Usage statistics and scholarly communications

Heather Morrison, Project Coordinator, BC Electronic Library Network (BC ELN)

http://eprints.rclis.org/archive/00004889/

High quality, comparable usage statistics are either available, or just around the corner, thanks to COUNTER and SUSHI. Librarians are very aware of the need for, and benefits of, usage statistics. This article will touch on the benefits of usage statistics, but focus primarily on some serious potential dangers to scholarship, if these statistics are used as a basis for economic decisions. The most serious danger arises from usage-based pricing, which inevitably discourages use. Basing purchasing and canceling decisions on usage statistics can have enormous implications for scholarship; for example, there are important areas of research, such as endangered species and rare diseases, where the number of potential readers may be small.

Benefits of Usage Statistics

Usage statistics can be useful to demonstrate the value of our services, particularly in the aggregate. For example, BC Electronic Library Network partner library patrons downloaded over 3.7 million articles from Academic Search Elite / Premier alone in 2005/06, a number quoted in the BC ELN Year in Review, 2005/06.

Usage statistics can be useful as a means of improving service. For example, low usage of a resource may indicate a need for promotion and training. Statistics can also help to identify problems. For example, no usage might mean that a service is not working; or, turnaways might indicate a need for a higher level of access.
Statistics make it possible to conduct new approaches to researching how information resources are used.

It is also possible to analyze usage to help determine pricing, for example tiered pricing, with no harmful effects, as long as there is no ongoing usage-based pricing.

**Usage-based pricing: dangers!**

Andrew Odlyzko, speaking about internet service pricing, says: “Usage-based pricing can be very effective. The trouble is, you might not like the effects!”

**Usage-based pricing: impact on use**

Usage based pricing is a very effective way to share scarce resources. If there are only so many apples to go around, it makes sense to sell by the apple, or by the pound. When apples are plentiful, have a sale!

**Usage based pricing and libraries**

Libraries do use usage based pricing, for good reasons. For example, most libraries charge other libraries for interlibrary loans. This is a practice that began when demand for interlibrary loan service began to exceeded our capacity to supply items. (As an aside: in British Columbia, ILL fees are going down).

Another example is photocopying charges. Most libraries charge on a per-page basis for photocopying. Here, usage based pricing serves the useful purpose of preventing excessive and unnecessary costs for photocopying pages that might not even be read – as well as saving trees!

*Usage based pricing & electronic scholarship*
Usage based pricing does not make sense when applied to a scholarly article online, because it is not a limited resource. A peer-reviewed article on the web can be downloaded a million times - or more, and the article itself is not diminished at all.

Knowledge gains value through use. A half-eaten apple is less valuable; a well-cited article is more valuable.

Usage based pricing harm: discouraging use. How?

Picture a reader who likes to browse through full runs of journals in a print collection. Picture the same reader in an electronic environment where we pay for every download. If pricing is based on usage - will libraries decide to limit or forbid browsing?

Usage based pricing harm: the undergrad

If we can assign per-article costs to reading for an undergrad assignment, will universities cancel some assignments to save costs? Will reading be rationed, for example, two articles per assignment? What might be the impact be on the serious student?

Usage based pricing and economics for libraries

If we seek to pay less for what we use less, will we pay more for what we use more? Airline pricing is the classic example of price discrimination. If our timing is flexible, deals are possible; but what happens to holiday travel pricing? Odlyko\(^1\) reported that Coca Cola was experimenting with vending machines that raise prices when the temperature rises. This question is not merely hypothetical; some libraries have reported that recent Nature pricing, based on usage, is resulting in large price increases.

Usage, collections decisions, & research
If libraries everywhere begin purchasing and cancelling journals based on usage, what happens to journals that publish the works of small research community? How many researchers are likely to be studying any particularly endangered species, for example, especially one that is not cute? How many people are likely to be engaged in research on any one particular rare disease? If publishing opportunities disappear, will the research follow?

Conclusions

In conclusion, usage statistics have value. However, usage based pricing is harmful, and should be avoided. Basing collections decisions on usage data alone could have some serious consequences. Open Access is not only a better access model for scholarship; it is a better economic model, too.

Heather Morrison

Project Coordinator, BC Electronic Library Network (BC ELN)
heatherm@eln.bc.ca
604-268-7001

The Imaginary Journal of Poetic Economics

http://poeticeconomics.blogspot.com

1. Andrew Odlyzko, Internet Pricing and the History of Communications
   http://www.dtc.umn.edu/~odlyzko/doc/history.communications1b.pdf