

# Content Analysis of Online English Newspapers in India

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## ABSTRACT

This paper aims to provide an overview of the contents and design of the online English newspapers in India. Twelve online English newspapers published daily in India were selected for the study. The study used website content analysis to assess the contents and design of these newspapers. A checklist was developed as the main tool for data collection and Microsoft Excel was used as the tool for data analysis. The study shows that online English newspapers in India have a common pattern of contents, coverage, and design. Contents availability and access to the contents are the most prevalent options in these newspapers. Majority of the newspapers use Blog, RSS and Facebook to connect with their readers.

**Keywords:** Website, news sites, online newspapers, world wide web, electronic publishing

## 1. INTRODUCTION

The exponential growth of Internet and the increased reliance on digital information have revolutionised online newspaper journalism with new ways and means of disseminating news and other products. It has put online newspapers to the challenge of updating and providing fresh news frequently and dramatically increased the news consumption and usage. 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.

Newspapers can provide online versions, that are not mirror images of print versions, instead offer something extra such as interactive features or information that could not fit in print versions<sup>1</sup>. There are a number of online newspapers on the Internet. Some of these have only extracts and general information, while others being complete newspapers with archives. The important characteristics of online newspapers include hypertext, interactivity, and multimedia. Hyperlinks enable navigation through online newspapers and connect

readers to related contents. News published on the online newspapers can be complemented with background information, graphics, photographs, animations, audio streams and video footage, sidebars, and links to e-resources such as online archives, magazines, e-books, and other online newspapers. Interactivity can be made available on the online newspapers to make online editions interesting. The interactivity could be achieved by engaging readers using RSS, Blogs, polls, surveys, opinions, comments, feedback, etc.

There has been a number of studies that assess the contents and design of online newspapers, and news websites. Williams and Nicholas surveyed USA and UK online news sites and found that American newspapers were exploiting the advantages of web information very well<sup>2</sup>. Massey and Levy analysed 44 English-language online newspapers from 14 Asian countries and found that the newspapers were focused on news contents but did not take advantages of immediacy, inter-sites hyperlinking, or communication between readers and the newspapers<sup>3</sup>. In a study, Dibeau found that most online newspapers had adopted innovations such as links to related information, and consumer services such as searchable classifieds<sup>4</sup>. Chyi and Lasorsa reported that websites produced by larger newspapers performed better in terms of structure, content, presentation and

interactive features<sup>1</sup>. Gilbert found very low readership overlap between online newspapers and their print counterparts<sup>5</sup>. Gao and Vaughan showed that link analysis was a novel and useful method that journalists and information professionals can use to gauge online readership and potential impact of online newspapers<sup>6</sup>. The study conducted by Ihlstrom and Henfridsson on genre change and interdependency of online newspapers in Scandinavia illustrated how online newspapers had established a number of communicative practices significant for recognising them as a distinct digital genre<sup>7</sup>. Hashim, Hasan, and Sinnapan found that content availability and choice was found to be the most significant element of interactivity. They found that majority of Australian online newspapers offered interactive functionality for expressing opinions, blogging, contests and polls, only one online newspaper provided genuine interactivity gaming<sup>8</sup>. Rahman found that contents availability and access to the contents were the most prevalent options in the online newspapers in Bangladesh<sup>9</sup>.

There is little research that focuses specifically on the contents and design of online newspapers in Asia. Therefore, a need was felt to analyse the contents and design of online English newspapers in India. This paper gives an informative preview of the contents and design of online English newspaper in India and will be useful for evaluating/deploying online newspapers and news websites.

## 2. OBJECTIVES

The main aim of the study was to analyse the contents and design of the online English newspapers in India with following specific objectives:

- (i) To evaluate the structure, style, and design of the online English newspapers in India.
- (ii) To identify the contents and coverage of the online English newspapers in India.
- (iii) To ascertain the nature of advertisements and special features that appears in the online English newspapers in India.
- (iv) To find out the patterns of news gathering, graphics and multimedia in the online English newspapers in India.

## 3. RESEARCH DESIGN

This study was conducted using website content analysis. The review of related studies shows that research methods like surveys<sup>10</sup>, web server log analysis<sup>11</sup> and link analysis<sup>6</sup> can also be used for analysing various aspects of the online news sites. The website of online

newspapers<sup>12</sup> was used to identify the news and URLs of the newspapers for the study. Twelve online English newspapers (*Annexure 1*) published daily in India were selected for the study. A checklist was prepared as the main tool to assess and evaluate the contents and design of the online newspapers. For preparing the checklist different online newspapers were observed and the literature, relating to the content analysis of online newspapers and websites were consulted. The checklist included general information about homepages, authority, accuracy, currency, graphics, multimedia, content, coverage, accessibility, cost, advertisement, special features, and application of Web 2.0 technologies. All the selected newspapers were carefully scanned and analysed based on the checklist. The consolidated data were presented in tabular form using Microsoft Excel for further analysis.

## 4. RESULTS AND DISCUSSIONS

### 4.1 Homepage Features

Homepage is considered to be the most important and often visited webpage of a website. It is the front page at which most web features are implemented. So it is very important that the homepage of any website should be appealing, user-friendly and informative to the readers. Table 1 shows that all the online newspapers have white background with about half of these have side bar or frame. A very few newspapers have moving text or marquee in their homepages. The Economic Times has a scrolling text box in the homepage.

Most of the online newspapers have provided links for contact address and copyright in their homepage. All the newspapers have advanced search facility. Majority of the newspapers have provision for feedback, comments, opinion, and polls from the readers. Majority of the newspapers provide sitemap and e-paper facilities, and about half of these provide e-mail and sign-in facilities also (Table 1). Even though the Times of India offers a wider range of services to its readers, the online versions of the Indian Express and The Hindu are most user-friendly.

### 4.2 Authority, Accuracy, and Currency

The authority and accuracy of information should intelligently be ascertained. Who is the author and what is his/her reputation, experiences, professional status, qualifications, etc., are required to be checked. Accuracy describes information that is factually irrefutable and complete. It should be assessed whether the information found on the online newspapers is accurate. Most of the webpages are self-published and self-edited. So the chances of inaccurate information are more. Table 2 shows that all the online newspapers are published by authorised and well recognised professional newspaper

Table 1. Homepage features of online English newspapers in India

Characteristics	Times of India	The Hindu	The Indian Express	Hindustan Times	Decan Herald	The Economic Times	The Statesman	The Telegraph	The Assam Tribune	Deepika	Mumbai Mirror	Daily News and Analysis
E-mail	✓	-	-	-	-	✓	-	✓	-	-	✓	✓
Mobile Alert	✓	✓	-	✓	✓	✓	✓	-	✓	✓	-	-
Newsletter	✓	-	✓	✓	✓	✓	-	-	-	-	✓	-
Feedback	✓	-	✓	-	✓	✓	✓	✓	-	✓	-	-
Opinion	✓	✓	✓	-	✓	✓	-	✓	✓	-	-	✓
Poll	✓	-	✓	-	-	✓	✓	-	-	-	✓	✓
Site map	✓	✓	✓	✓	✓	✓	-	✓	✓	-	✓	✓
Comment	✓	✓	✓	✓	-	✓	-	-	-	-	-	✓
Advanced search	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
E-paper	✓	✓	✓	✓	✓	✓	-	-	-	-	✓	✓
Sudoku	-	✓	-	-	✓	-	-	✓	-	-	-	-
Contact	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Copyright	✓	✓	✓	✓	✓	✓	-	✓	-	✓	✓	✓
Background	W	W	W	W	W	W	W	W	W	W	W	W
Side-Bar/frame	-	✓	-	-	-	-	✓	✓	✓	✓	-	-
Moving text/marquee	-	-	-	-	✓	✓	-	-	-	-	✓	-
Sign in	-	-	✓	✓	✓	✓	✓	-	-	-	-	-

companies. It was found that all the online newspapers chosen for the study met the basic requirements like clear and comprehensive information, and the contents followed the essential rules of grammar and composition. Usually the currency of online newspapers depends on the type of information it holds. Missing date not only mean that the document probably has not been updated recently. It can also be an indication that it was not written by professionals.

From the Table 2, it was observed that all the online newspapers gave importance to the currency of their contents and most of them have valid links except the Mumbai Mirror. All the newspapers meet its objective of informing the people about the daily happenings around the world. There are separate sections for debate, forum or opinion poll on all the online newspapers.

### 4.3 Graphics and Multimedia

Graphics and multimedia-supported information may attract the readers but it should not be the sole criteria for determining the quality of online newspapers. If the audio, video or other effects are used, then it must be appropriate to the purpose of the source. Table 3 shows how graphics and multimedia were used effectively by the online newspapers. All the newspapers had photos and videos in their sites and about half of these have flash-enabled photos and videos gallery. All the newspapers have separate link to the homepage. Majority of the newspapers are flash-enabled and about half of the newspapers provided interactive facilities such as blogs, RSS, feedback, polls, etc. The Hindu, The Daily News and Analysis, and The Statesman have interactive graphics on their online versions. A very few newspapers

Table 2. Authority, accuracy, and currency of online English newspapers in India

Characteristics	The Times of India	The Hindu	The Indian Express	The Hindustan Times	Decan Herald	The Economic Times	The Statesman	The Telegraph	The Assam Tribune	Deepika	Mumbai Mirror	Daily News and Analysis
Organisation/ Sponsor/Company	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dead links	-	-	-	-	-	✓	-	-	✓	-	-	-
Where about location	✓	✓	-	-	✓	✓	✓	✓	-	-	✓	✓
Information accuracy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Clear and legible	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Basic grammar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Last review of page	✓	-	-	-	-	-	-	-	-	-	-	-
Links valid	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓
Currency	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Public services	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Table 3. Graphics and multimedia design of online English newspapers in India

Characteristics	The Times of India	The Hindu	Indian Express	The Hindustan Times	Decan Herald	The Economic Times	The statesman	The telegraph	The Assam Tribune	Deepika	Mumbai mirror	Daily News and Analysis
Links to homepage	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Easy to print	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Graphic use	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	✓
Interactive graphics	-	✓	-	-	-	-	✓	-	-	-	-	✓
Photo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Video	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Statistical data	✓	✓	✓	✓	-	✓	-	-	-	-	-	✓
Flash enabled	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
Cartoons	-	✓	-	-	-	-	-	-	-	-	✓	✓

Table 4. Contents and coverage of online English newspapers in India

Characteristics	The Times of India	The Hindu	The Indian Express	The Hindustan Times	Decan Herald	The Economic Times	The Statesman	The Telegraph	The Assam Tribune	Deepika	Mumbai Mirror	Daily News and Analysis
Editorials	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Columnists	✓	-	-	✓	✓	-	✓	-	-	-	✓	✓
Most read	✓	-	-	-	-	-	-	-	-	-	✓	-
Most commented	✓	-	✓	✓	✓	✓	✓	-	✓	-	✓	✓
Astrology	✓	✓	-	-	-	-	-	-	-	-	-	✓
Business	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Entertainment	✓	✓	✓	-	✓	-	✓	✓	-	-	✓	✓
Environment	-	✓	-	-	✓	✓	-	✓	-	✓	✓	✓
Health	✓	✓	✓	✓		✓	-	✓	✓	✓	✓	✓
Life style	✓	✓	✓	✓	✓	-	✓	-	✓	-	-	✓
National	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
International	✓	✓	✓	-	-	-	✓	✓	-	✓	-	✓
Matrimonial	✓	-	-	✓	-	-	✓	-	-	-	-	-
Politics	-	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓
Stock	-	✓	✓	-	✓	✓	✓	-	✓	✓	-	✓
Sports	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Technology	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Weather	✓	✓	✓	✓	✓	-	✓	-	✓	✓	✓	✓
World	-	✓	✓	✓	✓	-	✓	✓	-	✓	✓	✓

provided cartoons in their websites. The online versions of The Hindu, The Mumbai Mirror and The Daily News and Analysis provided cartoons.

#### 4.4 Contents and Coverage

The validity, uniqueness, novelty, and purpose of information are some of the major points on which the contents of online newspapers are to be analysed. Table 4 shows that the online English newspapers in India have a common pattern of contents, coverage, and design. Contents availability and access to the contents are the most prevalent options in these newspapers. While all the online newspapers provided editorials, most of these also provided most commented news and articles. Coverage of

online newspapers gives an indication of the context to the areas the news pertains.

Table 4 reveals that most of the online newspapers cover news from the areas like business, entertainment, environment, sports, health, lifestyle, politics, science and technology, weather, etc. It was found that all the newspapers provide links to business and sports news. Most of the newspapers provide links to health, politics, and science and technology news.

Majority of the newspapers provide links to entertainment, environment, lifestyle, and weather news. A few newspapers have links to astrology and matrimonial also.

Table 5. Accessibility, advertisements and special features of online English newspapers in India

Characteristics	Times of India	The Hindu	The Indian Express	Hindustan Times	Decan herald	The Economic Times	The Statesman	The Telegraph	The Assam Tribune	Deepika	Mumbai Mirror	Daily News and Analysis
Accessibility	✓	✓	-	-	✓	✓	✓	✓	✓	-	-	✓
Browser dependency	-	-	-	-	-	-	-	-	-	-	-	-
Online subscription	-	✓	-	-	✓	-	✓	✓	✓	-	-	✓
Archive facility	✓	✓	✓	-	✓	✓	✓	✓	✓	-	-	✓
Indexed in search engines	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Free of cost	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Banners (Advt.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Classifieds	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓
Links to commercial sites	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
User send/share information	-	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓
Online shopping	✓		-	✓	-	✓	✓	✓	-	-	-	✓
Jobs	✓	✓	-	✓	-	✓	✓	✓	✓	-	-	-
Horoscope	✓	✓	✓	-	✓	✓	-	✓	-	-	-	✓

#### 4.5 Accessibility, Advertisements, and Special Features

The question of accessibility is to be taken into account. It should be assessed whether the newspapers are freely accessible or not. Generally, it is perceived that news websites are free of cost. There are certain websites, which require an agreement between the publisher and the subscriber to access the sites freely. Table 5 indicates that all the newspapers are freely accessible and browser independent. About half of the newspapers provide online subscription facility. The Hindu, The Decan Herald, The Statesman, The Telegraph, The Assam Tribune, and The Daily News and Analysis have online subscription facility. Majority of the newspapers provide links to access the online archive of their back issues, except The Hindustan Times, The Deepika and The Daily News and Analysis. There is no special cost of intellectual property of the contents of the online newspapers in India and all of these are public domains. Advertising can be categorised in many ways.

The most common mode of classifying various forms of advertising is in terms of product or service. It was found that all the newspapers have banners to publish advertisements and majority of these use top frame for the banners. All the newspapers have links to classifieds. Pop-ups are present only in the online version of The Times of India. Majority of the newspapers provide the facility to post information for the readers. About half of the newspapers provide links to online shopping, horoscope, and job advertisements.

#### 4.6 Application of Web 2.0 Technologies

The applications of Web 2.0 technologies in online newspapers have great importance as these increases the interactivity with the audience. The investigators assessed the extent of use of Web 2.0 technologies in the online English newspapers in India. Table 6 shows the use of Web 2.0 technologies such as Blogs, RSS, Facebook, and so on. The use of Web 2.0 technologies by the online English newspapers in India is very low.

Table 6. Application of Web 2.0 technologies by online English newspapers in India

Characteristics	The Times of India	The Hindu	The Indian Express	The Hindustan Times	Decan Herald	The Economic Times	The Statesman	The Telegraph	The Assam Tribune	Deepika	Mumbai Mirror	Daily News and Analysis
Blogs	✓	-	✓	✓	✓	✓	-	-	-	-	✓	✓
RSS feeds	✓	✓	✓	✓	-	✓	-	✓	-	-	✓	-
Podcasts	-	-	-	✓	-	✓	-	-	-	-	-	-
Twitter	✓	-	✓	✓	-	-	-	-	-	-	-	-
Facebook	-	-	✓	✓	-	-	-	-	-	-	-	-

Among the Web 2.0 technologies used by the newspapers, RSS, Blogs, and Facebook are the most used technologies. The online versions of The Times of India and The Hindustan Times, and The Indian Express provide links to Twitter also in their sites.

## 5. CONCLUSION

The online English newspapers in India have a common pattern of contents, coverage and design. Contents availability and access to the contents are the most prevalent options in these newspapers. All the newspapers are more or less similar in their design and structure with few exceptions. All the newspapers are flash enabled and some of these are using photos and videos gallery. Dead links can be found in Assam Tribune and The Economic Times. The online versions of The Hindu, The Statesman, and The Daily News and Analysis have interactive graphics. This is a very interesting feature and can be adopted by all other online newspapers in India. All the online newspapers have presented news with different headings like business, entertainment, environment, health, lifestyle, weather, etc. The online newspapers designers should try to arrange news in a more appealing manner.

The online versions of the Times of India, The Hindu, The Indian Express and the Statesman have provided information about the most read, commented, and e-mailed news, which help the readers to assess the value and importance of the news. This facility may be provided by all the online newspapers in India. Similarly all the online newspapers have news grouped in 'editorials' and 'headlines', which is innovative and should be given due attention. The online versions of The Hindu, The Statesman, and The Decan Herald provide the facility to send information for the readers. Online version of Decan Herald provides the facility to save articles and other

online newspapers may also follow this facility. Even though majority of the newspapers have RSS, Blog and Facebook facilities, the potentialities of these tools are not exploited fully.

The authors found that the online versions of the newspapers were initially formed as a complement to the existing print versions of the newspapers. Looking at the increasing capability of ICT, the online newspapers should try to attract and engage more readers by delivering their products and services in real time, increasing the quantity of information, upgrading news with photographs, audios and videos, enhancing the richness and timeliness of news, and application of Web 2.0 technologies to engage readers. Online newspapers in India can exploit e-mail, blogs, RSS, web postings, live chat rooms, online polls and surveys, discussion forums, etc. to engage their readers.

These tools and utilities will provide interactive communication, in the way to make the online newspapers a public sphere of discussion. E-mail can be used as easiest way of interpersonal communication between journalists and readers. Online discussion forums are one of the most effective ways to turn the online newspapers into a public platform of debate. Online newspapers can also use mobile platforms to expand their audiences and connection with readers using social media such as Twitter and Facebook. The growing power of social networking is evident from the time spent by readers on sites such as Facebook. The time spent on social networking sites is growing three times faster than that spent on the Internet and represented a strong channel to connect with readers. The online newspapers in India should exploit the emerging Internet and mobile platforms especially the Web 2.0 technologies to attract and increase their readers.

## REFERENCES

1. Chyi, H.I. & Lasorsa, D. Access, use and preferences for online newspapers. *Newspaper Research Journal*, 1999, **20**(4), 2-13.
2. Williams, P. & Nicholas, D. The migration of news to the web. *Aslib Proceedings*, 1999, **51**(4), 122-34.
3. Massey, B.L. & Levy, M.R. Interactivity, online journalism and English-language web newspapers in Asia. *Journalism and Mass Communication Quarterly*, 1999, **76**(1), 138-51.
4. Dibeau, Wendy. How U.S daily newspapers are using their internet counterparts. Paper presented to the University of Luton Creativity and Consumption Conference, Luton, U.K., 29-31 March 1999. <http://com.miami.edu/car/Luton-WD.pdf> (accessed on 14 December 2009).
5. Gilbert, C. Newspapers and the internet. *Nieman Reports*, 2002, **56**(2), 35-38.
6. Gao, Yijun & Vaughan, Liwen. Web hyperlink profiles of news sites: A comparison of newspapers of USA, Canada and China. *Aslib Proceedings*, 2005, **57**(5), 398-411.
7. Ihlstrom, Carina & Henfridsson, Ola. Online newspapers in Scandinavia: A longitudinal study of genre change and interdependency. *Inf. Technol. People*, 2005, **18**(2), 172-92.
8. Hashim, Lina; Hasan, Helen & Sinnapan, Suku. Australian online newspapers: A website content analysis approach to measuring interactivity. In 18th Australasian Conference on Information Systems, 5-7 December 2007, Toowoomba. <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1435&context=commpapers>. (accessed on 14 December 2009).
9. Rahman, Mashinur. Interactive option in online newspapers of Bangladesh. *Pakistan J. Soc. Sci.*, 2008, **5**(6), 620-24.
10. AlShehri, F. & Gunter, B. The market for electronic newspapers in the ArabWorld. *Aslib Proceedings*, 2002, **4**(1), 56-70.
11. Nicholas, D.; Huntington, P.; Lievesley, N. & Wasti, A. Evaluating consumer website logs: Case study of The Times/Sunday Times web site. *J. Inf. Sci.*, 2000, **26** (6), 399-411.
12. Online newspapers. Indian Newspapers. Web Wombat Pty Ltd. <http://www.onlinenewspapers.com/india.htm> (accessed on 14 December 2009).

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