
An Evaluation of Kannada News Paper Websites Using Alexa Internet Tool: A Webometric Study

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Abstract - The present study has been done by using webometric methods. This paper intends to evaluate the Kannada language newspaper web sites using the most well known tool for evaluating websites "Alexa Internet" a company of Amazon.com. The 10 leading Kannada language newspaper websites from the state of Karnataka were taken for evaluation. Each newspaper web site was searched in Alexa databank and relevant data including traffic rank, pages viewed, speed, links, and bounce percentage, time on site, search percentage, and percentage of Indian/foreign users were collected and these data were tabulated and analyzed. The result of this study shows that Vijayakarnataka has 2,255 the highest traffic rank in India Udayavani has 27,903 the highest traffic rank in global. Vijayakarnataka has 7.32 having highest number of average pages viewed per day and 12:40 estimated daily time spent on site by the visitors.

Keywords: Webometrics, Newspaper, Newspaper website Evaluation, Kannada Newspaper website, Alexa internet, Alexa databank, Website Analysis.

INTRODUCTION

News Papers: Information is an important element in every sector of life, be it social, economic, political, educational, industrial and technical development. In the present world, information is a very valuable commodity. Newspaper is a mirror or replica of day today developments and changes of human life, society, environment, business, sports, entertainment, politics, science, editorial, advice, food, etc. Newspapers have a long tradition and centuries of experience behind today's newspaper design. Newspapers are a vital source of information in enlightened societies providing the most recent information to readers. Newspapers serve various purposes for different categories of users. A newspaper is a publication printed on paper and issued regularly, usually once a day or once a week. It gives information and opinions about current events and news. The world's first Newspaper was the German-language newspaper 'The Relation' (Relation aller Furnemmen and gedenckwurdigen historian). Published by Johann Carolus, in Strasbourg, in 1605.

E-News Papers: Today, we are facing the introduction of another media channel, the e-paper. The advancement in ICT and the increased reliance on digital information among the people have compelled several news providers or newspaper industries to launch their own websites or online versions of the existing print news papers for disseminating up to date news and other products. An online newspaper is the online version of a newspaper, either as a stand-alone publication or as the online version of a printed periodical. Going online created more opportunities for newspapers, such as competing with broadcast journalism in presenting breaking news in a timelier manner. The first online newspapers appeared 1994 and since then research has been done to gain knowledge about how to design user friendly news sites.

Web metrics- Webometrics is a new research field in Library and Information Science applying quantitative bibliometric methodology such as publication analysis, citation, cluster analysis to the 3Ds that is distributed, diverse and dynamical information space of the web, including webpage content, links structures, search engine and user searching and browsing behavior. Webometrics is quantitative and quantitative study of web related phenomena, originated in the realization that method originally designed for bibliometric analysis of scientific journal articles. Citation pattern could be applied to web with commercial search engines, providing the raw data. The purpose of Web evaluation determines the appropriate methods to be used. The best evaluation methods are user testing and expert evaluation, while automatic and Web analytics tools could provide a first insight into the status of the website. Similarly, if Web ranking and traffic statistics are of interest, then the scope of evaluation is Web evaluation methods; thus the best way is to use a Web analytics tool such as Alexa. Alexa Internet is the most well-known tool for evaluating websites that offers a free-of-charge evaluation service few attributes.

ALEXA: A Tool for Website Evaluation

Alexa Internet was founded in April 1996 by American web entrepreneurs Brewster Kahle and Bruce Gilliat. It's owned by the Amazon.com. Alexa is a website metrics system and it provides commercial web traffic data. Alexa Toolbar users access various websites and it's a very powerful tool used to rank web site traffic and find out how your web site traffic stacks up against all other competitors. This is one of the most accurate freely available tools to find out how well your site ranks up against millions of other sites on the Web. According to Alexa Internet <https://www.alexa.com/> Alexa offers various websites attributes. It includes

a) Traffic rank: it's an estimate of popularity in a specific country. Alexa computes web sites' traffic by analyzing the web usage of millions of Alexa toolbar users and data obtained from other diverse traffic data sources. The traffic is based on three months of aggregated historical traffic data and is a combined measure of pages viewed and users (reach).

b) Pages viewed: It is an estimated percentage of global page views. Page views measure the number of pages viewed by site visitors. Multiple page views of the same page made by the same user on the same day are counted only once. The page views per user numbers are the average numbers of unique pages viewed per user per day by the visitors to the site. The three-month change is determined by comparing a site's current page view numbers with those from pages viewed three months ago, which reflects the average number of pages viewed by users in a certain web site. Page views/user is the estimate of daily unique page views per user.

- c) **Time on site:** Estimated daily time on site (mm:ss).
- d) **Links:** A measure of reputation, which includes a number of web sites connected to a certain web site which shows its popularity.
- e) **Speed:** Speed is the measure of average load time. Web pages downloading speed that reflects the average time for opening pages of a certain web site.
- f) **Bounce percentage:** Estimated percentage of visits that consist of a single page view.
- g) **Search percentage:** Percentage of visits that came from a search engine.
- h) **Audience Geography:** The percentage of people who visit a web site (local and International).

OBJECTIVES

The objective of the study is to Evaluate of Kannada news paper websites based on Alexa indexes they are:

1. Traffic rank (India and Foreign)
 - Pages viewed
 - Time on site
 - Links
 - Speed
 - Bounce percentage
 - Search percentage
 - Users Percentage (Indian and foreign users).

SCOPE

The scope of the present study is limited to 10 newspaper websites in Kannada language from the state of Karnataka.

REVIEW OF LITERATURE

Studies of electronic publishing, and metrics for the web, have been widespread from last few decades. A few of earlier studies examine the different Indian language news papers website using Alexa Internet Tool those are. **Stephen (2017)** in his study evaluates the websites of Ministry of Electronics and Information Technology Organizations in India using the Alexa Internet. The 16 Meity Organizations in India which have the web presence are included in the study. The results of the analysis give interesting insights about the organizations websites. Unique Identification Development Authority of India (UIDAI) is the most popular website and in the first position among the entire organizations website. It holds global rank 572, 29th rank in India. National Informatics Centre (NIC) and Education Research Network (ERNET) websites holds the highest bounce rate of 64.5. UIDAI websites holds the highest links of 1154. Among the Meity autonomous bodies National Institute of Electronics and Information Technology (NIELIT) websites holds first rank and overall NIELIT websites holds second rank. **Stephen and Pramanathan (2016)** their study provides an overall picture of Indian Institute of Technology's websites status in terms of their performances on the web based on the eight indexes of Alexa internet evaluation tool. Results shows that, most of the IITs websites do not act successfully on the web and need much attention Similarly, some high traffic ranking IITs showed weak performance in some of the attributes whereas some low traffic ranking IITs performed comparatively better in some of the attributes. The downloading speed and bounce rate of most of the IITs are not satisfactory, which needs to

be given due attention as it could increase the number of visitors for the respective IITs and their consequent global reach. **Naheem (2016)** examined the 13 Malayalam Newspaper websites. Results of the study shows that, most of the Malayalam newspaper websites do not act successfully on the web and need much attention. Similarly, some high traffic ranking newspaper showed weak performance in some of the attributes whereas some low traffic ranking newspapers performed comparatively better in some of the attributes. The downloading speed and bounce rate of most of the newspapers are not satisfactory, which needs to be given due attention as it could increase the number of visitors for the respective newspapers and their consequent global reach. **Naheem and Rao (2016)** in their study the 8 leading Telugu newspaper websites from the state of Andhra Pradesh were analysed using well known tool called “Alexa Internet”. Each one of the newspaper web site was searched in Alexa databank and relevant data were collected. Further these data were tabulated and analysed. The results of this study shows that, the websites of the newspaper „Eenadu“ did remarkable performances in most of the attributes like highest traffic rank in both local & global , daily time spent on site by the visitors , number of links and the highest number of foreign users. „Sakshi“ has the highest number of average pages viewed per day and lowest bounce percentage. The fastest downloading speed is for Andhra Prabha. The highest percentage of visits that came from search engines is for Visalaandhra.

METHODOLOGY

E-Newspapers evaluation study in this paper was those that were open access (non charged subscription) available over the Internet. The 10 leading Kannada newspapers listed in the website of the Karnataka media academy (<http://karnatakavarthe.org/e-papers/>) are taken as a sample for evaluation in the present study. The URLs/ website of these newspapers were collected from the internet. Using these URLs, each newspaper web site was searched on 13th Dec, 2017 in Alexa website (www.alexa.com) and all the data were obtained for examination. The present study has been done by using webometric methods with the help of Alexa databank tool for evaluating websites.

In this research analysis eight indexes were selected (traffic rank, pages viewed, time on site, links, speed, bounce rate percentage, search percentage and Indian/foreign users Percentage) in order to analyze Kannada newspaper websites. The Collected data were gathered, tabulated and visualized with specially designed Microsoft Excel worksheet. Then data were analyzed and tabulated to relevant findings in accordance with the desired objectives.

Table 1: List of newspapers with URLs

SN.	Name of The Paper	URL
1	EESANJE	http://www.eesanje.com
2	KANNADAPRABHA	http://kannadaprabha.com
3	PRAJAVANI	http://www.prajavani.net
4	SAMYUKTHAKARNATAKA	http://www.samyukthakarnataka.com
5	SANJEVANI	http://www.sanjevani.com
6	UDAYAVANI	https://www.udayavani.com
7	VARTHABHARATI	http://varthabharati.in
8	VIJAYAVANI	http://www.vijayavani.net
9	VIJAYKARNATAKAEPAPER	http://www.vijaykarnatakaepaper.com
10	VISHWAVANI	http://www.vishwavani.news

RESULTS & DISCUSSION

The data regarding Kannada newspaper web sites for eight indexes (traffic rank, pages viewed, time on site, links, speed, bounce rate percentage, search percentage and Indian/foreign users Percentage) as obtained from Alexa Internet is presented in below table.

Table 2: Data obtained from Alexa Internet

SN	Name of The News Paper	Traffic Rank		Pages viewed	Time on site	Links	Speed	Bounce rate %	Search %	Users Percentage	
		India	Global							India %	Foreign %
1	2	3	4	5	6	7	8	9	10	11	12
1	eesanje	8,616	111,648	3.39	7:11	108	1.67	41.70%	13.00%	81.50%	18.50%
2	Kannadaprabha	3,983	43,021	3.3	6:02	664	8.678	45.00%	13.10%	76.50%	13.50%
3	Prajavani	2944	38275	3.99	6:50	625	3.007	34.70%	24.60%	85.60%	14.40%
4	Samyukthakarnataka	28,679	427,882	3.4	3:33	131	NA	6.90%	50.40%	94.20%	6.80%
5	Sanjevani	16,841	214,078	3.9	4:22	305	NA	38.20%	30.00%	75.70%	24.30%
6	Udayavani	2,764	27,903	6.67	8:25	649	3.404	38.70%	24.70%	69.80%	31.20%
7	Varthabharati	16,167	115,288	4.5	7:57	311	1.82	37.80%	7.70%	44.90%	45.10%
8	Vijayavani	9,167	97,838	2.8	3:55	67	2.255	53.50%	15.30%	80.90%	9.91%
9	Vijaykarnatakaepaper	2,255	29,122	7.32	12:40	336	0.875	24.70%	33.60%	88.40%	11.60%
10	Vishwavani	7,972	86,728	6.78	7:33	33	2.204	34.70%	20.70%	81.50%	18.50%

Traffic Rank

It is based on the amount of traffic recorded from users that have the Alexa toolbar installed over a period of three months. This traffic is based on such parameters as reach and page views. The reach refers to the number of Alexa users who visit a particular site in one day. Vijaykarnataka, Udayavani and Prajavani are the top 3 best traffic ranked newspapers in Kannada language with traffic ranks off 2,255, 2,764 and 2944 respectively. The newspapers like Varthabharati, Sanjevani, and Samyukthakarnataka has high traffic ranks, which shows their weak performance on this account. Out of the 10 newspapers, only 4 have traffic rank of less than 5,000, which projects their good performance in this attribute while compared to others. While assessing Global traffic rank Udayavani and Vijaykarnataka have traffic rank less than 30000. Rest of the news papers has shown very weak performance.

Page views

It is an estimated percentage of global page views. Page views measure the number of pages viewed by site visitors. Vijaykarnataka, Vishwavani and Udayavani are top 3 Page views News papers. Vijaykarnataka is having highest number of average pages viewed by users per day (7.32), followed by Vishwavani (6.78) and Udayavani (6.67). Vijayavani has the (2.8) lowest number of average page views.

Time on site

According to Alexa internet Estimated daily time on site (mm:ss) method. The estimated daily time spent on site by the visitors is highest for Vijaykarnataka (12:40), Udayavani is in second place with (8:25) followed by Varthabharati with (7:57) and Vijayavani has the lowest in this category (2.8).

Links

A measure of reputation, which includes a number of web sites connected to a certain web site which shows its popularity. Among 10 Kannada News papers Kannadaprabha (664) has the highest number of links. Udayavani with 649 links secured second place, Prajavani is in third place got 625 links. Vishwavani with 33 links is the least among them.

Downloading Speed

Speed is the measure of average load time. Web pages downloading speed that reflects the average time for opening pages of a certain web site. In this category, Kannadaprabha has the highest speed (8.678). Udayavani has the 3.404 downloading speed and stands in second place and Prajavani is in third place with 3.007 seconds of downloading speed.

Bounce Rate/ percentage

Estimated percentage of visits that consist of a single page view called bounce rate. Vijayavani with (53.50%) has the high rate bounce percentage, followed by Kannadaprabha with (45.00%) shows its weak performance. Deshonatti shows the 6.90% lowest rate of bounce percentage. The higher bounce rate in most of the newspaper websites indicates their weak performance.

Search percentage

Estimated percentage of visits that came from a search engine. The highest percentage of visits that came from search engines is for Samyukthakarnataka with (50.40%) and with (33.60%) Vijaykarnataka is in second highest. The lowest is Varthabharati with (7.70%) followed by Eesanje (13.00%).

Audience Geography:

The percentage of people who visit a web site (local and **Foreign**) **India:** The top 3 highest percentage of users is for India are Samyukthakarnataka with (94.20%) followed by Vijaykarnataka (88.40%) users and Prajavani got (85.60%) users and Varthabharati (44.90%) has the lowest percentage of users in India.

Foreign: Varthabharati has highest percentage of users (45.10%) while it has lowest rate in India and Samyukthakarnataka has (6.80%) lowest rate of users in foreign but it has highest percentage of users in India.

Table 3: Indian and Foreign Users

SL. NO.	NAME OF THE NEWSPAPER	PERCENTAGE OF INDIAN AND FOREIGN VISITORS
1	EESANJE	India (81.5%), Qatar (13.6%), United Arab Emirates (2.5%), Singapore (1.4%), others (1)
2	KANNADAPRABHA	India (76.5%), Saudi Arabia (6.4%), United States (5.1%), United Arab Emirates (4.2%), Kuwait (2.3%), others (5.5%)
3	PRAJAVANI	India 85.6%, Saudi Arabia (4.0%), United States (3.2%), United Arab Emirates (2.4%), Oman (1.8%), others (3%)
4	SAMYUKTHAKARNATAKA	India (94.2%), United Arab Emirates (3.6%) Others (2.2%)
5	SANJEVANI	India (75.7%), United States (14.6%), United Arab Emirates (5.1%), others (4.6%)
6	UDAYAVANI	India (69.8%), Qatar (7.0%), Oman (5.0%), United Arab Emirates (4.7%), Saudi Arabia (4.4%), others (9.1%)
7	VARTHABHARATI	India (44.9%), Qatar (21.6%), Saudi Arabia (20.5%), Bahrain (6.7%), other (6.3%)
8	VIJAYAVANI	India (80.9%) Qatar (11.3%), Canada (2.9%), Singapore (1.4%) others (3.5%)
9	VIJAYKARNATAKAEPAPER	India (88.4%), Saudi Arabia (3.2%), United Arab Emirates (2.9%), United States (1.9%), Hong Kong (1.7%), others (1.9%)
10	VISHWAVANI	India (81.5%), Qatar (6.7%), United States (6.1%), others (5.7%)

Table 4 shows the data on Indian and foreign users. Most of the foreign user's to Kannada newspaper websites are come from United States and Gulf countries like United Arab Emirates, Qatar and Saudi Arabia.

CONCLUSION

The web impact factor was developed by Ingwerson to measure the impact of a web area by the number of links it receives. WIF calculations were found to be a crude instrument for Webometrics studies. Webometrics research, search engines, and an academic web crawler have been used. The purpose of this website evaluation using the Alexa Internet tool helps the webmaster and the respective newspaper websites to improve the usability of websites. The present study has been exploratory and there is possibility for future research in this area. The result of this study gives an overall preview of the Kannada newspaper websites' traffic and page ranks of local and foreign.

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