© JSS 2021 J Soc Sci, 66(1-3): 42-51 (2021)
PRINT: ISSN 0971-8923 ONLINE: ISSN 2456-6756 DOI: 10.31901/24566756.2021/66.1-3.2274

Global Ranking of Universities by Reputation: The Hidden Criterion

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KEYWORDS Class. Globalization. Preeminence. Tertiary Institutions

ABSTRACT The ranking of World Universities is a fairly recent phenomenon. It is one of the products of internationalization of higher education. Many of the indices used by the ranking systems are now familiar to readers and writers. The age of an institution is one salient factor often not considered in rankings. The objective of this study is to critically discuss the relevance of age in relation to the metrics used and to determine whether or not age can be shown to have a place in university rankings .The analysis of data shows the average age of the top 50 institutions by reputation to be 206 years and the median 162. A look at the rankings will not reveal this important criterion except each of these ranked universities is linked with the year it was founded. It concludes that there is value in age and should be factored into university rankings.

INTRODUCTION

Academic ranking of World Universities is human effort to measure quality, organizational effectiveness and performance of tertiary institutions in quantitative terms. It is also aimed at ensuring quality assurance measurements, standards, competiveness and comparing certain categories of tertiary institutions and ranking them according to a common set of metrics in descending order (Usher and Salvino 2006, 2007; Federkeil 2008; Shin 2011; Pavel 2015). It began in the early years of the twenty first century. The first of the global rankings was compiled in 2003 by ARWU – Academic Ranking of World Universities, also referred to as the Shanghai ranking. Since then, many more ranking bodies; national, regional and international, had emerged. Some of these are the QS World University Rankings, the Times Higher Education (THE) World University Rankings, the Webometrics, and the G-Factor. Others included the Global University Ranking, the US News World's Best Universities Ranking, the High Impact Universities Research Performance Index (RPI), Leiden Rankings, Professional Ranking of World Universities, the SC imago Institutions Ranking (SIR), and The Wuhan University Ranking.

Of the aforementioned, three considered fairly sound are:

1. The Academic Ranking of World Universities (ARWU),
2. The QS World University Ranking, and
3. The Times Higher Education (THE) World University Rankings.

The indicators and weighting for each criteria used by each of the ranking systems are summarized in Table 1.

Essential Elements in Word University Rankings

The Times Higher Education (THE) World University Ranking, also referred to as top Universities ranking, is often the most preferred because of the number of indices evaluated to determine its scores. It judges universities across the core missions of research, teaching, knowledge transfer and international outlook (THE 2019 methodology). It employs thirteen (13) performance indicators grouped into five categories as follows:

1. **Teaching and Learning Environment (30% of the overall ranking score)**
   There were five performance indicators under this category:
   (i) Reputation in teaching = 15%
   (ii) Ratio of students per academic = 4.5%
   (iii) Ratio of doctorate–to–bachelor's degree = 2.25%
   (iv) The number of doctoral awards per academic = 6%
   (v) Income per academic = 2.25%
2. **Research: Volume, Income and Reputation (worth 30%)**
   This category consisted of three indicators
   (i) University's research reputation among its peers = 18%

Table 1: Metrics and weighting used by ranking bodies in 2019

S.No.	*ARWU criteria/indicators weighting*	*THE criteria/indicators weighting*	*QS criteria/indicators weighting*
1	Nobel prizes/Field Medal 30%	Research-Industry Income 2.5%	Academic Reputation score 40%
2	Cited Researchers 20%	Citations 30%	Employers Reputation score 10%
3	Papers in Science & Nature 20%	Research Income/Output 30%	Faculty-Student Ratio 20%
4	Citation 20%	Teaching/Learning Environment 30%	Citations per Faculty score 20%
5	Academic Performance/Staff 10%	International Aspects 7.5%	International Faculty score 5% International Student score, 5%

(ii) University research grants/income = 6%
(iii) University Research outputs in academic journals indexed by Thomson Reuters per academic = 6%

3. **Citations: Research Influence (worth 30%)** This is the single most influential of the 13 indicators used by the THE and it is weighted 30% of the overall score
4. **Industry Income: Innovation (worth 2.5%)** This is a one indicator category and it referred to the ability of a University to help industry with consultancy, innovations and inventions, per academic staff.
5. **International Outlook: Staff, Students and Research (worth 7.5%)**
   This category comprised three indicators:
   (i) Student diversity on campus - the ratio of international to domestic students (2.5% of the overall score)
   (ii) Faculty Diversity – the ratio of international to domestic staff = 2.5%
   (iii) The proportion of a University's total research journal publications that have at least one international-co-author = 2.5%

The above scoring system used in World University Ranking is different from the one used for **World Reputation Rankings** by the same ranking body – THE. According to ***the Times Higher Education (2020),*** World Reputation Ranking was created using the world's largest invitation which involved a survey of academic opinion of 16,639 responses from 144 countries. The respondents that were pooled, on the average, had been working in the academic institutions for at least seventeen (17) years. The questionnaire was administered only on experienced published scholars, who offered their views on excellence in research and teaching within their disciplines and at institutions with which they were familiar.

Although the scoring systems used in the World University Rankings (WUR) is different from that used in World Reputation Rankings (WRR), the results were very similar. While only 100 top Universities were listed by reputation and World University Rankings listed and ranked the top 400 Universities, the world Reputation actually ranks only "the top 50 because, according to THE, the differential between institutions after that point becomes very narrow" (THE 2019:3). Because rankings by reputation is based on three principal factors for 90 percent, the three major categories of the indicators used in the World University rankings were analyzed based on the 100 World Reputation Rankings of Universities by THE.

Academic and/or reputational rankings have for a while come under severe criticisms. For example, Rainer (2019), was of the opinion that three levels of problems namely social, conceptual and methodological were associated with university rankings. Similarly, some researchers (Wiener-Bronner 2011; Nietzel 2020; Pop 2021) have attributed reasons why rankings were imperfect to the different methodological issues. Further (Marklein 2016; Vernon et al. 2018; Wikipedia 2021) have observed that none of the rankings was neither accurate nor gave a comprehensive overview of the strengths of the institutions ranked because 'all select a range of easily quantifiable characteristics' rather than important indices to base their results on. Specifically, Pop (2021) argued that the failure of ranking systems to include certain measurable and immeasurable factors among the indicators used has greatly limited the usefulness of rankings. Some of the factors that could not be measured included "what the student will actually learn beyond the grades, the activities the students will enjoy, the emotional support, the feel of the campus life and campus visits". One vital factor that is measurable like those commonly used but not often included in their calculations of scores for ranking is age, that is, when these institutions were founded by their respective proprietors.

Further, the ranking bodies have been accused of linguistic bias in favor of English language speaking countries as against other international, non-English languages such as French, Chinese, Russian, Portuguese, Hausa and other national languages such as Africana. There is also bias in favor of medical and engineering sciences against the social sciences, humanities and the arts (Richard 2015), large sized institutions over smaller ones, research intensive against undergraduate teaching, publications in international scientific journals, and arbitrariness in weighting of the variables used to measure performance.

The data for ranking have also been attacked as being insufficiently transparent and unreliable (Tilak 2016; Mussard and Pappachen 2018). Cramer and Page (2007) have observed that the many measurement limitations of rank-based data hinder " the assessment of how "good" or "bad" the top and bottom universities are, how or how much they differ in relation to others or to each other"(p.6). Reservations have also been expressed due to questionable practices involving data manipulation in order to secure ranking positions not actually deserved by certain higher education institutions (Fong and Wilhite 2017; Mussard and Papachen 2007; Vernon et al. 2018).The reputation survey in particular has been denounced for being complex, and opaque, and the fluctuations in the ranking of universities almost on yearly basis has increased the perceived confusion and controversies surrounding international university rankings (Altbach 2006; Erkkila 2013; Kehm 2013; Richard 2015; Anowar et al. 2015; Brendan 2016; Waltman et al. 2017; John 2019; Bates 2020). Finally, Marklein (2016) posited that ranking has led to unreasonable and unacceptable practices among some universities.

The shortcomings associated with the methodologies and other aspects of ranking are numerous. This may explain why Bates (2010) simply referred to university rankings as "equivalent of a Ponzi Scheme" and "rotten methodology", and that the methodologies also do not serve the mission statements and uniqueness of the majority of universities and other tertiary education institutions.

In spite of its numerous shortcomings, world university rankings have come to stay because of its influence on higher education and global comparison (Hazelkorn 2008, 2013). It has brought about internal and external environmental pressures to improve upon each of the indicators of performance although there is no universal agreement as to what constitutes the "best" University. Developing nations, however, are also directly or indirectly encouraging their institutions to aspire into the top 100-200 as this would be expected to give some pride to the nation. University rankings also provide useful and relevant information to higher education, researchers, parents, students, distinguished alumni, governments, and other stakeholders to influence institutional priorities and to support decisions to make visible the strengths of their universities (Wong 2015; Waltman et al. 2017).

There are also studies (Clarke 2007; Collier 2015; Sandstrom 2016; Bright 2020; Morse 2020) that have pointed to the significance of rankings. For instance, Chiu (2021) who was one of the few authors who have attempted to find out whether university's age mattered, argued that while it is true that not many admission seekers would choose a university based on its age, isolated cases of personal testimonies have suggested that choice was based on the assumption that the "older" is often synonymous with "better". Similarly, some other authors (Maringe 2006; Clark 2007; Salami and Saroyan 2007; Hezelkorn 2009; Yozenawa 2011; Dembereldorj 2018) have opined that university students and their parents used ranking to make decision as to their first choice of destination for their undergraduate or postgraduate studies. It has also given birth to the emergence of new model of research universities in certain first world countries such as Germany (Barker and Lenhardt 2008; Mohrman et al. 2008). University rankings have influenced South Korea, China and Taiwan to build more globally competitive research universities (Mok and Chan 2008; Liu 2011; Byun et al. 2012) and Europe to modernize her higher education (Hazelkorn and Ryan 2013).

Global rankings no doubt play a crucial role in designing national policies of higher education and have been useful in assisting academics and researchers to search for new international collaborators (Perkmann et al. 2013; Ahn et al. 2014; Dembereldorj 2018). It has also been indicated that developing nations often take decision to sponsor their young citizens to study overseas in top ranked universities with the hope that they will return to help build the various sectors of their economies; help foster quality education, manpower, and socio-economic, political and infrastructural development. It has encouraged faculty members to publish

articles in internationally recognized journals and to use those publications for consideration of new employments as well as tenure promotion process (Kim and Nam 2007; Arimoto 2011).

UNESCO (2016),while questioning whether rankings do more harm or not than good, concluded that they were, however, "perceived as a measure of quality and so create intense competition between universities all over the world". It is for these merits and more that made some researchers (Wong 2015; Waltman et al. 2017; Morse 2020) to expressed the view that university rankings should not be dismissed as being completely useless as they impact positively on the quality and excellence in higher education (Kozminski 2002; Dill 2018). Rather, these authors are of the view, that they should be handled cautiously and encouraged to continue to improve on the indicators with the aim of coming up with much better and more comprehensive criteria for determining performance and reputation. University rankings are no doubt reshaping higher education all over the world (Hazelkorn 2015).

Objectives

The various ranking systems based their rankings on a number of measurable criteria. These indices have been highlighted earlier in the paper. But which silent measurable variable has not been considered in all of these bodies in their global ranking of universities? This paper addressed this main question by critically examining the 2019 Times Higher Education World Reputation ranking. It also determined the average and median ages of the top ranked ten and then the top fifty (50) universities after linking each to the year it was established to determine its age as at 2019.

METHODOLOGY

This is a quantitative descriptive study using non-parametric statistics –frequency, percentage, mean and median - to analyze secondary data obtained from the World Wide Web (internet). The list of the 2019 top 100 Universities as ranked by Times Higher Education (THE) by reputation was obtained from the internet. Against each of the Universities, the researcher compiled the year in which it was founded and computed the age of the University as at the year 2019/2020. Thereafter, a critical inspection and analysis was made of the data and presented in a tabular format.

In 2019, the Times Higher Education released a list of World's top 100 Universities ranked on the basis of their reputations hinged on the result of the Academic Reputation Survey conducted by IPSOS Media CT for Thomson Reuters (see Table 2). The analysis of data showed that seven countries, namely the United States, the United Kingdom, Japan, China, Australia, Germany and Netherland, were represented in the top 20, and in total, 18 countries.

Table 3 shows the distribution of the World's 100 top Universities by country and were distributed among 18 countries. Of this number, 42were in the U.S, eleven (11) in the UK, China has six and Australia, Germany, Japan and Netherlands each has five (5).

In order to determine the place of age in the rankings, the year each ranked institution was founded was sought from each individual University's website and each computed age was included in Table 2 (column e).

A critical inspection of Table 2 column e showed that the top ten Universities had been in existence cumulatively for three thousand, two hundred and twenty five years (3225yrs) with an average of 322.50 years and a median of 176.5 years. The oldest of these top ten, is the University of Oxford in the United Kingdom established in the year 1096, that is 924 years ago and the least was the University of Chicago founded 1890, 130 years ago. The average age for the top 50 institutions was 206 years and the median was 162 years. This analysis pointed to one basic fact and that is, most of the top 50 Universities as ranked by reputation (THE) were established more than a century ago except for only three which by dint of hard work and commitment to excellence in all the indicators of measurement. These institutions were the University of California, San Diego ranked 30th and established in 1960, that is 60 years ago; PSL Research Intensive University Paris founded in 2010, which is ten years ago and ranked in the 40th position and Seoul National University, South Korea in the 47th position established in 1946, which is 74 years ago.

The picture that has emerged showed that age could be a variable that is important but often neglected in the assessment of institutional reputation and the literature on it is very scanty. A critical examination of the 20 Top Universities in Table 2, for example, shows that one was founded in the

Table 2: Data Summary Times higher education world reputation ranking 2019, year founded and endowment of top ranked 100

2019 The ranking (a)	*Institution (b)*	*Types (c)*	*Country (d)*	*Year founded/age (e)*	*Endowment in billion $ (f)*
1.	Harvard University	Private	United States	1836 (184 years ago)	$ 38.3b
2.	Massachusetts Institute of Technology	Private	United States	1861 (159 years ago)	$16.5b
3	Stanford University	Private	United States	1868 (152 years ago)	$26.5b
4	University of Cambridge	Public	UK	1209 (811 years ago)	$9.45b
5	University of Oxford	Public	UK	1096 (924 years ago)	$8.10b
6	University of California, Berkeley	Public	United States	1868 (152 years ago)	$1.94b
7	Princeton University	Private	United States	1746 (256 years ago)	$25.9b
8	Yale University	Private	United States	1701 (319 years ago)	$29.3b
9	University of California, Los Angeles	Public	United States	1882 (138 years ago)	$2.52b
10	The University of Chicago	Private	United States	1890 (130 years ago)	$7.9b
11	The University of Tokyo	Public	Japan	1877 (143 years ago)	-
12	California Institute of Technology	Private	United States	1891 (129 years ago)	$2.88b
13	Columbia University	Private	United States	1754 (266 years ago)	$10.87b
14	Tsinghua University	Public	China	1911 (109 years ago)	-
15	University of Michigan, Ann Arbor	Public	United States	1817 (203 years ago)	$11.9b
16	Johns Hopkins University	Private	United States	1876 (144 years ago)	$4.33b
17	Peking University	Public	China	1898 (122 years ago)	-
17	University College, London	Public	UK	1826 (194 years ago)	-
19	University of Toronto	Public	Canada	1827 (193 years ago)	$1.93b
20	ETH-Swiss Federal Institute of Technology, Zurich	Public	Switzerland	1855 (165 years ago)	$1.72b
20	University of Pennsylvania	Private	United States	1740 (280 years ago)	$13.8b
22	Cornel University	Private	United States	1685 (335 years ago)	$7.23b
23	Imperial College, London	Public	UK	1907 (113 years ago)	$1.3b
24	National University of Singapore	Public	Singapore	1905 (115 years ago)	$1.2b
25	London School of Economics and Political Science	Public	UK	1895 (125 years ago)	$8.05b
26	New York University	Private	United States	1831 (189 years ago)	$4.23b
27	Kyoto University	Public	Japan	1869 (151 years ago)	$2.2b
28	University of Washington – Seattle	Public	United States	1861 (159 years ago)	$2.76b
29	Duke University	Private	United States	1838 (182 years ago)	$8.52b
30	University of California, San Diego	Public	United States	1960 (60 years ago)	$1.73b
31	Carnegie Mellon University	Private	United States	1900 (120 years ago)	$2.39b
31	University of Texas at Austin	Public	United States	1833 (187 years ago)	Texas system $30.9b
33	Northwestern University	Private	United States	1851 (169 years ago)	$11.08b
34	University of Edinburg	Public	UK	1583 (437 years ago)	$0.61b
34	University of Illinois at Urbana-Champaign	Public	United States	1867 (153 years ago)	$3.43b
36	University of Wisconsin-Madison	Public	United States	1848 (172 years ago)	$2.99b
37	University of British Columbia	Public	Canada	1908 (112 years ago)	$1.48b
38	Lomonosov Moscow State University	Public	Russian Federation	1755 (265 years ago)	-
39	McGill University	Public	Canada	1821 (199 years ago)	$1.26b
40	Paris Sciences Letters – PSL Research University Paris	Public	France	2010 10 years ago)	-
41	Kings' College, London	Public	UK	1829 (191 years ago)	$8.34b

Table 2: Contd.....

2019 The ranking (a)	*Institution (b)*	*Types (c)*	*Country (d)*	*Year founded/age (e)*	*Endowment in billion $ (f)*
42	University of California, San Francisco	Public	United States	1873 (147 years ago)	$1.66b
43	LMU Munich (Lauding Maximillian's Universita)	Public	Germany	1472 (548 years ago)	-
44	Georgia Institute of Technology	Public	United States	1885 (135 years ago)	$2.09b
44	University of Hong Kong	Public	Hong Kong	1911 (109 years ago)	-
44	University of Melbourne	Public	Australia	1853 (167 years ago)	$1.173b
47	Seoul National University	Public	South Korea	1946 (74 years ago)	-
48	University of California, Davis	Public	United States	1905 (115 years ago)	$0.71b
48	Ecole Polytechnic Federale de Lausanne	Public	Switzerland	1853 (167 years ago)	-
50	University of North Carolina at Chapel Hill	Public	United States	1789 (231 years ago)	$3.43b
51-60	Delft University of Technology	Public	Netherland	1842 (178 years ago)	$0.11b
51-60	Heidelberg University	Public	Germany	1836 (184 years ago)	-
51-60	KU Leuven	Independent catholic university	Belgium	1425 (595 years ago)	$2.5b
51-60	University of Manchester	Public	UK	2004 (16 years ago)	$.32b
51-60	University of Minnesota	Public	United States	1851 (169 years ago)	$3.72b
51-60	Nanyang Technological University, Singapore	Public	Singapore	1981 (39 years ago)	$0.83b
51-60	National Taiwan University (NTU)	Public	Taiwan	1928 (92 years ago)	-
51-60	Pennsylvania State University	Public	United States	1855 (165 years ago)	$4.26b
51- 60	Sorbonne University Paris	Public	France	1971 (49 years ago)	-
51-60	Technical University of Munich	Public	Germany	1868 152 years ago)	$-
61-70	University of Amsterdam	Public	Netherlands	1632 (388 years old)	-
61-70	Humboldt University of Berlin	Public	Germany	1819 (201 years ago)	-
61-70	Karolina Institute	Public	Sweden	1810 (210 years ago)	-
61-70	Leiden University	Public	Netherland	1575 (445 years ago)	-
61-70	University of Maryland College Park	Public	United States	1856 (164 years ago)	$0.79b
61-70	Michigan State University	Public	United States	1855 (165 years ago)	$2.91b
61-70	Ohio State University (Main Campus)	Public	United States	1870 (150 years ago)	$5.21b
61-70	University of Southern California	Private	United States	1889 (131 years ago)	$5.54b
61-70	University of Sydney	Public	Australia	1850 (170 years ago)	$0.83b
61-70	Tohoku University	Public	Japan	1907 (113 years ago)	$1.3b
71-80	Australian National University	Public	Australia	1946 (74 years ago)	$1.37b
71-80	Brown University	Public	United States	1764 (256 years ago)	$3.60b
71-80	University of Copenhagen	Public	Denmark	1479 (541 years ago)	-
71-80	Fudan University	Public	China	1905 (115 years ago)	-
71-80	Indiana University Bloomington	Public	United States	1820 (200 years ago)	$2.40b
71-80	Korea Advance Institute of Science & Technology	Public	South Korea	1971 (69 years ago)	-
71-80	Osaka University	Public	Japan	1724 (296 years ago)	$2.3b
71-80	Purdue University West Lafayette	Public	United States	1869 (151 years ago)	$2.52b
71-80	University of Science & Technology of China	Public	China	1958 (62 years ago)	-
71-80	Shanghai Jiao Tong University	Public	China	1896 (124 years ago)	-
71-80	Washington University in Statius	Private	United States	1853 (167 years ago)	$7.59b

Table 2: Contd.....

2019 The ranking (a)	*Institution (b)*	*Types (c)*	*Country (d)*	*Year founded/age (e)*	*Endowment in billion $ (f)*
81-90	University of Arizona	Public	United States	1885 (135 years ago)	-
81-90	University of Boston	Private	United States	1839 (181 years ago)	$2.2b
81-90	University of California Santa Barbara	Public	United States	1891 (129 years ago)	-
81-90	Free University of Berlin		Germany	1948 (72 years ago)	$0.55b
81-90	The Hong Kong University of Science & Technology	Public	Hong Kong	1991 (29 years ago)	-
81-90	Rutgers University- New Brunswick	Public	United States	1766 (254 years ago)	$1.33b
81-90	University of Sao Paulo	Public	Brazil	1934 (86 years ago)	-
81-90	Sungkyunkwan University	Public	South Korea	1398 (622 years ago)	-
81-90	Tokyo Institute of Technology	Public	Japan	1881 (139 years ago)	$0.69b
91-100	Zhejiang University	Public	China	1897 (123 years ago)	-
91-100	Chinese University of Hong Kong	Public	Hong Kong	1963 (57 years ago)	$0.35b
91-100	Durham University	Public	UK	1832 (188 years ago)	$0.11b
91-100	Ecole Polytechnique	Public	France	1794 (226 years ago)	-
91-100	University of Florida	Public	United States	1853 (167 years ago)	$1.74b
91-100	Monash University	Public	Australia	1958 (62 years ago)	$1.20b
91-100	The University of Queensland	Public	Australia	1909(111 years ago)	$1.25b
91-100	UNSW Sydney	Public	Australia	1949 (71 years ago)	$1.41b
91-100	Utrecht University	Public	Netherland	1636 (384 years ago)	-
91-100	Wageningen University & Research	Public	Netherland	1876 (144 years ago)	-
91-100	University of Warwick	Public	UK	1965 (55 years ago)	$0.06b

Source: Compiled by the author from the following resources:
World's Top 100 Universities: their reputations ranked by Times Higher Education; Wikipedia, the free encyclopedia, retrieved 25th September, 2019;Thoughts on education policy; Endowment of top 25 research Universities,www.edpolicy-thoughts.com retrieved 23rd September,2019; US News and World Report; rating and endowment size, retrieved 13/11/19; University, endowments of World's Top 25 Universities, retrieved 25/10/2019; Individual University's website 2019.

eleventh century (1096), two in the thirteenth century, 1207 (813 years), and four in the eighteenth century 1701 (319 years), 1740 (276 years), 1746 (274 years), and 1754 (266 years) and the other fourteen, except one, were founded in the nineteenth century (specifically in 1817 (203 years) and 1891 (129 year ago). The only one established in the twentieth century was in 1907 (113 years), that is, more than 100 years ago. Thus, it could be argued that none of the 20 top Universities in the world is less than 100 years old; few are as old as 800 years and many more been 200 years old since they were founded.

Among the thirty Universities (30) ranked below the top 20, twenty one (21) were founded between 1472 and 1898 and nine (9) in the 20th century (1900 and 1960). A further inspection of the data showed that, on the whole, of the top one hundred (100) World Universities, majority (73, that is, 73%) were founded between 1096 and 1899 and few (27) were established in the twentieth century (between 1900 and 2000).

DISCUSSION

From the above analysis, it could be stated that the age of an institution could be said to have certain "hidden" value not included among the indicators of reputation rankings and the literature relating top ranked institutions to their age is scanty. Critical efforts was therefore made in this paper to creatively relate the value age might have added to the competitive edge or advantage of these top ranked institutions by reputation.

Age and experience no doubt bring advantage as starting early no doubt offered the widest possible set of benefits. Age of an institution, in practice, may go with a lot of positive experiences in teaching, research and community services which quality youthfulness and vibrancy could not easily match. It provides many opportunities to offer skill to new, emerging nations and new working environment. With centuries of existence, researchers in these long established

Table 3: World's top universities by reputation and distribution by country based on the ranking 2019

S. No.	*Country*	*No. of institutions among top 100*
1.	US	42
2.	UK	11
3.	China	6
4.	Australia	5
5.	Germany	5
6.	Japan	5
7.	Netherland	5
8.	France	3
9.	Canada	3
10.	South Korea	3
11.	Hong Kong	3
12.	Singapore	2
13.	Switzerland	2
14.	Sweden	1
15.	Brazil	1
16.	Belgium	1
17.	Russia	1
18.	Taiwan	1
	TOTAL	100

universities have conducted land mark studies which have resulted been frequently cited by modern researchers in much younger higher education institutions. They have also produced distinguished scholars, noble prize winners and notable alumni who have contributed immensely to their infrastructural development and endowment funds. For example, an inspection of Table 2 (the left column, F) shows the endowment of some of the top 100 universities in the world.

Sources of endowment funds have multiplier effect on the reputation of these age-long institutions. These universities have produced graduates who are holders of key positions in their home countries, other nations, regional, multi-national and international organizations. Their long years of existence and achievements have direct and/or indirect bearing with most of the criteria being used for the ranking of the world universities' by reputation today. These age long tertiary educational institutions have made a mark and a name known all over the world.

Over the years, these older institutions have learnt from their mistakes, overcome their weaknesses and challenges and have continued to wax stronger and setting the pace for others to follow. They have century-long experience in training post graduate students (Master's and PhD.) and their research outputs over the years could only but be imagined. The quality of their staff and infrastructure and experience in running graduate programs have made them to be centers of attraction for foreign students from all over the countries of the world. Thus, they have come to be characterized by diversity of student body, and staff too, one of the important criteria for determining ranking by reputation.

They also have the funds and endowed chairs to attract top scholars and students to themselves, something that most much younger institutions are lacking. With strong institution-industry research base and linkages/partnerships, these institutions are able to establish high powered research centers of excellence, laboratories, studios and workshops, and attract top scientists and artists to work in them. They can afford to offer scholarships to attract brilliant students. As a result, they have also contributed greatly to world's knowledge economy, and suitable teaching and learning environment. These have continually led to land breaking researches and inventions and innovations in these institutions; a development which in turn has attracted patent rights and further patronage from industries, multi-national organizations, states and international organizations. These have brought them fame and consequently had continuously earned them high rating and ranking by world university ranking bodies.

CONCLUSION

The ranking of universities is no-doubt a measure of the quality, reputation and performance of higher education institutions in the world today. It has become the in-thing as those ranked to be at the top of the hundred have been considered as centers of excellence. Consequently, most institutions are working tirelessly to improve upon areas of deficiencies and strengthening further their areas of competitive advantage along the metrics. This is to enable them move up the ranking ladder especially and be able to attract foreign students who are prepared to pay heavily for their education in a good university. From the above analysis, it could be argued that university rankings are no doubt shaping global higher education and age has a place in the ranking of higher education institutions.

RECOMMENDATIONS

Although the existing criteria currently used by the various ranking bodies have come under severe

criticisms leading to the emergence of new ranking bodies with new criteria and indicators, age is one indicator that has often been neglected in their calculations. From the analysis of the secondary data and findings, age may not necessarily be an indication of quality and excellence, it no doubt has certain added value. Therefore, age and different levels of it should be factored into the calculations in the ranking of world universities, including that by reputation. This will no doubt give a better insight and meaning to rankings. Efforts should also be made to improve on the methodologies being used and operationalize many of the identifiable measurable and immeasurable indices for inclusion in the ranking systems, including ranking by reputation. This is why, to this author, the emergence of the new 50 under 50 rankings is a welcome development. This refers to the ranking by QS of the top 50 universities in the world that have been founded in the past 50 years.

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Paper received for publication in December, 2020
Paper accepted for publication in January, 2021