ABSTRACT

The scholarly journals have played a very prominent role in the scholarly communication system for several centuries. In the last three decades two major forces have challenged their pre-eminence: the spiraling cost, and transition to electronic medium. This research is aimed at studying the correlation between economics and value of electronic journals. Research design was at two levels: macro level and micro level. Publishers of scholarly electronic journals were grouped into two broad categories — commercial and society publishers for the purpose of this study. After ranking of 214 commercial and society publishers according to the number of electronic journals they published, the top ten publishers, top five from each category were selected for further study. At macro level an analytical study of economic issues such as access control, archiving, licensing, and pricing models was carried out. The study also focused on 4,415 scholarly electronic journals published by these selected publishers. The 2003 annual institutional subscription price lists of journals, titles of journals, number of issue per year, and subject of journals were taken into consideration to carry out further analysis. With a view to study the pricing differentials across subjects/disciplines, subject-wise categorization of 4,415 journals published by the top ten publishers was carried out. In order to standardize the subject categorization, the Australian Standard Research Classification (ASRC) was chosen. The Average Subscription Price (ASP) and the Average Subscription Price Per Issues (ASPP) of various publishers and disciplines were calculated.

A comparison between the two categories — commercial and society publishers revealed that the number of journals published by commercial publishers is higher than the number of journals published by society publishers. The smallest commercial publisher (Springer-Verlag) in the present study published twice as many journals as the biggest society publisher (Oxford University Press). Blackwell is found to be the least expensive (US$455) publishers among top five commercial publishers and Cambridge University Press had the lowest ASP (US$279) among top five society publishers. MCB University Press was the most expensive publisher. Ranked ASP and ASPP showed that there is remarkable difference between commercial and society publishers in this research excluding MCB University Press. The Average Subscription Price (ASP) of commercial publisher-owned journals was 2.8 times higher and the Average Subscription Price Per Issue (ASPP) was 1.7 times higher than journals published by society publishers. These results confirm the findings of the earlier studies. Scholarly journals of Physics and chemistry were the most expensive disciplines among commercial publishers in comparison with the other subject categories surveyed.

To study the value of electronic journals, a user study was carried out at the Indian Institute of Science in Bangalore. The results of the survey reflect that there is an increasing interest among the users at the IISc. The use of electronic journals from twenty publishers was evaluated. The results revealed that use of the Elsevier electronic journals was the highest (63.97%) and the Sage Publication electronic journals were the lowest (2.51%). Analysis of top-thirty journals at IISc showed that two-third of thirty top journals belong to society publishers and only one-third of top journals belong to...
commercial publishers. The electronic journals were mostly used for research needs and PDF format was the most preferred format. The fact that users have free access to electronic journals all the 24 hours from their own computers in their offices seems to be the most appealing feature. In addition, the respondents strongly agree with the features such as “up to date information”, “search capabilities” and “download possibilities”. It is been found from this study that the journals Nature, Science and PNAS (Proceeding National Academic Sciences) are the most popular research journals.

Keywords: Electronic Journals, Scholarly Journals, Journal Price, Journal Usage, User Study, Commercial Publishers, Society Publishers, IISc, India