EARTHQUAKE ASSOCIATIONS' WEBSITES: VISIBILITY AND CO-LINKS ANALYSIS

Amir Reza ASNAFI

Faculty Member of Information Science, Shahid Beheshti University, Tehran, Iran
aasnafi@gmail.com

Maryam PAKDAMAN NAEINI

PhD Student of Information Science, IIEES, Tehran, Iran
m.pakdaman@gmail.com

ABSTRACT

The main objective of the present research is the study of the visibility extent and co-links analysis of the Earthquake Associations' websites in all around the world and identifying the core websites of these associations. Between earthquake associations' websites, we could not see relation and strong links. Most of 20 studied websites have weak traffic visit. Survey on back links of earthquake engineering websites' shows that Italian National Association of Earthquake Engineering with 442318 back links is the most highly linked among studied websites. Investigations showed that from the 20 examined websites of this research, 3 websites have more than 43348.65 back links. The webpage of these associations are core websites in the field of earthquake association's websites. These associations are Italian National Association of Earthquake Engineering, Australian earthquake engineering society –AEES, Spanish Association for Earthquake Engineering.

INTRODUCTION

Scientific associations in each country can play the vital role in generation of the scientific knowledge, training human resources and contribution in the development of the society and improvement of the science. Main objective of the present research is study on visibility extent and co-links analysis of the earthquake associations, societies, and foundations' websites in order to identifying the core websites of these associations.

LITERATURE REVIEW

Holmberg & Thellwall (2009) research indicated that information collected from and about links between web pages and web sites can reflect real world phenomena and relationships between the organizations they represent. Yet, government linking has not been extensively studied from a webometric point of view. The aim of this study was to increase the knowledge of governmental interlinking and to shed some light on the possible real world phenomena it may indicate. They show that interlinking between local government bodies in Finland follows a strong geographic, or rather a geopolitical pattern and that governmental interlinking is mostly motivated by official cooperation that geographic adjacency has made possible.

Holmberg (2010) studied the use of co-inlinks to local government websites, assessed whether co-inlinking follows geographic patterns and investigated reasons for creating the co-inlinks. Co-inlinking to

municipal websites was shown to follow geographic patterns, and co-inlinking was strongest within the (geographically organized) functional regions suggesting that the main trend was for geo-political linking. In addition, the majority of co-inlinkings to municipalities were to municipalities in the same functional region and the municipalities in the functional regions were very well connected to each other.

Danesh et al. (2012) studied the core websites of the Islamic universities. The results indicated that the King Saud University's website, from Saudi Arabia, has the highest visibility extent and in other words is the most prestigiouswebsiteinthestudied websites. The findings of co-links analysis showed that the websites of the universities of the Capitals of the Islamic world has cooperation with each other, with the method of cluster analysis in 12 clusters and with the method of multi-variable analysis in 11 clusters that tow case of studied cases in the method of cluster analysis, were national clusters (Iran and Turkey countries).

Asnafi & Pakdaman (2014) studied on the Visibility and co-links analysis of the Iranian scientific associations' websites in the field of Technical and Engineering Sciences.Investigations showed that from the total of 24 examined websites of Iranian scientific associations' websites in the field of Technical and Engineering Sciences, 4 websites have more than was 3555.45 back links. These associations are Iranian Society of Cryptology, Iranian Corrosion Association, Informatics Society of Iran, and Society of the Centres for Research & Development of Mines & Industries.

RESEARCH QUESTION

- How are the ranking of Earthquake associations' websites on the incoming links and their ranking in the Google?
- How is the visibility of websites of Earthquake associationsin all around the world on the web impact factor?
- Which websites are the core websites of Earthquake associations' websites?
- How is the status of co-links analysis for websites of Earthquake associations in all around the world?

RESEARCH METHOD

We were gathered 20 Earthquake association websites from 35 websites through the website of the European Association for Earthquake Engineering and other WebPages on the net. For data gathering, we used Woorank[1], Majesticseo[2] and Google page rank recurring Oct 2014. In order to con-link analysis Webometric Analyst Software[3] was used. For determination of core websites, the total number of incoming links will divide to the number of websites. In order to analyze the active websites was used Webometric methods.

FINDINGS

Findings revealed that in Earthquake associations' websites there is not see any strong links. Most of 20 websites had weak traffic visit. Survey on back links showed that Italian National Association of Earthquake Engineering with 442318 back links is the most highly linked among studied websites.

In Table1, we can see ranking of Earthquake associations' websites on Google Rank and visibility of these websites. Indian society of Earthquake Technology had very high traffic with eight score in GPR[4]. It might be because of huge society of this country. After that earthquake association of Australian, Nonwage, America and Slovenia had the most GPR.

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[1]. www.woorank.com
[2]. www.majesticseo.com
[3].http://lexiurl.wlv.ac.uk/index.html
[4].Google Page Rank

Table 1: Ranking of Earthquake associations' websites on Google

website	Name	GPR	traffic	Backlink	Rank
http://www.iitr.ernet.in/iset/	Indian Society of Earthquake Technology	8	very high	4241	62.6
http://www.aees.org.au/	Australian earthquake engineering society -AEES	6	low	184677	62.6
http://www.ngi.no/en/Geohazards/	Norwegian Society for Earthquake Engineering		low	28403	60.7
http://www.seismosoc.org/	SEISMOLOGICAL SOCIETY OF AMERICA (SSA)		low	5420	72.9
http://www.zag.si/si/index.php	Slovenian Association for Earthquake Engineering		low	33375	54.2
http://clsmee.geophys.bas.bg/index_en.php	National Institute of Geophysics, Geodesy and Geography	5	high	99	44.1
http://www.oge.or.at/	Australian Association for earthquake engineering and structural dynamics			46	40.1
http://www.ieea.ir/	Iranian Earthquake engineering Association		low	17505	57
http://www.nzsee.org.nz/	New Zealand Society for Earthquake Engineering		low	4804	66.5
http://www.sgeb.ch/	Swiss Society for Earthquake Engineering and Structural Dynamics		Very low	772	32.3
http://www.seced.org.uk/	The Society for Earthquake Engineering and Civil Engineering Dynamics, UK		Very low	515	50.8
http://www.eaee.boun.edu.tr/bulletins/v20/v20web/bulgaria.htm	Bulgarian National Committee for Earthquake Engineering		very high	1916	53.4
http://www.caee.uottawa.ca/	Canadian Association for Earthquake Engineering	4	Very high	170	47.4
http://www.dgeb.eu/Home	German Society for Earthquake Engineering and Structural Dynamics			37	46.8
http://www.jaee.gr.jp/en/	Japan Association for Earthquake Engineering		low	2415	52.2
http://www.anidis.it/en/	Italian National Association of Earthquake Engineering		very low	442318	47.8
http://www.caee.org.cn/eng.htm	Chinese Association of Earthquake Engineering CAEE	3		601	39.5
http://www.seism.org.ua/seism_e.html	Association for Ukrainian Earthquake Engineering			407	42.7
http://www.esee.eg.net/index-en.html	Egyptian Society for Earthquake Engineering (ESEE)	0	medium		34.4
http://www.aeis.es/	Spanish Association for Earthquake Engineering		very low	139252	55.2

CORE WEBSITES

In order to determination of core websites, the total number of incoming links divided to the number of websites. In this research, the total number of incoming links was 866973 links. Regarding to 20 examined websites the factor for determination of core websites was 43348.65. Investigations showed that from the total of examined websites three websites have more than 43348.65 back links. The webpages of these associations are core websites in the field of earthquake association's websites that were shown in below Table.

Table 2: Core websites in earthquake associations

Name	website	Back links
Italian National Association of Earthquake Engineering	http://www.anidis.it/en/	442318
Australian earthquake engineering society -AEES	http://www.aees.org.au/	184677
Spanish Association for Earthquake Engineering	http://www.aeis.es/	139252

In Figure 1, indicates that there is not strong links among studied websites. It can be seen that two clusters have strong links. It had shown that statue of co-links analysis for websites of Earthquake engineering associations in all around the world was not good.
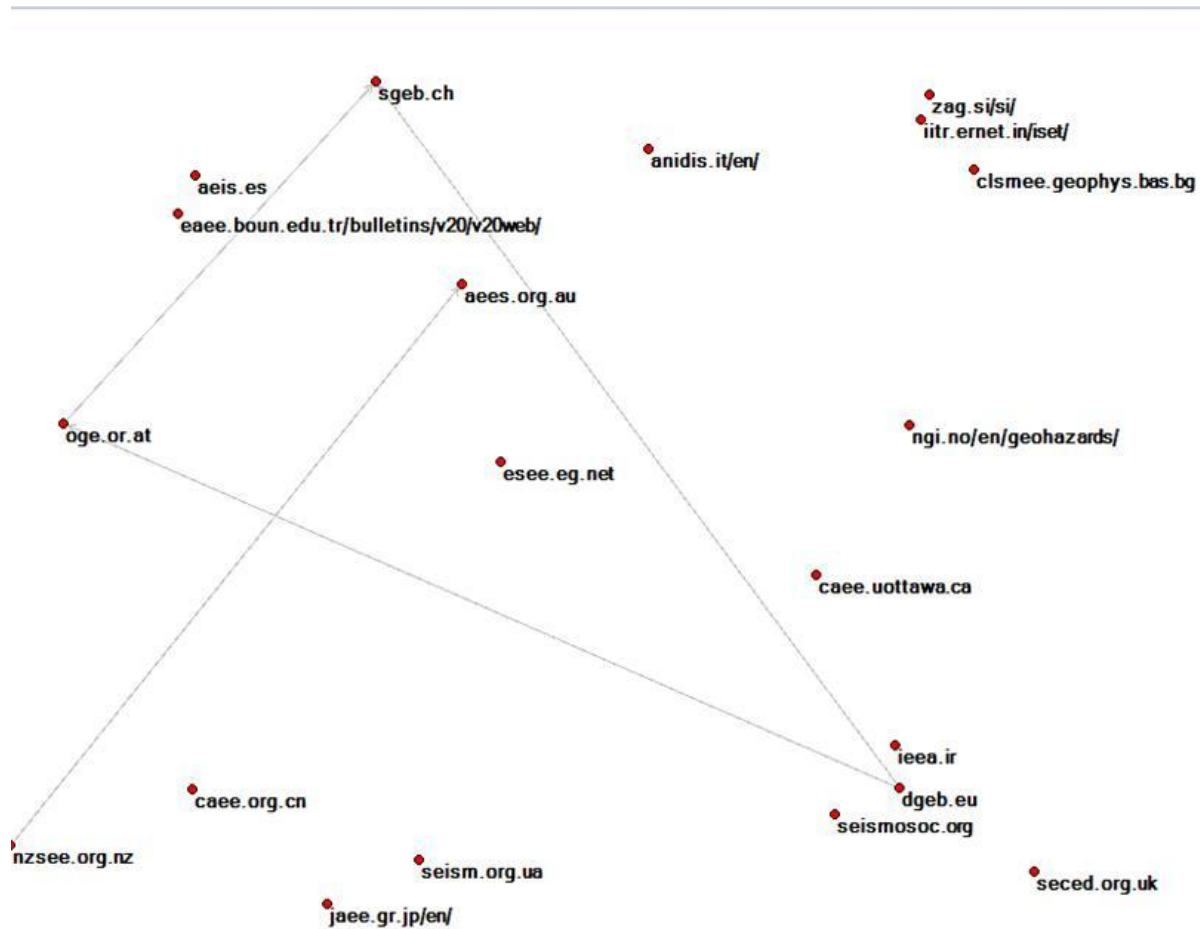

Figure 1: Status of co-links analysis for websites of Earthquake associations

CONCLUSIONS

Scientific websites are interaction point of their users with different events and access to their needed information and services. Various and useful pages, updated contents, user friendly interface, fast access to information and using multiple electronic services for users are some factors that affect visibility of websites of Earthquake associations. Noruzi (2006) stated that attention to factors like: quality, size, language, inclusion and so on can impact of websites success. Thellwall (2003) believed that there is not any certain reason for interactive links. Subject relation or geographical proximity can impact on link networks. Danesh et al (2012) stated that web designers must identify how to attract links and web traffic in order to promote the quality and content of websites. Current research revealed that Server administrators and designers of

studied municipal websites must have a strategic plan for contents and services of websites for users. They should understand items and factors that can lead to absorb more links to their websites. Findings showed that websites of Earthquake associations have not desirable status in position of collaboration and link networks. Since these websites are common in contents, if they have co-link together, then their visibility will be increase. Between these entire websites just earthquake associations of Swiss, Australian, and German made a triangle link. In addition, website of Australian earthquake engineering society and website of New Zealand Society for Earthquake Engineering had a good cooperation together. It Shows that this kind of colink pattern don't follow geographical pattern.

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