MALAYALAM NEWS PAPER WEBSITES: A WEBOMETRIC STUDY USING 'ALEXA INTERNET'

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Abstract

The purpose of this paper is to evaluate Malayalam newspaper web sites using 'Alexa Internet' a subsidiary company of Amazon.com which provides commercial web traffic data.. It is one of the most well known tools for evaluating websites that offers a free- of- charge evaluation service. The present study has been done by using webometric methods. The 13 leading Malayalam newspaper websites from Kerala are taken for evaluation in the present study. Each newspaper web site was searched in Alexa databank and relevant data including traffic rank, pages viewed, speed, links, bounce percentage, time on site, search percentage, and Indian/foreign users were collected. Further these data were tabulated and analysed. The results of this study show that Malayala Manorama has the highest traffic rank in India as well as global. Siraj has the highest number of average pages viewed per day and estimated daily time spent on site by the visitors. The fastest downloading speed is for Madhyamam. Malayala Manorama has the highest number of links. Veekshanam has the lowest bounce percentage. Highest percentage of visits that came from search engines is for Janayugom. The highest number of foreign users is for Chandrika. Most of the foreign users to Malayalam newspapers come from the Gulf countries like Qatar, UAE, Saudi Arabia and Kuwait.

Keywords: Webometrics, Newspaper, Malayalam Newspaper website, Alexa internet, Alexa databank

1. INTRODUCTION

Newspaper is one of the primary communication tools of the society. These are ''the most effective source of current and up to date information'' (Sutar, 2007). 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. Compared with traditional news media, online newspapers have remarkable advantages including their ability to provide up-to-date information, rapid access to a large number of newspapers and their archives without additional expenses,

the advantages of being interactive and paperless, the possibility to bookmark, print or save and edit the contents of online newspapers (Haneefa & Nellikka, 2010).

The press in Kerala is healthy, strong and vibrant. The majorities of Malayalam newspapers exists on the web and are addressed to a broad spectrum of readers. Therefore, it is vital to improve newspaper websites by investigating and evaluating those using webometrics methods. Webometrics methods measure the web to get knowledge about the number and types of hyperlinks, structure of the web and usage patterns[5]. Websites' attributes can be measured using various search engines like Altavista (Smith, 2005) and Yahoo (Kanellopoulos and Kotsiantis, 2012). In this research we used the Alexa Internet tool which was the instrument in the previous studies (Shen et al., 2006; Jowkar & Didegah, 2010; Bhat, 2013; Kanellopoulos & Kotsiantis,2012).

2. ALEXA: A TOOL FOR WEBSITE EVALUATION

Alexa Internet started in April 1996 by American web entrepreneurs Brewster Kahle and Bruce Gilliat and presently it is a California-based subsidiary company of Amazon.com which provides commercial web traffic data. Currently, Alexa Internet is the most well known tool for evaluating websites that offers a free- of- charge evaluation service. Alexa data is collected from millions of its Toolbar users. Alexa continually gathers various types of information (from all public websites) such as traffic rankings, number of page views, links pointing to sites, average time on site per user, etc. Alexa Toolbar users access various websites and Alexa computes websites' traffic by analysing 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' aggregated historical data and is a combined measure of pages viewed and number of users (reach). After calculating websites' traffic Alexa ranks all covered websites based on this traffic. Therefore, the best websites are those with the lowest numbered rank. The closer a website gets to #1, the more reliable its traffic ranking becomes, while traffic rankings of 100,000 and above are not reliable. (Alexa Internet, 2016a). Alexa is a very powerful tool used to rank web site traffic. Find out how your web site traffic stacks up against all your 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 (Alexa Internet, 2016b). Alexa offers various websites attributes including: traffic rank, pages viewed, speed, links, bounce percentage, time on site, search percentage and local and foreign users which are formed the foundation of evaluation in the existing study. The same has been given in the (Table 1).

Table 1: Alexa web attributes for ranking websites

Websites attribute	Definition
Traffic rank	It is an estimate of popularity in a specific country. Alexa computes web sites' traffic by analysing 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) (Alexa Internet, 2016).
Page views	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 (Alexa Internet,2016).
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 (Alexa Internet,2016).
Links	A measure of reputation, which includes a number of web sites connected to a certain web site which shows its popularity (Alexa Internet, 2016).
Reach	Estimated percentage of global internet users (Alexa Internet, 2016).
Bounce percentage	Estimated percentage of visits that consist of a single page view (Alexa Internet, 2016).
Time on site	Estimated daily time on site (mm:ss) (Alexa Internet, 2016).
Search percentage	Estimated percentage of visits that came from a search engine (Alexa Internet, 2016).
Users	The percentage of people who visit a web site (local and international) (Alexa Internet, 2016).

3. OBJECTIVES

The objective of this study is the evaluation of Malayalam news paper websites based on 8 Alexa indexes including: traffic rank, pages viewed, speed, links, bounce percentage, time on site, search percentage, Indian and foreign users.

4. SCOPE

The scope of the present study is limited to 13 newspaper websites in Malayalam from the state of Kerala.

5. REVIEW OF LITERATURE

Website evaluation provides useful information for users to estimate sites validation and popularity. So far, a number studies using webometrics methods have been done by various authors on different websites. Here is an attempt is made portray some of the website evaluation studies using Alexa Internet as tool for evaluation.

Shen et al. (2006) evaluated 15 university library web sites, using six indices as library web site evaluation criteria: traffic rank, visits, connectivity, speed, pages viewed, and freshness. Jowkar & Didegah (2010) evaluated Iranian newspapers' web sites based on the criteria obtained from Alexa search engine using correspondence analysis. Results show that most Iranian newspaper web sites do not act successfully on the web and need much attention. Bhat (2013) evaluated Indian newspaper websites using Alexa Internet. The results of this study show that Dainik Bhaskar has the highest traffic rank. Punjab Kesari has the highest number of average pages viewed per day and estimated daily time spent on site by the visitors. The fastest downloading speed is for Economic Times. Hindustan Times has the highest number of links. Decan Herald has the highest reach amongst the global internet users, whereas Udayavani has the lowest bounce percentage. The highest percentage of visits that came from search engines is for Dainik Jagran. The highest number of foreign users is for Ananda Bazar Patrika. Most of the foreign users to Indian newspapers come from the USA. Kanellopoulos & Kotsiantis (2012) evaluated Greek newspaper websites using clustering and a number of criteria obtained from the Alexa search engine. Based on data obtained from Alexa, the *Naftemporiki* newspaper has the highest traffic rank and the *Eleftherotypia* newspaper the largest number of links among others. The *Macedonia* has the largest number of foreign users. The results of the study also show that most newspaper websites' visitors come from the UK. Actually, the above mentioned studies inspired our research for evaluating Malayalam newspaper websites using Alexa Internet as a tool. However, the present study intends to portray interesting findings of the evaluation of Malayalam newspaper websites, which remains unexplored.

6. METHODOLOGY

The present study has been done by using webometric methods with the help of Alxa databank, which is known as the most famous tool for evaluating websites. In this research we selected eight indexes – i.e. traffic rank, pages viewed, speed, links, bounce percentage, time on site, search percentage, Indian and foreign users. – in order to analyze Malayalam newspaper websites.

The 13 leading Malayalm newspapers listed in the website of the Kearala media academy (http://keralamediaacademy.org/history-of-media/) as taken as a sample for evaluation in the present study. The internet addresses (URLs) of these newspapers were collected from the internet. Using these URLs, each newspaper web site was searched on 1st July, 2016 in Alexa website (www.alexa.com) and all the data were obtained by real-time examination according to prearranged evaluation indexes (Table 1). The data collection process was completed on the same day to decrease possible errors associated with frequent website updates. The downloaded data were further entered into the specially designed Microsoft Excel worksheet. Then data were analyzed and tabulated to relevant findings in accordance with the desired objectives. The list of the Newspapers with their URLs , which are coming under the purview of this study, is provided in (Table 2).

Table 2 : List of newspapers with URLs

S.no	Name of the paper	URL
1	Chandrika	chandrikadaily.com/
2	Deepika	deepika.com/
3	Deshabhimani	deshabhimani.com/
4	Janayugom	janayugomonline.com/
5	Janmabhumi	janmabhumidaily.com/
6	Kerala Kaumudi	keralakaumudi.com/
7	Madhyamam	madhyamam.com/
8	Malayala Manorama	manoramaonline.com/
9	Mangalam	mangalam.com/
10	Mathrubhumi	mathrubhumi.com/
11	Siraj	sirajlive.com/
12	Thejas	thejasnews.com/
13	Veekshanam	veekshanam.com/

7. RESULTS & DISCUSSION

The data regarding Malayalam newspaper web sites for eight indexes (traffic rank, pages viewed, speed, links, bounce percentage, time on site, search percentage and Indian/foreign users) as obtained from Alexa Internet is presented in Table 3.

Table 3: Data obtained from Alexa Internet

S.No	Name of the newspaper	Traffic Rank		Pages viewed	Speed	Links	Bounce rate	Time on site	Search	Users Percentage	
		India	Global							Indian	Foreign
1	Chandrika	12,284	75,583	2.25	7.073	90	48.50	3:38	4.00	49.3%	50.7%
2	Deepika	2,029	14,493	4.06	4.335	474	34.90	6:57	3.00	55.4%	44.6%
3	Deshabhimani	5,833	45,871	2.83	7.449	465	38.70	4:21	7.70	72.8%	16.2%
4	Janayugom	29,442	207,613	1.65	2.365	72	61.00	2:19	14.10	63.9%	35.1%
5	Janmabhumi	4,817	56,366	4.00	2.274	130	41.40	6:11	10.70	78.7%	21.3%
6	Kerala Kaumudi	1,642	14,171	5.27	5.32	449	26.80	8:07	7.00	60.00%	40.00%
7	Madhyamam	1,790	11,674	4.25	2.326	432	34.70	7:16	7.10	49.5%	50.5%
8	Malayala Manorama	127	735	5.72	4.86	6,001	29.30	10:26	6.90	60.2%	39.8%
9	Mangalam	1,356	10,505	4.17	4.319	448	32.10	6:33	4.90	58%	32%
10	Mathrubhumi	369	3,283	4.65	2.959	1,483	29.60	8:07	7.30	67.1%	36.9%
11	Siraj	7,031	65,506	11.30	8.352	74	32.90	26:24	3.90	66.1%	33.9%
12	Thejas	15,475	115,202	2.80	2.908	119	43.00	3:59	9.70	66.4%	33.6%
13	Veekshanam	20,915	11,654,49	2.40	2.365	82	22.60	2:43	6.50	71.0%	29.0%

7.1 Traffic Rank

With regard to the attribute traffic rank in India, the best-ranked newspapers are Malayala Manorama and Mathrubhumi, with traffic ranks off 127 and 369, respectively. The newspapers like, Janayugom, Veekshanam, Thejas shows high traffic ranks, which reflects their weak performance on this account. Out of the 13 newspapers, only 2 have traffic rank of less than 1,000, which projects their good performance in this attribute while compared to others. In the case of Global traffic rank, only one newspaper i.e., Malayala Manorama have traffic rank less than 1000, i.e., 735, reaming all are shown very weak performance in this attribute (Table.3).

7.2 Page views

Concerning to this attribute, *Siraj* has the highest number of average pages viewed by users per day (11.30%), followed by Malayala Manorama (5.72) and Kerala Kaumudi (5.27). The lowest number of average pages viewed is 1.65% for Janayugom (Table 3). Except the first three newspapers (Siraj, Malayala Manorama and Kerala Kaumudi) all others have shown bad function in this attribute.

7.3 Downloading Speed

Concerning the downloading speed, Madhyamam, Janayugom and Veekshanam have the highest speed (2.326s and 2.365s, each respectively). Siraj has the slowest downloading speed of 8.352 seconds followed by Deshabhimani 7.449 seconds and Chandrika 7.073 seconds. The overall downloading speeds are in the range of 2.326s – 8.352s (Table 3), which clearly indicate the weak performance of the Malayalam newspaper websites in this attribute.

7.4 Links

Regarding the number of links that each newspaper web site has received, Malayala Manorama has received the highest number of links (6001), which is considerably different from other newspapers. This newspaper has covered a various range of news like political, cultural, arts, social, economic, sports, and world news which has probably made it much more popular than others. Mathrubhumi with 1,483 links occupy second place. Janayugom with 72 links is the last in the queue (Table 3). Majority of the newspaper websites have less than thousand links shows their poor performance in this attribute.

7.5 Bounce percentage

Veekshanam has the lowest bounce percentage (22.60) followed by Kerala Kaumudi with (26.80) and Malayala Manorama (29.30). Janayugom shows the high rate of bounce percentage (61.00) shows its weak performance (Table 3). The higher bounce rate in most of the newspaper websites indicates their weak performance in this attribute.

7.6 Time on site

The estimated daily time spent on site by the visitors is highest for Siraj (26:24), Malayala Manorama occupies second place with (10:26) followed by Mathrubhumi and Kerala Kaumudi with 8:07 each and the lowest in this category is for Janayugom (2:19). The time spent on the rest of the sites is in the range of 2:43-7:16 (Table 3).

7.7 Search percentage

The highest percentage of visits that came from search engines is for Janayugom with (14.10) and the lowest is (3.00) for Deepika (Table 3).

7.8 Audience Geography

The highest percentage of foreign users is (50.7) per cent for Chandrika, followed by (50.5) per cent for Madhyamam and the lowest in this category is Deshabhimani (16.2). The percentage of foreign users for the rest of the sites is in the range of 21.3 -44.6 percent (Table 3).

Table 4 : Indian and Foreign Users

Sl.no	Name of the newspaper	Percentage of Indian and foreign visitors
1	Chandrika	India (49.3), UAE (14.8), Qatar (14.2), Saudi Arabia (13), Oman (5.7), Others (3)
2	Deepika	India (55.4), USA (8.9), UAE (8.6), Qatar (5.3), Kuwait (3.6), Unknown (18.2).
3	Deshabhimani	India (72.8), Qatar (8), UAE (6.7), Kuwait (3.1), Saudi Arabia (2.4), Unknown (7).
4	Janayugom	India (63.9), Qatar (11), Saudi Arabia (6.1), UAE (4.7), USA (1.2), Unknown (13.1).
5	Janmabhumi	India (78.7), UAE (6.2), Qatar (5.5), Bahrain (4), USA (2), Unknown (3.2).
6	Kerala Kaumudi	India (60), Kuwait (8.2), Qatar (6.9), UAE (6.1), USA (5), Unknown (13.8).
7	Madhyamam	India (49.5), Qatar (12.7), UAE (12.3), Saudi Arabia (10), Kuwait (5.8), Unknown (9.7).
8	Malayala Manorama	India (60.2), UAE (9.4), Qatar (8.2), Kuwait (4.4), Oman (3.9), Unknown (13.9).
9	Mangalam	India (58), UAE (9.9), Qatar (9.9), Oman (5), USA (4.6), Unknown (12.6).
10	Mathrubhumi	India (67.1), UAE (9.5), Qatar (6.2), Kuwait (4.5), USA (3.4), Unknown (9.3).
11	Siraj	India (66.1), UAE (14.6), Qatar (10.6), Saudi Arabia (5.7), Turkey (1.7), Unknown (2.3)
12	Thejas	India (69.4), UAE (15.6), Qatar (6.6), Saudi Arabia (3), Unknown (5.4)
13	Veekshanam	India(79) , Ireland (14), New Zealand (6.8), Austria (4.2), USA(3.5)

Table 4 shows the data on Indian and foreign users. Most of the foreign users to Malayalam newspaper websites are come from Gulf countries like Qatar, UAE, Saudi Arabia and Kuwiat. Other foreign visitors come from countries like UAS and UK. It is inferred from this results that migrated Malayalies are still interested to know the local news through the websites of Malayalam newspapers.

8. CONCLUSION

The findings of this study provides an overall picture of Malayalam newspaper websites status in terms of their performances on the web based on the eight indexes of Alexa internet evaluation tool. Results of show 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. Besides administrators of Malayalam newspapers, the results of this study will be useful for web site managers in any field including those in charge of library web sites. The study will also help librarians and anyone interested to increase usage of a web site by analyzing the use of web site using Alexa internet.

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