

EVALUATIVE STUDY OF UNIVERSITY WEB SITES AND THEIR LIBRARY WEB PAGES

By

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Abstract

Tremendous growth & diversification of knowledge have emerged with multidisciplinary subjects. Information has been identified as one of the vital resources needed for the success in almost every major human endeavor. Growth of website is increasing very fast. So it is necessary to study about reliability of them. The success of website hinges on how much users consider the information credible on the website to which he/she was accessing. "Information credibility has been seen as one of several 'key information problem. Present paper is aimed to study and analyze the various aspects of the credibility of Websites Deemed universities of Maharashtra. 21 Deemed universities from all over the Maharashtra are considered for the study. The analysis of the data represents the extent and level of credibility possessed by these Universities.

INTRODUCTION:

Today we are living in digital world. Tremendous growth & diversification of knowledge have emerged with multidisciplinary subjects. Information has been identified as one of the vital resources needed for the success in almost every major endeavour. Collection, organization and dissemination of information with economy and efficiency dampened on the skills and expertise of the librarians. Information is needed in all aspects of society and in all disciplines. Users demand information up-to-date and quickly. The demands of information users and researchers are increasing day-by-day. Old technologies of information exchange are being replaced by new technologies and methods. In this age

internet become an essential medium for information exchange and with its helps to maintain scholarly communication anyone can communicate his/her information with another at anywhere in the world. Today web becomes a part of people daily life. As the emergence of internet today normal person is using we directly or indirectly for different purpose, for example for booking tickets, banking work, railway information, share market updates, college and university admissions, shopping and mostly for information search. It becomes an important, fastest and easiest way for any type of information. The World Wide Web offers a great wealth of information, as well as the opportunity for people to express themselves and exchange ideas. This makes it a potentially great place to accomplish research on many topics. But putting documents or pages on the Web is easy, cheap or free, unregulated and unmonitored. The Internet is used increasingly for educational purposes. Many campuses are requiring students to have computers to take advantage of Web-accessible classrooms, and many educators are incorporating the Web into their curricula. That's why role of library and information professionals has changes worldwide. So the librarian, who was the keeper of books, is now the provider of information and learning opportunities.

WHAT DOES WEB CREDIBILITY MEAN? :

Credibility is a perceived quality that does not reside in an object, a person, or a piece of information. Therefore, in discussing the credibility of a computer product, one is always discussing the perception of credibility¹. Many scholars agree that credibility perceptions result from evaluating multiple dimensions simultaneously. Although the literature varies on how many dimensions contribute to credibility evaluations, the vast majority of researchers identify two key components of credibility as trustworthiness and expertise. A person makes an assessment of both trustworthiness and expertise to arrive at an overall credibility assessment. "Web credibility is about making your website in such a way that, it comes across as trustworthy and knowledgeable"². In nutshell, web credibility is a perceived quality of a website by a user, whereas web evaluation is the process of web credibility.

EVALUATION:

"Evaluation is defined as the systematic process of determining the merit, value and worth of something"³. It is a general term that includes various aspects of performance measurement and assessment. Activities include laboratory experiments, regional, national and international survey or quasi-experiments time series, analysis, online monitoring of user- system interactions, observations of use and other forms of data collection"⁴

Today different types of techniques have been developed for the evaluation of web sites and web resources.⁵

Need of evaluation of web site:

- Website consist information is self published
- Not all web sites are equally reliable
- Sometimes may not be authentic

- May not be current

NEED OF THE STUDY:

The success of website hinges on how much users consider the information credible on the website to which he/she was accessing. "Information credibility has been seen as one of several 'key information problem' as far back as the 1980s."⁶ The result of various studies shows that from last few years proliferation of web site with low quality information as well as sites without right misleading. Web users are becoming more skeptical of information.

- Many websites contain low quality information
- User experience is affected by the credibility of website
- Not all sources are equally valuable some time many not be authentic.
- Success of websites hinges on how much the web information is credible
- Hackers may alter the information.

Scope of the Study

The present study is based on "Evaluative study of University Websites and their library web pages", the study is done only for the deemed universities in Maharashtra. In the State of Maharashtra there are 21 Deemed universities as per the UGC norms, so the present study is limited to these 21 Deemed universities of Maharashtra.

UNIVERSITIES IN MAHARASHTRA:

Though Maharashtra is major hub of business, the state is also known for educational excellence. There are several universities in Maharashtra, which provide quality education to the people of the state. There are also numbers of educational and research institutions of world repute in this Maharashtra state. Maharashtra is the third largest state In India, with Mumbai (Bombay) as the capital of Maharashtra state government. Good Universities set the basis of a healthy society by contributing space for higher education and research. The Universities in Maharashtra are helping the students to do quality higher education as it gives a peaceful academic environment. As students from different parts of the country and also from abroad come to study in the Universities of Maharashtra, students and scholars widen a better understanding of the variety of the country. The multi cultural zeal along with the qualified professors of the Maharashtra universities is not only creating quality research paper but informed citizens and thus helping the country to develop⁷⁻⁸.

OBJECTIVES:

The following are the objectives of this study:

1. To identify the importance of website credibility.
2. To find out the Deemed Universities in Maharashtra and their websites and their library web pages.
3. To collect the data regarding the structure and content of Websites.
4. To compare the websites and contents and their library WebPages.
5. Draw conclusion and offer suggestions for the betterment of website.

HYPOTHESIS:

Hypotheses applied for the study were:

1. A majority of the deemed universities in Maharashtra has hosted websites on the Internet.
2. The university websites are heterogeneous in the structure and contents.
3. Most of the websites do not confirm to the established guidelines.

LITERATURE REVIEW:

Stanford Persuasive Technology Lab & Makovsky & company⁶ launched their lab's research on Web credibility in 1998 and presented the report as 'Stanford-Makovsky Web credibility Study 2002 investigating what makes web sites credible today' this report covers large scale study. They report major findings.

Fogg⁷, et al. gathered the comments people wrote about each site's credibility and analysed the comments to find out what features of a website get noticed when people evaluate credibility. The team found that the design look of the site was mentioned most frequently followed by comments about information structure, and information focus. In this study, 2,684 people evaluated the credibility of two live websites on a similar topic (health) and the authors shared participant's comments in the top 18 areas that people noticed when evaluating websites' credibility.

Fogg⁸ also proposed a theory that users notice and interpret various websites elements to arrive at an overall credibility assessment.

Jasek⁹ offered a short set of simple-to-implement guidelines in his pamphlet "How to Design Library Websites to Maximise Usability" to help librarians to design usable library websites. The guidelines are based on a survey of literature on library website design and usability testing; results of usability reviews conducted by Elsevier for library customers, and established best practices in website usability.

Karp and Karp¹⁰ offered guidelines about the web designing. Though not directly related to web credibility, adopting those guidelines will help to improve a website. The guidelines explain intelligent use of graphic elements and design that can add greatly to the attractiveness of a web page.

Mangala Hirwade¹¹ evaluated the websites of Indian universities with special reference to their library's web pages. Two hundred and seventy three Indian universities were selected for this study. Out of these, 91 (59.87 percent) have included information about their libraries in their websites. Major findings and suggestions were presented and directory of Indian university websites were created as a by-product of the study.

METHODOLOGY:

In the study, self-evaluative method¹⁰ was adopted, which include the following:

- A review of state-of-the-art websites.
- Designing a check list²
- Evaluation of the websites¹⁵⁻¹⁶ and data collection.
- Analysis and interpretation of data.

DATA ANALYSIS:

Table 1. Web site classification by year of university Establishment

Year of Establishment	No. of Universities
Before 1990	06
Between 1991 to 2000	04
Between 2001 to 2005	10
After 2005	01
Total Universities	21

Table 1: Among all 21 Deemed universities of Maharashtra only 19 university webs are studied. In remaining two, Site of one university is excluded due to technical support by site server and another one hasn't any web site link. Studying about the establishment of university it is found that 48% universities are established between the year of 2001 to 2005. It shows the growth of phenomenal growth in the number of universities is established between these years.

Table 2. Web site classification by URL format

URL	.com	.org	.ac.in	.edu	.edu.in	.in	res.in	Total
No. of Universities	02	02	04	02	06	02	01	19

Table 2: Maximum number of universities (31.57%) has their URL with 'edu.in'. Next to 'edu.in', 'ac.in' is the most used URL. In remaining 'com', 'org', 'edu' and 'in' each of these four is used by two-two universities and just a single university used 'res.in' for their university URL.

Table 3. Web site classification by Design matter

Design	No. of Universities
Are there graphics in sites	19
Animation available	17

Background and font color matching	15
No. of Visitors is given	05
Site page format is followed by sub pages	17

Table 3: reveals that all the web sites have graphics or pictures (100%). Near about 90% sites has animation, 80% sites have background and font colour matching. But only 26% of sites provide the information about the visitors to that particular site.

Table 4. Web site classification by Easy to use issues

Easy to use issues	No. of Universities
Site map is given	12
Search Facility available	10
The site has picture gallery	08
Home page link in sub pages	17

Table 4: To study easy to use issues is more important because it offers user-friendly access to the visitors. Which play an important role in the credibility of the site. Table 4 reveals that 63% site has site map, it shows that 37% of the sites of universities doesn't have site map. It is very hard to find out the particular field form the entire pages of sits so it is needy to have search facility for the user. But only 52% sits helps user with search facility. To have records about the task and the major functions at our institute or university it play great role to put impression on the visitors. It can be done by having picture gallery or photos of important programs. More than 58% sites doesn't have picture gallery. The link for home page from any sub page is must to give. And it is a very good sign in studied universities that 90% of the sites give this facility of home page link to return at home page form any sub page of the site.

Table 5. Web site classification by Reliability Topics

Reliability Topics	No. of Universities
History of University is mentioned	19
Information about accreditation is mentioned	04
Faculties and Departments information is provided	13
Photo of VC is given	03
Information about university certification	00
Site has copyright registration	15
Postal Address is given	18
Telephone no is given	18
Contact e-mail address is given	18

Table 5: With the study of 5th table we can understand that all the sites mentioned the history of the university by which user can understand the background of the university. It is the very happy task to say that university has any certification of accreditation, but is also find that only 21% of sites are giving information relating to their accreditation. Vice chancellor is the head of the university, user can know about their VC only from 15% of sites. Copy right site and data on the web site shows more credibility about the information 21% universities are not yet make copy right to their site. How can anyone feel reliability about their information and site? 100% of the sites provide information about the postal address, telephone contacts and e-mail ids.

Table 6. Web site classification by Validity factor

Validity factor	No. of Universities
Information about students achievement	12
Links for feedback	07
Date of updated is given	05
Academic calendar is given	04
Site is maintained without any internal external advertisement	00

Table 6: Validity is a matter to take decision about any product. So researcher studied some contents by which user can understand the validity about the information. If students achieved so success in their competition or in exam it should be noted more than 50% of sites has information about their student's achievement. User can give their feedback to 37% of the sites. Today students or the users demands for newer information about anything. To update the site information is plays great role in credibility and reliability about the information about the university. Here more than 74% universities are not providing information about when the sites are updated.

Table 7. Web site classification by Expertise Factor

Expertise Factor	No. of Universities
The site offer information more one language	01
Information about research activity is given	14
The site appeared on the first page of Google search	19
Yahoo search Result	19
Rediff search Result	19
Site is large (not less than 5 pages)	19

Table 7: This table no 7 show various elements about the expertise factors about the sites to give information about more and more user it needy one but it is found that only a single site give facility to access the information in the another language.

Table 8. Web site classification by Library information

Library information	No. of Universities
Information about Library is provided	14
Separate library pages available	13
Working hours of library is given	10
OPAC link is available	07
Kinds of collection is given	07
Number of books are noted	07
No. of journal subscription is given	08
Information audio visual collection is available	06
Information about online resources is available	08
Information about digital resources is available	06

Table 8: It is said that ‘Library is the heart of every institute’. University is a representative of the colleges running under its affiliation. Various researcher and students are using university library for their success in particular exam and for their research work. So it should be necessary to give information about the collection holding of the university library. This table discussed various contents about library information. User can know about university library from 74% of the sites. 68% of universities has special library page, only 53% sites give details about the working hours of the library. Only 37% of sites are able to provide the collection details. Today we are living in the digital era, user are depending on digital information but only 32% university libraries are providing facility of digital resources to their students.

Table 9. Web site classification by Library Services

Library service	No. of Universities
Lending	05
Reference	06
Referral	03
Inter Library Loan	06
Indexing	03
CAS	04
Reprographic	07
Internet	03
Study Room	01
Bibliographic	02
User orientation	03
Document Delivery service	02
Online Database	02
Cyber Library	01

Table 9: To help the researchers and the user by giving different information facilities services is an important role of the university library or any library. The Reprographic service, Reference service and Inter library Loan services are the common library services served by maximum libraries. Only some countable libraries are giving services like Internet service, bibliographic service, Document Delivery service, online Database, CAS.

Table 10. Web site classification by administration related information

Administration related information	No of Universities
Information about Placement cell is given	07
Information about hostel facility is available	08
Facility for Alumni data is available	06
Facility of NCC, NSS is available	02
Information about sports facility is given	05

Table 10: Table no.10 focuses on the administrative information about the university but it is found that more than 70% of university sites are not providing reliable information to their user.

FINDINGS:

- Maximum of the universities are established after the year of 2000.
- Maximum universities chose edu. in domain for the URL.
- All sites are having graphics and providing information about history of university and contact details.
- Very few sites are having information for their update details and academic event calendar.
- Information about the library and library hours and details about their holding is given by almost libraries.
- Library collection, no of books and journals, their digital collection, web resources, no of subscribed journals and different kinds of library services are provided by some of the websites.
- Non academic information is rarely provided by the websites.

SUGGESTIONS:

- Majority of the websites doesn't have the information about the date of update which can be a valuable issue about the credibility, that's why it is must to provide it.
- Home page put first impression on the user very few sites are providing information about the VC, information about accreditation, certification if any, it should be given.
- Very few site giving about administrative information so it should be given by all the sites.
- Language can be option based which will add more clarity and easier to use and end user can be allowed to chose his/her language which helps to increase credibility.

- Library is a heart of every institute majority sites are not providing detail information about library resources so it should provide.

CONCLUSION:

Credibility of website is a major issue in those days. Many students are taking decision by observing university websites. Study shows that all deemed university websites are different in many respects. Majority of deemed universities in Maharashtra has their own websites. The growing user of internet among the general public and dissemination of information pertaining to deemed university activities, services, rules and regulation, admissions, various sections, staff. Library web pages are excellent media for publishing detail information about collection, services and different activities as well as resources. But very few of the university sites provide detail information about the library and its resources and services. The website and library pages need to be evaluated periodically using established criteria like web design, accessibility, arrangement etc. which will help to improve website according to the user's need and credibility and reliability issue.

REFERENCES:

1. Fogg, B.J. & Tseng, Hsiang. The Elements of computer credibility. ACM Digital Lib. (Accessed on 8May 2012).
2. Fogg, B.J., et al. What makes websites credible? A report on a large quantitative study. ACM Digital Lib., (Accessed on 8May2012).
3. Fuhr, N., Hansen, P., Mabe, M., Micsik, A. and Solvberg, I. (2001). Digital libraries: A generic classification and evaluation scheme. Springer Lecture Notes in Computer Science, 2163, p. 187~A, \$199. <http://www.springerlink.com/content/w22qmkk09ncy59av/>. (Browsed on 28th July 2012).
4. Fourth DELOS Workshop (2003). Evaluation of Digital Libraries: Test beds, Measurements, and Metrics. Final report to National Science Foundation, Digital libraries Program. NSF report on DELOS workshop on DL, evaluation, 21 p. http://www.dli2.nsf.gov/internationalprojects/working_group_reports/evaluation.pdf. (Browsed on 22nd July 2012).
5. Tan, wei-siog, Liu, Dahi & Bishu Ram (2008) Web evaluation : Jeuristic evaluation vs user testing Internation Journal of industrial ergonomic Doi: 10.1016/j.ergon 2008.02.012.
6. D. Harrison McKnight ,Charles J. Kacmar (2007) Factors and effects of information credibility, New York, NY, USA:ninth international conference on Electronic commerce Pages 423-432 available on <http://dl.acm.org/citation.cfm?id=1282180> (Accessed on 30th sept. 2012).
7. University Grants Commission (UGC): Model act for universities. http://www.ugc.ac.in/policy/model_parti.html (Accessed on 15 May 2012)

8. University Grants Commission (UGC).
<http://www.ugc.ac.in/inside/deemeduniv.html#maharashtra> (Accessed on 17 May 2012).
9. 'Stanford-Makovsky Web credibility Study 2002 investigating what makes web sites credible today http://secure.proofreadnow.com/Credible_Web_site.pdf(Accessed on 17 May 2012)
10. Fogg, B.J, et al. How do users evaluate the credibility of websites? A study with over 2,500 participants. ACM Digital Lib. (Accessed on 15 April 2005).
11. Fogg, B.J. Prominence-interpretation theory: Explaining how people assess credibility online. ACM Digital Lib. (Accessed on 27 April 2007).
12. Jasek, Chris. How to design library websites to maximize usability. <http://libraryconnect.elsevier.com/lcp/0502/lcp0502.pdf> (Accessed on 13 July 2008).
13. Karp, T. & Karp, M. Art and the zen of web sites. <http://www.tlc-systems.com> (Accessed on 03 May 2008)
14. Mangala, Anil Hirwade. Websites of Indian universities: An evaluation. Himalaya Publishing House, Bombay, 2005.
15. Chandran, D. & Ramesh Babu, B. Web resources: Access and evaluation. In Library resources and services in the digital era, edited by B. Ramesh Babu, et al. SRM University, Kattangulathur, 2006. pp. 127- 35.
16. Web Site optimisation: Maximum website performance. <http://www.websiteoptimization.com>
17. B. Ramesh Babu, A. M. Naredra Kumar & S. Gopalkrishnan: Credibility of University Websites in Tamil Nadu , DESIDOC Journal of Lib. & Inf. Tech., Vol.29No.3, May 2009 pp 16-29