

CHAPTER 4

RESEARCH METHODS

Chapter 4

Research Methods

This study is an investigation conducted in order to comprehend the distribution of LIS subjects on the LIS blogosphere and the subject trends discussed on the LIS blogosphere. The study reflects a research design that is twofold - quantitative (demographics and other specific data) and qualitative (allowing the categories to emerge out of data). Quantitative content analysis was done to categorize the subjects on the LIS blogosphere, and to rank the blogs on the basis of the number of links present on the blog. Qualitative content analysis was used to identify the subject trends on the blogs and to find out the publication trends of the bloggers. This chapter reports an overview of literature demonstrating the use of content analysis as a research methodology to study blogs in general and LIS blogs in specific followed by a detailed explanation of the development of the present study, data collection steps, data validation and data analysis and presentation.

4.1 Content Analysis: An Overview of Literature

Content analysis is a research methodology concentrating on the actual content and internal features of media. It is used to determine the presence of certain words, concepts, themes, phrases, sentences within texts and to quantify this presence in an objective manner. An early definition of content analysis by Berelson (1952) defines content analysis as, "a research technique for the objective, systematic, and quantitative description of manifest content of communications". Content analysis has been defined as, "a research technique for making replicable and valid inferences from data to their context" Krippendorff (1980).

Bauer (2000) defines content analysis as a systematic technique for coding symbolic content (text, images, etc.) found in communication, especially structural features (e.g., message length, distribution of certain text or image components) and semantic themes. By breaking down the contents of materials into meaningful and pertinent units of information an attempt can be made to distinguish certain characteristics of the content (Busha & Harter, 1980).

In *Content Analysis of Communication*, Richard W. Budd and his co-authors wrote: “No content Analysis is better than its categories, for a system or set of categories is, in essence, a conceptual scheme.” Gould and Kolb (1964) defined a category as “either the name given to any class of things, actions, or relationships which recur with sufficient (relative) uniformity and frequently as to render the class a useful subject of a prediction of the class itself” (Busha & Harter, 1980). Kerlinger (1967) notes in *Foundations of Behavioural Research* that:

- a) A category is a partition or sub partition set up according to some rule;
- b) Categories are established in regard to the purpose(s) of a unique investigative problem, and
- c) Categories are exhaustive and mutually exclusive.

4.1.1 Web Content Analysis

Historically, content analysis usually indicated a study of paper based documents, such as books, journals or newspapers. With the proliferating digital content on the World Wide Web with its diversity in form, structure and function researchers are increasingly using content analysis to study web content. Blog analysis being a relatively new area of research presents considerable challenges due to the unstructured nature of blog contents, lack of established methodology and lack of specialized software tools to aid such a genre of content

analysis. Herring (2010) states that the phrase 'Web Content Analysis' can be understood as follows:

"web content analysis" can be interpreted in two different ways, the second of which subsumes the first: 1) the application of traditional CA techniques, narrowly construed, to the web [web [content analysis]] and 2) the analysis of web content, broadly construed, using various (traditional and non-traditional) techniques [[web content] analysis]".

(Herring, 2010, p.1)

Web content mining not only deals with useful information from the texts of web pages, but also includes other multimedia resources images, audio or video files, etc. Herring (2010, p.2) further states that,

Its (Content Analysis) most prototypical uses have been the analysis of written mass media content by scholars of advertising, communication, and journalism. However, in recent decades, CA techniques have also been used increasingly to analyze content on the internet. Perhaps due to its original presentation as a one-to-many broadcast medium, the web has attracted an especially large number of studies that employ content analysis methods.

Using content analysis on a random sample of 203 weblogs Herring, Scheidt, Bonus and Wright (2004) analyzed blogs as a distinct genre of internet communication. The parameters used for coding in this study included the primary reasons for blogging, structural and temporal features of the blog as well as demographics of the blog authors. The quantitative interpretation of the results showed that the demographics of the authors were not very different from other users who used forums or personal web pages for discussions (Herring, Scheidt, Wright & Bonus, 2005). Content analysis methods have been employed in analyzing the structure, topics and purpose in a study of weblogs (Herring, Scheidt, Kouper, & Wright, 2006).

Analysis and mining of such content can provide useful and important insights (Chau & Xu, 2007). Content Analysis methodology has been used to analyze blog content to fulfill

various objectives in studies conducted by Kim (2009) in studying cancer blog posts; Foo (2009) for analyzing heritage blogs; and Zizi (2006) in investigating the journalistic potential of blogs; Tauro (2008) in conducting her research on Content Analysis of the Vizblog; and Pan, Bing, Maclaurin and Crotts (2006) for analyzing travel blogs.

4.1.2 Content Analysis of LIS Blogs

In the LIS Blogosphere, blog content analysis has been adopted by Clyde (2004), Herring (2005), Aharony (2009), Bar-Ilan(2007), Spurgin (2009), and Jackson-Brown (2013) among others for investigating various issues on the LIS blogosphere. Pertinent features of a few of these studies have been discussed below.

Clyde's (2003, 2004) study of weblogs, maintained by libraries, in late 2003, found library blogs in only three countries, with the vast majority in the USA. A total of 55 weblogs maintained by libraries were identified using Internet search engines and directories. The weblogs were studied using content analysis techniques. A further study was a content analysis of library weblogs at two points in time, September/October 2003 with 57 library weblogs created by 52 libraries and in July 2004 with 198 library weblogs.

Bar-Ilan (2005, 2007) conducted two investigations of the LIS blogosphere, using the content analysis methodology. In the 2005 study she monitored a set of weblogs for a two-month period in September–October 2003 and characterized these blogs based on descriptive statistics and content analysis. A set of 15 'topic-oriented' blogs, i.e., blogs whose purpose was to convey professional information were selected. The findings showed that most of these blogs were excellent information hubs, i.e., provide short summaries with links to further information on major issues related to the topic of the blog. The 2007 study reports the use of blogs by libraries and librarians. The blogs and the content of one month of

postings were characterized using content analysis. In general, the findings indicated that blogs have an impact on the activities of information professionals and they are a novel information channel for transferring information both to fellow professionals and to other users of the Web.

An exploratory analysis of LIS blogs was conducted during two different time frames by Aharony (2009). The purpose of the content analysis was to describe and classify the LIS blogosphere, with the purpose of understanding the tagging patterns of librarian and information scientist bloggers and the nature of the folksonomies they form. Aharony (2010) further expanded the study to analyze the comments assigned to the posts. Content analysis and statistical descriptive analysis was used as the methodology of the study. The language of the comment-writers, type of information found in the comments and the content of the comments were analyzed.

Spurgin (2009) conducted an exploration of 144 blogs to study the use of category archives as given by the blogger in Library and Information Science Topical Blogs. The research studied the presence of category archives used in LIS topical blogs and their use. The study revealed that category archives are used in a small percentage of the blogs in the sample.

The present study attempts to content analyze LIS blogs with an objective to categorize them into specific and broad subjects to understand their representation on the LIS blogosphere and to study the development of the subject trends within these broad subject categories.

4.2 Content Analysis –The Present Study

4.2.1 Sample of the Present Study

The population for the present study was the English Language LIS blogosphere. As a comprehensive directory of LIS blogs is not available, and given the ephemeral nature of blogs, any recently generated comprehensive list of blogs would by definition become historical in no time. The researcher went through the Dmoz Blog Directory; Technorati Blog Directory, LIS Wiki, and the various top 10 and top 100 lists available on the World Wide Web before finalizing the sample for the current study from Walt Crawford's *The Liblog landscape 2007-2010* (2011). Crawford's study was chosen for deriving the sample for the present study as his work was found to be the only recent work presenting a comprehensive list of LIS blogs at the time. Moreover Crawford's selection and grouping of blogs were found to be adequate to study the objectives of the current research.

4.2.1.1 Crawford's Group 1 Blogs

Crawford had divided 1303 LIS blogs into groups based on their visibility and activity during March-May 2010. The blogs were divided into 4 groups, with Group 1 comprising of 443 blogs (34%), also referred to as core blogs by Crawford, being the most active and visible during the period of study, with two intermediate levels to Group 4. Crawford placed blogs with GPR (Google Page Rank) 4 or higher into Group 1 as these blogs clustered much higher than other groups in their visibility. Group 1 formed the sample for this study.

According to Crawford a blog had to meet the following five requirements and one exclusion to be included in this study:

Viewable: I had to be able to reach the blog on the open web, using Firefox, without passwords, at some time between June 1 and September 14, 2010.

Blog: It must have at least minimal characteristics of a blog, i.e., a stream of individual posts presented in reverse chronological order.

English: Most posts (based on inspection of the first viewed page) must be in English.

Liblog: Either the blogger(s) must identify themselves as library people (not necessarily Librarians) or the blog must relate to libraries or librarianship. I'm interpreting "library" to include archives and museums.

As of May 31, 2010: There must be at least one postdated on or before May 31, 2010.

Exclusion: Official Blogs: Blogs that appear to be official as opposed to personal, including library blogs, corporate blogs and others are excluded. This is frequently a judgment call, e.g., a blog with an association's name that is clearly written by members without association approval of each post would be included

(Crawford, 2011, p.16-17)

Crawford has not strictly abided by the above mentioned requirements and exclusions as he further goes on to state that "there are certainly some blogs included in this study that might be considered official and a few that are not exclusively English". For the current study, Group 1 blogs fulfilled the requirements of the objectives and scope of the study. Thus the researcher contacted Walt Crawford (see Appendix A) for the complete list of all blogs (see Appendix B) which fell into this Group 1.

4.3 Data Collection Procedures

Each of the 443 blogs from Crawford's Group 1, obtained from the author was visited in the period of April - June 2012 to collect information about the subject focus of the blog. It was found that 100 blogs had discontinued their activity leaving the researcher with 343 blogs. The 343 blogs from the Group 1 formed the sample for the present study. Thus, 77% of the Group 1 blogs were still operational at the time of data collection and 23% blogs had

closed down. The basic unit of content analysis was the blog post and other blog content present on the blogs.

4.3.1 Broad Subject Categorization of LIS Blogs

For the first objective each blog was visited individually and information was collected from the 'about' section, and the subject category as stated by the author was derived and recorded, wherever not specified the same was collected from the tags if given by the author. The tag with the maximum number of posts was taken as the focus area of the blog. Each blog was assigned a specific subject category. If a blog showed more than one subject category it was placed under only one defining category. The blogs with posts on multiple topics were placed under a separate category called as Multi-topical. The categories were developed using a clustering approach, with new categories coming into being when a tag did not fit into an already established category.

Unlike the controlled vocabularies such as Sears List of Subject Headings or Library of Congress List of Subject Heading or classification schemes such as Library of Congress Classification or Dewey Decimal Classification, advocates of collaborative tagging argue that "allowing meaning of a tag to emerge through collective usage produces a more accurate meaning than if it was defined by a single person or body" (Brooks, 2006). Thus the researcher chose to use natural language keywords, as the communication format of blogs is characterized by its informal structure with a tendency to slide towards more popularly used terms and phrases. Many keywords were taken as they appeared on the blog site as used by the blogger. Natural language keywords were assigned to each blog subject category and each category was thereafter entered and colour coded in an Excel Spread sheet as shown in Figure 4.1.

LibraryLaw Blog	Libraries
Slaw	Libraries
The In Season Christian Librarian	Libraries
The Krafty Librarian	Libraries
The Running Librarian	Libraries
The Search Principle blog	Libraries
Vancouver Law Librarian Blog	Libraries
Out of the Jungle	Libraries
ArchivesNext	Preservation
Beaver Archivist	Preservation
Center for the Future of Museums	Preservation
Confessions of a Curator	Preservation
fresh + new(er)	Preservation
frontier librarian	Preservation
Museum 2.0	Preservation
Special & Rare On A Stick	Preservation
Free Government Information (FGI)	Information Science
Gothos	Information Science
In through the outfield	Information Science
The Book of Trogoool	Information Science
The Steampunk Librarian	Information Science
InfoMatters	Information Science
Informationoverlord	Information Science
ALA TechSource Blog	Emerging Technologies
Citegeist	Emerging Technologies
clifflandis.net	Emerging Technologies
code4lib	Emerging Technologies
Coffee Code	Emerging Technologies
Creative Librarian	Emerging Technologies
David Lee King	Emerging Technologies
Disruption Library Technology Center	Emerging Technologies

Fig.4.1 Colour Coded Subject categories

The categorization generated eleven major categories, each with several specific subcategories. In this manner 54 specific subject categories were derived. These were further consolidated into 11 broad subject categories which have been defined in Chapter 5. For each broad subject category, the list of subcategories covered within it was listed. The scope of each broad subject category was defined and stated (see Table 5.3). These help in fulfilling a basic requirement of the content analysis technique whereby replication and validation of the data collected becomes possible.

The oldest blogs, those which were a decade or more old were further identified and their gender demographic statistics and number of contributors to each of the oldest blogs was collected and analyzed.

4.3.2 Ranking LIS Blogs

Links are an integral part of blog content. Links help in establishing the subject focus of the blog. To get a deeper understanding of LIS blog content the researcher further counted the number of links present on each blog to fulfill the second objective. The data for the link analysis study was collected from 8th December 2012 to 19th December 2012. Out of 343 blogs, data for 323 blogs was collected. A detailed explanation for the number of blogs not included in the study has been stated in Chapter 5. The counting of links was done with the help of a free program 'Link Counter' from Submit Express, a Search Engine Optimization program. This program was used to count the number of links present on each blog and displayed links as Total Number of links, Internal Links, Out-Going links and No-follows. Blogs were ranked on the basis of number of links present. Thus for each broad subject category the highest ranking blog was derived.

4.3.3 Deriving Subject Trends in LIS Blogs

Blog content was analyzed to identify the subject trends from two perspectives, a particular trend emerging and its momentum being gained through comments and discussions. The unit of study for this objective was the blog post, comments & responses and links given within the post. The one highest ranking blog derived from the link counting representing each broad subject category formed the sample to realize this objective. Thus

eleven blogs from eleven broad subject categories were content analyzed. As suggested by Busha and Harter (1980, p.173.) to deal with the mass of cognate materials, the quantity can be made manageable by limiting to a specific time period – for example 6 months, 1 year or 3 years depending upon the latitude of the inquiry (Busha & Harter,p.173). Thus content of each blog over a period of six months October 2012 to March 2013 was analyzed. Blogs which showed no posts at all during this period were not included in the study. In such cases the second highest blog from the link counting study was taken. In case of blogs that did not show activity for two months, the remaining four months were content analyzed for the same period. A blog which did not show activity for more than two months was excluded from selection and the next blog from the list was chosen. Each blog post and the corresponding comments and responses were content analyzed and the core theme for the individual post was derived and noted down in Excel Sheets. Recurring themes were clustered together resulting in a list of emerging themes for each broad subject category. The themes thus derived were taken as an indicator of a trend. This trend was further validated with the comments & responses generated for the concerned core theme.

4.3.4 Bloggers in Formal Channels of Communication

The blog posts revealed a high percentage of content mentioning the publications of the bloggers in formal mediums. The operational 343 blogs were used as a sample for this objective. Demographic data related to the blogger's gender and designation was collected from a variety of sources such as the 'about' page of the blog, 'my web page' on the blog, institute page and general search on Google and recorded in Excel Sheets. The number of contributing bloggers to each blog was collected and the blogs were categorized as solo, two bloggers and multiple (more than two bloggers). The data for the blogger's publications was

collected from the blog itself. If the information was not available on the blog, an attempt was made to collect it from Google Scholar, Amazon and Worldcat.

The following screenshots have been taken to show the steps followed by the researcher for locating publication data of bloggers in formal channels of communication.

- a) The first step taken by the researcher was to check the ‘about’ section wherein many bloggers mentioned their publications as seen in Figure 4.2.

Fig. 4.2 Example of Blog Showing Publications in the ‘about’ Section

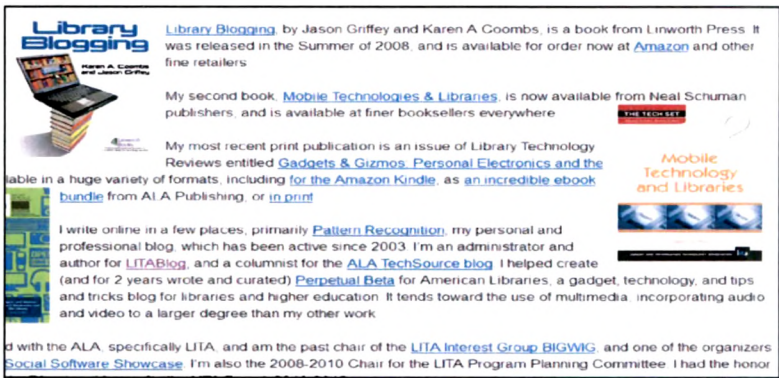


Image Source: <http://www.jasongriffey.net/wp>

- b) Publication information of bloggers was also collected from direct links to ‘publications’ page provided by the bloggers on their blog as seen in Figure 4.3.

Fig. 4.3 Example of Blog with Direct Link to ‘Publications’ Page

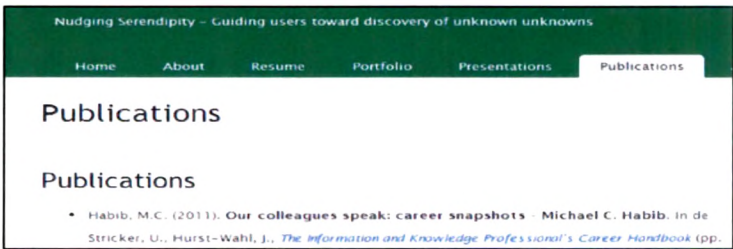


Image Source: <http://mchabib.com/publications-press-etc/>

Wherever the publications were not mentioned on the blog, the researcher had taken the name of the blogger and identified the publications. In cases where the name of the blogger was not mentioned clearly, other useful information such as the name of the blogger's work place was taken to identify the blogger and then the information about the publications were collected as shown below through different sources like Google, Google Scholar Citations, and Amazon. The following screenshots from Figures 4.4 to 4.6 show the steps followed by the researcher to identify the bloggers with their publications.

STEP 1

Fig. 4.4 Example of Blog Home Page with Publications Highlighted



Image Source: <http://libetiquette.blogspot.in/>

STEP 2

Fig. 4.5 Example of Retrieving Bloggers' Name and Place of Work

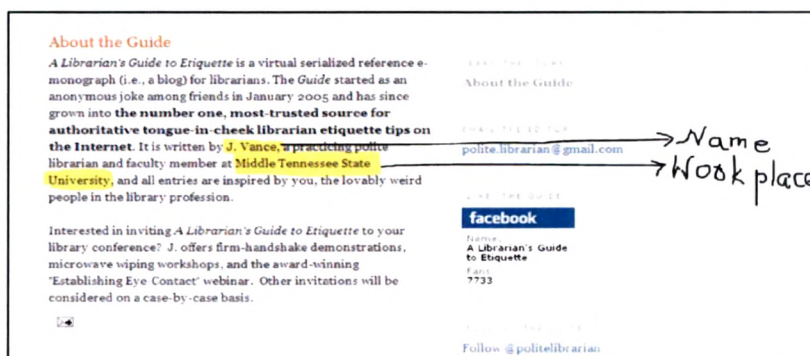


Image Source: <http://libetiquette.blogspot.in/>

STEP 3

The details derived were subsequently searched in Google or Google Scholar to identify the publications of the blogger as shown below in the Google Scholar Citation page of the author.

Fig. 4.6 Example of Publication Data of Blogger Collected through Google Scholar Citation Page



This method also provided the researcher the means to verify the publications, name and work details mentioned on the blog by the blogger.

c) Publication information was also collected through the ‘Amazon’ website

Fig. 4.7 Example of Publication Data Collected through Amazon

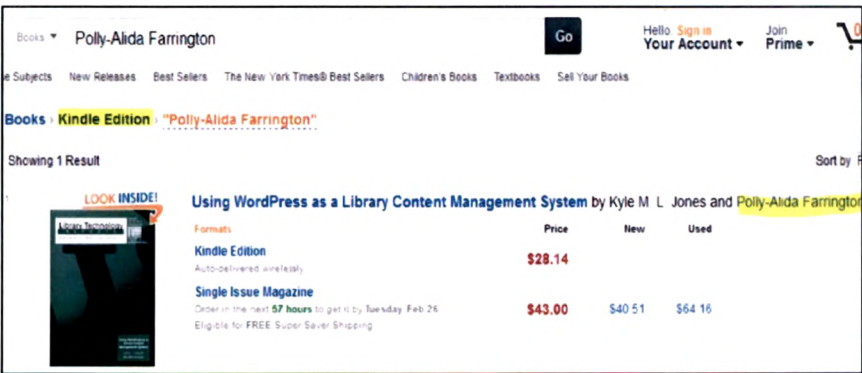


Image Source: www.pafa.net/

d) The steps (1 to 4) shown below for locating publications of a blogger whose publications or name was not mentioned distinctly on the blog are shown through Figure 4.8 to 4.11.

STEP 1

As seen in the screenshot in Figure 4.8, the blogger states the reader can gather more information through the ‘research guides’ which was explored by the researcher.

Fig. 4.8 Blog Page with ‘about’ section

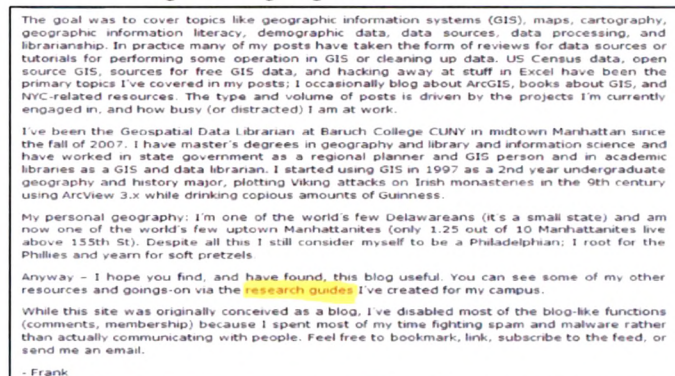


Image Source: <http://gothos.info/>

STEP 2

Thereafter the hyperlink ‘Research Guides’ was explored further and blogger’s identity was retrieved.

Fig.4.9 The Hyperlinked Page

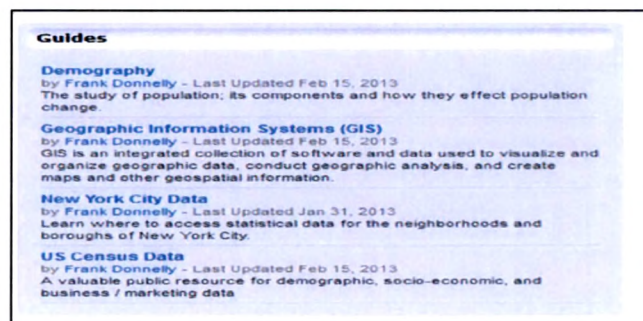
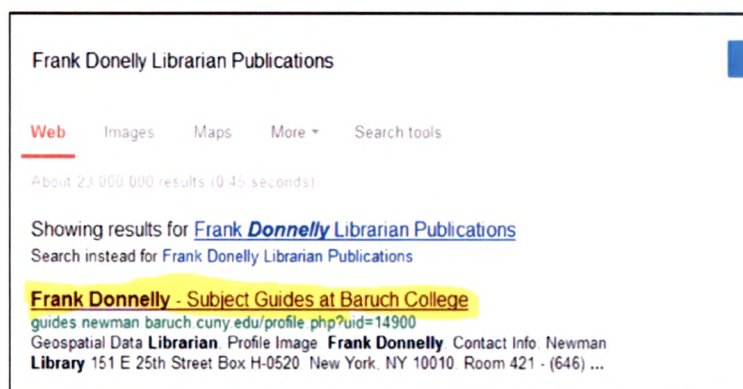


Image Source: <http://guides.newman.baruch.cuny.edu/profile.php>

STEP 3

The retrieved blogger's name was searched through a search engine. The name was verified with the place of work to avoid an error.

Fig. 4.10 Webpage showing Highlighted Link for Retrieval



STEP 4

The highlighted link shown in the above screenshot was explored to the blog post.

Fig. 4.11 The Hyperlinked Blog Post with the Bloggers' Publication

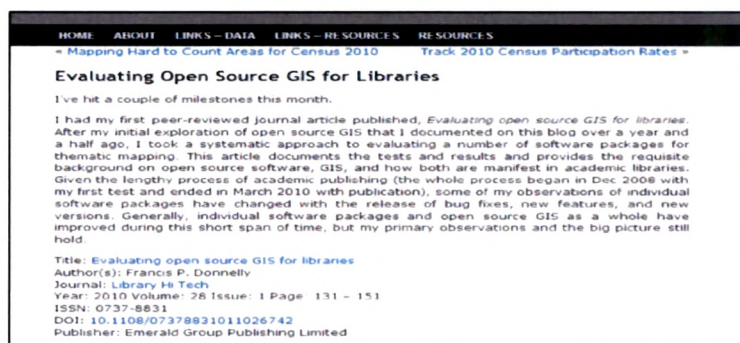


Image Source: <http://gothos.info/>

Thus the bloggers' publications have been collected through various approaches. The researcher wishes to state that the publication data collected may not be completely exhaustive and comprehensive, as the chief source for collecting this data has been through the blog and the openly accessible web based sources.

4.4 Data Validation, Analysis and Presentation

The researcher did a self-validation of the data collected, by reassessing the coded categories to ensure correct categorization of the LIS blogs. The analysis of the data collected and recorded in Excel was done with the help of simple computations/formulas using the Excel Program. The percentages and ratios were derived in this manner. Tables, Charts and screenshots have been prepared and saved respectively to present the data in Chapters 5 to 7. The subject trends derived have been presented using Wordle - the freely available program for word cloud formations.

In summation it can be said that content analysis in this research comprises of analyzing the subject themes of the blog, bloggers' posts, reader's comments, and links present on the blog. The researcher who is a non-participant reader of blogs has attempted to present an unbiased and objective analysis of the LIS blogosphere. Content analysis methodology has been used to assimilate and analyze the quantitative and qualitative representation of subjects and their trends as portrayed on the library blog environment.

References

- Aharony, N. (2009). An Exploratory Analysis of Librarians' Blogs: Their development, nature and changes. *Aslib Proceedings: New Information Perspectives*, 61(6), 587-604. Retrieved from www.emeraldinsight.com/0001-253X
- Aharony, N. (2010). LIS blog comments: An exploratory analysis. *Libri*, 60, 65-70. doi:10.1515/libr.2010.006
- Bar-Ilan, J. (2000). The Web as information source on informetrics - A content analysis. *Journal of the American Society for Information Science*, 51(5), 432-443. doi: 10.1002/(SICI)1097-4571
- Bar-Ilan, J. (2005). Information hub blogs. *Journal of Information Science*, 31 (4), 297-307. doi: 10.1177/0165551505054175
- Bar-Ilan, J. (2007). The use of Weblogs (blogs) by librarians and libraries to disseminate information. *Information Research*, 12(4). Retrieved from <http://informationr.net/ir/12-4/paper323.html>
- Bauer, M. (2000). Classical content analysis: A review. In M. W. Bauer & G. Gaskell (Eds.), *Qualitative researching with text, image, and sound: A practical handbook* (pp. 131-151). London: Sage.
- Berelson, B. (1952). *Content analysis in communication research*. New York: Free Press. p.74
- Brooks, C. H. and Montanez, N. (March, 2006). An Analysis of the Effectiveness of Tagging in Blogs. *Proceedings of the 2005 AAAI Spring Symposium on Computational Approaches to Analyzing Weblogs*. Stanford, CA.
- Budd, Richard W., Thorp, Robert K., & Donohue, Lewis. (1967). *Content Analysis in Communication Research*. New York: Macmillan. p. 6
- Busha, Charles H. & Harter, Stephen P. (1980). *Research Methods in Librarianship: Techniques and Interpretation*. New York: Academic Press. 171-173

- Clyde, L. A. (2004a). Library Weblogs. *Library Management*, 25(4-5), 183-189.
doi:10.1108/01435120410533765
- Clyde, L. A. (2004b). Weblogs –are you serious? *The Electronic Library*, 22(5), 390-392.
doi:10.1108/02640470410561893
- Chau, M. & J. Xu. (2007). Mining communities and their relationships in blogs: A study of online hate groups. *International Journal of J. Human-Computer Studies*, 65, 57-70. doi:10.1016/j.ijhcs.2006.08.009
- Crawford, W. (2011). *The Liblog Landscape 2007-2010*. California: Cites and Insights.
- Foo, S. (2009). Blog content analysis: Reflections at Bukit Chandu Singapore heritage site. *Paper presented at International Association for Development of the Information Society (IADIS) International Conference e-Society 2009*, Barcelona, Spain, February 25-28. Retrieved from
http://www.ntu.edu.sg/home/sfoo/publications/2009/2009-IADIS-SF_fmt.pdf
- Herring, S. C., Kouper, I., Scheidt, L. A., & Wright, E. (2004). Women and children last: The discursive construction of weblogs. In L. Gurak, S. Antonijevic, L. Johnson, C. Ratliff, & J. Reyman (Eds.) *Into the Blogosphere: Rhetoric, Community, and Culture of Weblogs*. University of Minnesota. Retrieved March 24, 2006 from
http://blog.lib.umn.edu/blogosphere/women_and_children.html
- Herring, S., Scheidt, L. A., Bonus, S., and Wright, E. (2004). Bridging the gap: A genre analysis of weblogs. *Proceedings of the 37th Annual Hawaii International Conference on System Sciences (HICSS-37)*. Los Alamitos: IEEE Computer Society Press. Retrieved July 5, 2011 from
<http://ella.slis.indiana.edu/~herring/herring.scheidt.2004.pdf/hicss/2004/2056/04/205640101b.pdf>
- Herring, S. C., Scheidt, L. A., Bonus, S., & Wright, E. (2005). Weblogs as a bridging genre. *Information, Technology & People*, 18(2), 142-171. Retrieved from
<http://www.student.tue.nl/V/t.s.oosterwijk/ModellerenB/Literature/19%20Genre%20Analysis.pdf>

- Herring, S. C., Scheidt, L. A., Kouper, I., & Wright, E. (2006). A longitudinal content analysis of weblogs: 2003-2004. In M.Tremayne (Ed.), *Blogging, Citizenship, and the Future of Media* (pp. 3-20). London: Routledge. Retrieved from <http://ella.slis.indiana.edu/~herring/tremayne.pdf>
- Herring, S. C. (2010). Web content analysis: Expanding the paradigm. In J.Hunsinger, M.Allen, &L.Klastrup (Eds.), *The International Handbook of Internet Research* (pp. 233-249). Berlin: Springer Verlag.
- Jackson-Brown, G. (2013, February 4). Content analysis study of librarian blogs: Professional development and other uses. *First Monday*, 18(2). Retrieved from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/4343/3415> doi:10.5210/fm.v18i2.4343
- Kerlinger, Fred, N. (1967). *Foundations of behavioural research: Educational and psychological inquiry*. New York: Holt, Rinehart and Winston. p. 606.
- Krippendorff, K. (1980). *Content analysis: An introduction to its methodology*. Newbury Park: Sage.
- Pan, B., Maclaurin, T. & Crofts, J.. (2007). Travel blogs and the implications for destination marketing. *Journal of Travel Research*, 46(1), 35-45. doi: 10.1177/0047287507302378
- Papacharissi, Zizi. (2007). Audiences as media producers: Content analysis of 260 blogs. In M. Tremayne (Ed.), *Blogging, Citizenship, and the Future of Media* (pp.21-38). London: Routledge. Retrieved from http://tiger.uic.edu/~zizi/Site/Research_files/TremayneChapterBlogs.pdf
- Spurgin, K. M. (2009). *Use of category archives in Library and Information Science topical blogs*. Retrieved October 2, 2011 from <http://infomuse.net/papers/libBlogCats.pdf>
- Sujin Kim. (2009).Content analysis of cancer blog posts. *J Med Libr Assoc*. 97(4), 260-266. doi: 10.3163/1536-5050.97.4.009

Tauro, C. M. (2008). *A usability evaluation and content analysis of Vizblog: An online conversation discovery tool*. (Unpublished Doctoral Dissertation). Virginia Polytechnic Institute and State University, USA. Urn: etd-05082008-084417