience or organization, easy navigation Blog use of graphics, photos, and icons contribute to understanding of the information
Design and interface	Blog has an aesthetic appeal (good use of graphics and color)
Search capability	quick and easy access to search blog archives
User support	Blog provides help or guide to users
Feedback mechanism	Blog makes it easy to give feedback
Links to/from blog	Blog provides useful link to other sources (blogs, sites)

Authority

Authority is the credibility of the author, which refers to the extent to which an author is known and verified. The credibility of the author should be easily identified in the blog (Tillman, 2003). The authority of the author's assessment indicators that should be clearly indicated are shown in Table 3. In fact, disclosing authors' identities and motivations can enhance authority (Gunter; et al., 2008), raising the quality of blogs. Subsequently, a high-authority author produces high quality content (Chai, Potdar; & Dillon, 2009).

Table 3 Authority indicators for assessing the quality of blogs

Sub-Criteria/Indicators	Description
Author's name	Author's name is clearly indicated
Author's expertise	Author's expertise is clearly indicated
Author's education	Author's education is clearly indicated
Author's credentials	Author's credential is clearly indicated
Author's personal/institutional affiliations	Author's personal/institutional affiliation is clearly indicated
Author's position/title	Author's position is clearly indicated
Author's contact information	Author's contact information is provided, including telephone number and e-mail
Author's relevance to the topic	Author's expertise is relevant to the topic of the blog
References/citation	citations and references should be clearly indicated
Blog hosting organization	Blog hosting organization is clearly indicated, including organization's name, type, reputation, and affiliation
Field (discipline) of blog	Area of the blog is clearly indicated

Although field of blog, blog hosting organization, and references/citation may be applicable to other criteria, for instance blog credibility (field of blog, blog hosting organization, and references/citation) and content quality (references/citation), the results from EFA indicate that field of blog, blog hosting organization information, and reference/citation contribute to authority more than other criteria. Significantly, a clearly indicated discipline of blog represents the field that blog belongs to and verifies the authority of the blog. The indication of a blog's hosting organization, including name, type, reputation, and affiliation, can also increase the authority because it indicates the affiliation of the author and the blog hosting organization. Further, references/citations indicate scholarly writing style, which is

associated to authority. In fact, citations provide evidence about the credibility of the content by linking to trustworthy sources and strengthening the believability of the information (Dalip; et al., 2009). Besides, citations help readers easily verify information, acknowledge earlier findings, provide insight to subject matter, and illustrate the author's awareness of past studies. Also, references/citations signify that the author does not plagiarize others' work and writes blog entries or posts by himself/herself so the authority, as well as quality, may increase.

Credibility

Credibility is a direct measure of actual quality because a credible mechanism ensures quality. Credibility refers to the believability (able to believe) of information, information sources, or people. A credible person is believable person; credible information is believable information (Fogg; et al., 2001a); a credible information source is believable information source. Since credibility is the perceived quality or audience's perception, the blog users perceived believability as a vital indicator for both content quality (believable information) and blog credibility (believable information source). Blog credibility is a trusting relationship between bloggers and blog readers. Two groups are dynamically involved in information exchange process and credibility building and assessment. Not only does the blogger's perceived reputation, knowledge, and skills but also the perceived quality and credibility of the blog itself affect a blog' popularity and credibility (Kinniburgh & Denning, 2006). It is important to note that a high quality blog is credible; the blogs that are rated high quality are also rated high in credibility. Blog credibility indicators are shown in Table 4.

Table 4 Blog credibility indicators for assessing the quality of blogs

Sub-Criteria/Indicators	Description
Popularity	
Recognizing	Blog is recognized and well-known
No. of subscription	Blog has high volumes of subscriptions
No. of blog posts	Blog has high volumes of blog posts
No. of comments	Blog has high volumes of blog comments
Lack of advertisement	Blog has low volumes of advertisement
Blog's rank	a rank of blog in the search engine output
Originality	original (new / not plagiarizing) content

The results from EFA show that originality weighed more on blog credibility than content quality. Originality was intended to measure whether authors write their own content. Plagiarism is a significant problem and it may affect the credibility of blogs (Chang & Yeh, 2008). It is likely that blogs containing original content are more credible.

Conclusion

The quality of blog is diverse and different from the quality of websites. It should be evaluated by its users. This study constructed a user-centered framework for evaluating the quality of blogs, consisting of 4 criteria with 35 indicators.

Blog content should be easy to understand, up-to-date, accurate, and credible. Also, blog content and comment should have sufficient detail, appropriate word length, interesting content, contain no spelling or grammatical errors, and be helpful for user's information needs. In terms of usability, blogs should be user-friendly; easy to use; easy to navigate; and good use of graphics, photos, and icons, quick and easy access to search blog archives, help for users, ease of giving feedback, and useful links to other resources (blogs and websites). The

blog author's credentials should be clearly indicated—name, expertise, education, credentials, personal/institutional affiliations, position/title, contact information (telephone number or email), and relevance to the topic. Also, a discipline of blog; blog hosting organization's name, type, reputation, and affiliation; and references/citations should be indicated. In addition, blog should be well-known with a high number of blog posts, subscriptions, and comments, but low number, or even free, of advertisements, ranked in the top of search engine outputs. Significantly, blog content should be original.

Applying the framework from this research to evaluate the quality of blogs can distinguish high-quality blogs from poor-quality blogs. The 35 indicators in the framework are quality markers. Blog readers and information professionals should look for those quality markers in blogs in order to effectively select blogs and collect them in a blog repository; the more positive perception regarding these indicators, the higher quality that blog contains. System developers can employ indicators to develop automatic quality blog identification system. Finally, as the quality markers, blog authors can apply the quality indicators for creating higher quality blogs. If authors concentrate on the quality of their blogs, accordingly, the whole blog system will become a valuable communication medium and information resource.

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