

# New approaches to digital archival collections report

UK Higher Education (HE) libraries may find it hard to continue buying digital archival collections (DACs) in their current form; we convened four round tables to discuss this issue with publishers

April 2021

## Introduction

This report charts the outcomes of four publisher round tables with Adam Matthew Digital, Gale, Taylor & Francis and ProQuest. These were convened after Jisc organised a community round table in November 2021. The community's agenda which was developed during that meeting shaped the conduct of the subsequent discussions with publishers and focused on the following themes:

- Finance, purchasing and affordability
- Development of DACs
- Working with libraries
- Content integration

The community round table recommended publishers consider these key actions:

- Improve affordability of DACs for teaching by reducing their size
- Ensure closer collaboration with libraries to understand academic needs
- Provide better support for the use of DACs in teaching and learning as well as research
- Develop more flexible business models and price points to suit all types of institution

In preparation for these events, Jisc examined current provision of commercial DACs. A series of interviews and discussions with the DAC advisory group over 2020 suggested that the market, in the UK, was at a crossroads.

### The current situation

Libraries will have much less to spend on DACs. They are also having to deliver many courses online due to COVID-19 and DAC content is increasingly important to this delivery. DACs may prove essential to the shift online, but the cost of the collections provided by publishers is a major concern.

Our partner RLUK has already described the shift to digital and, has also alongside SCONUL and Jisc, issued information to publishers about the financial implications of COVID and its impact on journal purchasing. However, DACs have not received the kind of attention which is focused on journals and books, and the DAC advisory group proposes that this must change.

As the scholarly environment increasingly shifts online, there is likely to be a further move towards digital teaching (especially in a post-COVID-19 landscape). Some HEIs are starting to focus more on DACs as these collections can provide the content needed to stimulate improved academic progress by students. Publishers have traditionally marketed these collections for research. They do provide affordances to research, but their high one-off purchase cost means that HEIs need to carefully consider their return on investment, especially if a collection is only used by a few specialist researchers. A broader uptake of such collections would mean that institutions, which traditionally have not purchased them, can make the case for investment to faculty and management.

How DACs are sold in the UK is important. There is a perception amongst librarians that publishers digitise large amounts of content on a theme and then sell it in the market, hoping that research intensive institutions will buy it. We wanted to find out from publishers to what extent they have been talking to UK institutions about their needs for this content prior to product development. To what extent are collections developed for a UK context, and are librarians, who make purchasing decisions, sufficiently involved in informing the market?

Our members, including affiliates such as national libraries, wanted to explore these and related questions directly with publishers and to examine if new approaches to DAC development and purchasing might be possible. To this end, we organised a panel led discussion with the community on 16 November 2020 in which we explored what we and the advisory group had found out so far. It tested some of our assumptions and allowed us to gather qualitative evidence of on-the-ground DAC acquisition issues in HEIs. This meeting allowed us to solidify emerging use-cases which formed the structure for the subsequent publisher round tables and for the rest of this report.

## **Structure of the report**

The use cases are treated according to the depth of discussion which occurred about them during the round tables. Some were covered more fully while others became subsumed or were ignored due to the flow of conversations. The use cases were shared in advance of the events with publishers, and they responded to them in their presentation of business models and collection development approaches. The structure follows the community's themes. Each section starts with a summary which draws out the key issues from across all four events. It should be noted that the discussions are anonymised to protect commercial sensitivity.

## **Acknowledgements**

We are pleased that we were able to work with our partners SCONUL and RLUK on organising these round tables and thank them for their support of our work on DAC purchasing and collection development.

We are grateful to the DAC advisory group for all its advice and support in looking at these issues and we also want to thank colleagues in Jisc member libraries who have given their time to inform this work.

We would like to thank the publishers<sup>1</sup> for agreeing to take part in these round tables. All came prepared with insightful presentations to help library participants understand more about their business models and development processes. They also participated very openly and fully in the discussions.

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<sup>1</sup> The statements in the round table section are not verbatim and we have paraphrased for sense/brevity.

# Recommendations

1. Publishers are encouraged to set up UK-wide library advisory boards for the development of DACs to ensure their offer is informed by faculty and library. Libraries are also encouraged to approach publishers if they wish to be included in existing advisory groups.
2. Publishers are encouraged to work more closely with the community to ensure that DAC content provision reflects increasing teaching requirements and consider developing collections or subsets of larger collections focused on teaching needs.
3. Publishers should consider or revisit the implementation of multiple payment and evaluation methods to support uptake of DACs across Jisc bands. Libraries are also encouraged to propose to publishers, and Jisc, alternative approaches that are more affordable to them.
4. Publishers should consider providing full metadata records to libraries when they purchase a product, possibly wrapping up the cost of metadata in the price of the collection.
5. Libraries are encouraged to be more proactive in showing leadership in the community around DACs and championing their value in teaching, learning and research.
6. The community and publishers are encouraged to work with Jisc to address some of these issues.

## Background

### Defining Digital Archival Collections

We define DACs as “products such as static primary source archives, book or periodical archives or databases that are typically acquired by libraries as one-off perpetual purchases”.

### A brief history of investigating DAC purchasing with our members

Jisc has been working with the DAC advisory group to explore the issues of acquiring such collections. We have undertaken various investigations and initiatives over the last few years:

- we set up the [Jisc’s Group Purchasing Scheme](#) (GPS), to support libraries with a more efficient and transparent mechanism for acquiring DACs by leveraging institutions’ collective purchasing power
- we developed [guidelines for librarians](#) to support their negotiation with publishers when purchasing DACs in relation to platform charges
- we conducted [a survey and published a report on](#) the issues faced by libraries with regard to platform charges
- we experimented with the testing of different business models for the creation of digital collections such as through “library crowdfunding” and publisher partnerships
- we [developed case studies](#) on the impact of using digital collections in teaching and learning (as part of our guide: Making your digital collections easier to discover).
- we ran technical pilots with libraries and publishers to investigate the need for a central service to support DAC purchasing decisions but it was felt that this would be challenging to implement from a data and service delivery point of view.

# DAC expenditure estimate

We thought it would be useful to provide some indicator of the potential size of the UK's HE market for DACs by using data from our 2019 platform charging survey. Note that the figure below is not a total for expenditure of all DAC purchasing in the UK. It only estimates part of our membership's purchasing, on a yearly basis, averaged over the preceding five years.

Our survey asked HEIs to indicate the range of their DAC expenditure across Jisc bands<sup>2</sup>.

Finding

**56% spent up to £10,000 on one-off purchase costs averaged over the preceding 5 years**

Finding

**16% spent up to 100K and 26% spent over 100K averaged over the preceding 5 years**

We then asked members to indicate overall spend in the year 2017/18 against a set of ranges, starting with expenditure between 0 and 5K all the way up to 200K+. This allowed us to reach a total spend among the respondents, though admittedly this is only an estimate (see footnote<sup>3</sup> for more detail on how this has been calculated).

The survey asked:

*'In the last academic year, roughly, how much has your institution spent on one off purchase costs for DACs?'*

## Jisc member 2017/18 expenditure

(rough estimate)



**£4,480,000**

Returns made by 68\* of our members.

<sup>2</sup> A Jisc Band is used to determine subscription fees for some Jisc resources. Bands are allocated to every organisation that uses our negotiation and licensing service.

<sup>3</sup> Survey Q3: In the last academic year, roughly, how much has your institution spent on one off purchase costs for DACs? (n=70, 68 answered\*) – to get this total we have taken the midpoint of each range: eg where an institution stated it spent between £100,000 and £149,999, we calculated a mid-point of £125,000 (rounded up). For those indicating expenditure of 200K+ 200K expenditure was counted as there was no range indicated for that expenditure category. We then added up all the totals.

# Summary of the round table discussions

The full set of use cases, which helped structure the discussion, can be found in appendix A. These formed the basis of discussions, but they were not exclusive and, in some instances, use cases were not addressed directly.

## Working with libraries

### Topic analysis

This topic was more deeply explored at some round tables and less in others. The use-cases related to the need for publishers to engage in an appropriate way with the customer (librarians tend to buy the collection on behalf of the HEI). Over time many librarians have mentioned that publishers talk to faculty first, which can leave the librarian having a demand for a particular collection without having available budget.

Some publishers see desk-based market research as the best way of starting to develop a product and, of the four participating publishers, only one starts off by talking to librarians (potential customers) directly about the kind of content that should be developed prior to starting production. Although some have built up strong relationships with librarians over the years and suggest they have a good understanding of needs.

Publishers obviously need to satisfy a range of customers, often in multiple territories. They therefore may find it hard to engage with the full panoply of customers. There is also the pressure to find suitable content and then to negotiate with the source provider (usually archivists and librarians) to digitise the material. These activities sit at the front of the process. Members around the table made it clear that they want to be consulted in advance of product development. The discussions covered these key themes:

### Strategic approach to content development

It is valuable for publishers to engage with individual academics, how do they develop this contact into a strategic view to avoid fragmentation?

A publisher said that source HEIs want their special collections digitised so they do careful mapping of collections against what is available and take care to avoid fragmentation by developing a three-to-five-year plan. They talk to lots of academics and attend conferences to understand trends, and map content against those to develop a robust publishing programme. These can be developed thematically or be generalised. The publisher also focuses them locally or globally, whilst recognising that linking content can be appropriate in one context but perhaps not in another.

### Avoiding duplication

All four publishers said they do extensive market research to identify collections and to ensure what they are developing is not available elsewhere in the market.

A librarian had mapped a clear overlap between a purchased collection and a similar one provided by another publisher (not an entire overlap), and asked do you map your selection against competitor offers?

A publisher responded that it has been left to publishers to self-police but as traditional journal publishers move into digitising primary sources, there is a more crowded marketplace so there is a danger of more overlap, but publishers try to avoid it as there is little value in duplication; even where there is subject area duplication the uniqueness of archival content is likely to offer value.

### Librarians as the link to academics and faculty

Librarians offer the opportunity of knowing what academics are talking about in the university over time and they have a good sense of what is coming up, so these conversations should start with the librarian.

One publisher focuses mainly on engaging with academics in the development cycle, working with source libraries and archives to make a content proposition for the market. It is unclear to what extent purchasing librarians (the customer) figure in these early discussions.

Another remarked that librarians are able to develop their wish lists because academics are made aware of what is being offered in their subject area through direct publisher engagement activities with faculty.

Out of the four participating publishers, one talks to academics and librarians from the start of development. The others start with academics and engage with librarians later in the process.

One publisher undertakes an initial evaluation of what is in the market and what content might be useful to develop. This is followed by a set of surveys used to iteratively identify courses already available at institutions (looking at many courses over time). They then test these market research findings with librarians to validate them.

It was suggested that a survey of current and recent courses does not address what is becoming a requirement within a HEI. Librarians are often talking to faculty about emerging needs, so engaging with librarians when content is developed would be beneficial to both the HEI and the publisher.

A publisher noted that archives are increasingly being thought of as research infrastructure and some HEIs are purchasing them from central rather than library budgets, so the librarian is not the customer in such cases.

## Recommendation

*Publishers are encouraged to set up UK-wide library advisory boards for the development of DACs to ensure their offer is informed by faculty and library. Libraries are also encouraged to approach publishers if they wish to be included in existing advisory groups.*

## Development of DACs - changing needs

### Topic Analysis

Note: some of the use cases in this theme were covered above under the Working with Libraries set. This section therefore focuses on the use of DACs in teaching which was an emerging driver prior to the COVID pandemic but it is now imperative.

All four publishers stated that they do a lot of work to make their content useful to teaching but only one of them seems focused on activities which help content to find its way into teaching practice.

There is a clear tension in HEIs about buying large amounts of content for a small number of academic researchers as the demand is for expenditure to be made for the widest possible number of students and academics. There is a struggle for budget to cover both special collections material and e-textbook expenditure, with textbooks receiving a much higher priority. The change of emphasis away from journal purchasing, driven by the open access agenda, is also in play. The dynamics in library spending allocations mean DACs may get squeezed, especially as there is a drive for HEIs to serve STEM. Developing more DACs for STEM is of course an option to be considered by publishers.

One way of increasing the usage of larger DACs (those less mediated) could be for publishers to improve their metadata and expose this to the web, allowing academics and librarians to locate their own course content by easy identification of relevant material from a massive archive.

There is considerable change of direction in HEIs. Even if demand for DACs is strong, generalised (wide) use of resources drives purchasing decisions, and such use serves the economic imperative in a world where satisfying student needs (teaching) is becoming the primary objective of many HEIs.

Overall, the issue of breaking down collections into smaller parts has its challenges, especially for large collections which have already been digitised. There is also the commercial investment case to be considered which needs to

make economic sense to the publisher. For academics, the issue of mediation (curation) is often critical as they simply want to have the entire archive so they can make their own decision about emphasis. However, as students are now driving institutional agendas, it is not only for the research-oriented academics to make use of DACs and to drive the decision-making process. The key discussion points were:

### **Breaking large DACs into smaller ones or sub-themes**

Generally, members noted that DACs are still developed with research in mind and that the demands in institutions is changing to make them more useful to those who are teaching.

One publisher of a very large collection has already broken down this collection into multiple parts, but library participants at the round table thought that many of these 'parts' were still too big and expensive.

Another publisher already develops smaller collections and spends a lot of time working with libraries to develop content to fit with curricula.

Yet another has been testing the development of smaller collections focused on specific use. They give the appointed academic editorial board a budget to develop the content and tools themselves. This includes the development for example of a crowd sourced dictionary.

### **Engaging content users in new ways**

A publisher has undertaken a research initiative in which they interviewed over 170 students and academics across the English speaking world. The idea is to improve information about how to integrate materials into systems such as Moodle and Blackboard.

Three of the publishers enable text and data mining on their own platforms. For example, one provides a lab to allow manipulation and use of the underlying platform data and this is included in the capped hosting fees. One publisher is still working to make text and data mining of its collections easier.

## **Recommendation**

*Publishers are encouraged to work more closely with the community to ensure that DAC content provision reflects increasing teaching requirements and consider developing collections or subsets of larger collections focused on teaching needs.*

## **Finance, purchasing and affordability**

### **Topic analysis**

The financial pressures in HEI libraries have been an evolving issue since 2011 (with the new government's slashing of public expenditure) and, when we started to look closely at the issues of DAC acquisition in 2016, we became aware that budgets were increasingly being diverted to other activities in HEIs. The two big items of library expenditure, books (including e-books) and journals remained and remains dominant.

Digital special collections have often been treated differently. For a long time, their purchase depended on end of year underspend on the two primary categories. This was something that publishers were well aware of, and the business model many employed was a one-off purchase model with sales targeted (not exclusively) on a particular time of year. Some had tried other models, for example subscriptions, but with little success. Libraries often were not able to pay for DACs from planned budgets but relied on the underspend. This position has changed in many HEIs over the last few years (at least for members of the DAC advisory group) and all expenditure in the library tends to be very carefully managed. That is not to say that some HEIs will not use underspend from time to time, but it is certainly no longer the norm.

Several ideas for alternative models were raised during the discussions. It was notable that some librarians asked publishers to reconsider subscriptions and the idea of special licensing arrangements also emerged whereby a



group of HEIs might club together to purchase very expensive DACs. Evidence based acquisition (EBA) models also featured with three publishers saying they already provide this option or are piloting it (in the US).

So called platform charges (see [this](#) blog post for more on this topic and a definition) came up in each round table. We have already sought to address the issue of platform charging through our guide, Purchasing Digital Archives, and by ensuring such charges are bundled into the list price in our DAC Group Purchasing Scheme (GPS). Platform charges are made to facilitate updates to systems and additional value features. It is notable that one publisher decided to include all such charges in the purchase cost of its DAC products in response to Jisc's GPS.

## **Pricing decisions**

Librarians at all the round tables were concerned about how publishers determine their pricing.

One publisher noted that many sales have recently gone by the wayside as the priorities in libraries have shifted towards e-books (seemingly also due to reprioritisation considering the COVID pandemic). This publisher bases price on the size of the archive. Platform fees increase above inflation year on year to support the infrastructure which is developed to deliver the content.

There was a general feeling from one round table discussion that these collections are unaffordable for many institutions and such an increase in fee is not sustainable.

Another publisher said price is based on the value of the content but also the added value offered in terms of editorial quality and services such as the provision of text mining tools. They seek to offer a fair price so that HEIs across Jisc bands have something they can afford.

Another suggests their prices range between 10K and 50K depending on archive size, and pricing is offered according to Jisc banding. The idea is to ensure collections are affordable.

Some librarians pointed out that these are still significant expenditures, especially for those in more teaching intensive HEIs where the business case is more likely to need to demonstrate wide use of a collection.

All the publishers provide their pricing in the UK based on Jisc bands.

## **New (and some not so new) business models**

One publisher is offering evidence-based acquisition (EBA) model for most of its collections except where 3rd party content is provided. Two others have trialled EBA type approaches either in the US or the UK. Some had also offered subscriptions in the past but had not seen much take up.

Various members suggested that subscriptions and other models may be more attractive now that end of year money (underspend) is no longer allocated to DACs.

A librarian suggested the idea of consortium approaches whereby a few HEIs might club together to buy access to a DAC.

Generally, the publishers seem open to trying new models as long as they make economic sense. There is some concern about the idea of small collections as the investment in digitising archives is predicated on some notion of scale due to the high investment costs; with one publisher suggesting that smaller might not necessarily equate with cheaper.

Another publisher has a scheme whereby a collection is purchased, and payments occur over three years. If after one year the collection is no longer required, then payments for years 2-3 cease.

## **Increasing need for evidence of demand**

A librarian at a teaching-intensive HEI reiterated the need for affordability as it becomes increasingly hard to be able to justify expenditure on any resource. To make a case for funding a collection the use must be for the widest possible range of students (teaching) and researchers.



At another HEI no business case can pass unless it evidences wide usage. Usage is hard to measure and takes time so longer trials would be a good idea to help make evidencing use easier.

One publisher works directly with librarians to map content to curriculum and others state that they are keen to support business case development.

Overall, the discussions did not suggest that publishers will extend trials to support evidence of content use prior to DAC purchase (note that there are documented issues with usage stats which Jisc examined during its DAC pilots).

### **Platform charges**

Three publishers levy platform charges to cover development, with one detailing a substantial list of provision: 400tbs of data, long term preservation, ensuring continuity of service, monthly updates to the service (not always visible), compliance with accessibility standards, data privacy and security, and browser compatibility.

Librarians pointed out to this publisher that all this is necessary to provide a digital library, so it may be better to factor in these costs to the one of purchase cost or into any spread costs.

### **Up-front investment and more stringent business cases**

One librarian said that it is not acceptable for a collection to be sold without all the material being available when promised. Content should all be sourced and available upon the licence being signed otherwise libraries are investing up front to support development.

Two publishers responded with a similar answer: content cannot always be sourced up front and if they were to wait until everything is digitised the development cycle would be too long.

A librarian asked if it is necessary to have an HEI wide licence when only a small number of academics need access, for example, at her HEI, a request for an archive was not funded from within the library due to no apparent application of the content to teaching. This is where a subscription licence would support specialised use.

Another suggested that the purchase of large collections may become less likely in the UK, so publishers are encouraged to find ways of breaking provision down into chunks which can meet UK needs, eg for a magazine archive, provide blocks of 10 titles rather than blocks of 100 titles.

## **Recommendation**

*Publishers should consider or revisit the implementation of multiple payment and evaluation methods to support uptake of DACs across Jisc bands.*

*Libraries are also encouraged to propose to publishers, and Jisc, alternative approaches that are more affordable to them.*

## **Content integration (library systems and associated data)**

### **Topic analysis**

The roundtables were largely focussed on business models and development cycles for commercial DACs but the issues of how content works both in library systems and the wider information/scholarly environment has been a critical topic from the beginning of our investigations (pilot with 12 HEIs and technical data pilot). It is not something

which is going to go away and our members are often very dissatisfied with the quality of the data they receive to enable integration into their systems, but also with visibility on the web.

## Discussion summary

Questions were asked from around the table about strategic approaches to content development. Do publishers look at what is already in the environment, beyond DACs, before making strategic decisions?

One publisher responded by saying that they plan collection development over a 3-5 year time span and carry out extensive research before commissioning a new product so there is a good understanding of where the content is positioned (less clear that this extended beyond the specific DAC market). Metadata development is an important factor in developing the product and ensuring it can be used effectively.

A librarian articulated an issue with a publisher not providing MARC records for an expensive collection without an additional fee. The publisher responded by saying that the MARC records they develop are of a very high standard and that it takes considerable investment to make them so.

Other librarians at each round table stated that it is becoming essential for MARC records to be provided as their library now had policies of not buying products without adequate metadata.

One of the publishers provides detailed MARC records as a standard product feature, two provide basic records and one charges for records separately. Members have found that often the metadata is of poor quality and not fit for purpose, so it is not only about providing records but about providing the right kind of records.

There was a consensus that the quality of metadata is the abiding issue with academics complaining of poor provision for their work. They want to be able to link resources and discover them across multiple publishers. No academic wants to use one publisher's products exclusively. Being able to reuse metadata in academic research is also an issue (we did not explore this in any depth in these events as we had already looked the at issue in previous work).

There was also consensus that integrating metadata into library discovery systems is vital, as currently DACs are not getting the kind of attention they deserve, due to a lack of visibility.

The idea was floated by one publisher that a system of allowing publishers' collections to be made visible to the general web in a consistent manner might be transformative. This idea responds to the preceding pilot work to look at the information which surrounds DACs when they are provided by publishers.

## Recommendation

*Publishers should consider providing full metadata records to libraries when they purchase a product, possibly wrapping up the cost of metadata in the price of the collection.*

# Conclusion

The round tables have provided a great opportunity for Jisc's members to meet directly with publishers to discuss the issues with DACs which concern them, and publishers have been able to respond to the use cases and to show what they are already doing to address some of our members' concerns.

It is suggested that there be further discussion with the DAC advisory group and the Jisc Content and Discovery team to identify activities to support the recommendations.

## Recommendations to the HE library community

*Libraries are encouraged to be more proactive in showing leadership in the community around DACs and championing their value in teaching, learning and research.*

*The community and publishers are encouraged to work with Jisc to address some of these issues.*

# Appendix A: Proposed use cases

The use cases were shared in advance with publishers as part of a discussion briefing document which evolved out of the community round table event in November 2020. As they were not all discussed in any detail, we have decided to include them in this appendix.

## Working with libraries

- DACs need to be developed according to the needs of the entire scholarly environment whether they are developed for research or increasingly for utilisation in teaching.
- Detailed market research and consultation prior to developing DACs would help publishers better target their UK customers (libraries).
- HEIs want to buy DACs in accordance with their potential usage and need long trials with closely monitored usage prior to purchase.
- Publishers should focus on their customer's (library) needs? Approaching faculty to suggest collections for purchase can only work if the library is involved in the conversation at the start.
- It is recognised that publishers may not be able to meet the individual requirements of each institution, but there needs to be more choice.

## Development of DACs considering changing needs

- It would be preferable for collections to be developed in consultation with institutions across Jisc bands, rather than simply being digitised in the hope that the content will be useful to HEIs, or only targeted at large institutions with bigger budgets.
- The dialogue between the sector and publishers about what they are digitising and how they deliver it needs to be improved with libraries being central to that dialogue.
- Curated sets of content are not what is required, rather librarians and other in the purchasing HEIs should be involved at the start of the content creation process, so that developed content fits with the needs of institutions and works with emerging models of learning and teaching.
- Bringing a library perspective to DAC purchasing decisions results in higher usage and ultimately creates a stronger case for further purchases.
- Consideration needs to be given to differing requirements for research and for teaching. Publishers should develop tools to help the practical reuse of subsets of research-focused content for teaching?
- We need a better understanding from publishers as to the value of the 'product' vs the value of the content.
- Platforms need to accommodate the effective reuse of the content they contain, and publisher should work with HEIs, which have purchased content, to support the development of teaching modules within the institution eg by providing tools (apps) on their platforms to help users easily pull the content into teaching systems.

## Finance, purchasing and affordability

### Proposed use-cases

- It is essential that DACs are provided through flexible business models eg (subscriptions, demand based etc) as the budgetary constraints due to the pandemic make the purchase of monolithic DACs much less likely (note that it was already getting much harder for even big institutions to afford them prior to the crisis).

- Publishers should test a model whereby usage is monitored over a longer timeframe at a pay per use rate with the option to buy a collection based on that usage (evidence-based acquisition, EBA). Libraries would like to pilot pay per use (tracking the actual use of individual content items so that libraries can subscribe to the platform, but only get charged for what they use. Other subscription type approaches should be tested.
- Investigate smaller affordable DACs which will democratise their use across Jisc bands, making them more widely available to more institutions.
- Libraries need to know the product they are buying is complete at the start rather than needing to wait for content to be added to a platform over time; financially the risk of all development should be with the publisher.
- There is a need for much clearer definitions of what DACs are, and what content they include. They can then (all or part) be zero-rated for VAT.
- As budgets shrink, there is no longer the option of making use of underspend to fund the purchasing of DACs, so those undertaking library planning need to give equal weight to DACs, journals, and books.
- Buying very large undifferentiated DACs has become unsustainable for many HEIs and there is greater need to understand the nuances of the market and what individual institutions need when making purchasing decisions.

## Content integration (library systems and associated data)

### Proposed use-cases

- DACs should be integrated with other content in the information environment to allow better research, improve teaching with DACs and to serve the increasingly interdisciplinary remit of HEIs.
- To enable a fully-fledged digital research environment, a DAC from one publisher should be cross-searchable against collections provided by other publishers.
- HEIs need to ensure they can integrate the content in library systems and publishers need to provide much better 'shelf-ready' metadata and they want to work with publishers to make sure such integration happens.
- Collections need to be developed in line with accessibility legislation, otherwise the market is limited to the most research-intensive institutions, precluding those which want to see them used directly by students.