

[Reseña de libros]

Cybermetrics Measuring the Web

Enrique Orduña-Malea and Isidro Aguillo. (2014). *Cybermetrics. Measuring the Web*. Barcelona: Editorial UOC - El profesional de la información.

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"Measure what is measurable; and make measurable what is not so". This quote by Galileo is still valid in the ongoing debate about colleges and universities and their role in society as higher education establishments that are continuously subject to performance indicators and evaluations using different tools, following the logic of production and impact of the traditional scientific publications circuit; where if you are not on Google, you don't exist.

To this end, the discipline of cybermetrics, described by Isidro Aguillo and Enrique Orduña-Malea in their work, is proposed as a tool that can be used to objectively quantify the reach of a college (or other establishment) by studying the links to and from its website. This is done because the websites of these schools are playing an evermore important role in academic establishments achieving their mission, in terms of serving as spaces for dissemination on the internet. Several international rankings are evaluating their global presence and visibility, being a differentiating factor in a highly competitive environment.

Its methodology is based on the same overall measurement and valuation scheme general used in bi-

biometric studies to provide quantitative analysis of the citations and references among authors, but this time applied to the entire internet, or, as the authors prefer to call it, the web. The definition of cybermetrics given to us in the text makes note of the semantic disquisitions that the term has had since the first years of the internet, defining it today as the study and characterization of the web, based on the analysis of its constitutive elements (especially those related to its creation, structure, topography, diffusion, interrelations, evolution, usage and impact) via quantitative techniques used in social research.

These aspects are presented, from general down to specifics, in the main chapters of the book, in which cybermetrics are explained from three angles. First is the descriptive, defining its scope of action, its focal points, units of analysis and the main indicators are identified, such as size, mention, use and satisfaction, among others. This is where the number of pages indexed in the search engines or the amount of mentions on social networks as a sign of popularity becomes important.

The second is the instrumental, which mentions the main instruments used to measure the presence of and establishes parameters, based on the study of the audience and fundamentally in the positioning in search engines or search engine optimization (SEO). Lastly,

the third section of the book refers to applied cybermetrics, the point where this technique connects with the necessities of social research and is illustrated with examples of its use on the college scene, on social media, in corporate world and by the people of today.

Despite being written using very technical and academic language, this last section holds one of the main strengths of this work: revealing the practical applications of the technique, providing specific case examples and links to useful online tools for all those who are not familiar with the material. In the case of the study of the college websites, several different methodologies are mentioned for its application and heuristic-systemized models based on the number of links to individual or personal pages, websites, directories and domains, determining which have the most inlinks being synonymous with quality, due to linking being a sign of recommendation. This criteria was the one that gave Google its initial success, thanks to the measuring of the importance of website pages using the algorithm PageRank.

Another important aspect that can be measured is the size of the domain, which is done via its indexing in search engines. However, it's difficult to inquire given the vastness of college websites and the differences detected among the various engines, and thus today, the



use of a sole search engine isn't a reliable way to calculate real size. One example of this type of measurements, evermore important in evaluating academic impact, is the Ranking Web of Universities, whose editor and creator is Aguillo himself. Carried out since 2004 by Spain's Consejo Superior de Investigaciones Científicas (CSIC), Webometrics, name that this ranking is also known by, evaluates more than 25,000 websites of higher learning establishments twice a year. Together with external links, it also includes the presence or position based on the total number of pages indexed in the main search engine; excellence, according to the number of academic works published in main international journals, using data provided by Scimago Journal Rank; access, according to the total amount of documents indexed by Google Scho-

lar On this last factor, a question must be raised about the quantity versus quality ratio and what correlation really exists between a school's level and how many Word, PDF or PowerPoint files it publishes, points that the book does not clarify. All things considered, the factors used to create this ranking allude to promoting electronic publishing of academic production and, nonetheless, strengthening open access, which speaks of the college or university's overall performance.

Another weakness of cybermetrics as a technique is that it does not incorporate qualitative variables related to usage, traffic, valuation or user participation on websites. These are metrics that social media do provide. Another important topic discussed in this text is the emergence of the social network in the colleges' communication

strategies and the high value that is being assigned to the academic and professional use of these platforms. This has led to the emergence of altmetrics (short for alternative metrics). Its initial success is due to its use of statistics coming from various sources like blogs, Facebook, Twitter, LinkedIn, YouTube, social bookmarking sites like Delicious and CiteULike, and reference managers like Mendeley and Zotero, to create a new way to measure article readership. It's at this point that the next challenge for authors arises, cybermetrics and the academic establishments themselves: how to effectively systemize social networks and their own Scientific or Academic Social Network Sites (ASNS), such as ResearchGate and Academia.edu, that combined have more than 26 million users, giving researchers a more direct platform for knowledge diffusion.

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