Briefing Paper

Open Access Business Models and Current Trends in the Open Access Publishing System

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'Briefing Paper on Open Access Business Models and Current Trends in the Open Access Publishing System': D/2016/13.324/3

Author: Science Europe Working Group on Open Access to Scientific Publications, Task Force B on Open Access Business Models (Task Force leader: Dr Johannes Fournier, DFG)

Editorial input by: Members of the Science Europe Working Group on Open Access to Research Publications

Introduction

The Science Europe Roadmap contains a clear objective "to move from a subscription-based 'reader-pays' system to different business models for research publications."[1] How the transition to Open Access (OA) can occur has been, and still is, heavily debated. Through their activities, several Science Europe Member Organisations, and research funding and performing organisations in general, have contributed directly to this transition.

This paper presents some of the recent trends and developments, as well as various business models currently in use which aim to facilitate the transition to OA. It also highlights expected benefits and underlines remaining challenges.

With this paper, Science Europe contributes to raising the general level of knowledge of audiences of policy makers and stakeholders about current developments in OA scholarly publishing at a time when decisive action is needed to transition towards an OA publishing system.

Focusing on business models alone would be a conservative and possibly short-sighted approach and therefore different types of new development in the area of scientific and scholarly communication should also be addressed. In the words of Falk Reckling, member of the Science Europe Working Group on Open Access to Scientific Publications:

> "This generation [of digital natives] does not only have new technical skills but different approaches to reading and sharing information. That will change the modes of scholarly communication significantly."[2]

Thus, although this paper mainly addresses the business models linked to 'traditional' journal formats, it also touches upon the evolution of the provision of publishing services.

1 Adding Open Access Requirements to Subscription Contracts

With the advent of electronic journals, publishers and libraries have become used to negotiating large contracts which facilitate access to a multitude of journals in a single package. This is made possible by bundling access rights to many journals together and, often, selling them at a discounted rate to library consortia, rather than to individual libraries.

Such contracts can be beneficial to both parties: publishers are able to sell additional content to a larger number of customers, and libraries gain access to additional content at an often lesser cost. In addition, by pooling their resources and acting collectively through consortia libraries strengthen their bargaining power allowing them to negotiate better deals.

The introduction of such 'big deals', however, has led to a situation wherein a very large percentage of libraries' acquisition budgets is tied to contracts with a small number of large publishers. Thus, the bulk of library budgets for licences goes to a few large publishers and only limited funds are available to acquire licences from the smaller publishers or to pay additionally for OA charges. This presents a challenge, as a large-scale transition towards OA cannot take place without freeing up funds from subscription budgets.

This problem can be solved if, as a first step, OA requirements are negotiated and included in subscription contracts, so that OA publishing costs can be covered by the same budget used to pay for e-journal licences. Therefore, when discussing the renewal of subscription contracts, an increasing number of publishers and librarians now take into account whether and how the acquisition budget can be used to also cover OA publication charges. This opens the door to negotiating a new kind of 'big deal', in which the pricing of subscriptions takes into account payments made to make a subset of articles within a given portfolio of subscription journals available immediately as OA upon publication. Although this approach may help to avoid paying twice for the same content and to realise possible savings, some challenges remain which are inherent in this contract model.

Benefits

- By re-allocating money originally intended for subscription budgets to pay for OA Article Publication Charges (APCs) instead, no or little additional money will be necessary to cover the costs of the transition to OA (which also involves other kinds of cost, such as those for establishing an appropriate OA infrastructure).

- Taking into account all OA articles published in a given journal package in contracts means that neither the research institutions nor the publishers need to manage individual bills for single articles. The benefits of consolidated invoicing can be maximised and transaction costs can be kept low for both parties. At the same time, this approach helps to remove administrative burdens from the individual authors.

- By including OA in larger contracts between the research institutions and publishers, publishing in OA will become easier, and the transition is likely to be accelerated. This could save money as it will reduce the time during which it is necessary to finance APCs separately from the existing subscription costs.

- Covering the APCs from central budgets would make it easier to include services important to the academic community (e.g. CC licences, automatic deposition in repositories, machine readability);[3] such standardised services could and should be included in all contracts with publishers.

Challenges

- There is a chronic lack of transparency in the way that the 'big deals' are priced. There is a risk that the real cost of publishing remains opaque if APC costs are simply included, and special efforts will need to be made by all stakeholders to achieve transparency of pricing.[4]

- By the nature of 'big deals', it is very likely that resources will be concentrated with a few publishers that hold a majority of journals. Entering the market will get even harder for other publishers. Thus, the market is unlikely to function as openly as it should due to the absence of real competition, and the risk is that the price paid by libraries will not accurately reflect the cost of publishing services that are provided.

- Larger, expensive contracts are likely to affect the flexibility of organisations: the more money is needed to cover the costs of a large contract with just one publisher, the less will be available to fund, for example, articles published on innovative OA platforms. Furthermore, if a contract is entered into with a publisher perceived to offer the core journals in a given academic field, it may become difficult to unsubscribe to selected journals or to cancel the whole contract, even if the OA services provided by the publisher are not satisfactory.

- Only on an aggregated level, could shifting the subscription budget to OA funds be a zero-sum game. At least at a local level, highly productive research organisations are likely to end up paying more in an APC-based system, whereas the less productive research organisations may save money. Transitioning and managing this 'winners/losers' situation will thus require detailed analysis and solutions to smooth over these differences and to therefore enable money flows to be modified without significant disruption.

- If the money from existing subscription budgets is used to pay centrally for APCs, authors will remain unaware of the true costs for their papers to be published, and accept higher APCs as the norm.

2 Accelerating the Transition through Offsetting Models

The basic idea behind offsetting is to consider the complete spending on subscriptions together with the funds spent for covering OA APCs, and thus to recognise the total spending of a given institution for research publications. The actual offsetting, then, is a financial mechanism that allows counterbalancing of the payments for subscription licences with the spending on APCs, thus ensuring a relatively steady state of expenditure.

In any mechanism that balances these payments, negotiated as part of a contract with a publisher, the number of OA articles provided and paid for by the organisation purchasing the licence should weigh more than its 'historical spending' for the digital journal package (the traditional payment for access/reading rights). In that way, any offsetting deal introduces the logic of a business model which over time will be based on publication costs only.

By combining payments for access rights with payments for publication services, any offsetting represents a form of hybrid OA.

An increase in offsetting deals will thus lead to a boost in the number of individual OA articles in the hybrid journals (i.e. journals that contain a mix of OA articles and articles still behind a paywall) covered by such contracts. This may lead to a change of business model for individual hybrid journals towards pure OA, if the number of OA articles in these journals passes a certain threshold.

There is to date no clear mechanism, however, that guarantees that offsetting subscription payments against publication charges will eventually lead to pure OA journals.

Ultimately, when looking at all hybrid journals as a group, the transition will only occur if more and more individual journals, including the most respected subscription journals, are 'flipped over' to pure OA and only a low number of new individual hybrid journals is started.

Benefits

- Offsetting facilitates the transition to OA since it clearly reduces the need to find additional money to cover APCs: institutions work with the budgets they already have. Furthermore, from an administrative point of view, offsetting can be handled relatively easily within the already established financial structures and organisational workflows, such as those for licence negotiation or billing, which could be adjusted to include OA costs.

- Offsetting the costs for licences against APCs clearly avoids double dipping[5] by the publisher. Thus, one of the major obstacles for large-scale transition towards OA is partially addressed.

- If offsetting was negotiated at the level of a (supra-regional) consortium, it could be a mechanism to address differences with regard to the financial impact of a transition to OA for research institutions with different levels of publication productivity.

Challenges

- In the subscription model, it is not always clear and transparent how prices for a specific journal package are established. This is exemplified by the fact that two institutions with comparable numbers of researchers and students may easily pay very different amounts for licensing exactly the same content. Although offsetting addresses the issue of double dipping, it will not resolve such lack of transparency in pricing.

- Offsetting seems to guarantee to publishers that their income levels will remain the same. There are no inbuilt mechanisms that would lead to a clear price reduction, reflecting lower processing costs for example. However, maintaining existing pricing levels may not always be an appropriate reflection of the value of services offered by a publisher, or the actual costs of providing such services.

- Furthermore, offsetting could perpetuate the subscription status of individual journals or bundles since offsetting mechanisms do not provide clear strategies to transition them to full OA.

- Offsetting fosters de facto the use of hybrid journals, which is only acceptable if institution-, region- or country-specific reductions are applied. However, assessing the right level for price reductions will remain difficult due to the lack of transparency surrounding these arrangements, and might slow down the transition.

- Publishers offering only pure OA outlets such as Plos, Copernicus or BioMed Central, which by definition lack a subscription base to put in the balance, might be unfairly impacted. Alternative funding sources to support publishing in these journals might need to be identified.

- If offsetting led to a situation where most of the content of a journal package is available in OA, organisations which rely on research publications, but do not publish much themselves, including commercial research organisations, might cancel their subscriptions, and therefore their contribution to the sustainability of journals. This should be carefully monitored as it could cause publishers to increase the level of their APCs to compensate. The transition process might need to include consideration of whether there are viable solutions to get non-research-performing organisations to contribute to the overall cost of information distribution in an OA world.

3 Capturing Key Data and the Need for Transparency

Transitioning to OA requires accurate bibliometric information, for example on the journals where researchers publish, the number of journal articles from a given institution, or of the costs incurred by such publishing activities.

Many processes, from negotiating with a publisher to paying the bills and budgeting for the future, can be organised only if such key indicators are available. In order to automatically collect such information, and monitor developments, some infrastructure is needed, as well as the adoption of common standards.

Benefits

- Getting hold of accurate information is paramount not only for budgetary planning, but also for establishing efficient processes to administer the provision of OA.

- Making institutions' OA spending information publicly available[6] increases transparency, and will help develop authors' and institutions' awareness of the true costs of publishing and thus possibly help control price increases.

Challenges

- Apart from the known budget that covers for subscription licences and APCs (that is typically administered by, for example, the university library), there are various other funding streams where money is directed towards OA (such as grant money used by researchers to cover APCs), and other publishing costs (such as page and colour charges). For the transition to OA, these funding streams also need to be identified. An institution could even consider pooling all these resources in order to make more efficient use of this money.

- Traditionally, researchers also provide significant in-kind contributions to the publishing process beyond providing research articles, for example by acting as peer reviewers or by serving as editors. Such contributions are generally undertaken voluntarily. Costs involved here should also be thoroughly examined as they are not usually taken into account when assessing the overall cost of existing publishing business models.

4 The Variety of Business Models in the Evolving Scholarly Communication Landscape

The discussions about a large-scale transition to OA often ignore the fact that not all business models for 'Gold OA' rely on article processing charges (APCs). In addition, new forms of scholarly communication are evolving, and research results are increasingly distributed via new online channels, including social media.

Although it is difficult to compare the 'value for money' across highly diverse dissemination and funding models, it is clear that offsetting cannot be the solution to all the financial, organisational, and cultural challenges that the transition presents.

Benefits

- Business models that do not rely on APCs offer the opportunity to pilot new approaches, to stimulate new developments, and to experiment with ideas that may eventually lead to alternative sustainable OA models.

Challenges

- Although the conversion to OA of existing subscription journals is a key priority, as these represent a significant proportion of all research outputs, other formats of scholarly communication should also be published in OA. Shifting the subscription budget alone will not immediately suffice to cover these costs, and this could even inhibit innovation. For example, when looking at the production of OA monographs, additional specific services like copy editing need to be taken into account when budgeting.

- Subscription licences are paid from a variety of sources depending on national, regional and institutional funding models. The money flows will need to be clearly understood in order to manage budgets to cover the remaining costs of legacy subscription as well as new OA services. Since governments, universities, research performing organisations and funders may manage different aspects of these budgets, all stakeholders will need to work closely together in order to identify how funding traditionally allocated to library budgets can be re-organised to cover the transition to sustainable OA publishing.

5 Accelerating the Transition of an Outgrown Publishing System

The debate on the best way to transition from the subscription model towards OA has so far mainly focused on making the most of the money already in the system, and gradually offsetting new investments in OA against the traditional costs of subscriptions.

However, there might be grounds to question more broadly whether the current publishing processes are still appropriate to serve the interests of the scholarly community in all regards, and if offsetting is really the best model to truly accelerate the transition. In addition to getting better value for money in covering existing needs, there is also a number of new service requirements which need to be addressed in order for publishers to support the kind of research that is suitable for the 21st century; it will not be sufficient to save money, unless value is added.[7]

Furthermore, the question remains as to how the necessary competition between publishers and between journals can be stimulated. For that reason, some funding agencies, as well as research performing organisations, provide money to develop and explore novel approaches towards OA platforms.[8]

Benefits

- New OA journals or outlets, supported by the research community, provide a wider choice for authors to disseminate their results, with a wider range of services and related prices.

Challenges

- Supporting the establishment of new journals or new forms of dissemination of research results does not necessarily mean that authors are comfortable with publishing their best research in those new venues. The evaluation and reward mechanism will need to be considered as well.

- Whilst some funders provide support for the conversion of existing journals to OA, or for developing new OA platforms, the funding is usually time limited (typically the length of a grant), which offers no guarantee for the long term sustainability of these journals once subscriptions charges are no longer levied. Moreover, most journals converted to OA through these means still depend heavily on the ‘in-kind’ contributions of reviewers and their editorial team, and may not be able to scale up to support a significant increase in the number of submissions.

Conclusion

The scholarly publishing industry is truly international, whilst in contrast, funding for the purchase of content is organised at a national or local level, and research funding agencies typically spend their budget within their own borders.

This means that collaboration to support a transition to OA has to work in parallel on several paths, with the principles agreed internationally and implemented in local funding and operational structures. Unless the research community sustains and increases its efforts to enable a timely transition by making best use of the approaches described above, progress may be much slower than previously anticipated.

References

1. Science Europe Roadmap, 2013, p. 16 (http://scieur.org/roadmap)
2. http://dx.doi.org/10.5281/zenodo.17272
3. The connection between payments for OA and services to the research community is further elaborated in: Positions on creating an OA publication market which is scholarly adequate: Positions of the Ad Hoc Working Group OA Gold in the Priority Initiative "Digital Information" of the Alliance of Science Organisations in Germany, see at http://gfzpublic.gfz-potsdam.de/pubman/faces/viewItemOverviewPage.jsp?itemId=escidoc:1274627
4. http://www.wellcome.ac.uk/stellent/groups/corporatesite/@policy_communications/documents/web_document/wtp055910.pdf
5. Double dipping refers to situations where publishers could both charge an access fee and an Open Access publication fee for the same content.
6. An example for such transparency can be found at https://github.com/OpenAPC/openapc-de where German universities and research organisations indicate how much money they spent for OA publishing and make the information available by re-usable data sets, but more countries have put in place such monitoring processes, e.g. Austria and the UK.
7. See for example Science Europe Principles on the Transition to Open Access to Research Publications, May 2015 (http://scieur.org/opennew).
8. E.g. Overlay journals, PolyMath project, working papers in economics, IPOL, SJS, etc.

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To contact Science Europe, e-mail office@scienceeurope.org.

Science Europe
Rue de la Science 14
B-1040 Brussels
Belgium

Tel +32 (0)2 226 03 00
Fax +32 (0)2 226 03 01
office@scienceeurope.org
www.scienceeurope.org

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