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Letter to the Editor

The time for bibliometric applications

Dear Sir,

The use of smartphones to access and retrieve information, communicate with colleagues and establish social interactions has increased exponentially in the last years. Indeed, it is expected that by 2016 the number of smartphone users will increase up to 2000 million people, that is, 25% of the world population (eMarketer, 2014). This has positioned mobile applications or apps, as the new end product demanded by users (Nicholas, Clark, Rowlands & Jamali, 2013). Mobile applications are widely used in the library and information profession, mainly as access points to library catalogues or to special collections. For instance, the British Library includes several apps for smartphones and tablets[1]. The same services are offered by the New York Public Library[2] or the Library of Congress[3]. This same trend can be observed in the scientific community where the main scientific journals, platforms, databases and reference managers also include mobile apps (i.e., Science Magazine[4], Pubmed Mobile Pro[5] or RefME – Referencing Made Easy[6]).

This integration is part of a process which started around 2005 in the information world with the adaptation of academic publishing and library services to the new Web 2.0 environment (see e.g., Xu, Ouyang & Chu, 2009; Schneiderman, 2008). Indeed, three clear stages can be observed on these efforts to adapt to the rapidly evolving information technology and consuming habits. The first phase took place in the 1990s with the shift from print to electronic format and the development of online databases. At the beginning of the new century social media and Web 2.0 applications appeared changing once again information consumers' habits. Plos One is the major journal representing such shift as a pioneer introducing social media in scientific journals and enhancing new ways of scientific communication. On the other hand, tools such as Mendeley or the extinct Connotea introduced social bookmarking offering new solutions for consuming scientific information. The third stage introduces another major shift, the adaptation of content to mobile devices through the development of applications and responsive interfaces.

While the bibliometric community has rapidly analyzed and integrated new measures to understand the changing habits of researchers with regard to their integration with social media (i.e., Haustein & Siebenlist, 2011; Neylon & Wu, 2009), they have not worked on the development of mobile applications adapted to smartphones. This is something especially noticeable due to the large experience in the field of scientometrics with regard to the development of visualization tools and end-user interfaces. Indeed, interfaces and information visualization are key features in most of the products developed for research evaluation, such as software programs (i.e., VOSviewer or Sci2 Tool), bibliometric suites (i.e., InCites) or university rankings (i.e., Leiden Ranking). This type of tools provide especial attention to the interpretation of information or the generation of easy-to-read visualization tools that make them provided more accessible to the non-expert reader. Although they pay such attention to the presentation of information, they do not offer responsive interfaces or mobile applications that adapt to new communication and information consuming habits.

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[1] http://www.bl.uk/app/
[2] http://www.nypl.org/mobile-help
[3] http://www.loc.gov/apps/
[4] https://play.google.com/store/apps/details?id=com.texterity.android.ScienceMagazine
[5] https://play.google.com/store/apps/details?id=com.bim.pubmedp
[6] https://play.google.com/store/apps/details?id=com.weebly.microbuff.gssearch

Aware of the lack of mobile applications in this field, at the University of Granada we have developed a bibliometric application called 'UGRinvestiga'. The idea behind this initiative was to analyze the potential interest this type of tools may have for researchers and how it can be useful for research policy. Based on our own experience, we encourage the development of bibliometric mobile applications as new end-products that better adapt to users' information consumption habits.

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