Dollars and Decision-Making.

What Is the State of the Big Deal?

By Tony Horava

Introduction

It is no exaggeration to say that the Big Deal has been the most influential and controversial development in collection management in academic libraries in the past 20 years. Starting in the late 1990s, the Big Deal has had a profound impact on how we understand collection building today. While not all academic libraries embraced the opportunities afforded by the Big Deal, the majority of them committed to one or multiple journal package deals with large commercial publishers, and by and large most libraries have renewed them without fail. There is a burgeoning literature on the Big Deal; there are countless journal articles, book chapters, blog posts, discussion lists, and conference reports and this grows every month. There are 245 articles in the Library and Information Science Source database, as of this writing. There are about 1,000 results in Google Scholar. In this column I will deconstruct how it works, why it has been controversial, and discuss current trends and future possibilities related to the Big Deal.

Origins

In 2005 Kenneth Frazier coined the phrase and defined it thus:

A Big Deal is a comprehensive licensing agreement in which a library or library consortium agrees to buy electronic access to all or a large portion of a publisher's journals for a cost based on expenditures for journals already subscribed to by the institution(s) plus an access fee.

The Big Deal was a publisher response to the financial challenges libraries were facing in the late 1990s. Libraries were facing massive print cancellations as their budgets were losing purchasing power.

Publishers offered an easy solution: if libraries maintained their current print subscription base, publishers would give them a "big deal" bundling large collections of electronic journals, thereby allowing libraries to expand access and develop collections without significant additional cost.²

The initial cost was tied to the subscription "spend," which was the specific library's total cost of print and digital subscriptions at the time the Big Deal was implemented. Therefore, a major inequity was baked into the model—a library that had recently carried out a cancellation program would receive much better pricing than one that had not made cancellations in many years. It was the luck of timing. The harder but more equitable strategy would have been to determine the value of current journals (instead of relying on the so-called "list price"). However, coming up with a transparent value methodology would have been very challenging. Therefore, a problematic model was implemented and was exacerbated over time. Cost and value became difficult if not impossible to correlate with each other.

Cost Implications

One of the major implications of the Big Deal is that it requires a library to



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commit a large portion of its collection budget. This can range from 30-60 percent, depending on the library. As these agreements are typically multiyear, e.g., two, three, or four years, it means that a significant percentage of the budget cannot be reallocated if there is a budget cut at the library. As the inflationary cost of journals is typically in the 6-8 percent range, if a library receives a flat budget (rather common these days) this implies a significant cut in purchasing power. And if the library is hit with an actual cut of say, 2-3 percent in its collection budget, this translates into a substantial hit of approximately 10 percent. If half of the collection budget spending is locked up in Big Deal agreements, there is not much room to maneuver.

It should be pointed out, however, that some Big Deal agreements allow for an exit on the anniversary date of a contract, without the library needing to demonstrate financial hardship. This is an important trend in consortial license agreements and is to be greatly encouraged, since it offers more flexibility for libraries in making difficult decisions.

In most academic libraries, the expenditure on continuing resources

(mostly serials and databases) represents anywhere from 75-90 percent of the collection budget. The Big Deal agreements consume a large portion of this funding, and the certainty of annual inflation only exacerbates the situation. If a Big Deal increases 3-4 percent per year over ten years, which means a cumulative increase of over 30-40 percent (with compounding costs increasing over time). Libraries rarely receive a 4 percent increase nowadays, and certainly not on a consistent basis. The inflationary cost will depend on the content (inclusions/exclusions), the length of the agreement, transfer titles, and any other negotiated provisions that could have a cost implication for the publisher.

Key Factors: Usage and "List Price"

One of the biggest knocks against the Big Deal is the fact that many titles are either never or rarely used. We look at our usage statistics and see many rows of zero downloads for these journals. We are paying for many fluffy titles that we would never have chosen to acquire if we had had a choice. This bothers many librarians and with good reason. Are we exercising our responsibility to manage public funds in an effective manner if we willingly agree to pay for large numbers of titles that have no value? This is where the calculus of tradeoffs becomes important. What would need to be the threshold of value to decide that the cost of the Big Deal is still worth it, i.e., the point at which it is more efficient to choose the package, including the low value or no value titles? Would it be 60 percent of the titles? 70 percent? 80 percent?

How is this determined, and how is this complexity explained to the university community? There are various methodologies and no easy answers!

Here I would like to comment on the murkiness of the infamous concept of "list price." Publishers will always benchmark their Big Deal offers as a percentage discount from their list price. However, it is an open secret that no one ever pays list price and that the list price is a moving target. I cannot remember ever seeing a transparent pricing model for list prices of journals that truly explained the rationale behind the pricing. Granted, there are many different types of costs for journal publishing and there are certainly some that could be shaved and the price reduced accordingly. However, this raises much larger questions - should public monies be used to support for-profit corporations that have different motivations, values, and stakeholders than the public sphere? I certainly side with those who believe that we should be prioritizing an information commons that is open, publicly-owned, and managed with the interests of the public in mind. But that is a longer-term goal.

Key Challenges

As mentioned above, a key problem with the Big Deal is the lack of perceived value. Following is a snapshot of the key challenges faced by academic libraries.

- Sustainability: Is the agreement sustainable financially, considering that the Big Deal consumes a large and ever growing portion of the collections budget?
- Value: How does one measure value of the content and what

- metrics or narratives are compelling to demonstrate this value?
- Reduced access to content: How would the unbundling of the Big Deal affect researchers' access to scholarly literature? Would document delivery or interlibrary loans need to be used to supply titles that would no longer be subscribed?
- Operational capacity: How would unbundling affect the library's ability to manage journals?
 Technical services activities and subject librarian workflows would need to be reassessed to accommodate title-by-title selection, access, management, and payment.
- Budget issues: How would funds be reassessed and redistributed once there is no longer a large centralized cost for participation in Big Deals?
- Post-cancellation: How would the library ensure ongoing access to content for which it has acquired perpetual access rights? This can be challenging to understand and even more so to implement. The devil is in the details.
- Competitiveness: Would the cancellation of the Big Deal affect faculty recruitment in some disciplines?
- Diversity of research: Would the cancellation affect the availability of society journals and other niche publications across various subject areas, thus limiting access to scholarship?

Affordability

The cost of the Big Deal has increased dramatically over time, and (continued on page 18)

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this increase is far above the cost of inflation. This is one of the major irritants about the model. Libraries are paying significantly greater amounts for packages that contain a large number of titles they do not value or need. At the same time, the budget is a zero-sum game. Each year there are demands for new scholarly resources in all subject areas, whether they be digital archives, data sets, streaming services, memberships, software, or discovery tools. The pressures are growing as the breadth and variety of new resources and vendors continues to grow each year. Some of these are onetime purchase costs while others are annual, ongoing costs. In this environment, the disproportionate percentage of the budget dedicated to the Big Deal spending becomes less and less defensible. The Big Deal model is about 20 years old and is showing its age.

Current Landscape

There has been a certain momentum to cancel Big Deal agreements. In 2017, Rick Anderson identified 24 libraries that had cancelled these agreements.3 According to Scholarly Publishing and Academic Resources Coalition (SPARC) data, seven more institutions planned to cancel their Big Deals.⁴ There is a growing anger in libraries about the Big Deal. It is perceived as monopolistic, rigid, and not providing sufficient value, while delivering massive profits to the major commercial publishers. This is occurring at a time when libraries are more and more constrained in their budgetary options. There is less and less tolerance for the inequity and the lack of affordability of these agreements. Will this trigger a massive

exit or a slow trickle of withdrawals? This is a question that many are asking.

In Europe, this issue has ignited into a firestorm of opposition. Post-secondary education funding and coordination is centralized in many European countries, unlike in North America. Various European governments have articulated public policy goals of ensuring that all research by their authors should be made freely available ("read and publish" agreements). The Deal Projekt (www.projekt-deal.de) Germany, Couperin (www.couperin. org) in France, and Bibsam (www. kb.se/bibliotek/centrala-avtal/Bibsam-Consortium) in Sweden have received attention for cancelling Big Deal agreements. As Roger Schonfeld explains, these decisions share key elements: they are looking for Open Access provisions for their own researchers' work; they represent national-level consortia that speak with a single voice; and they have taken a more assertive posture than in the past (which can be attributed to political and public policy decisions).5 An important contextual piece is the European Commission's ambitious target of making all scientific publications openly available by 2020.

At the same time, the OA2020 initiative, which was launched by the Max Planck Library in 2015, has led a movement to radically flip all research literature to open access by the year 2020—a very ambitious objective that many in North America (myself included) see as completely unrealistic, since it does not disrupt the current ecosystem of scholarly publishing. While this issue has divided the library community, it has led to a vigorous debate about the goals of open access

and its intersection with the publishing ecosystem, particularly the collision of private and public interests around the future ownership of research infrastructure and the distribution of new knowledge.

It is also worth pointing out that illegal sites like Sci-Hub are providing access to huge amounts of research literature (about 70 million articles as of this writing) without authorization and, whether we like it or not, this channel is being used extensively by students and researchers, even in countries where the Big Deals are widely implemented. This only adds to the charged atmosphere and rhetoric surrounding the economics and politics of the Big Deal.

Other Options

Three other options are being explored: subject-based collections, bespoke or customized collections, and various modes of alternative access.

Various publishers have begun offering subject-based collections in recent years. This is one approach in response to the perceived rigidity and inequity of the Big Deal. Publishers offer a mini-bundle of journals in subjects such as physics, chemistry, sociology, or history. There has not been much uptake of this model, the reason being that few libraries find it attractive. In these mini-bundles there will be some titles that are essential, others that are moderately useful, and some that have no value at all. Libraries still end up paying for many titles that they do not need or want. A related problem is that the subject divisions assigned by a publisher might not align with the library and institutional realities to disciplinary groupings, especially with titles that are very

interdisciplinary and cross many disciplinary lines. For these reasons, the subject bundles have not addressed the structural problems of the Big Deal.

Bespoke or customized collections is the option of allowing a library to determine which specific titles it wants to license, and thereby build its own collection. Libraries have been clamoring for this option for many years. It gives libraries the opportunity to determine their spending based on their own determination of value. Usually it is a combination of metrics that are assessed, such as number of downloads, number of citations by institutional authors, number of mentions by faculty (e.g., through surveys), and average cost per use. This allows a library to base their selections on an evidence-based approach to value assessment. Big Deal agreements, however, are tied to a spend model that is predicated on previous spending-a publisher is very unlikely to accept a 30-50 percent drop in a library's expenditures since their revenue projections and overall business model are tied to a continuation of previous levels of revenue. Library consortia have argued that member libraries should be able to aggregate their total spend for all of a publisher's titles, whether included in a Big Deal offer or not, but this has not been widely adopted. The current business model of the large commercial publishers is predicated on extracting maximum profits by insisting on the "full meal" approach.

Some libraries have left the Big Deal and have relied on alternative means of access for supplying journal articles to their patrons, such as interlibrary loans, pay-per-view services, and privileging access to openly available versions of articles, such as Unpaywall or Kopernio. This last option is most useful to small institutions that are not research focused. The libraries that have exited a Big Deal have needed to carefully prepare the ground with a robust communication plan for informing faculty and students about the context and the reasoning for their decision. They also have needed to plan for the work involved in licensing individual titles and managing access, payment, troubleshooting, and other lifecycle aspects of journals management.

Conclusion

For too long, the Big Deal was seen as unchallengeable and based on what the academic market would bear. Libraries are under pressure to provide new resources and demonstrate value for money, and librarians have become increasingly dissatisfied with a model that has not fundamentally reassessed in 20 years. Now we are at a point where the Big Deal has become structurally unsustainable for virtually all libraries. Will it collapse under its own weight in the coming years? If I had a crystal ball, here is what I would predict will happen.

There will be more Open Access Big Deals, especially in Europe but elsewhere as well. This means that libraries will be paying for access or reading rights as well as publishing and open availability for articles from their institutional authors. This model is in rapid evolution with publishers such as Springer and Wiley, and it very important to stay abreast of this major trend and what the implications will be. It is highly likely that the traditional Big Deal will diminish in popularity and value. More publishers will offer

customized collections as a way to maintain some of their revenue base and more libraries will take up this offer. Efforts to develop sustainable infrastructure for publicly funded research and to consolidate various Open Access publishing platforms and initiatives will intensify. Will increased competition create downward pressure on the costs of article publishing? What are the objectives of libraries in participating in Open Access initiatives, especially in relation to the bigger question of re-evaluating the scholarly communications ecosystem? The polarization in the community between the interests of the private sector and the public sector will become increasingly fractious. However, it is unclear whether the commercial publishers will lose their dominant position in the scholarly publishing industry anytime soon. What is certain is that the reassessment of the Big Deal will lead to massive disruption in the scholarly communications lifecycle and major repercussions for the role of libraries in managing, distributing, and preserving knowledge. Time will tell!

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Book Reviews.

Angel, Christine M., and Caroline Fuchs, eds. *Organization*, *Representation*, and *Description through the Digital Age: Information in Libraries, Archives and Museums*. Berlin, Boston, MA: de Gruyter Saur, 2018. ix, 294 pp.; index. ISBN 978-3-11-033715-0 (hardcover) \$91.99; ISBN 978-3-11-033741-9 (PDF) \$91.99; ISBN 978-3-11-039599-0 (EPUB) \$91.99.

Editors Christine M. Angel and Caroline Fuchs (both affiliated with St. John's University-Queens, N.Y.) have compiled case studies contributed by practitioners and researchers in libraries, archives, and museums worldwide to form the basis for Organization, Representation and Description through the Digital Age: Information in Libraries, Archives and Museums. Part of the Current Topics in Library and Information Practice series published by de Gruyter Saur, this collection takes a look at efforts by libraries to move from the Web 1.0 view of cataloging and documenting objects and collections through Web 2.0 cataloging and into Web 3.0 cataloging.

Although definitions of Web "generations" may vary, most agree that Web 1.0 is read-only and passive. Web 2.0 emphasizes user-generated content, usability, and interoperability, and the way Web pages are designed and used. Tim Berners-Lee coined the term "Semantic Web" for a web of data that can be processed by machines and explained that the Semantic Web is a component of Web 3.0.1 The idea of creating structured content that can be enhanced via links to other structured content (particularly in the areas of name authority and subject authority) has been of particular interest to members of the library, museum, and

archives communities.

The chapters are organized into four sections:

- Part I: Cataloging Technologies and its Influence on the Organization and Description of Information
- Part II: The Transition from Analog to Digital. Web 1.0
- Part III: Finding Structure. Making Connections. Web 2.0
- Part IV: Transition to Web 3.0 Each section consists of several case studies, except for Part I, which is a single chapter: "The Historical Use of Catalogs in the Arrangement of Knowledge in Libraries, Archives, and Museums: A Survey," by Michael W. Handis (City University of New York).

Most of the case studies are collection-based or include Semantic Web-based content. For example, Chapter 12, "Cultural Heritage Curriculum Crosswalk: Using Metadata to Connect to Curriculum" by Sonia Yaco, Saleha Rizvi, and Arkalgud Ramaprasad, reports on the University of Illinois-Chicago's crosswalk. This initiative maps various manuscript and special collections cataloging (currently housed in a traditional Voyager integrated library system) with course curriculum resources (including course syllabi, course textbooks, course learning outcomes, faculty information, student information, course pedagogy, and course assessment outputs). This framework then allows appropriate cataloging metadata from each repository to be linked together using technology that match enabled linked open metadata elements by using course curriculum and collection-based algorithms and a solution powered by a Google search.

Other use cases follow similar Semantic Web-based cataloging and

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