Value-based pricing, open access, enhanced usage rights – the impact of current trends on collaborative collection building for digital resources

Hildegard Schäffler
Bavarian State Library, Munich, Germany
Value-based pricing, open access, enhanced usage rights – the impact of current trends on collaborative collection building for digital resources

– Hildegard Schäffler, Bavarian State Library, Munich –

1. Market dynamics for digital resources in fast motion

Since the advent of digital resources for academic purposes in the 1990s the market has seen significant developments and changes, some of them at a breathtaking speed. At a rather early point in this development, libraries world-wide established collaborative collection building structures and strategies in the form of library consortia. As early as 1997 such consortia organised themselves in North America as what was soon to become the globally active International Coalition of Library Consortia (ICOLC).\(^1\) In German-speaking countries the consortia working group GASCO, the German, Austrian and Swiss Consortia Organisation, was founded in the year 2000.\(^2\) Until today libraries all over the world work within such collaborative structures and with the specific licensing models which have arisen and changed over time. The paper aims at analysing a number of current trends in the field of licensing digital resources and looks at their impact on the consortial acquisition model.

A few landmarks – nota bene a list nowhere near completeness and with a clear focus on e-journals – of the market of academic digital resources within the last 15 years or so may illustrate its inherent dynamics and identify some of the threads underlying major current trends.

- In 1996 the first so-called Big Deal was offered by what was then Academic Press (later purchased by Elsevier), i.e. a journal bundle covering the complete portfolio or defined sub-collections of the publisher’s portfolio in digital form and at a price within the broad range of what libraries used to pay for individual subscriptions of that publisher. Regarded at the time as a relief to what is known as the serials crisis, the Big Deal has never been unambiguous in its reception, offering both a significant increase in access for virtually the same money, but also committing a significant part of one’s budget to the publisher in question.

- As early as 2003 the Open Access (OA) movement with its main principles of freeing access to content approved by the scientific community from subscription barriers and permitting its liberal use gained momentum due to the “Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities”.\(^3\)

- In the same year the Library Journal in its annual Periodicals Price Survey observed that “pricing models for online journals, when standardized at all, are getting more complex.”\(^4\) This was certainly true – and has been ever since – for the consortia-driven bundling models, but nonetheless for single subscriptions.

- In 2004 the Open Access concept was adopted by one of the largest STM publishers in the market in establishing – as Springer Open Choice – the hybrid model of OA publishing. It means that single articles can be “freed” within the context of a subscription journal via payment of Article Processing Charges (APC). At the time a couple of consortia tried to include those APCs

---

\(^1\) Cf. http://icolc.net/
\(^2\) Cf. https://www.hbz-nrw.de/angebote/digitale_inhalte/gasco/
\(^3\) Cf. http://openaccess.mpg.de/Berlin-Declaration
into their Big Deals, but in retrospect it seems that it was too early days to fully understand the opportunities and challenges of such a model on both sides. With the hybrid model in general, libraries have been suspicious about publishers earning their money twice ("double dipping") with rather inadequate compensation mechanisms being put in place at a largely global level.

- While this was a relatively early point in the OA movement in 2005 the Library Journal states that "on the surface, not a lot has changed. [...] Beneath the surface, however, the tide of change runs strong."

- Another landmark for OA publishing was the founding of the MegaJournal PLOS ONE in 2006, a database rather than a journal with a broad STM subject coverage, publishing papers in a fast peer review process on the basis of scientific soundness rather than expected impact.

- While the OA movement gathered speed, in 2007 the California Digital Library began to develop criteria for what they called a "value-based pricing strategy", thus systematically questioning pricing structures essentially rooted in the print world for both single titles and Big Deals.

- More or less at the same time, in 2008, the American Chemical Society (ACS) rolled out what they also called "value-based pricing", i.e. the package deals sold to consortia would no longer be based on historic print spend, but on other criteria such as usage ranges. While it was a positive move to look at pricing parameters different from historic subscription spend the implementation of the concept was somewhat thorny as any change of parameters will almost inevitably lead to a winner-and-loser situation. But in some way it was a milestone in the development of a new form of pricing model, as the Library Journal stated in 2011: "We can expect the next generation of pricing, likely based upon some form of tiers, to be unveiled in the coming year. [...] pricing content based on print subscriptions makes less and less sense as the content moves further into the digital realm." 8

- Any of these models will only work on an e-only basis, which means that print subscriptions – differing in speed from country to country – were beginning to erode, with the Library Journal claiming in 2010 that "the shift from print to digital is likely to accelerate greatly".

- Both (consortial) subscription models and OA approaches developed over those years without significant convergence. Genuine, i.e. gold Open Access journals, including MegaJournals, largely tend to be newly founded titles. Hybrid publishing has not reached the numbers yet to induce full transformation of existing subscription journals to gold OA. In the wake of the Finch Report issued in 2012 in the UK and thus on the basis of a strong political will academic funding was closely tied to OA publishing of research results with a strong gold OA bias. In order to mitigate negative cost effects of both subscribing to Big Deal collections and publishing in gold OA at a significant scale, Jisc Collections started to undertake the Total Cost of Ownership project with first results published in 2014, engaging in so-called offsetting models.

- In 2014 the Library Journal noticed that "the Big Deal e-journal package continues to dominate academic library purchasing." 11 Despite all criticism the bundling model in e-journal subscription

---

5 Library Journal, April 15, 2005.
still prevails, but has undergone some change in terms of pricing models and as the basis of offsetting mechanisms. Relating to the latter, the Library Journal states in spring 2015, though, that “the financial tipping point for open access is not on the horizon.”

- 2015 has also seen a statement on text- and datamining by the International Association of STM Publishers and a response by LIBER, thus illustrating that – with any kind of model – libraries/consortia have become more and more conscious of access and usage rights over time.

Three major trends in (collaborative) licensing of digital resources will be discussed in a little more detail in the following – tiered or value-based pricing in package deals, Open Access and subscription models as well as enhanced usage rights. All three can be traced back to some of the developments sketched above. The paper will focus on these three issues which seem to illustrate some of the market dynamics at its present state and which pose both challenges and opportunities for consortia work.

2. Pricing structures in package deals – farewell to historic print spend?

There is hardly anyone who would not agree that historic print spend as a basis for pricing Big Deals is largely inadequate. Originally this was – at least in those parts of the world which have a significant “subscription legacy” – the calculation basis for defining package pricing. Even though the print copy as such has increasingly been abandoned, the deals in many cases still tend to be based on the grown subscription value, regardless of format. In moving away from this practice alternative pricing criteria are to be found. Examples of such parameters would typically include

- the type of institution, e.g. Higher Education institution vs. research institute,
- the size of the organization, often measured as full-time equivalents (FTEs), possibly subject-specific,
- usage statistics or
- budget figures, either institutional or based on the acquisitions budget.

It is clearly in the interest of libraries/consortia to find ways of standardising those parameters by defining pricing tiers/bands which reflect institutional specifics and which can actively be used in licensing negotiations with publishers. Examples of such library-defined standardised pricing tiers/bands would include the well-established Jisc Banding Model as well as a concept developed more recently for Germany within the context of a project funded by the German Research Foundation (DFG). Whereas the Jisc model is mainly based on budget figures, the German approach relies – below the level of different types of institutions – on full-time equivalents, either for the complete institution or a subject-specific subgroup.

---

The different parameters underlying the UK and the German models illustrate that there is not one objective set of criteria to be applied. In this particular instance it seems to play a role how the underlying figures for both budgets and FTEs can – in a particular environment and tradition – most objectively be retrieved and compared. Other considerations would e.g. apply to usage statistics and the question of whether such a parameter, which may well show the demand for a particular resource, is not inclined to undermine libraries’ efforts to promote access to the resources on offer. What is more is the question of what is regarded as an adequate price in absolute numbers in line with value-based pricing analytics. In any case, one of the major challenges of such a change of pricing criteria lies in the fact that there will always be winners and losers unless the overall volume of the deal is reduced dramatically.

What are possible strategies to make such a transition – especially at a collaborative level – work at all? It can be helpful – and has e.g. been practiced by the American Chemical Society – to make use of migration plans, which means to draw out the transition process from one model to the other over a defined period of time. In some so-called Alliance licences funded by DFG in Germany (see also below), which actively experiment with pricing models independent of previous print spend, the peaks were cut in comparison to what was paid before, at the expense of the implementation of the pure concept. In a consortium setting one single flat fee is possible, which is then distributed according to internal mechanisms irrespective of the publisher and possibly with the help of a standardised banding model. As far as the overall amount to be paid is concerned and thus the question of the value of the resources to be purchased, is it fair to claim benefit from savings on the publisher’s side, whose internal workflow should be simplified significantly when moving away from a holdings-based approach. In any case, a collaborative strategy is likely to enhance the buying power in such a scenario, which could also lead to additional services to be gained.

3. Open Access and subscription models – how do they go together?

One step further from putting package deals on a new pricing basis is the question of how the subscription model as such can altogether be transformed into a gold Open Access model. As quoted above a recent issue of the Library Journal didn’t see the financial tipping point for open access to have been reached. What is more: „OA is not relieving the pressure that rising costs have on library budgets.” In view of Open Access mandates which we see in a growing number of countries, most prominently in the UK, consortia as well as publishers have been considering – as briefly sketched above – how they could mitigate the cost increase effect in a hybrid scenario by constructing offsetting schemes which are intended to intertwine open access and subscription models together. Let us look at a couple of examples.

The first example was brought up by the publisher rather than the libraries or consortia in the first place. It is the “Gold for Gold” programme of the Royal Society of Chemistry where the publisher issues vouchers alongside the subscription deal for hybrid OA publishing in their journals. This scheme has been viewed critically, especially for its workflow deficiencies and for the lack of transparency of how the APC vouchers relate to price increases at the subscription end. But it can certainly be seen as a starting point in trying to intertwine open access and subscription models.

---

The second example to be mentioned here was initiated by the Austrian consortium for the journals of both the Institute of Physics (IOP) and more recently Taylor&Francis. Any article sponsored by the Austrian Science Fund (FWF) is to be published in Open Access. In the case of these two publishers the FWF pays for the APCs, which in turn are deducted from the subscription fees of the consortium. Thus double dipping avoidance is directed straight to the local level rather than solely addressed by opaque global compensation mechanisms.

In the wake of the Finch report Jisc Collections – our third example – set up the Total Cost of Ownership of Scholarly Publication project as mentioned above. It aims at systematically taking offsetting schemes for cost control to the negotiation table when subscription deals are up for renewal. Jisc Collections has come up with a couple of models of how this could be achieved and has a number of deals in place now, mostly those which discount APC costs for authors of participating institutions. It seemed an essential step, given the amount of money invested in the aftermath of the Finch report, to tie the costs of subscription deals, which cannot be abandoned yet, and APCs together.

The last example involves Springer and what they call Compact model, which is currently piloted by a number of consortia and which seems the answer of a publisher with a rather long-standing tradition of experimental open access policies to the current offsetting discussion. Its appears that this model, which works on the basis of a flat fee approach, even more radically shifts the focus towards the publishing side. This constitutes a large share of the overall cost, based on projections of the expected publication output of the group in question, and is complemented by a smaller share of what used to be subscription costs. It is too early to evaluate the potential of such an approach, but it illustrates the dynamics the offsetting concept has already gained.

It is clearly the case that national policies/mandates have been major drivers in pushing the open access frontier a little forward by tying APCs into the subscription model. Since the offsetting approach predominantly works in a hybrid environment, reactions are by no means unequivocally positive. It is therefore important to note that such offsetting models, apart from the aim of mitigating the cost effects of gold Open Access mandates and from taking double dipping avoidance to the local level, should be watched closely as to whether they can seriously support the transformation of subscription journals to full gold Open Access by pushing the line to the break-even point. Again it becomes clear that such an approach works best in a collaborative environment where general principles can be worked out at an aggregate level. The same is true for another aspect of this development, which is not to be underestimated. There are significant workflow issues ahead when it comes to APC administration, including issues like (corresponding) author affiliation and invoicing.

4. Enhancing licence agreements – is there more to it than access?

The principal idea of licensing e-resources is gaining access to digital content. And yet there is more to it than acquiring simple access rights. Consortia are increasingly trying to enhance licence agreements by negotiating usage rights which go beyond traditional standards.

An example shall illustrate this development. Collaborative licensing in Germany works at both the regional and the national levels. While the majority of consortia are organised along the federal structure of the country – completed by consortia of large research organisations like the Max Planck Society – the German Research Foundation (DFG) has been supporting licensing activities at the national level across different types of institutions, carried out by a number of larger libraries experienced in collaborative licensing. A current funding scheme of DFG supports the Alliance licences mentioned in the introduction, which are rooted in the context of the Priority Initiative "Digital Information" of the Alliance of German Science Organisations. Alliance licences are opt-in consortia for both Higher Education and research institutes, which receive financial support from DFG if they fulfill certain added value criteria.  

What are those criteria? First of all any licence contains both perpetual access and hosting rights, thus not only securing permanent access to the material purchased, but also the right of hosting the content outside the publisher’s realm. Negotiating such rights is one thing, but exercising them in case of a trigger event, which will interrupt access, is quite another. Therefore DFG is currently also supporting a project called “National Hosting of Electronic Resources”, which aims at working out a national strategy of how to ensure and enforce perpetual access rights, essentially based on a combination of membership in Portico and setting up a Managed Private LOCKSS network.

A second feature of the Alliance Licences, at least for e-journal content, is the so-called Moving Wall. It means that after a defined embargo period a year of journal content, which was up to then only available to paying members of the consortium, will be added to an existing national archive previously funded by DFG and thus be accessible to all publicly funded academic institutions in the country. The content acquired thus contributes to the establishment of a growing national archive.

Alliance Licences also aim at improving green Open Access rights in that publishers are asked to allow the authors of participating institutions to publish their articles in institutional or subject-specific repositories of their choice as soon as possible after publication and in the published version, thus in many cases going beyond the usual Open Access policy of the publisher.

Finally the Alliance licences, which are based on a model licence specifically developed for this purpose, contain language on virtual research and learning environments as well as text- and datamining rights. As the current public debate illustrates this is a matter which is gaining considerable importance and in which libraries’ engagement in support of their researchers’ needs and interests is highly significant.

---

21 Cf. http://www.portico.org. Portico is a non-profit US organisation which preserves e-resources content and provides access to paying members in case of a trigger event.
5. Conclusions and perspectives

It will have become clear that the current market situation for digital resources is highly dynamic and transitional. As the introductory chronology of a selection of significant events during the last 15 years or so showed, different strands of development co-occur and intertwine. From a licensing point-of-view such a framework requires a multi-layered approach. This does not only include further development of the features of current subscription models by looking at parameters of value-based pricing and by enhancing access rights, but it also relates to strategies of working on the transition to full gold Open Access.

It seems equally obvious that collaborative efforts remain important. Much of what has been illustrated above, i.e. new and changing models, work within and are often driven by consortial arrangements. Ideally they can bring in the right kind of leverage to promote the developments in question.

It may finally be observed that much of the above refers to the STM e-journals world. Of course, there is more out there than that. E-Books are on the rise, both subscribed to and with interesting Open Access concepts. Gold Open Access transition in the Humanities may possibly take a different stance from what is going on in the STM fields, adding yet another dimension to the current phase of transition.