

# **The economics of Repository Libraries in the context of the future conventional libraries**

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## **Abstract:**

The costs of repository libraries will be measured and reported in different ways. Most repositories are differing in their histories, perceived role and collecting aims. Most often administrators see this equation in conventional terms. This paper argues that it is important to view repository libraries anew and to re-invigorate the debate as to their value and their place in the digital world. The paper is also set in the context of the CARM Centre which is located in Victoria.

The measurement of the performance of any organisation must be relative to its performance within groups of like organisations. It is impossible to compare the efficiency and performance of a zoo in comparison to an art gallery. In the same way it is difficult to assess the performance of repository libraries against that of a large public library or even an academic library. Both the zoo and the art gallery provide public functions supporting education of the public regarding the nature of their area of expertise; the zoo about animals and animal welfare and the art gallery about the creativity of artists and the history of art movements. The repository library and the normal library, in whichever sector it serves, are connected by the fact that they collect materials but their purposes are quite different, the pressures on them are quite different, their respective roles are changing significantly, their collecting policies are sharply differing and their service models are being shaped on different approaches. In many ways the repository library is now emerging in the light as an organisation with its own purpose, style and peer group. But how is any quality exercise going to measure the effectiveness and the measurable aims? Australia has a national quality review process for the universities measuring them against sets of criteria. It also looks at the libraries but not against each other. It is really looking to see how they meet the institution's perceived needs. The libraries engage in their own quality survey examination using an instrument called Rodski (which does not contact non-users) and some will soon use LibQual+ ( which does examine non-users as well as users). However, they do not measure or evaluate the libraries against each other. This is a mistake, as this paper will contend.

This paper sets out to explore the place of the repository library in today's information world. The economics of this repository library will be sharply affected by how we see and present the purpose, role and future of the repository library.

There are five main lines to this argument:

Firstly, the roles of conventional libraries have changed very significantly,  
Secondly, the delivery of published information is going digital and affecting library budgets

Thirdly the amount of library space available to house ongoing collection growth as well as new functions is extremely limited

Fourthly, the economics of repositories needs to be set in the context of this new world order

Finally, the development of new service models will re-vitalise old and emerging repository facilities generating new purpose and economic relevance.

Each of these, singularly and especially collectively, will severely shape the economics of the information delivery models.

### **Libraries in our information world**

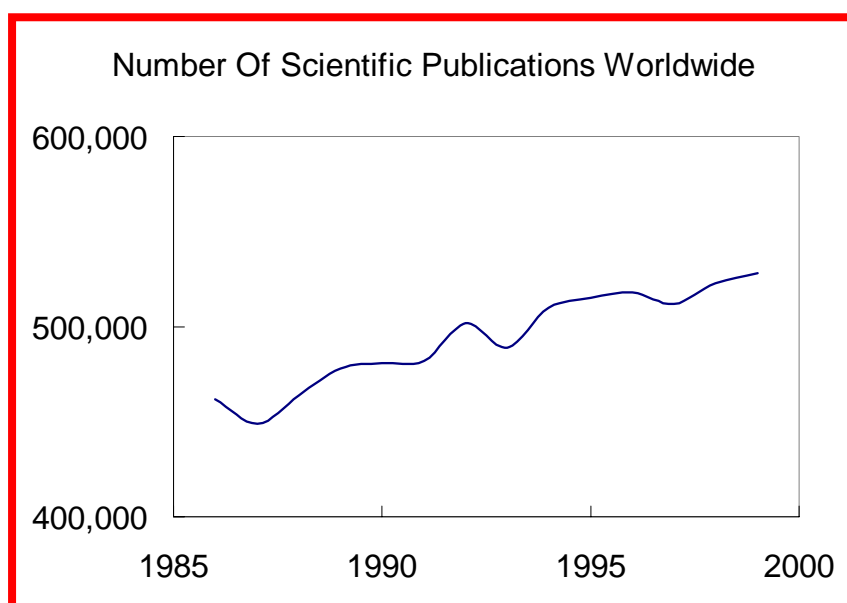
The purpose and role of the library in our information world has been changing over the past ten years from that of a collector and provider of information with a reputation respected and valued in its organisation. This role was funded without too much question and was bound by the physical building. The world of higher education has itself changed very markedly as a precursor to library changes.

Computers were used to access the library catalogues but vast banks of computers forming an 'information commons' were not conceived of. The library saw its role dealing with published information in a continuum from the publisher to the user. It saw its role as archiving the published word and establishing systems to ensure that the sharing of the collected information was not only possible but easily encouraged. There was not question of the right of a library to share information as this 'right' was plainly part of the 'fair dealing' provisions of the copyright acts in each of our countries. Inter-lending systems flourished although they were slow. They were not as responsive or robust as they are today. Each of these issues need to be explored in order to understand the current and prospective role of the repository library. The repository library is no longer the adjunct to the

library system but can and should play a much stronger and definitive role in the provision of information across our systems.

### Confluence of trends

The past 10 years have seen a number of trends emerging affecting the future of libraries. Library budgets have become increasingly tighter while publishing has not decreased in volume or intensity. In fact there is more publishing as the research<sup>1</sup> from British Library research indicates.



The impact on library budgets is already quite apparent with the rate of acquisition diminishing in most libraries and the trend to buy less monographs, less print serials and more electronic serials is widespread. In this it is difficult to ascertain the extent of overlap in library collections. A study done in 2003 in Australia by Missingham and Walls<sup>2</sup> highlighted that there are 23 million monograph holdings for the 42 universities across Australia representing 9.5 million separate titles. On the serial side there are 1.07 million serial titles holdings representing 444,000 separate titles. Further, the universities are the only holdings for 1.67 million monograph titles and 79,365 serial titles. These are the only locations for these titles. However, percentage of monograph titles held by only one university library in a state ranges from 57% in Victoria to 63% in NSW (this excludes small states). There have been stronger collection development programs in Victoria than in NSW

<sup>1</sup> Richard Boulderstone "International Library Cooperation". Fiesole Collection Development Retreat, Fiesole March 2004.

<sup>2</sup> Missingham,R and Walls,R (2003) "Australian university libraries: collection overlap study". Australian Library Journal, 52(3)

thus leading to a better spread of titles. The number of serial titles is very high raising the suspicion that many are very esoteric, annual reports and the like. It would have been very much more interesting to see an analysis of the top 100,000 serial titles world-wide. This would have produced much higher levels of overlap. It would make the findings of the study much more problematic.

This study is unique in Australia. Another perspective on the issue is that although 1,669,962 titles are uniquely held in the university libraries, there are still very significant numbers of titles held across the other libraries as duplicates. The state-by-state comparison does not reveal the full extent of duplication. Put another way, do we need copies of all these titles in each of the libraries within a state or even across the various states?

The costs of libraries building their collections to be bigger and bigger are eventually translated into larger and larger buildings with accompanying maintenance programs. It has to be remembered that there are two foci to overlap studies. One is to identify unique material but then the second is to begin to think about and understand the amount of material we wish to retain in our library systems or indeed which our users would wish us to.

In these overlap studies, librarians are still thinking of themselves as institutionally-bound meeting all their requirements from their own budgets. It is a real stand-alone system. Any pretence to cooperation is shadowing, at best.

The development of digital collections, especially of serials only exacerbates the situation. Up to 40% of Australian university library acquisitions budgets are being spent on digital resources achieving homogeneous collections across a system of these institutional libraries. It is an increasingly homogeneous collection for the rather limited digital serial resources currently available and which is not supporting the genuine research needs of researchers. Of the 22,000 peer reviewed journals across the globe, only 10,000 are available in digital form. This still represent still less than 10% of the world's published serial literature. Any suggestion that libraries have achieved the status of a digital library is erroneous. Digital Library ---no! Digital Delivery – yes!

At the same time, these libraries retain hard-copy of those serial titles which they are now receiving in digital form. The consequences of these very altered circumstances need to be carefully thought through.

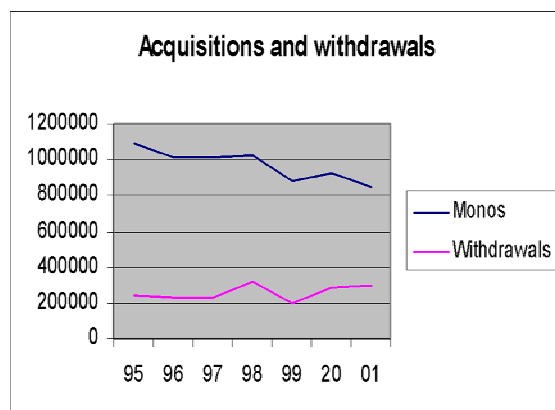
With the growing importance of open access digital repositories which many libraries are developing, it is being argued that the traditional publishing

cycle is being fundamentally changed. Instead of a cycle which starts with the User as Author- publisher-librarian and concludes with the User as Reader; the cycle now could be User as Author – Librarian – User as Reader. This would be a simplified view of the traditional view of research libraries that they were an integral part of the scholarly publishing process, especially as they were funding it. There will be much continuing debate over this but if there is any movement at all in the traditional process then it does have a real impact on the role and economics of the repository library.

The latest research I have read is that the cost of producing an STM article through the publishing process is around USD3,000 or USD300 per page. By far the greatest percentage of this cost goes in the process cost and only a small fraction of the total cost is accounted for in the digital storage and delivery. It is on this point that the open access debate turns. If the production costs can be severely reduced or eliminated then traditional publishing will cease to be very attractive and the roles of repositories will be very limited. While the debate rages around us, it is the contention of this paper that the academic community will not support the abolition of the publishing process with its peer review and support processes.

## Space

The impact on library space is also becoming evident with fewer and fewer library extensions. The rate of acquisition is slowing very sharply in Australian university libraries while rate of withdrawal from collections is increasing. Apart from the Victorian academic libraries there is no co-ordination of what is being withdrawn and, obviously, what is being retained. The overall collection strength of a state or the nation is haphazard.



In times previous with good acquisitions budgets and less voluminous amounts of publishing, libraries were able to hold in their collections across Australia over 70% of English language published output. Now that

percentage has dropped significantly below 50%. As library administrators we are still very conscious of the metrics of our operations. In Australian academic libraries there are over 28 million monographs volumes and 14 million titles. If only a fraction of the duplicate copies of less used titles were withdrawn and retained centrally, then there would be enormous space savings in the system. One library in Melbourne is noting that there is up to a 15% overlap with the material they are withdrawing to go into the CARM Centre.<sup>3</sup> The reason for this is that material being withdrawn from that library collection has already been placed into the collaborative CARM Centre. This enables them to discard that material immediately.

A lateral view by which to think about this is to express the equation in terms of the space across a library or information system. In this way, space for materials in an institutional library can be aggregated with other institutional libraries as well as the space in a systemic repository. All the space may not be owned legally by one entity but it is a way of thinking about the impact of space on collection development, both in print and digital.

### **Economics of repository libraries**

The creation of new repository space is an easy economic argument to make. Repositories are cheaper to build and the capital and running costs for storing individual volumes is considerably less than that of a conventional library. The costings for the repository are a factor of five or six times less expensive than that of the conventional library. The density of storage is far greater at an average 373 volumes per metre square as opposed to the conventional library at around 145 volumes per metre square and less for serials. It is a factor of 2.6 times better. The Centre for Research Libraries in Chicago would achieve even more with their practice of converting much material to microforms.

What is more difficult to argue is the extent of economic value which one's information community places on the supply of low-use materials. For this argument to be successful, the libraries in that information community need to relinquish aspects of their previous role and to assign value to the low use information. A systemic view needs to be developed on this, or a view across the whole of a geographic system. This view fundamentally changes the economics of the repository library. Realistically and politically, each

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<sup>3</sup> Some of this experience is encapsulated in the article by this author (2004) "Collaborative strategies for low-use research materials" Library Collections, Acquisitions and Technical Services 28:51-57

Librarian has to respond to their own community and administration for what they are achieving and also to defend their own views of what their library ought to be. This means that there will no immediate uniformity of view across a system as to what the library or repository ought to look like.

The legacy collections residing in the institutional libraries have enormous value to the research communities. Part of the difficulty changing the present realities lies with those research communities who put pressure on their libraries to retain as much material locally as possible, and thus not allowing the libraries to gain better value from their buildings and collections.

The CARM Centre in Melbourne is a collaborative model of the repository library. It currently has around half of its one million volume capacity complete. It is owned and run by a company which is itself owned by the universities. The company is now planning for the expansion of its membership and also its repository by a further 1.7 million volumes. The current difficulty is that its catalogue is openly available on the internet and its holdings are included in the National Bibliographic database in Australia which is called KINETICA. This practice has been established in the fine tradition of Australian librarianship of sharing and opening access to materials. Any library in the world, for that matter, can access the CARM database ([www.carm.edu.au](http://www.carm.edu.au)) and know that any titles listed in that catalogue will be retained by the CARM Centre for 250 years, at least. If any of the libraries consulting the CARM catalogue wishes at any time to relinquish, or discard a title, they can do so knowing that the CARM Centre will retain it. This action has a real economic value to that library in that they can save storage space in their collection. This would be expressed in terms of capital and maintenance savings. If the withdrawn material were not a single monographic title but a number of serial titles with long runs then this would multiply the economic value to that library. The difficulty for the CARM Centre is that someone has to pay for the extension and operation of the Centre. Should the catalogue and its holdings be only available to those who are members supporting the establishment and growth of the Centre.

This a very measurable economic value where it has always been very difficult to ascribe value to a book, an idea a set of words in a low use source. As an extension of this thought the system of libraries which financially and materially support a particular repository should be able to gain the economic value of their work in reduced capital costs. Repositories across regions, or indeed, across the globe could link bibliographically undertaking to retain certain materials for the benefit of this network. This would generate further savings.

There are three arguments coalescing here:

Firstly, it is uneconomic and unhelpful to researchers to shelve long runs of very little used resources. All the research indicates that they, especially scientists, are not visiting their physical libraries and expect service to their desk-top;

Secondly, there is a saving for institutional librarians to have one set of the serial title now held in the digital form but, from the repository's point of view, there is no business case for storing that material for future usage. It will not be used and therefore will only incur cost for storage, and no income through inter-lending usage. The lessening of the burden of this archiving of low use material across other repositories could add further economic gain for everyone.

Thirdly, there is economic value if the collections are treated as a whole across a system even though the institutional collections are still locally "owned". The shared approach and the shared ownership of the repository resource makes real economic sense. It is more than a mind-set by all the partners to an effective system; it is a new way of operating.

### **New Systems**

Publishers have over the past ten years abrogated the previously held role of library as the archivist of the published print issues of journals. They have taken on this role, reluctantly at first, but then with more enthusiasm as the realisation of new revenue models have emerged. The additional possibilities of changing access models from being based on copyright and fair dealing, to licensing and restrictive practices has bought with it huge amounts of control over the IP.

The emergence of the Digital Object Identifier (DOI) as the unit block descriptor for all articles, graphs, tables and, in fact, all emerging learning objects will fundamentally change the way in which libraries collect and allow users access to resources.

There seem to be three basic roles for the repository in this emerging digital world:

Firstly, there is a role managing the low-use legacy collections which will never be digitised, providing access to them in some defined service and pricing model. Delivery in digital form would still be the highly desirable

aim. The establishment of international service standards would seem to be a beneficial development.

Secondly, there is a role to manage the vast array of learning objects which are being developed institutionally for on-line learning programs on behalf of our existing institutional libraries and their learning and teaching units. Open access may not replace the peer reviewed process but it will generate new storage issues as well as a vast array of new materials for storage and access.

Thirdly, as the peer review process falters in the emerging digital world, the repositories can extend their role to encompass these institutional open access digital repositories. Repositories could logically offer a 'plagiarism verification certificate (PVC)' which, itself, could easily be included as a field in the DOI, thus making the learning object more transportable with a known quality level. In many senses, the publishing industry has in the past provided that verification of quality just through the publishing process.

## **Conclusion**

Repository libraries need to debate a new more active and involved role in their information communities. The measurement of the economics of the repository library should, substantially, not be within their own organisation but within their information community. Their informational communities may, in time, be defined partly in terms of an informational network of repositories. The critical issue is that existing roles are not merely accepted; that they are not tweaked in adjustment to changed circumstances but that much thought goes into how they serve a systemic role. Much will be gained from a rigorous re-examination of the economics of systems rather than of individual repositories.