6 ICLEHI 2017-049 Tawatchai Suksida

A Study of Website Visibility in Webometrics Ranking of World University by Using SEO Tool: Case Study of Thailand Rajabhat University

Tawatchai Suksida*, Lalita Santiworarak
Dhurakij Pundit University,
Prachachuen Road, Bangkok, Thailand
*Corresponding Author: tawatchai.suk@dpu.ac.th

ABSTRACT
Today, World is change to digital age and people can access information rapidly because of technology is higher than former times. Website is the one of tool for organizations to presented information of them. The most important thing of website is content due to content will communicate with user and explain everything which organization presented. In addition, Educational Institution also use website to presenting their information to outside too and there are many organization ranks website of education for several purpose, webometrics ranking of world university too. Webometrics Ranking of World Universities is the ranking of education website which assessed accessibility of website content. They use 2 major indicators to evaluate the accessibility of website, first is visibility and the last one is activities. In this paper, we study the visibility indicator of webometrics ranking of world university by analyze relational of top 10 and bottom 10 of Rajabhat universities in Thailand by using Search Engine Optimization Tool (SEO Tool). This article aims to evaluate the number of backlinks of Thailand Rajabhat University's website by using difference SEO tools and result from this paper should help administrator of website to manage their content on the site and the result from the tools will help them to move up their site in Webometrics Ranking of World Universities too.

Keywords: Website ranking, webometrics, website visibility, website content, backlinks, search engine optimization, SEO

Introduction
Nowadays, people can search information which they want to know by using search engine tools easily and quickly, especially website information. It is a representative of an organization to present academic news, courses, student life and other useful information. Webometrics (Isidro F. Aguillo, 2017) ranking of world universities is an organization which rank educational institution around the world by Consejo Superior de Investigaciones Científicas (CSIC), a research group in Cybermetrics Lab of Spain in 2004. Webometrics ranking of world universities rank educational institution 2 times per year, the first times is the end of January and another one is the end of July. The main objective of the ranking is supporting the open access concept and transfer knowledge from educational institution to whole society. Webometrics using 2 indicators (Isidro F. Aguillo, 2017) to prove website information accessibility. The first indicator is 50% of website visibility by evaluation from website impact score which the website impact is number of backlinks to the educational institution website. Webometrics use 2 tools for evaluate backlinks include Ahrefs and Majestic SEO and the other one is 50% of website activity. The activities of website include 10% of Presence, 10% of Openness and the last one is 30% of Excellent.

In this paper, we study a relationship of educational institution website visibility in top 10 and bottom 10 of Thailand Rajabhat universities by using 2 groups of search engine optimization tool or SEO tool. The first groups is tool of webometrics ranking of world university consist Ahrefs and Majestic SEO and another group is Alexa and SEMRush. This article aim to evaluate the number of backlinks of Thailand Rajabhat university's website by using difference SEO tools and result from this paper should help administrator of website to manage their content on the site and the result from the tools will help them to move up their site in Webometrics ranking of world universities too.

Objectives
1. To evaluate number of backlinks of educational institution's website by using different tools.
2. To present the tools which can use for evaluate website visibility.

Research Questions
The number of backlinks from external websites which returned to the educational institution's website from the SEMRush and Alexa tools consistent with Ahrefs and MajesticSEO tools which the tools of Webometrics.

Theory
The methodology of webometrics ranking of world universities have two indicators to rank educational institution website and the one from two of webometrics indicators is visibility which evaluate by impact values. Impact values can get from Majestic SEO and Ahrefs database by get the total numbers of backlinks from outside educational institution website and bring them to normalize. After that, the maximum value between the two sources is selected. It's present in Impact Rank on webometrics ranking table. Another SEO tools which can get backlinks from the website is SEMRush and Alexa. SEMRush and Alexa are Search Engine Optimization : SEO Tools, There have backlinks checker tool for analyze the links from outside the website. SEMRush backlinks checker feature are checking the number of external links, present a type of backlinks domain and show their geolocation. Alexa's competitor backlink tool present url of backlinks and show the missing url of educational institution website. Thus, in this article, we want to know finding consistency between webometrics using tools and another SEO tools.

Methodology
1. Get Thailand ranking from Webometrics ranking of world universities in January 2017 focus on visibility indicator of Thailand Rajabhat universities.
2. Divide the data for 2 groups, first group is top 10 of Thailand Rajabhat universities rank and the last one is bottom 10 of Thailand Rajabhat universities rank.
3. Study of visibility indicator by consider the impact of website. The impact of website is backlinks which getting from Ahrefs, MajesticsSEO, SEMRush and Alexa tool.
4. Compare the data from number of backlinks of top 10 and bottom 10 of Thailand Rajabat universities and finding the relationship of them.

Population and Sample
Population of this article is Thailand universities's website which ranked by Webometrics ranking of world universities in January 2017 overall 180 websites and the

sample of the paper is top 10 and bottom 10 of Thailand Rajabhat universities's website which ranked by Webometrics in January 2017.

Tools

In this paper use 2 groups of tool for collected data. First group is tool which Webometrics using include Ahrefs and Majestic SEO and the second group is tool of search engine optimization or SEO, SEMRush and Alexa.

Literature Review

R.K. Pandey selected 1 to 19 universities from Webometrics ranking of world universities of July 2010, Academic Ranking of World Universities (ARWU), Times Higher Education (TIMES) and 4 International Colleges and Universities (4ICU) to comparing each other and the result is 35% of indicators of Webometrics can manage by website owner and 65% is evaluated from website visibility and google scholar. The evaluation of website visibility is number of backlink to website. The number of backlinks to website is a business which huge income in website searching business. In addition, Ahmad Bakeri, Abu Baka and Nur Leyni study about website visibility of Webometrics by compare the backlinks between 1 to 30 of webometrics ranking and 30 from bottom in webometrics word ranking universities 2013 and the result is number of backlinks and number of website accessibility of top 30 in webometrics ranking more than 30 bottom in webometrics ranking.

Finding and Discussion

The number of backlinks which getting from Ahrefs and MajesticSEO is showing on Table 1 and the number of backlinks from SEMRush and Alexa is show on Table 2

Table 1
The number of backlinks which getting from Ahrefs and MajesticSEO

Thailand Rajabhat Webometrics Rank (Jan 2017)	Impack Rank in Webometrics	University	University Website	Ahrefs Total Backlinks	MajesticSEO Total Backlinks
1	2575	Suan Sunandha Rajabhat University	www.ssru.ac.th	118,442	235,894
2	448	Buriram Rajabhat University	www.bru.ac.th	127,860	87,768
3	1909	Nakhon Pathom Rajabhat University	www.npru.ac.th	9,253	1,343
4	4454	Suan Dusit University	www.dusit.ac.th	18,583	9,707
5	4460	Pibulsongkram Rajabhat University	www.psru.ac.th	16,902	18,002
6	4048	Phuket Rajabhat University	www.pkru.ac.th	7,308	2,995
7	3121	Ubon Ratchathani Rajabhat University	www.ubru.ac.th	142,218	15,020

Thailand Rajabhat Webometrics Rank (Jan 2017)	Impack Rank in Webometrics	University	University Website	Ahrefs Total Backlinks	MajesticSEO Total Backlinks
8	5750	Rajabhat Maha Sarakham University	www.rmu.ac.th	1,349,085	7,093
9	3477	Phranakhon Rajabhat University	www.pnru.ac.th	100,931	108,419
10	2418	Roi-Et Rajabhat University	www.reru.ac.th	494,983	2,575
30	7586	Kanchanaburi Rajabhat University	www.kru.ac.th	390,818	3,230
31	7969	Thepsatri Rajabhat University	www.tru.ac.th	45,283	3,715
32	8959	Surindra Rajabhat University	www.srru.ac.th	48,606	13,875
33	9842	Nakhon Sawan Rajabhat University	www.nsru.ac.th	7,498	9,317
34	9906	Rajanagarindra Rajabhat University	www.rru.ac.th	10,333	41,947
35	10309	Nakhon Si Thammarat Rajabhat University	www.nstru.ac.th	304,159	3,104
36	12551	Kalasin Rajabhat University	www.ksu.ac.th	57,773	15,489
37	12328	Muban Chom Bung Rajabhat University	www.mcru.ac.th	915,506	1,300
38	13434	Chaiyaphum Rajabhat University	www.cpru.ac.th	21,162	2,781
39	99999	Phetchaburi Rajabhat University	www.pbru.ac.th	5,266,318	1,723,870

From Table 1, The most number of backlinks to educational institution website by using Ahrefs tool is Phetchaburi Rajabhat University which ranked in the last of Thailand Rajabhat universities and they have 5,266,318 backlinks but Webometrics ranked this university in 99999th of impact rank because of some reason, therefore the next most number of backlinks by Ahrefs tool is Rajabhat Maha Sarakham University which ranked in 8th of Thailand Rajabhat universities and they have 1,349,085 backlinks and the least number of backlinks to educational institution website by using Ahrefs tool was ranked in 6th of Thailand Rajabhat universities, they have 7,308 backlinks. As for MajesticSEO tool, the most number of backlinks by using this tool is Phetchaburi Rajabhat University, they have 1,723,870 backlinks and the same reason like Ahrefs tool then the next most number of backlinks by using MajesticSEO tool is Suan Sunandha Rajabhat University which ranked in 1th of Thailand Rajabhat universities and they have 235,894 backlinks to

their website and the least number of backlinks was ranked in 37th of Thailand Rajabhat universities and they have 1,300 backlinks to their website. The total of backlinks in Table 1 are showing in chart format on figure 1.
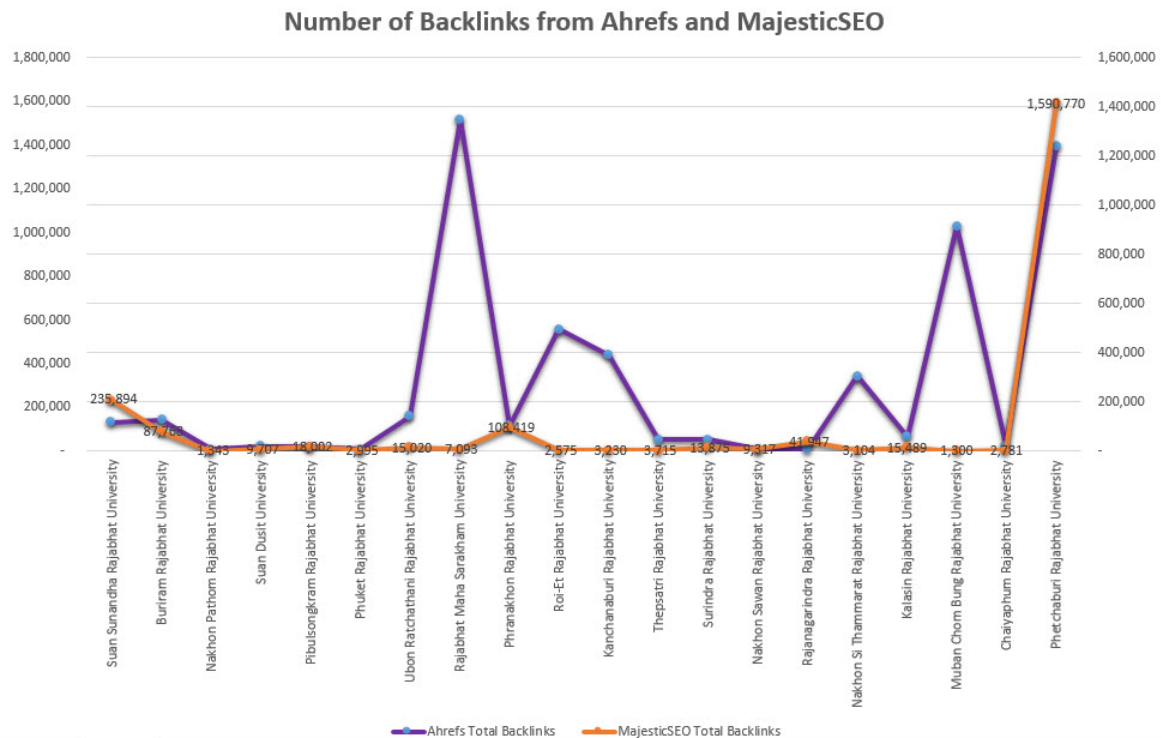

Figure 1. This is a chart which showing the number of backlinks from Aherfs and MajesticSEO.

From figure 1, the most of backlinks to educational institution website by using Ahrefs and MajesticSEO tools was ranked in top 10 of Thailand Rajabhat universities by Webometrics ranking of world universities.

Table 2
The number of backlinks which getting from SEMRush and Alexa

Thailand Rajabhat Webometrics Rank (Jan 2017)	Impack Rank in Webometrics	University	University Website	SEMRush Total Backlinks	Alexa Total Size Linking in
1	2575	Suan Sunandha Rajabhat University	www.ssru.ac.th	27,000	710
2	448	Buriram Rajabhat University	www.bru.ac.th	270,000	3,741
3	1909	Nakhon Pathom Rajabhat University	www.npru.ac.th	65,100	1,355
4	4454	Suan Dusit University	www.dusit.ac.th	32,700	549
5	4460	Pibulsongkram Rajabhat University	www.psru.ac.th	50,500	349

Thailand Rajabhat Webometrics Rank (Jan 2017)	Impack Rank in Webometrics	University	University Website	SEMRush Total Backlinks	Alexa Total Size Linking in
6	4048	Phuket Rajabhat University	www.pkru.ac.th	3,600	529
7	3121	Ubon Ratchathani Rajabhat University	www.ubru.ac.th	4,900	442
8	5750	Rajabhat Maha Sarakham University	www.rmu.ac.th	44,100	365
9	3477	Phranakhon Rajabhat University	www.pnru.ac.th	5,000	288
10	2418	Roi-Et Rajabhat University	www.reru.ac.th	83,500	409
30	7586	Kanchanaburi Rajabhat University	www.kru.ac.th	1,200	144
31	7969	Thepsatri Rajabhat University	www.tru.ac.th	1,700	118
32	8959	Surindra Rajabhat University	www.srru.ac.th	3,700	185
33	9842	Nakhon Sawan Rajabhat University	www.nsru.ac.th	2,400	163
34	9906	Rajanagarindra Rajabhat University	www.rru.ac.th	3,200	128
35	10309	Nakhon Si Thammarat Rajabhat University	www.nstru.ac.th	10,800	156
36	12551	Kalasin Rajabhat University	www.ksu.ac.th	2,800	79
37	12328	Muban Chom Bung Rajabhat University	www.mcru.ac.th	975	96
38	13434	Chaiyaphum Rajabhat University	www.cpru.ac.th	10,200	71
39	99999	Phetchaburi Rajabhat University	www.pbru.ac.th	2,000	142

From Table 2, The most number of backlinks to educational institution website by using SEMRush tool is Buriram Rajabhat University which ranked in 2rd of Thailand Rajabhat universities and they have 270,000 backlinks and the least number of backlinks to educational institution website was ranked in 37th of Thailand Rajabhat univevrsities, they have 975 backlinks. As to Alexa tool, the most number of backlinks by using this tool is Buriram Rajabhat University too, they have 3,741 backlinks and the least number of backlinks was ranked in 38th of Thailand Rajabhat univevrsities and they have only 71 backlinks to their website. The total of backlinks in Table 2 are showing in chart format on figure 2.
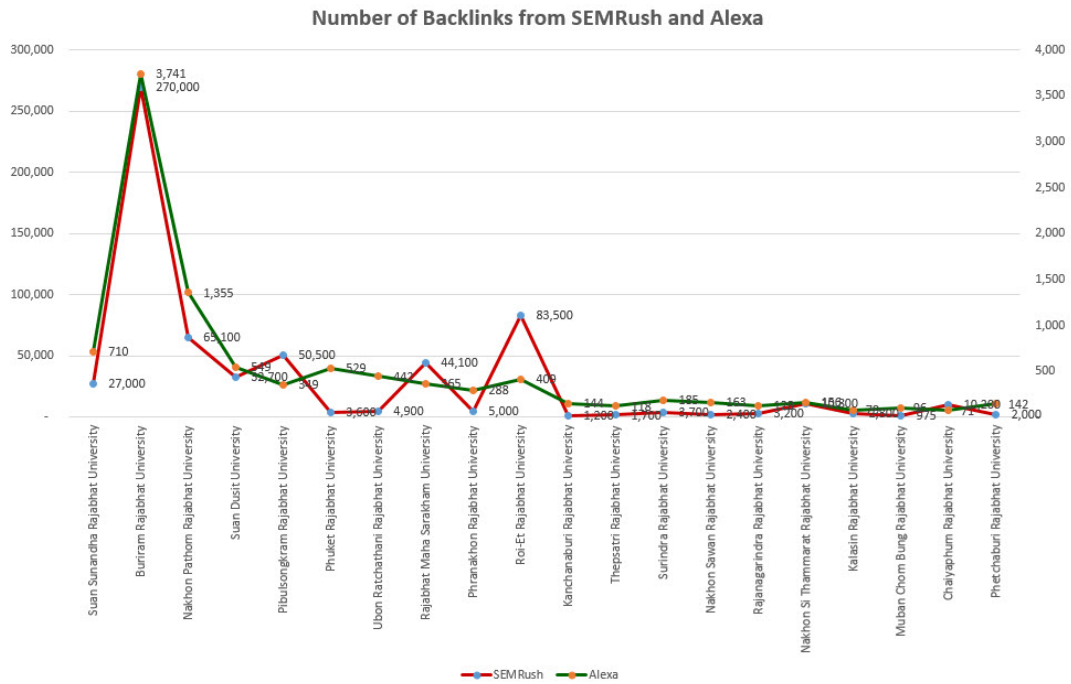
Figure 2. This is a chart showing the number of backlinks from SEMRush and Alexa.

From figure 2, the most of backlinks to educational institution website by using SEMRush and Alexa tools was ranked in top 10 of Thailand Rajabhat universities by Webometrics world ranking and the least of number of backlinks was ranked in bottom 10 of Thailand Rajabhat universities by Webometrics ranking of world universities.

Limitations

The result of total backlinks to educational institution website have discrepancies because there are some university have more over total backlinks to their website by using Ahrefs and MajesticSEO tool which the tool of Webometrics and when Webometric corrected the data then effected to some universities and the impack ranking of Webometrics which that effected was ranked in 99999th. That cause is a little effect to answer the research question due to mostly number of total backlinks was ranked in top 10 of Thailand Rajabhat universities.

Recommendation
1. Should analyse details from backlink to educational institution website because it will help website administrator to create their content on the website.
2. Should be study about speed of website loading that will help user when their clicking back to the webpage.

Conclusion

The number of backlinks from external websites which returned to the educational institution's website from the SEMRush and Alexa tools consistent with Ahrefs and MajesticSEO tools which the tools of Webometrics.

The result of total backlinks from external websites which returned to the educational institution's website by using Ahrefs and MajesticSEO tool which the tool of Webometrics consistent with SEMRush and Alexa tool which the tool of search engine optimization or SEO tool. In this paper, we found a relationship between total number of backlink and visibility indicator of Webometrics ranking of world universities, that is the university

which have much more number of backlinks from external website will get high score of visibility indicator too. Therefore, we can use SEMRush and Alexa which SEO tool for preliminary evaluate the visibility of website too that if the educational institution website have high score in visibility indicator, it will move up in Webometrics ranking of world universities too.

References

Alexa website admin, Competitor Backlink Checker. [Online], Available : *http://try.alexa.com/marketing-stack/competitor-backlink-checker*, Apr 2 2017.

Ahmad Bakeri Abu Baka and Nur Leyni, N. P. J., Webometric Study of World Class Universities Websites, *Qualitative and Quantitative Methods in Libraries (QQML) Special Issue Bibliometrics and Scientometrics,* 2015, 105 – 115.

Isidro F. Aguillo, About Us. [Online], Available : *http://www.webometrics.info/en/Aboutus*, Jan 25 2017.

Isidro F. Aguillo, Methodology. [Online], Available : *http://www.webometrics.info/en/Methodology*, Jan 25 2017.

R.K. Pandey, Empirical Validation of Webometrics based Ranking of World Universities, *International Journal of Computer Science and Information Technologies*, 5(1), 2014, 580 - 584.

SEMRush website admin, Backlink. [Online], Available : *https://www.semrush.com/features/backlinks*, Apr 2 2017.