

DOES SEARCH ENGINE OPTIMISATION (SEO) INCREASE SCIENTIFIC JOURNALS' VISIBILITY, PRESTIGE, AND IMPACT FACTOR AS A NEW METHOD?

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Abstract *Publishing in an ISI or high impact factor journal is a concern for researchers to increase their citation record and their prestige in the world of Science. The study shows that search engine optimisation (SEO) not only increases visibility of scientific articles but also helps to receive more views, downloads, and citations. This paper is the first study looking SEO in a new approach.*

Keywords: *Search Engine Optimisation, SEO, Page Ranking, Impact Factor, Citation*

INTRODUCTION

Nowadays, in the modern world, Internet is the most important communication tool and is recognised of great significance incustomer potential for everyone. With the arrival of network marketing, one of the especial, notable, and enjoyable techniques for increasing sale has emerged as Search Engine Optimisation (SEO) of productions online. The successful websites are those which use more Internet advertisement or new modern lower cost marketing technique, search engine optimisation. Briefly, SEO as a strategy enables a website to appear in top result lists of a search engine for some certain keywords using meta tags. There are many other different ways and factors that enable a website to improve the page rank for relevant search queriesand move up top results. Some of them are: graphic and design or redesign of the website, link building, back link development, text contents, using tags,blogging to develop link popularity, mobile app development, and metadata implementation. It means that by SEO, visibility and accessibility of a web page extremely increases. So, visibility is defined as the ranking position for any professional organisation or company and every Internet web publisher desires good webpage visibility in search engine results lists.

With the development of computers and accelerated development of information technology, networking, SEO and many other industries resulted in rapid growth of World

Wide Web. In 1990s, electronic online serials (non-printed materials) parallel with or without their traditional print serials, dependent or independent, come along and their life came in to existence.In particular, developed countries and leading publishers all around the world proved successful in electronic online publications market due towich they found that they should advertise their materials more in comparison to other publishers with new methods directly or indirectly to sell better. By this reality and ahidden competitive advertising among publishers and journals, discussions started on topics like “Does SEO increase visibility of them?”or“Does SEO improve impact factor and prestige of scientific journals?”and “Is it useful for building academic reputation?” This turned a major area of discussion and was discussed by experts in Library and Information Science fields and after that among leading publishers all across the world at many conferenceto increase the citations of journal articles.

In order to find the answer of above questions, the present study tries to investigate a scientific ISI journalwith low impact factor andevaluates whether SEO of journal’s website would assist to improve impact factor of itor not and then verify whether SEO has any correlation to impact factors(IF) of journals or not.

METHODOLOGY

Whole professional websites and e-commerce sites are keen to attract a wider web audience. On the other hand the publishers of journals chiefly the scientific journals are interested in it too. So, gaining a high page rank, especially in Google, is the aim of majority of them with the help of SEO. Because SEO is a guarantee for digital online collections and resources that works for more discoverability and helps web crawlers to fetch the URLs of websites and add URLs to queue and finally index and store data, it notifies web crawlers to maximise traffic on a website and about collection of a website's visibility and reach to faculties and other users and ease to find contents swiftly. According to the paragraphs above, after optimising search engine of a journal's web pages, your customers will increase by SEO and then you have more opportunities to sell your products. Thus, in this case and in the first step, in-person visits, orders, request of information, publication downloads, publication page views, and finally publication citations will increase and improve and after that the value of your scientific journal and organisation is higher.

The importance of research and journal publications in hospitality and tourism is widely documented. The scientists should recognise that SEO is not a set of tricks it is simply helping the right audience to find what they are looking for as a great modern opportunity.

In order to substantiate the method that I used, I should tell a story about it. After 5 years of existence of a scientific peer reviewed and ISI journal, executive members of a journal asked me as an experienced librarian what measures they could take to further improve the visibility and promote their publications. The journal's website had a basic design and the members were not professional in computer fields. I suggested them some basic and simple ways of SEO – as I had learned before to improve the visibility of the journal's site for less than seven months. Some methods that I used was registration on periodical directories like Ulrich, tweetation in social media and SMO activities (*social media optimisation*) such as Facebook¹, YouTube², LinkedIn³ and Research Gate⁴. According to a survey, Research Gate is the most popular and effective platform increasing visibility of research papers. Research Gate is also a free social-networking site for academicians. There are many different scholar websites and SNS⁵ for boosting page rankings and visibility such as Epernicus⁶, Academia.edu,

Mendeley⁷, studymode⁸, Scribd⁹, linguist list¹⁰, ORCID¹¹, etc. Registration is free and after opening account, you can upload your articles for more visibility or you can introduce your journal table of contents. Use of social networking sites and research-profiling sites help to disseminate the research works and share experiences with others of same interests or academic background. The use of this technique is the only part of the original method that I did. SEO is broad and needs more study to learn.

I checked the ranking of the site in Google and also citation of articles in Web of Science occasionally. Monitoring your traffic is one of the significant methods that an executive manager or SEO manager should pay attention to. I tried hard and found that I was right and it works. The ranking number of website from 6 shifted to 5 in Google Ranking and our visitors developed slowly and some of the new audiences found the journal is perfect and compatible for their research and also for their new articles to submit.

Accordingly, we were successful in Alexa Traffic Rank¹² too and we first observed that the journal's website did appear in the first fifty results on Google.

Results indicate that rank is an important determinant of clicks; Alexa Traffic Rank is calculated by combining a website's average number of daily visitors and page views over the past month. Google Page Rank, as the Google founders Larry Page and Sergey Brin put it, is a tool developed to rank websites that are listed in the Google search engine. The page rank is given in a scale of 0-10.0 is the lowest possible score for a site that has no organic click, while 10 is the highest. The higher the page ranking of your site, the greater the amount of traffic it receives.

As a result, Google is the search engine mostly used by visitors all around the world and to discover and access information on the Web. Most people start by using a general search engine such as Google, Yahoo, Msn, or Bing. Each search engine has its own algorithms for ranking a piece of content, such as a journal article and many search engines estimate the content's relevancy and popularity as measured by links to the content from other websites. For the first time I checked Alexa before starting simple ways, our scientific journal rank was more than 11 million and I changed it to 4.7 million patiently and I knew in order to be lastingly effective, and maintaining in a top organic SEO ranking, optimising shall be an uninterrupted, long-term work.

It means that the popularity and visibility of the journal is higher than before and we are more famous.

1 Facebook.com

2 Youtube.com

3 LinkedIn.com

4 Researchgate.net

5 Social Networking Services

6 Epernicus.com

7 Mendeley.com

8 studymode.com

9 www.scribd.com

10 www.linguistlist.org

11 ORCID.org

12 www.alexa.com

On the other hand as the negative control I stopped the process of SEO for one week. One of them was sending email to the potential audiences. The rank of the site decreased in Alexa.

Furthermore, optimising the articles for search engines will greatly increase its chance of being viewed and/or cited in another works. Citation indexes already figure in many disciplines as a measure of an article's value; there is evidence that article views/downloads are also beginning to count in the same way. And the crucial area for optimisation is your article's abstract and title, which are freely available to all online. So, as a librarian I always checked the keywords of any scientific articles with care in Mesh database after reviewing by editorial boards and before publication and again I refer it to the reviewers to suggest the keywords to the authors. It was virtually collaboration between a team like a symphony that everyone liked this harmony.

RESULTS

So, equipping a journal's website with SEO is a kind of marketing to be in the top of search engines for scientific online journals and everybody will cite your paper if they can read it easily or on time and without walking to the library. It will satisfy scientific journal owners need at affordable cost and now new scientific publications all around the world will need SEO managers instead of executive managers. Social media metrics, altmetrics and also tweetation are useful for building a scholar or academic reputation and citation. It means that Institute for Scientific Information would change some evaluations of scientific journals.

CONCLUSION

Nowadays publishing in a ISI or high impact journal is a concern for researchers to increase their citation record. As I compared scientific journals and the effect of SEO, concentration on journals by IT men would increase citation of papers more than past. But the importance of this study is to understand whether the attitude of scientists to scientific journals will change or not by this intervention and is it acceptable to them? Which scientific journals are using these methods to increase their impact factor? Is this study endangering some scientific journal position? Do researchers of the world need more research that what publications have used these methods? And many other questions. So, as our result demonstrates for the first time, we can claim and anticipate that some journals use these methods in a hidden or informed way.

REFERENCES

- Adrian, T. (na). Google Page Rank and Alexa Rank. *Cabikhosting.com*. Retrieved from <http://cabikhosting.com/file/SEO-Ebook/Google%20Page%20Rank%20and%20Alexa%20Rank.Pdf>
- Ale Ebrahim, N. (2013). Effective Strategies for Increasing Citation Frequency. *International Education Studies*, 6 (11). DOI:10.5539/ies.v6n11p93
- Baye, M. R., Santos, B. De los., & Wildenbeest, M. R. (2014). Search Engine Optimization: What Drives Organic Traffic to Retail Sites?. Retrieved from http://kelley.iu.edu/babur/research/SEO_What_Drives_Organic_Traffic_to_Retail_Sites.pdf
- Evans, M. P. (2007). Analysing Google Rankings through Search Engine Optimization Data. *Internet Research*, 17(1), 21-37. DOI: 10.1108/10662240710730470
- Fattahi, R., Mansourian, Y., & Arastoopour, S. (2006). *Serial Management Handbook: Collection Development, Organization and Services* (2nd ed). Tehran: Dabizesh, Chapar.
- Gandour, A., & Regolini, A. (2011). Web site search engine optimization: A case study of fragformet. *Library Hi Tech News*, 28(6), 6-13. DOI:10.1108/07419051111173874
- Kammerer, Y., & Gerjets, P. (2012). Chapter 10 How Search Engine Users Evaluate and Select Web Search Results: The Impact of the Search Engine Interface on Credibility Assessments, in Dirk Lewandowski (ed.) *Web Search Engine Research (Library and Information Science, Volume 4)* Emerald Group Publishing Limited, 251-279. DOI:10.1108/S1876-0562(2012)002012a012
- Law, R., & Veen, R. vander. (2008). The Popularity of Prestigious Hospitality Journals: A Google Scholar Approach. *International Journal of Contemporary Hospitality*, 20(2), 113-125. DOI:10.1108/09596110810852113
- Noorden, R. V. (2014). Online Collaboration: Scientists and the Social Network. *Nature*, 512, 126-129. DOI: 10.1038/512126a
- Solomon, D. (2008). *Developing Open Access Journals: A Practical Guide*. Chandos Information Professional Series. UK: Chandos Publishing.
- Tips for Authors. (2012). *Tips for Authors: Writing and Search Engine Optimization*. Springer. Retrieved from http://static.springer.com/sgw/documents/1298243/application/pdf/H4552_Author_SEO_Tips_Jan2012.pdf
- Writing for SEO, John Wiley & Sons. (2013). Retrieved from http://exchanges.wiley.com/authors/writing-for-seo_334.html
- Yalcin, N., & Kose, U. (2010). What Is Search Engine Optimization: SEO. *Procedia Social and Behavioral Sciences*, 9, 487-493. DOI: 10.1016/j.sbspro.2010.12.185
- Zhang, J., & Dimitroff, A. (2005). The Impact of Metadata Implementation on Webpage Visibility in Search Engine Results (Part II). *Information Processing and Management*, 41(3), 691-715. DOI:10.1016/j.ipm.2003.12.002