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The value of online journal backfiles to university libraries

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Background

During September 2005, librarians at five major universities were interviewed about their experiences since purchasing online backfiles of pre-1995 journal issues published by Elsevier and available on ScienceDirect. ScienceDirect is Elsevier's full-text online database of over two thousand journals and books. The aim of the interviews was to investigate the value that the respondents placed on the availability of backfiles since they had purchased them.

The librarians were asked to comment on

- The disclosure of content that previously was not as easily available to users
- The role and value of online delivery of backfiles in a research environment
- The creation of possibilities within the library since the backfiles were purchased

This white paper summarises their views and seeks to inform academic librarians about the experiences of their peers when deciding to invest in online backfiles. The goal of the paper is to contribute to the engaging and ongoing debate about the need to digitize and provide online access to the historical data that is published in peer-reviewed journals. Ensuring that scientific discoveries are evaluated, recorded and preserved for future generations, such journals collectively represent "the minutes of science".

Respondents

This paper has been written with the generous input and consent of:

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5. **Rick Anderson,**
Director of Resource Acquisition,
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Summary

The librarians interviewed have purchased diverse amounts of online backfile material. Some had already analysed usage and made decisions about collection and storage management on the basis of the use of backfile material. Some felt that it was too early to comment. However, all agreed that there were four significant benefits they had experienced as a result of purchasing the backfiles.

■ Librarians had empowered their users to find relevant material quickly and easily. Users may have known that this material was in existence but they could not as easily access it before, or online availability may have revealed 'hidden gems' that made a positive contribution to the success of research endeavors.

■ The delivery of online backfiles is key to the library providing a best-in-class service, thereby fulfilling its aims and raising its profile.

Online availability of scientific research is not new. User expectation levels are set and journal subscription models are of little interest to them. As a result, they do not distinguish between current and backfile material and do not understand if some issues of a journal are not available online.

■ The addition of backfile material to core online journal repositories is important to meet user expectation levels.

Libraries face physical space challenges. This could be driven by the need to house new printed matter, or rare collections, or to make way for work space or other initiatives to promote the use and vibrancy of the physical library. Whether the decision has been made now or is planned for the future,

■ the online availability of large amounts of key literature assists librarians in the migration of printed matter to cheaper, off-site storage locations.



The new university library building, University of Utrecht, The Netherlands

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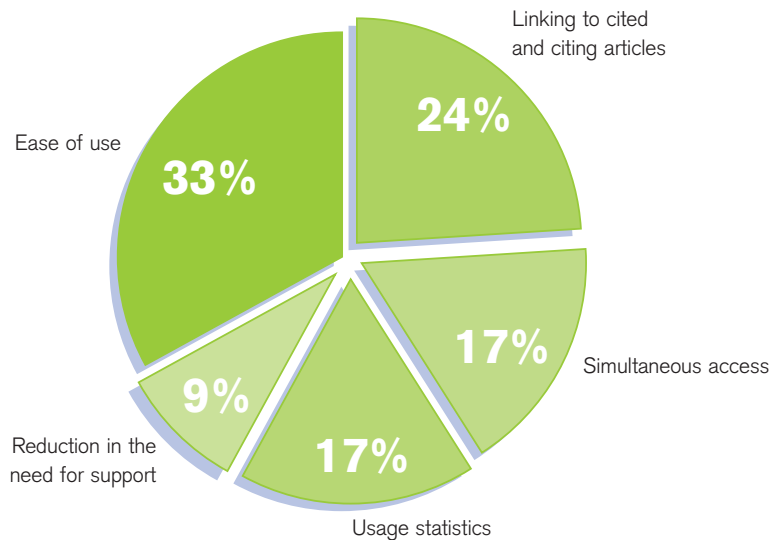
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Backfile value ranking

Respondents ranked the value demonstrated by the online backfiles they have purchased. They were asked specifically to relate the value to the online, rather than print, availability of backfiles. The chart expresses the values they assigned as a percentage.



On the disclosure of content that previously was not easily available to users

It is clear that users' expectation levels have been set by the ubiquitous online availability of scientific research literature. They do not distinguish between current and backfile content: "The question always being asked is why can't we go back any further? Why isn't everything electronic?" (*University of Manchester*), or as another respondent noted, "they [our users] want a specific article, that is all that matters". For many librarians, the online delivery of backfiles is a logical step in their digital strategy: "we like to move anything to the patrons' desktop if we can".

■ The online availability of current content has raised the visibility of and demand for backfile content, to an extent that surprised some of the librarians interviewed.

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The increase in the resolution of citation links when backfiles are delivered online is seen as key to improved research: "the more content we provide online, the easier it is to follow that trail of citations" (*University of Nevada Reno*). The ability to link directly from references in a current article to older material was seen as a specific advantage over the print environment.

The delivery of historical information makes new discoveries possible: "I think new research will come out of it that formerly would have been in a drawer because it is now easier to find".

*The delivery of historical information
makes new discoveries possible.*

Respondents agreed that the increased content accessibility that an online environment provides is correlated with research quality. This helps the library achieve its academic goal of being at the heart of information disclosure: "the more you can do in a single session, sitting at your computer, the faster your research is going to go and that is what we want to come up." Librarians interviewed appreciated the breadth and depth of understanding that instant access to historical data can support. For many users, the backfile articles are their core literature: "[They are] full of wonderful information and they are primary research material for a lot of folks" (*University of Cincinnati*). The purchase of online backfiles has, for many libraries, secured access to a broad range of journals that were never available in the library. The University of Cincinnati estimates that half of its online backfile collection is new material within the library.

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backfile collection is new material within the library.*

Of the librarians that had reviewed user behavior, heaviest usage was seen among the medics, the chemists, the economists and the linguists.

On the role and value of online delivery of backfiles in a research environment

The advantages of online delivery of scientific literature are well-documented, and the backfiles are no exception: "all the advantages of electronic journals obviously apply to back issues". Academic researchers are less inclined to make use of anything that is not online, particularly in the scientific, technical and medical fields. Responding to this trend by providing access to backfile articles is a way that libraries can add value to the research process: "what is value for us is what our users appreciate...and so digitized back issues are a way in which we can please a large part of our user base" (*University of Bristol, UK*). A reliable platform, such as ScienceDirect, reassures librarians when making the decision to buy online backfiles for their users.

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and ease of use is greatly valued.*

The "instant gratification" of desktop access and ease of use is greatly valued. This is particularly true of backfiles, containing data that may not be as visible or well-known as current material, but no less relevant. Online delivery is "much more interrogable", enabling users to decide whether they actually want the article: "in the print world it was very difficult to determine whether you wanted a particular

article from 1975. But with the enhanced searching capability, the ability to really interrogate the content of these journals, you can become aware of articles that you didn't know you needed" (*University of Nevada Reno*). For librarians, this translates as value for money: "You do it because it is worth the money"... "I think we have gotten very good value for money." (*University of Nevada, Reno*).

"I think we have gotten very good value for money."
University of Nevada, Reno

Respondents highlighted some particular challenges in the management of print collections of older journal issues. The problems of torn, missing or defaced articles are exacerbated during the lifespan of that issue or volume, and frequently libraries maintain only one copy that cannot be replaced. User complaints are reduced by the online delivery of this material: "a silence signifies contentment". At the same time, ease of use drives usage. Some respondents have already noticed that users are downloading more and a wider variety of backfile articles than they would have requested through document delivery.

The University of Manchester library used to tie pink ribbons around print journals, or test for layers of dust, as one method of assessing usage of print journals. With such a critical mass of information published in the backfiles, the ability to review COUNTER-compliant usage statistics is critical to collection management. Usage of older material is a particularly nebulous area that is, for the first time, being thrown into sharper relief for librarians. The combination of quality, peer-reviewed content, a platform you can count on and insight into the usage of these articles is, as one respondent commented, "really a clear winner for us".



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Paradoxically, the profile of the library and the use of its resources increase because users are not limited to library opening hours: “what we were trying to do is to make life a lot easier for our users by actually not having to come to the library” (*University of Manchester*). Remote users, and visually-impaired or motor-challenged users, are far better served in an online environment. The University of Manchester library has seen remote access accounting for 30% of total usage. Users are pleased that they do not have to interrupt their workflow and physically come to the library to access articles they need, particularly older material which they may not be so familiar with: “our users tend to be scientists who are very, very comfortable in the online environment and who don't want to have to physically come to the library to use the materials” (*University of Nevada Reno*).

On the creation of possibilities within the library since the backfiles were purchased

All respondents noted that the purchase of online backfiles is part of a transformation in their libraries; to free up space, reduce local storage costs and gradually complete migration to online resource provision. Librarians see this as key to providing better service to their users, resulting in increased user satisfaction and a positive impact on the profile of the library.

Respondents expressed a difference in opinion about the savings in storage space they have experienced since purchasing backfile material. Some libraries have not yet made any storage savings; others have saved “huge amounts”. They were unanimous, however, that the question is not one of discarding print, but being able to move print collections to cheaper storage options and free up library space. The provision of backfile articles online makes that wish a potential reality, even though many academics have misgivings about discarding print the library already has: “we are in a better position to think about discarding print and saving space.” The University of Manchester library has challenged user reluctance by agreeing that any print backfile material stored offsite will be retrieved free of charge on demand: “and, literally, we have not unpacked them.”

■ The partnership between publisher and library is key to a successful migration to electronic backfiles. The archival policies and agreements that Elsevier has made to deposit electronic copies of all articles with national libraries are welcomed by librarians as a guarantee of the permanence of the record. This delivers advantages of duplicate copies and ease of retrieval that are far less tangible in a print environment.

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successful migration to electronic backfiles.* ■

The University of Cincinnati has already reaped benefits since purchasing the backfiles on ScienceDirect. They needed to clear the way for new material that would deliver the timeliness that the library demands. The availability of the backfiles “allowed us to store our paper offsite which is a

great benefit for the campus. We were able to save a lot of space. If it is in the Elsevier backfiles, there is no need to have it on campus". Even with a culture not yet ready to discard print, libraries can experience significant local storage savings.

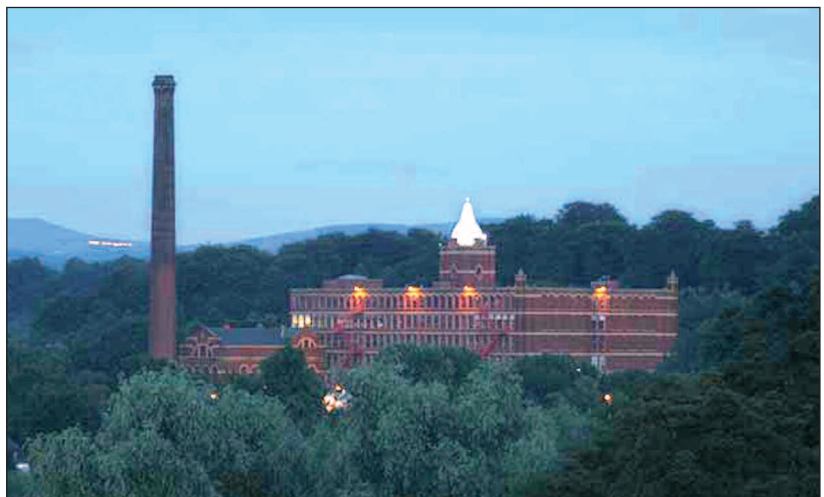
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For the University of Nevada Reno, the backfiles allowed them to capitalise on the resources they had: "what is really at a premium in the library is space for us to put tables and chairs". They have ensured that the library retained its role as a working environment that successfully discloses information, rather than just an archive: "when we can reduce the amount of shelving without reducing access to information, then we want to do that wherever we can".

The University of Manchester claim "necessity is the mother of invention". Their John Rylands University Library had "severe space problems" and was faced with the need to house an additional two-thirds of the special collections, archives and rare books library. "The backfiles just came at a point of salvation...the backfiles frankly are a godsend" to the library at Manchester. They succeeded in housing additional "kilometres of material as a result of moving out all our electronic journals". Later in 2006, Manchester will use additional room that has been created to function as student workspace.

Today, the Elsevier print journals that the University of Manchester owns are housed in one of the mills that played a key role in the industrial revolution.

Nineteenth-century England saw an industrial revolution as powerful watermills and cotton-weaving factories produced Britain's global textile export. Today, the Elsevier print journals that the University of Manchester owns are housed in one of the mills that played a key role in the industrial revolution. If you journey through Stockport, near Manchester, look out for a mill with a pear on top. That is Pear Mill where there are "thousands of cardboard boxes, not unpacked" of print journals: "we are the only university in the country that has actually shed all its printed materials if we have them electronically available". Just as the industrial revolution transformed the wealth of the country, so the University of



Stockport Pear Mill, Manchester, UK; where Elsevier print journals are housed.

Manchester is seeing a transformation in usage and savings resulting from their decision to take the backfiles on ScienceDirect. Usage of electronic backfile articles at the university is 15-20% of their total full-text article usage; they have seen document delivery and inter-library loans drop by nearly 40% in two years, and photocopying has reduced by a quarter over all journal articles.

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University of Manchester

All respondents noted that the financial investment in the backfiles and even additional investment in staff time to provide technical support was worthwhile: “the ability to give people 24 hour a day access from wherever they are, to be able to distribute the information very quickly and easily, outweighs the cost of having to deal with the management of it”.

As librarians meet the challenges of serving users in a digital age, managing burgeoning collections and transforming their libraries into 21st century environments, the value of online backfiles can be appreciated.

For more information on the ScienceDirect backfiles, please visit

www.info.sciencedirect.com/backfiles

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