

Future of Rankings in Higher Education

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Abstract: *In the late 1990s, some institutions started discussing the idea of comparing universities and educational institutions according to certain criteria. Since then, the rankings of universities have become widespread. With the rapid spread, extended and developed scientific progress and technological development every day as we have not seen before, and with the increasing spread of the Internet, these sites have become dependent on the Internet to obtain the data they rely on in the ranking of these universities. Because the ranking of universities, educational institutions, higher education institutions, colleges, and institutes is one of the main elements that have been used in the past two centuries, and because the ranking of universities has become one of the most important ways and means to measure the development or decline of universities, it was important to clarify the mechanisms of the ranking of universities in This period of the twenty-first century and the expected perception for tanking of university for the future period. The aim of this research paper is to present a study on the methods and methodologies that can be used to measure the ranking of universities, taking into account the technological development that has taken place over the past period and to determine what is the possibility of relying on the ranking in the future as a tool to measure the progress and development of universities and the possibility of relying on the Internet as a reliable means of ranking. Observations regarding the educational institutions' perception of ranking are also discussed.*
Keywords: *Ranking, University Rankings, Higher Education Institutions Ranking, Future Ranking, Top Universities, Standards, Indicators, Future.*

I. INTRODUCTION:

Over the past years, Internet has become the main source of information and access to information and having the required information has become one of the easiest things and means at all due to the usage of 4G and 5G networks and the availability of the Internet everywhere. This spread and the development that took place at the time prompted companies that provide web content services and website statistics services to develop their work and improve the mechanism of implementation and increase the quality of work to obtain high results aimed at ensuring the credibility and reliability of these centres.

For universities and educational institutions and institutions working within the crucible of higher education, the aim of the university's website was to provide a platform to present ideas and perspectives in general and a portal to communicate with students and to respond to their messages and inquiries.

As time progressed, with the introduction of the concept of university ranking based on web content, universities and educational institutions had to develop and design their sites and add forums and blogs in addition to increasing the scientific content published not forget to focus on attracting visitors and add exclusive content which cannot be permitted except for subscription in addition to uploading a lot of student-specific content to the site, which increases the spread of the site among students and visitors.

This method has caused anomalies in the results of the ranking of universities that rely on web-content based and the reason for this is the following:

Visits to the site (leads to) more site spread on search engines (leads to) increased indexed pages (leads to) increased reliability of the site to other sites (leads to) higher Alexa site rankings (leads to) increased search engine power (leads to) more site visits.

In this case, the ranking loses part of its credibility in the case of large universities and those with large numbers of students because in this way, those universities will have fake, illegal ranking and would have in its methodology and main focus to increase the visits and publish rich text files even if they are not valuable or meaningful for the sole purpose of improving its ranking.

Similarly, reliance on these criteria regarding the number of visits to the university's website cannot be completely abandoned because it constitutes the overall impression of these universities and hence, the strength of their presence and impression, whether local, regional or international, the regional influence they play and the international factors they have in particular, international universities and international institutions that target and attract international students.

II. Resorting to social media for ranking of higher education institutions: problems and solutions.

One alternative that has been used in the past few years is to rely on social media to rank universities.

Social media has emerged in the past decade and is now the most popular and popular website due to the services they offer regardless of the short-term age they have!

Revised Manuscript Received on September 25, 2019.

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Table1: Dates for establishment of most common social media websites

Website	Date was founded
YouTube	February 14th, 2005
Facebook	February, 1 st , 2004
Reedit	June 23, 2005
VK	Jan, 1 st , 2006
Instagram	October 6, 2010
Twitter	March 21 st , 2006

According to Alexa.com, social media is very widespread around the world.

Table2: Results on 14-9-2019 at 6.57 GMT ¹

Website	Alexa World Ranking
YouTube	2
Facebook	7
Reedit	19
VK	20
Instagram	28
Twitter	32

Some university ranking agencies have included and used specialized social media rankings. For example, a ranking based on the number of subscribers to the university's YouTube channel (the greater the number of subscribers in the channel the more an indication of the strength and spread of the university) or a ranking based on the number of likes on the university's Facebook Fanpage (the greater the number of likes the more the university has a greater spread) Or a ranking based on the number of retweet for a tweet posted from the official university account on Twitter (the more followers the more tweets the more the university ranks). The real problem facing this type of ranking is the existence of some sites that provide paid subscription and likes services and therefore, we cannot have a real and actual measurement of the real strength and the actual deployment of universities on social media. In addition, the marketing and paid advertising published on these sites significantly increased in illogical, irrational and unreasonable way in the results of the ranking of these universities on social networking sites. The factor of transparency is one of the most important factors in the ranking of universities. This factor concerns the transparency of information, accessing and processing. If the university relies on random generators or generates untrue or unhelpful visits for its website, it is then working to the

contrary to the main objective of the ranking process. I am going to clarify this point at a later stage.

Another major problem facing this type of ranking (Web-based ranking) is similar to the previous one: large universities (those with tens of thousands of students) usually get astronomical traffic to their websites and thus get a great amounts of followers and shares of their ideas and projects. This circulation does not reflect the actual and real value or scientific value of this university and therefore, when the results of ranking are published, there would be a very large anomaly between inputs and outputs.

Another problem that we have with tried to target with concern when focusing on social media ranking is that social media is not as widespread and geographically distributed around the world in a similar way! In more details, the physical factor plays a very significant and influential role at this particular point. It is unfair to treat universities in the regions of Africa as much as we do in Scandinavia!

For example, Facebook is spread in East Asia, India, Pakistan and the Middle East, while it is rarely used in Europe or the United States. On the contrary, Twitter is widespread in the United States and Europe while it is rarely used in the Middle East (except Turkey and Saudi Arabia) and East Asia.

WORLD MAP OF SOCIAL NETWORKS Ranked 2nd - January 2019

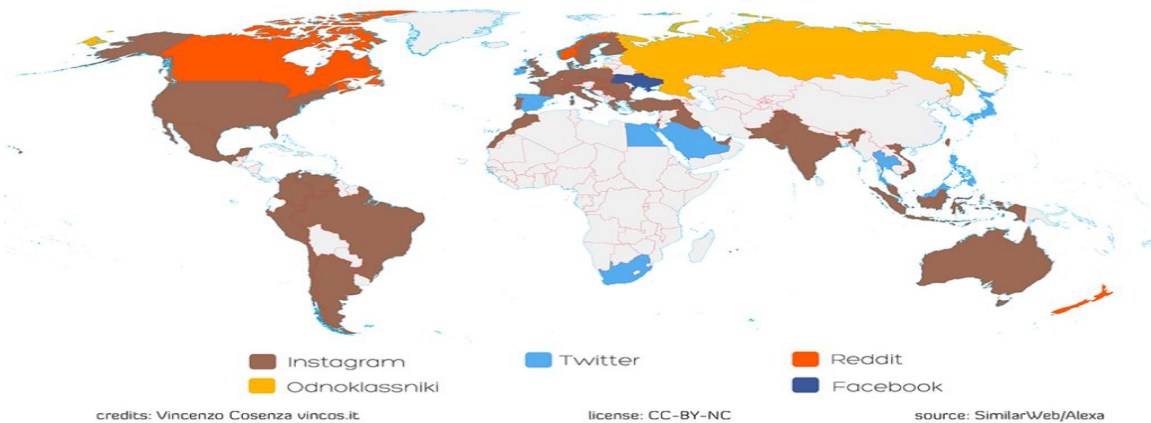


Figure 1: Map of social networks issued in January 2019 ²

Consequently, it is difficult to rely on social media to be a reliable source of information for ranking of universities and at the same time, it cannot be abandoned because it reflects (albeit to a small extent) the level of spread played by the university and educational institution in the community and sometimes at the regional level. Depending on a survey we

conducted on some universities' Facebook's Fanpages, we found a percentage of permanent followers of the activities of some universities reside in other countries and states and in a lower proportion, some of those followers wanted to get benefit from these universities regardless of the geographical dimension.

The world map of social networks

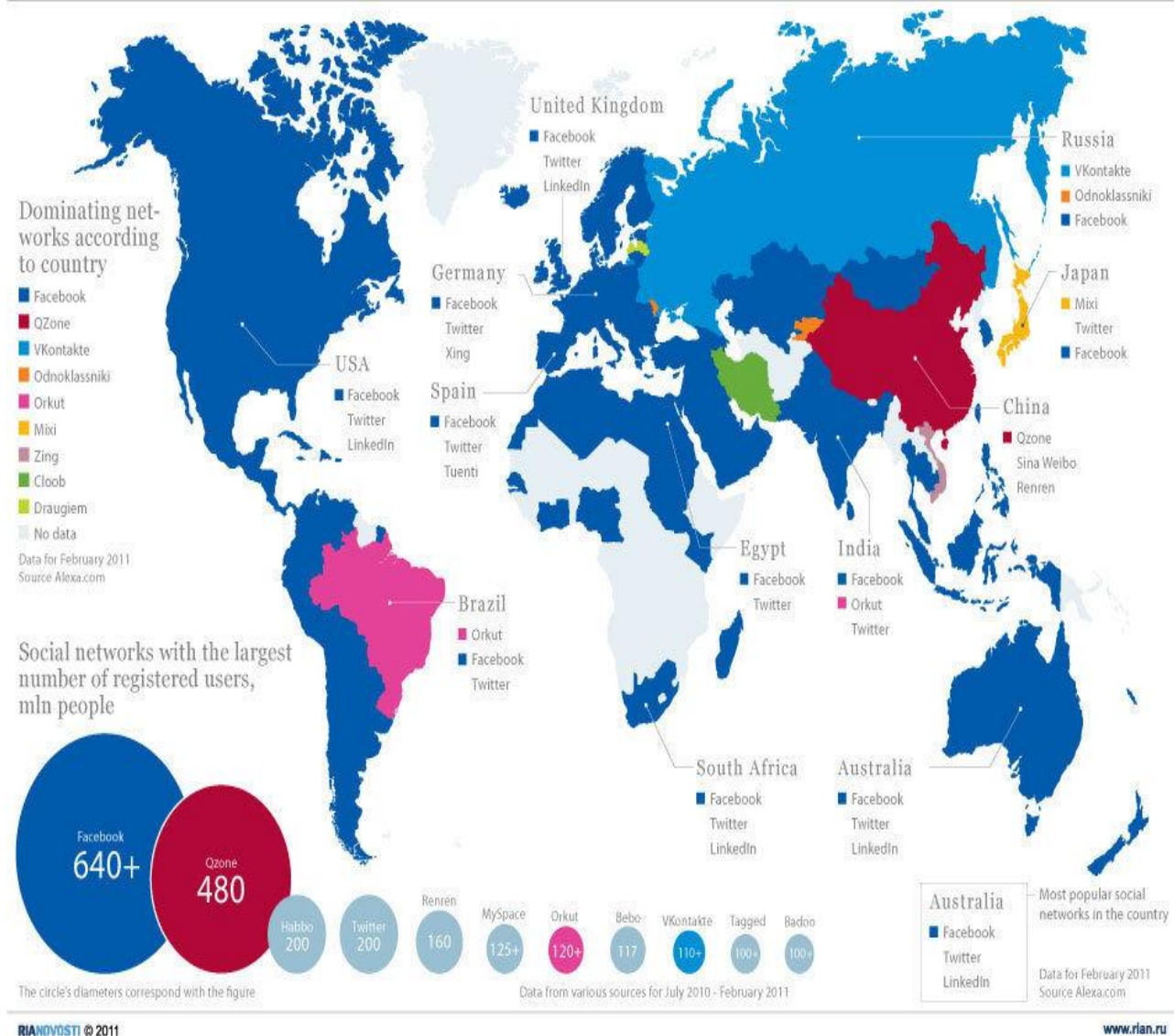


Figure 2: World map depending on the use of social media ³

Higher Education Institutions and academic rankings

Despite all the above, and despite all the negative indicators, there is an urgent need for universities and educational institutions, universities, colleges and educational institutes for ranking. Furthermore, Their need today for those rankings are far more than needed during the past years and the reason for this is that the number of universities today around the world is more than 31,000 universities and therefore universities and higher education institutions should look for ways and means to know whether they are moving forward or backward, whether they are progressing or retreating, and whether their strategic plans have been successfully achieved or remain unimplemented.

Universities can consult their students, faculty and administrative staff and consult graduates through

conducting questionnaires and surveys to determine their level of satisfaction. This procedure for internal quality is not enough at all and it is very necessary and important for those universities to have procedures for the evaluation of external quality. It is also necessary for universities to support and develop their spread on the Internet and improve and increase the amount of their scientific content and support the content of rich text files (docx, doc, odt, rtf, xml, htm, html, epub, txt, pdf, mht, ppt, chm, pps, xls, xlsx, djvu, odp, ods, csv, ppz) on their website in addition to the establishment of blogs on these sites and focus on the dissemination of news on social media and support their presence and digital spread.



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It is important for the institution of higher education to note that the aim of the ranking is to promote and support the digital circulation of the university on the Internet in addition to encouraging universities and educational institutions to circulate their scientific content and therefore, universities and educational institutions should not work and make plans to increase and improve its ranking (this should not be the main theme for the HEI) and this should not be the initial and comprehensive impression regarding the ranking. The goal should be focused on supporting the spread of scientific research and to contribute to the development of the university.

Ranking of the university can be a real and effective portal for the university, through which, universities support faculty members (teaching staff) to increase their research papers, publications, and research documents. Therefore, the ranking is a real tool for change in educational institutions and a mean to develop the scientific aspect in universities.

Is the ranking of universities important to the university or is it one of the 21st century themes?

In this regard, the question of ranking seems to be a thorny, controversial and highly complex ethical issue that needs a lot of clarification, study and elaboration.

Is ranking important to the university?

Since universities need ways, means, and mechanisms to determine whether they are moving forward or working contrary to their plans, the ranking is therefore the book that the university can use to see how successful its action plan was. Its progress in the ranking is also a sign of its success (in the areas covered by ranking). In addition, it is noticeable that the increase of scientific publications and the increase of research is positively reflected on the work of the University as a whole and encourages the university to strengthen the methodology of scientific publishing and communication with scientific journals, which leads in general to great and potent improvement in the work of the university.

In addition, ranking is considered as an indicator of the reputation of the university and thus it plays a big role in the admission process of students which therefore leads to an increase of the budget which can be used by this university in order to support and improve scientific research and increase the efficiency of education provided to the students. In this regard, we have found some cross-points between the indicators related to ranking, those related to quality assurance and accreditation/certification standards. Thus, higher education institutions can (and are advised) to make specific intersections between all of these standards, ultimately contributing to the institution's higher ranking, fulfilling quality assurance and achieving certification/accreditation.

There is also a psychological factor related to ranking that universities can work to create in a similar way to increase the effect of dopamine in humans, and a sense of euphoria and happiness when there is an increasing for this hormone. Higher ranking leads to increase the factor of confidence in the educational institution and thus, this factor is an incentive to increase the work, production and development of the educational institution as a whole.

Is ranking important to the student?

Ranking plays an important motivation for students in the process of enrollment in universities, in particular to differentiate and compare between two or more universities or to enroll in two universities with a comparable level and similar registration fees but each one has a different ranking. For rankings based on scientific research criteria, any student can make a trade-off between the points directly affecting his or thier studies, for example the number of faculty members holding a Ph.D. degree or the proportion between the number of faculty members and the number of students. Less important to them is for example the number of papers issued by the university or other criteria that the student may notice that their impact is indirect on his study.

For rankings that rely web-content, it seems more complicated than the first case. This is because the criteria adopted by the ranking authorities are not directly related to the student and are not directly related to the educational process and therefore cannot be seen by the student or clarify or approach points related to them directly. For example, it is difficult for a student who wants to enroll in a high-ranked university to know the real approach, the real criteria and the algorithm by which the ranking is built. Even if those students know, this will not mean much to them!

In the first case, the motivation that the student depends on enrollment plays a big role in his choice between the two universities and can choose a university with a lower and less ranking but has a higher point in the field that he wants and focus on.

In the second case, factors such as psychological motivation, confidence, and reputation are the main theme for students in order to enroll. In this case, those students will not be able to know the direct reason for doing so, but they will know that the trust factor has contributed to the registration process.

"They are better because they are ranked higher." This will enable you to register at the higher ranked university.

In this regard, universities must work with a very high level of credibility, transparency, professionalism and confidence in dealing with a thorny and complex subject such as ranking.

We know very well that some universities are eagerly awaiting the results of the ranking and are awaiting with great concern the decision of the Court, which will determine whether its level has improved or decreased. The reason for this is that the ranking is an integral part of the media policy adopted by universities in the periods of registration and admission because this contributes to increase the number of students and increase the budget and annual income. Therefore, financial motivation plays a big role in doing this which trigger some universities, in some cases, to change its policy, plans and activities in order to improve the ranking without focusing on developing the educational process and obtaining a high ranking without addressing its weaknesses or enhancing the quality and development of action plans.

As higher education ranking institution, we certainly do not encourage universities to focus on improving their rankings as much as we ask them to view the ranking as a mirror that reflects the work they have done over a period of time. Thus, the university is not required to improve the plans that will make it look more beautiful to the mirror (improve the ranking) but to work on improving the educational process (improving quality) in a real way which will automatically improve its ranking. If the university or higher education institution neglects the educational process and focuses its attention on the criteria that contribute to obtaining a higher ranking, this ranking will be a fake criterion in its work plan. It will also have an absolute negative impact that will have a very negative role in its work of this university. At this point in particular, the university will be like the old woman who wears makeup to look prettier in front of the mirror ... Will she look like that? Of course NO! Will anyone care or be deceived? Would anyone be charmed by her? Of course NO! Is ranking important for faculty members?

Faculty members and teaching staff is one of main three pillars for teaching process (infrastructure and students are the other pillars) and the functioning of the institution of higher education and therefore a large part of the responsibility lies in the success or failure of the educational institution rely on them. When we talk about ranking, we find that there is a great responsibility on the faculty member, the most important of which is to encourage the university to focus on scientific research and encourage it to publish research and scientific articles not forgetting to publish their books and researches on the Internet. On his part, a faculty member is supposed to publish research with affiliation to his/her university and to create accounts and subscription on scientific research sites on the Internet. Doing so will play a major role in improving the educational process at the university as it will contribute to support the scientific methodology and scientific mentality in the educational institution in addition to raising the scientific efficiency of the lecturer. Doing so will transform the institution into a real scientific laboratory and that is the real goal on which the university should be based.

A faculty member is not just a teacher who lectures and leaves, but as part of his educational responsibilities, they should promote and encourage scientific research,

participate in scientific researches, participate in conferences, seminars and scientific events leading to self-development, the development of the educational institution they works for, the development of the student as well as the improvement of the educational process as a whole for this institution. Ranking bodies encourage faculty members to focus on promoting the things that serve the whole educational process in addition to strengthening the methodology of scientific research and encourage students to think about a real scientific methodology. It is important for universities and educational institutions to think of all legitimate ways and means to achieve the highest and greatest benefit to the student and achieve the maximum amount of information that contributes to the development of practical and professional experiences not forgetting to enhance the information being studied and its relationship with the labor market as well as follow-up in all new scientific, research and technical information. We observe ranking as an enabling tool for the university that can rely on to develop its work. Ranking is a friend that the university can rely on and trust and advise his advice and guidance. The problem here is that this friend does not accept lying or deception and does not like to get incorrect or false information because this information will be detrimental to the university and its work and will reflect unrealistic, unreasonable and unacceptable consequences for its work. In viewing of the above, we recommend higher education institutions to work on the development of the educational process, raise the level of quality, promote scientific research and increase the number of research published because doing this will automatically lead to better ranking and much better development of work and improve the institution.

III. Attempts to obtain a higher ranking.

As I mentioned before, in order to get a higher ranking, universities can perform some illegal and unethical operations. Unfortunately, sometimes it is difficult to track these illegal operations because they can simulate the real ones and therefore, sometimes it is difficult to detect them in some cases.



Figure 3: Pinocchio - cartoon character – Credit: Walt Disney

As I explained earlier, the financial role, the financial motivation, and the reputation factor play a major impetus that can motivate universities to undertake processes that contribute to them to have better ranking in an irrational, unnatural and irrational way. For a ranking of 31,500 universities (such of Heranking Higher Education Ranking), it is normal for a university of lower grades (ranking between 20,000 and 30,000) to progress rapidly (1500 - 4000) and this jump makes sense in this case.

In the very opposite and absolutely irrational outcome, it is not possible for a middle ranking (ranking between 10,000 and 20,000) to advance by more than 1,500 points, and it is impossible, not acceptable and absolutely unlikely for a university of the advanced grade (ranking between 1000 and 10,000) to advance more than 500 points because this will lose the credibility of the educational institution and the credibility of its work and the credibility of the ranking.

In general, ranking is a tool that helps the university and contributes to its development, but it can be used by some universities in a negative way. In this situation, the main objective and the main work of the university would be to obtain a higher ranking which contribute to obtaining greater returns by exploiting the ranking in media campaigns that they do. What will the university achieve from a very high ranking when they have a very poor scientific standards or with they are not applying quality principles? Students would be aware at the time that they had been subjected to a big deception. Hence, would not the ranking be a bad unfair and inequitable standard for the university? This will have serious consequences for the university and will be a very negative factor for its work. Universities should know that integrity is a very important factor when ranking is taken into account.

Ranking entities always promote that the goal of ranking is to help all universities and provide assistance for them. As for HERanking⁴, we initially aimed to rank only 5,000 universities but after extensive studies, we found that this would only serve a few universities and therefore not all universities would benefit from it. Thus, we ranked all universities in the world and give the opportunity to all universities to develop their plans.

A university can advance by 5% to 15% in each ranking cycle and therefore, it makes sense that a university with a world ranking of 20000 would jump to 17,000 in the first cycle, to 15,000 in the next cycle, to 14,000 in the next cycle and to 12500 in a subsequent cycle, Progress would be logical and reasonable. But if the same university progressed from 20,000 to 8000 in one cycle, would not this be a sign that there is something illogical and unreasonable and that there is a large manipulation done by this university?

For us, we maintain the indicators and the results of the ranking of all universities. If the university progresses in one ranking cycle by more than 15%, we conduct a study of this university and its criteria. In case of suspicion of something illogical, we will communicate with the university to determine what is happening and find out the real reason for this.

We really wish that all universities provide reasonable and logical results, and not to use the ranking in an unethical manner. Universities are also advised not to use methods, means and tools that lead to unreasonable and deceiving

results. We do not want universities to trick students with the results of their ranking.

HERanking Higher Education Ranking is issued twice a year. In December and in July. To avoid anomalies in the results, we analyze the data three times in the first three weeks (in both months) and then find an intermediate result so that we minimize the errors in the results. We also compare the results of the ranking process in the previous cycle and send letters to the universities that have fallen at a level exceeding 20% to notify them in order to develop their work and to avoid any mistakes.

IV. Can the Internet be a reliable source of university ranking?

With the evolution of data analysis on the Internet over the past ten years, we have clearly and beyond doubt seen that the Internet can be a reliable and trustworthy source for ranking of universities (noting the avoidance of any possible manipulations or by increasing the indicators of ranking entities to ensure the credibility of the results and ensure continuity in the future).

When we talk about the ranking of universities according to scientific standards, the targeted group does not exceed 1000 universities (communicating with them permanently and requesting information and data from them) and here can reduce the incidence of any illogical results or non-logical criteria and therefore if we assume that the rate of anomalies of the results is estimated at 1%, we will have only 10 universities with anomalies and thus, that can easily communicate with them and avoid any problem.

When we talk about web-content, based ranking, the targeted group exceeds 30,000 universities (it is impossible to communicate with them all during the cycle of the ranking) and it is impossible to coordinate work with them or analyze the responses that can be sent to e-mail and thus will reduce the anomalies and results. If we assume that the rate of anomalies of the results is estimated at 1%, we will have more than 300 universities with false criteria and is difficult to communicate directly and manually with all of them.

In order to avoid this problem, the ranking process is done automatically by depending on websites that provide statistics with a complete and comprehensive analysis with anomaly percentage of almost 0%.

Is this enough for credibility of the ranking?

Certainly, this is not enough to obtain highly credible results. Therefore, ranking agencies increase the number of indicators by which they have built the ranking, thereby reducing or relocating, causing the elimination of any irrational manipulation or questioning of the results presented.

Consider the following example:

Suppose that xyz.com is based on a university ranking based on a single indicator (Alexa for example), the results would be similar to the following:

- It will be easy for this university to improve significantly.
- There will be a rapid change in the ranking results.
- There will be a very large convergence of results between modern universities and universities that have become hundreds of years.
- There will be no credibility or transparency in the ranking results.
- In this case, the ranking process will look like a whole chaotic process because the rate of change can exceed 2300%.

In the previous case, it is impossible for the Internet to be a reliable source of ranking and therefore, it would be unreliable.

Consider the following alternative case:

Suppose that the same university xyz.com is based on a multi-criteria, multi-valued, multi-structure university ranking. Would the result be similar to the previous case?

Certainly not, the result would be:

- Changing values is very complex and difficult and changes will be of logical order value.
- Changes would be simple, rational and uncompromising.
- There will be no convergence of results between modern and old universities.
- Transparency, credibility and reliability will be present, assured and observable.
- The ranking process will be a non-chaotic organization with a change rate not exceeding 15% at its best.

Based on the above, it can be noted that the Internet can be a reliable source of information if the ranking is multi-criteria and multi-input.

Is it possible to include scientific standards while measuring the ranking of universities via web content?

The scientific indicator is the criterion that determines the reliability of the ranking and the reliability of the results it provides because the aim of the ranking of universities is to measure the scientific dimension and scientific development of the university in addition to the progress or decline of the scientific process of researches, books and scientific files published by the university. Not forgetting the follow-up process of the faculty members at the university for sake of achieving scientific development and their desire to develop the educational process as a whole.

It is necessary for ranking bodies and agencies to adopt at least one scientific criterion, which could be one of the following:

- The number of rich text files that you publish directly on the university's website (it is very important that these files contain real and authenticate information). Such rich files can be of the following extensions: docx, doc, odt, rtf, xml, htm, html, epub, txt, pdf, mht, ppt, chm, pps, xls, xlsx, djvu, odp, ods, csv, ppz.
- Number of faculty member's accounts registered with Google Scholar with domain of the university.
- Number of scientific papers published in peer views journals.

- Number of rich text files for the domain of the site Google has archived.

It is not possible to achieve the credibility of the ranking without the existence of a special factor related to scientific standards or without the inclusion of reliable scientific indicators aimed at giving the ranking a scientific dimension in his work.

V. RESULTS

According to the above, the following results can be reached:

- The Internet can be relied upon as an official, authoritative and documented reference for university rankings, whether done in part through rankings based on scientific content or those focused on web-content.
- Scientific standards can be combined with web-based rankings.
- Higher education institutions, universities, institutes and educational institutions can rely on academic rankings whether based on scientific standards or those based on web-content based.
- Higher education institutions can benefit from the academic ranking to develop their business plan.
- Ranking bodies can add multiple criteria and indicators in their ranking to ensure greater credibility and quality.
- Ranking bodies should find a way to monitor the work of ranking and the extent to which universities progress or review.
- Universities should focus on developing the educational process, not on improving their rankings.
- Ranking bodies can rely on social media for their work in part (for example, by searching for the number of university domain addresses on the social networking site).

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AUTHOR PROFILE:



Entrepreneur, researcher, translator, editor and publisher. Founder of Lighthouse Books for Translation and Publishing and HERanking Higher Education Ranking. I have a great interest in the field of Higher Education and specially, ranking of HEIs.

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For that reason, I have established HERanking Higher Education Ranking to be a platform for HEIs to monitor and develop their operation and to encourage them to increase their web-content on the internet. I have a great interest for books in which, I have published more than 1500 books at my publishing house, wrote and translated many books with more than 3 million words translated. I am also a polyglot, and a loving father for two daughters, Larin and Mira.