

DELIVERABLE

Project Acronym: DCH-RP

Grant Agreement number: 312274

Project Title: Digital Cultural Heritage – Roadmap for Preservation

D4.2 Engagement with commercial publishers

Revision: Version 2.0 for submission to EC

Authors:

Tim Devenport (EDItEUR)

Reviewers:

Börje Justrell (RA)
Michel Drescher (EGI.eu)

Project co-funded by the European Commission within the ICT Policy Support Programme		
Dissemination Level		
P	Public	
C	Confidential, only for members of the consortium and the Commission Services	

Revision History

Revision	Date	Author	Organization	Description
0.1	2013-10-30	Tim Devenport	EDItEUR	Initial outline draft
0.9	2014-03-07	Tim Devenport	EDItEUR	First draft for internal review within the project: reviewers Börje Justrell and Michel Drescher
1.0	2014-04-04	Tim Devenport	EDItEUR	For submission to EC
2.0	2014-07-28	Tim Devenport	EDItEUR	Updated version including results of online survey and various minor alterations; for submission to EC

Statement of originality:

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	5
2	INTRODUCTION	6
2.1	STRUCTURE OF THE DOCUMENT	6
2.2	OBJECTIVES OF THE DELIVERABLE	6
3	CONSTITUENCIES OF INTEREST	7
3.1	COMMERCIAL AND NONCOMMERCIAL PUBLISHERS	7
3.2	ORGANIZATIONS REPRESENTING PUBLISHERS	7
3.3	CULTURAL HERITAGE ORGANIZATIONS IN THE UK	7
3.4	PRESERVATION AGENCIES AND NATIONAL MEMORY INSTITUTIONS	8
3.5	OTHER AGENCIES ACTIVE IN DIGITAL PRESERVATION	8
4	OUTREACH AND NETWORK BUILDING	9
4.1	TARGET ORGANIZATIONS AND POTENTIAL PARTNERS	9
4.2	BUILDING A NETWORK OF INTEREST	10
5	FACTORS INFLUENCING PUBLISHER INVOLVEMENT	11
5.1	LIKELY FACTORS: WORKING HYPOTHESES	11
5.1.1	<i>Shared use of the preservation facilities/infrastructures proposed by DCH-RP</i>	11
5.1.2	<i>Using the DCH-RP infrastructure to monetize content</i>	11
5.1.3	<i>Access to new or novel forms of CH content</i>	12
5.1.4	<i>Access to new software or techniques for manipulating CH content</i>	12
5.1.5	<i>Commercially favorable “terms of trade”</i>	12
5.1.6	<i>New or wider markets for products, sponsorship and advertising</i>	13
5.2	VALIDATING THE HYPOTHESES: RESULTS OF AN ONLINE SURVEY	13
5.2.1	<i>Survey participants</i>	13
5.2.2	<i>Digital preservation arrangements or requirements</i>	14
5.2.3	<i>Reasons for sharing preservation facilities</i>	14
5.2.4	<i>Multi-purpose infrastructure: preserve AND monetize?</i>	15
5.2.5	<i>New or novel forms of content</i>	16
5.2.6	<i>Software, toolsets and techniques</i>	17
5.2.7	<i>Terms of trade, rights and licensing</i>	17
5.2.8	<i>Responders and the DCH-RP project</i>	18
6	LESSONS FROM E-JOURNAL PRESERVATION	19
6.1	BACKGROUND AND OVERVIEW OF THE E-JOURNALS SECTOR	19
6.2	ESTABLISHED PRESERVATION MODELS FOR E-JOURNAL CONTENT	19
6.3	KEY AGENCIES INVOLVED IN E-JOURNAL PRESERVATION	20
6.3.1	<i>LOCKSS and public or private LOCKSS networks</i>	20
6.3.2	<i>Portico and JSTOR</i>	21
6.3.3	<i>CLOCKSS</i>	22
6.3.4	<i>e-Depot of the KB</i>	22
6.3.5	<i>British Library</i>	22
6.3.6	<i>The Keepers Registry</i>	23
6.3.7	<i>Other players</i>	23

6.4	VARIATIONS IN THE COVERAGE OF E-JOURNALS PRESERVED	23
6.5	IS E-JOURNAL EXPERIENCE TRANSFERRABLE TO THE DCH DOMAIN?.....	24
7	ONGOING COMMUNICATION	25
	APPENDIX A: QUESTIONS POSED IN THE DCH-RP SURVEY.....	26
	APPENDIX B: GRAPHICAL SUMMARY OF SURVEY RESPONSES	29

1 EXECUTIVE SUMMARY

The key role assigned to EDItEUR within DCH-RP is to act as a “bridge” between the project’s aims and partners, on the one hand, and the world of (largely commercial) publishers, on the other. This is seen as an important element both in critiquing and refining project recommendations and in contributing to the sustainability of project outcomes beyond the formal end of DCH-RP.

EDItEUR is seeking to meet these objectives via three complementary work streams.

First, by utilizing its extensive membership and contacts network, it is communicating project aims to a wide constituency and helping to extend the community of interest in DCH-RP’s work. Various contact organizations, including “commercial publishers” narrowly defined, representative bodies such as national or international publishers’ associations, preservation agencies active in scholarly publishing and others, have been actively targeted to encourage their participation.

Secondly, EDItEUR is working with these contacts to explore factors that are most likely to encourage publishers to get involved with DCH-RP or related activities. Such factors range from opportunities for partnerships in content exploitation, through access to specialized software or toolsets to mutually acceptable terms of engagement – for example, licensing terms, limited embargoes, etc. The intention is not only to identify likely factors, but also to validate these with publishing experts, allowing us to formulate recommendations to the DCH-RP project and beyond.

Finally, EDItEUR believes that there may be considerable potential for knowledge transfer between the relatively mature preservation infrastructure that has come into being around electronic online journals (e-journals) since the emergence of e-journals during the 1990s. To support and explore this contention, the e-journal preservation landscape is described and a range of contacts are being set up between key players in that landscape and DCH-RP partners.

Based upon this threefold approach, a set of focused conclusions and recommendations is presented, together with introductions to a variety of organizations in the extended publishing world.

2 INTRODUCTION

2.1 STRUCTURE OF THE DOCUMENT

The structure of this document follows the three main strands of EDItEUR's contributions to the DCH-RP project. EDItEUR's project role overall can be described as building bridges between the project and the world of publishing.

Within this framework, Section 3 describes the types of constituencies potentially interested in DCH-RP, including but not limited to publishers themselves. Section 4 extends this to explain which specific organizations have been approached directly and EDItEUR's efforts to start building a network of interested parties. Section 5 examines factors that are likely to influence publishers for or against participating in partnerships with DCH institutions over the longer term, as well as an online survey undertaken to investigate those factors further. Section 6 describes experiences with digital preservation in a parallel domain. It provides a high level overview of how preservation questions have been tackled in the sphere of scholarly online publications (e-journals and e-books) and examines the possibility that the solutions that have evolved may provide useful comparisons and insights for DCH institutions undertaking functionally similar tasks. Finally, Section 7 relates some of the communication methods that EDItEUR has used to date in informing its network of contacts about DCH-RP.

2.2 OBJECTIVES OF THE DELIVERABLE

As related in the previous section, the D4.2 deliverable seeks to document the three main objectives of EDItEUR's contributions to DCH-RP:

- To communicate the objectives and outputs of DCH-RP to the world of publishing, broadly defined, thus contributing to the general awareness and sustainability of the project's work.
- To investigate factors that may make publisher partnerships with the DCH community more or less likely, thus offering advice to DCH institutions wishing to attract support, sponsorship or revenue streams.
- To review experiences from e-journal preservation in case any useful lessons can be learned or models adopted that may be of relevance to DCH preservation.

3 CONSTITUENCIES OF INTEREST

3.1 COMMERCIAL AND NONCOMMERCIAL PUBLISHERS

The international publishing industry consists of a wide variety of players, focused on exploiting both mass markets and niche sectors, and with a very broad range of interests and missions. Any approach to engage with “publishers” must of necessity be somewhat selective and concentrate on areas that seem most likely to bring synergies to the work of DCH-RP. Within its membership and contact network, EDItEUR is well placed to facilitate links to specific publishers that might be expected to be receptive to requests to critique the project’s work and to offer insights and possibly partnership arrangements with DCH-RP.

Many of the major publishers are straightforwardly commercial in nature, albeit that some include in their mission statements the aim of supporting wider scholarship or the dissemination of research results. There is also a very significant group of so-called “society publishers”, which primarily exist to promote the professional interests and needs of the members of learned societies: these too have been considered as being within scope for outreach from DCH-RP. Alongside these are a range of (largely) nonprofit university presses, whose mandates are explicitly geared to the pursuit or dissemination of knowledge and the furtherance of educational aims. And increasingly prevalent, particularly in the scholarly and research field, is the phenomenon of open access publishing – sometimes within an otherwise-commercial framework and sometimes entirely independent of it.

EDItEUR has endeavoured to make contact with representatives of all of the categories previously mentioned – commercial publishers, those who represent societies or nonprofit university presses, and the emerging community of open access publishers.

3.2 ORGANIZATIONS REPRESENTING PUBLISHERS

An alternative approach to engaging publishers directly is to communicate via appropriate representative bodies. Sometimes this can be more effective, for example when the publishing community concerned contains a large number of relatively small organizations or when interest groups transcend national boundaries. EDItEUR has tried to exploit both of these avenues. On the one hand, we have contacted a number of national publishers’ associations, with the aim of disseminating news of DCH-RP more widely within the countries covered by those associations. On the other, we have linked up via representative bodies such as ALPSP (the Association of Learned and Professional Society Publishers) and STM (an organization representing international Scientific, Technical and Medical Publishers). This work continues at the time of writing, as do the contacts with individual publishers described above.

3.3 CULTURAL HERITAGE ORGANIZATIONS IN THE UK

In view of the extensive knowledge of Cultural Heritage (CH) organizations elsewhere within the project, and via the DCH-RP partner Collections Trust in particular, EDItEUR felt it appropriate to concentrate here on only a small number of institutions with which we have particularly close links.

3.4 PRESERVATION AGENCIES AND NATIONAL MEMORY INSTITUTIONS

As will be described elsewhere in this deliverable, digital preservation is of course an activity that is of great interest in a number of domains and is by no means limited to the CH sector. EDItEUR's experience in this area has been primarily focused on arrangements for the preservation of (largely, but not exclusively) text-based resources, since this is most closely related to our other activities in the publishing and library supply chain.

With this in mind, we have reached out primarily to organizations or initiatives already very active in preservation arrangements for textual e-resources, most notably online scholarly publications or "e-journals". Leading examples here include both national and transnational bodies, such as LOCKSS ("Lots Of Copies Keep Stuff Safe"), CLOCKSS (Controlled LOCKSS) and Portico.

Two national memory institutions – the British Library and the Koninklijke Bibliotheek in The Netherlands – provide interesting crossover cases, in which originally national-based missions have developed into significant roles in the preservation of published scholarly outputs that originated around the world. At the time of writing it also appears that the US Library of Congress and other national libraries/memory institutions are also active in this space.

Finally, for the moment, the organization EDINA, based in the UK and funded by JISC, provides a range of services to UK universities and in particular has pioneered the Keepers Registry, which aims to provide a central service showing which e-journals have been preserved by which preservation agencies.

The various organizations mentioned here have been involved in EDItEUR's networking and outreach efforts and will be discussed further in later sections.

3.5 OTHER AGENCIES ACTIVE IN DIGITAL PRESERVATION

For reasons similar to those mentioned in Section 3.3, EDItEUR has not attempted to replicate the wide range of contacts available to other DCH-RP partners in terms of other, non-text-focussed preservation agencies. However, there have been a number of fruitful contacts with the Digital Preservation Coalition (DPC), based in Scotland and with a functionally diverse membership spread largely over the UK and Ireland. More information on DPC's membership and objectives can be found on the website: <http://www.dpconline.org/about>

4 OUTREACH AND NETWORK BUILDING

4.1 TARGET ORGANIZATIONS AND POTENTIAL PARTNERS

In addition to general dissemination activities, via the EDItEUR Newsletter and other channels, we have directly contacted a significant number of organizations to seek their input or feedback on DCH-RP project aims. The following table lists these contacts and describes in each case the type of organization concerned.

Organization	Type
AIE (Associazione Italiana Editori)	National association of publishers, Italy
ALPSP (Association of Learned & Professional Society Publishers)	International association of society publishers
Bloomsbury	Commercial publisher
British Library	Library/memory institution/legal deposit repository, preservation organization, UK
Cambridge University Press	Publisher, nonprofit
CLOCKSS (Controlled LOCKSS, see below)	Preservation organization and methodology, USA, but with international client base
DPC Digital Preservation Coalition	Advisory body on preservation issues and methods, UK and Ireland
e-Depot of the Koninklijke Bibliotheek	Library/memory institution/preservation organization, The Netherlands
Elsevier	Commercial publisher
Federation of European Publishers	International association of publishers
FGEE (Federación de Gremios de Editores de España)	National association of publishers, Spain
Keepers Registry, EDINA	Registry of e-resource preservation agencies
LOCKSS	Preservation methodology and software; preservation network with both public and private instances worldwide

Organization	Type
Nature Publishing Group	Commercial publisher (science)
Palgrave Macmillan	Commercial publisher (humanities)
PLOS (Public Library Of Science)	Open access journal and publishing organization
Portico	Preservation agency, USA, but with international client base
Publishers Association	Association of publishers, UK
Royal Academy	National fine art gallery, UK
Springer	Commercial publisher
STM	International association of publishers (science, technology & medicine)
Taylor & Francis	Commercial publisher
Ubiquity Press	Publisher, Open Access
Wiley	Commercial publisher

4.2 BUILDING A NETWORK OF INTEREST

We have contacted the target organizations via a variety of means, including direct approaches to known contacts, presentations at industry events such as the Frankfurt Book Fair, the London Book Fair, and the Charleston Conference, and referrals from colleagues active in preservation and/or the CH domain. We are planning to reinforce these initial contacts through conference calls as well as informal meetings at future industry events.

Initial contacts have usually been favourable, though it has proven more difficult to convert expressions of interest into active participation or partnership. Part of the problem is that it can be challenging to explain to busy commercial players what might be the benefits to their organizations of getting more actively involved with DCH-RP and its partners, particularly when current project activities are largely conceptual in nature. An offer of access to new forms of CH content or novel display techniques, for example, would make it easier to attract and retain publishers' attention and interest, both for the new materials or resources and to make the proposition of DCH-RP involvement more "concrete".

On the other hand, publishers have in several instances been quite ready to express opinions about factors that might influence their future cooperation – an area that we are actively exploring as described below (see Section 5 next).

5 FACTORS INFLUENCING PUBLISHER INVOLVEMENT

5.1 LIKELY FACTORS: WORKING HYPOTHESES

At the outset it was necessary to formulate some preliminary ideas about factors likely to encourage (or discourage) publisher involvement in the objectives of DCH-RP. The likely benefits to the project itself and any successor efforts were clearer, in that partnerships between CH institutions and the commercial world should at least have the potential to:

- Increase the exposure of preserved DCH resources
- Attract revenue streams to help offset some of the costs of preservation
- Contribute to the sustainability of the effort, beyond the period of the project itself.

A number of areas were considered, covering likely factors that might motivate publisher involvement and in particular, hold out the prospect for commercial returns. Naturally, some nonprofit publishers might be expected to consider more altruistic or societal-benefit factors, but it was felt essential to pose at least some provisional answers to the first question from the commercial publisher – “what’s in it for me?!” The areas initially proposed were as follows.

5.1.1 Shared use of the preservation facilities/infrastructures proposed by DCH-RP

One possibility posed was whether publishers might themselves use (and of course, pay for) some of the infrastructure proposed by DCH-RP. For example, publishers themselves have a need for secure, long-term digital storage and it is possible that DCH-RP inspired cloud storage, coupled with SaaS access or manipulation techniques might be attractive.

EDItEUR’s provisional opinion was that this was unlikely to be a persuasive offer, for two main reasons. Firstly, there has already been a great deal of investment in such facilities by publishers, content hosting services and (see elsewhere) digital preservation agencies. Secondly, organized digital storage has rapidly become commoditized over recent years and it was felt unlikely that any such infrastructure driven primarily from the nonprofit CH domain could be expected to compete effectively on price grounds alone.

Nevertheless, this option has been included (without qualifying remarks) in the list of factors on which publishers have been asked to comment and respond.

5.1.2 Using the DCH-RP infrastructure to monetize content

Another suggestion was that the DCH-RP inspired infrastructure might evolve so that it could be used as a platform to monetize some of the content involved. This would of course be alongside the role primarily envisaged for the infrastructure, namely as a vehicle for long-term preservation.

Although this might appear an unusual option, we tried to explore which additional functions – in addition to those needed for preservation – might need to be added to support this additional role. Examples might include, for example, enhanced discovery mechanisms or facilities to explain authoritatively the publication rights associated with each piece of content.

5.1.3 Access to new or novel forms of CH content

Content is the lifeblood of publishing, so we might reasonably assume that access to new CH content would be of considerable interest to publishers, particularly those active in the arts and humanities. This content might take a number of forms, including newly digitized representations of artworks or other artifacts, carefully curated metadata describing and locating those representations in their historical context, or extended data sets derived from the research and curation processes involved.

Whichever form the content takes, it is possible that it might form part of a publishable product or service – either in its own right or as an adjunct or extension to another publication or service. For example, one may conceive of online encyclopedias, guides to a particular topic, or supporting materials to enhance research articles or online learning resources.

But a key question underlying this whole area is whether the general thrust of the largely publicly funded DCH preservation efforts will point toward effectively open access arrangements, in efforts to maximize public access to the content thus preserved. This potential dichotomy – between a likely preference for open-ness and the commercial imperative to derive some financial benefit – is explored further in Section 5.1.5 below.

5.1.4 Access to new software or techniques for manipulating CH content

In addition to CH content, it is expected that the kinds of infrastructure envisaged by DCH-RP would encourage the development and deployment of novel software or techniques for presenting the materials that have been digitized. For example, it may be that new visualization or 3D display techniques are required to effectively convey the representation of a painting, sculpture or archeological finding.

Publishers who bring such material to the market are increasingly interested in tools and techniques as well as “content”, not least since a frequent mantra is to try to “embed” their services in the workflows of the professionals who subscribe to those services. Similar considerations may apply in the rapidly growing area of online learning resources where, as so often, “a picture (think: digitized representation) is worth a thousand words”.

5.1.5 Commercially favorable “terms of trade”

To secure meaningful involvement or partnership on the part of commercial publishers, there must be at least the prospect of some commercial return. In this and the following section 5.1.6 we explore some potential areas for a profitable association, whilst mindful of the high-level tension that may exist (see section 5.1.3) between profit on the one hand and “public funding requiring open access to the results” on the other.

Chief among the topics to be addressed is the area of rights. If the preserved content is to be efficiently and legally exploited, it is vital that an interested publisher (or a rights management intermediary) can speedily identify the rights holder for each piece of content, as well as the rights or permissions that are in principle available for publication in various formats.

Co-publication arrangements, with the publisher and the CH institution jointly bringing the product or service to market, are the most likely model. Some CH institutions may contract with a commercial organization to publish and disseminate aspects of their digitized resources as a kind of outsourced

service. Other institutions may be large or prestigious enough to maintain their own publishing operations, without the need to involve external publishers.

Whether or not partnerships are involved, care should be paid to clear and enforceable licensing arrangements. These may govern co-exploitation of DCH resources by institutions and publishers; but particularly bearing in mind the digital nature of the content, they need also to cover what kinds of usage are permitted or denied for end users too.

It may also be appropriate to negotiate some preferential terms or limited exclusivity for the publisher, who might otherwise find it difficult or impossible to derive any commercial income from resources that are simultaneously available free to the general public. One mechanism that might permit this could be charging for early access. This might take the form of a limited initial embargo period, during which the publisher could promote and sell products derived from the DCH content and after which the resources would become fully public domain and potentially “open access”.

5.1.6 New or wider markets for products, sponsorship and advertising

The digital nature of the content under discussion, together with the large-scale infrastructures envisaged to store, preserve and access the materials, could potentially combine to produce a large distributed marketplace for DCH content. Whether or not commercial content licensing and exploitation are in place (see Sections 5.1.3 and 5.1.5 above), there are potentially further opportunities for publishers and others to “monetize” aspects of the offering.

Possible opportunities in this space include branded sponsorship of the gateways and portals to the content, as well as online advertising directly around the offering or generated from search-engine discovery of the DCH artifacts that are displayed.

5.2 VALIDATING THE HYPOTHESES: RESULTS OF AN ONLINE SURVEY

An online survey was carried out in April and May of 2014, to test our hypotheses on factors likely to influence publishers and related organizations toward cooperation in future initiatives of the type foreseen in DCH-RP. The detailed questions posed in the survey are reported in Appendix A of this deliverable. 41 usable responses were received and the results are summarized in Appendix B.

5.2.1 Survey participants

A variety of channels were used to reach representatives of the target communities. Links to the online survey and invitations to participate were emailed to targeted lists maintained by EDItEUR. Publishing organizations were contacted both directly and via a number of trade or professional organizations across Europe and beyond. Links were also embedded in the DCH-RP page on the EDItEUR website, the DCH-RP project website, the site maintained by DigitalMeetsCulture and elsewhere.

Results have been anonymized for this report, although contact details have been retained for those participants who indicated their openness to further contacts related to DCH-RP.

From the usable responses received, the largest groups of responders characterized themselves as commercial publishers (36.6%), not for profit publishers (14.6%) and library/archive/memory institutions (17.1%). Also represented were publishers associations or federations (7.3%), preservation agencies or

preservation service providers (4.8%), publishing rights intermediaries (2.4%) and others. Graphical displays of this and other survey responses can be found in Appendix B.

For one particular section of the survey (Q36–42, see below), a further categorization was made of those organizations closely involved in publishing itself.

5.2.2 Digital preservation arrangements or requirements

Nine questions (Q7–15) explored existing or planned preservation initiatives for each of the responding organizations. As can be seen in the graphical displays in Appendix B, there was overwhelming agreement on the importance of digital resources, with 97.2% of respondents stating that maintaining digital assets/resources is important to their organization’s mission and a similar percentage stating that secure preservation of those assets for the foreseeable future is also important.

80% of responders stated that preservation arrangements for digital assets were already in place. Of this group, 41.4% rely on in-house arrangements, 3.4% on outsourced arrangements and 55.2% on a mixture of in-house and outsourced provision. Frequently, more than one preservation arrangement is in place for a given organization – only 26.7% rely on a single arrangement, whilst 70% have more than one solution in place. There is also some sensitivity to the potential vulnerability of a single preservation site: 69% of these responders require that copies of preserved content be replicated across geographically separated sites whilst 24.1% do not.

Amongst those organizations with digital preservation arrangements in place, there appears to be less unanimity regarding the sharing of preservation services: 37.9% of this group reported that such facilities must be exclusive to themselves, 44.8% that such facilities could be shared (with appropriate safeguards in place) and 17.2% didn’t know the stance of their organization. The relevant safeguards are explored further in Q14, with secure access (68.8%) and data segregation (43.8%) being rated as the most important requirements whilst financial compensation for interrupted access (12.5%) or data damage/loss (0%) features much lower than might have been expected. The prevalence of a variety of “audit” requirements on preservation service providers is analyzed in Q15.

5.2.3 Reasons for sharing preservation facilities

Four questions (Q16–19) briefly examined possible motivations for shared, rather than exclusive preservation facilities and the likely readiness for organizations to participate in such shared arrangements. A rating (see Figure 1, next page) of various factors encouraging sharing was perhaps predictably headed by cost sharing (66.7%) and the provision of services beyond the scope of individual institutions (60.6%), but there were also strong showings for advantages of replicated storage (57.6%), functionalities tailored to the needs of the DCH community (54.5%) and advantages of delocalized (incl. cloud-based) storage.

Turning to the attitudes of individual organizations, there was less clarity on likely “sign up” for a DCH-RP-style arrangement. 52.6% of responders felt that their organization would be interested in the existence of such an arrangement, but this was followed by a very reasonable 34.2% who said “perhaps, would need more information”, illustrating the challenges of surveying attitudes to facilities that are at present largely hypothetical. Even more “perhaps, would need more information” responders (52.6%) were recorded when examining whether their organizations would actively consider using DCH-RP infrastructure to preserve their own digital content; 31.6% said “yes” and 15.8% “no”.

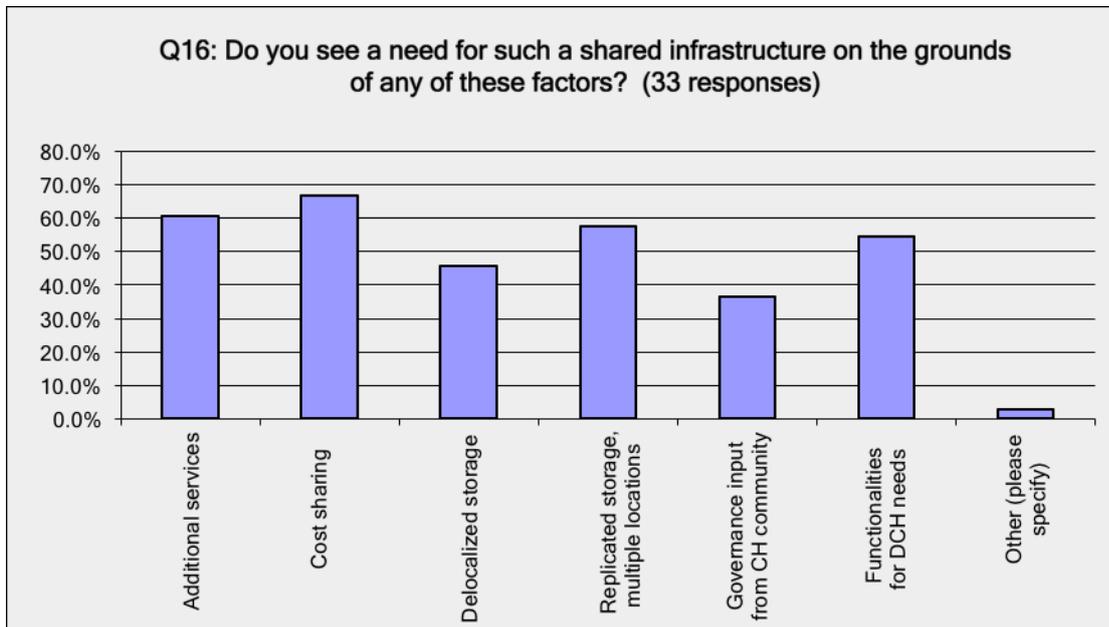


Figure 1: Possible factors influencing the adoption of shared infrastructures.

Finally, 68.4% felt that infrastructure of the type envisaged by DCH-RP could potentially support the requirements of both preservation and some commercial exploitation – a topic explored further in the next section.

5.2.4 Multi-purpose infrastructure: preserve AND monetize?

Five questions (Q20–24) examined in more detail whether responders felt that the requirements of preservation and commercial exploitation might usefully coexist within a DCH-RP-style infrastructure. 50% felt that this might be possible but 35.3% were unsure, responding “don’t know, open to discussion”.

Q21 (see Figure 2, next page) surveyed 11 areas of functionality that would need to be added to the infrastructure to support such dual use. Ratings of more than 73% were obtained for usage monitoring, content discovery and rights discovery mechanism, closely followed by access control facilities and security over personal data – both with 66.7%. Alongside the “controlled” suggestions posed in the survey, several “other” responses recommended tools to help combine separate DCH entities to derive new insights or services, detailed metrics and analytics, curation services (metadata, social media “likes”, ability to build links between entities based on users' behaviours) and clarity regarding which is the “version of record”.

Attitudes varied toward the potential usage of a shared DCH-RP infrastructure. 75% of responders would consider using such an infrastructure to serve content to their customers, 54.5% would consider using the infrastructure for any associated e-commerce activities but only 36.4% would consider advertising within such a framework.

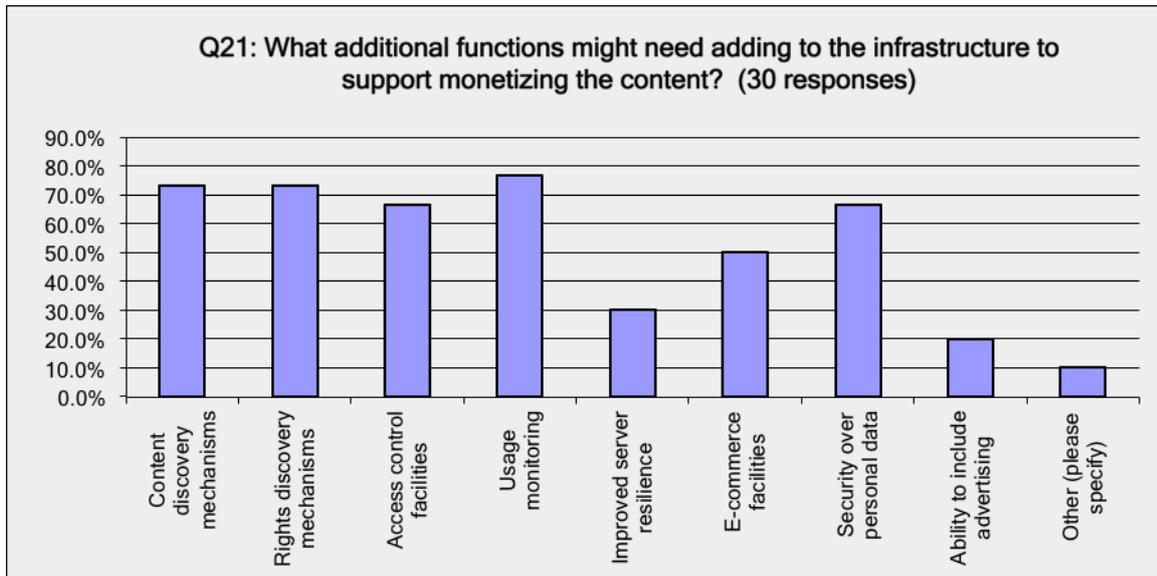


Figure 2: Additional infrastructure functions needed to support monetizing the preserved content.

5.2.5 New or novel forms of content

Given the frequently repeated adage in publishing circles that “content is king”, particular attention was given in seven questions (Q25–31) to the importance of various content-related topics.

Interestingly, the content itself seems to be only part of the story: 51.7% of responders agreed that the availability of new digital content would be an important factor when considering publishing and cultural heritage institution partnerships, but 37.9% answered “perhaps” and 10.3% “don’t know”. Similarly, only 24.1% of responders gave a definite “yes” when queried whether it would be important for new content to be “complete and self standing”, with 72.4% responding “not necessarily” to the same question. 44.8% felt that supplementary or supporting digital data would be useful to enrich existing product offerings and another 41.4% answered “perhaps” to the same question.

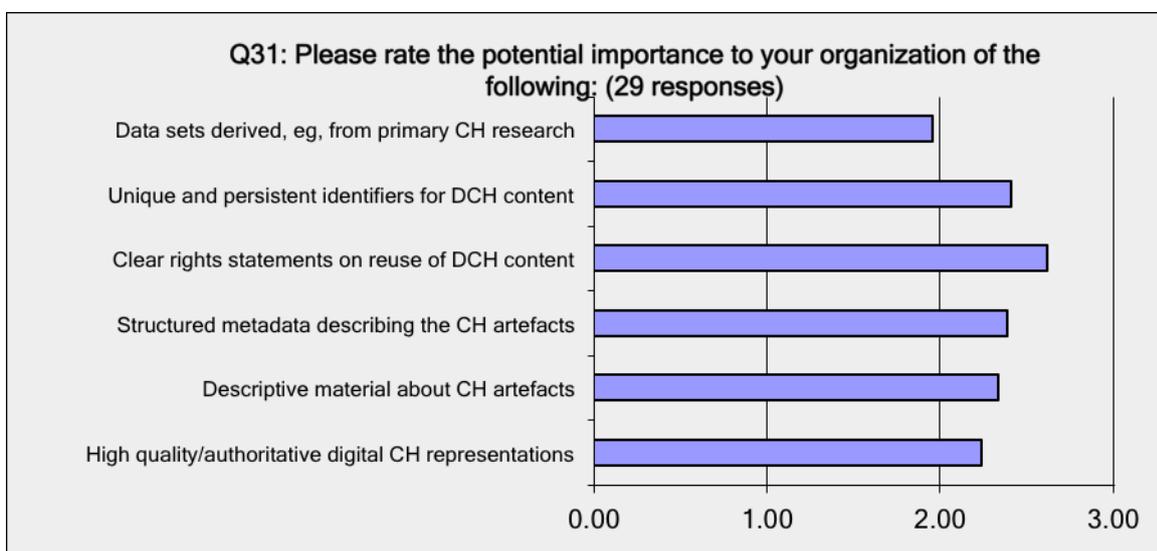


Figure 3: Importance of various content attributes to potential publishers of DCH content.

Publisher responders appeared not to be narrowly focused on their existing lists: 37.9% indicated that they would primarily be interested in DCH content from subject areas close to their existing programmes, but 51.7% said this restriction was “not necessarily” the case and 10.3% said “no” to the same question.

Attributes of the content were felt to be of considerable importance. 93.1% felt it would be important to have clear statements of the rights associated with each item of DCH content. Provision of good quality metadata also rated highly, with 75.9% responding “yes” and 20.7% “perhaps” when asked to rate its importance. Q31 (see Figure 3, previous page) attempted an overall ranking of the importance of a number of factors – clear rights statements ranked highest, but all six factors presented attracted significant responses.

5.2.6 Software, toolsets and techniques

Four questions (Q32–35) explored the attractiveness or otherwise of new software, toolsets or techniques, using as a jumping-off point a question on the extent to which responders try to improve the daily routines or workflows of their customers (55.6% of responders said that they do attempt this and 44.4% that they do not). There appears to be some interest in this area but largely via software, toolsets or techniques *in conjunction with* DCH content (81.5%) rather than new software/tools alone (7.4%).

Q34 attempted a ranking of several techniques, resulting in advanced search methods (highest), then data mining and content manipulation techniques, followed by visualization/virtual reality techniques (lowest). Other types of software or techniques of interest were reported in response to Q35: Semantic Web related tools, ability to build connections between entities based on user behavior, usage and other metrics, crowd-sourcing tools, facilities to index digital images with one or two keywords, and personalization options.

5.2.7 Terms of trade, rights and licensing

The final main section of the survey (Q36–42) examined more closely terms of trade, rights and licensing issues. The 25 responders to this section – designed only to address those responders directly involved in publishing activities – were categorized via Q36: the largest groups represented were commercial publishers (56%), CH institutions with their own publishing programmes (20%) and not-for-profit publishers (12%).

54.2% of responders said that they would need exclusive rights in order to commercially publish particular formats of DCH content but 45.8% did not. These responses are somewhat at odds with the higher 70.8% who would be prepared to enter into co-publication agreements (thus without requiring exclusive rights). Nearly 70% of responders advised that they had “significant” or “some” experience in co-publishing arrangements, although this dropped to around 46% in total when the question was specifically narrowed to co-publishing with institutions in the DCH domain.

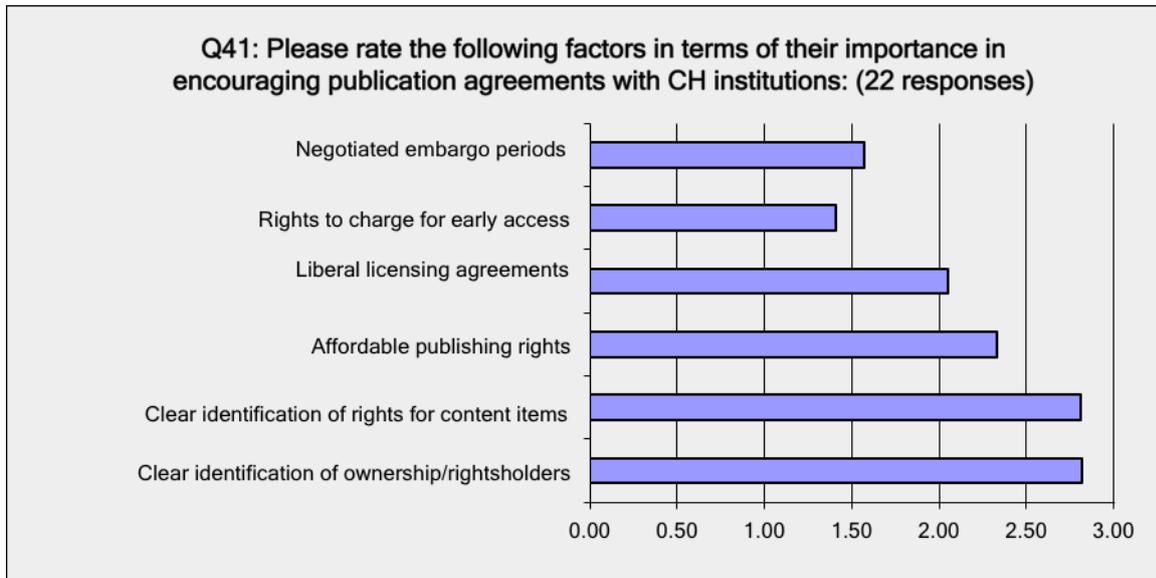


Figure 4: Factors encouraging publication agreements with CH institutions.

Q41 (see Figure 4) requested a ranking of six factors in terms of their importance in encouraging publishing agreements with CH institutions. The list was headed by clear identification of ownership/rightsholders and of the rights situation for individual content items, followed in this order by affordable publishing rights, liberal licensing agreements, negotiated embargo periods and rights to charge for early access.

5.2.8 Responders and the DCH-RP project

The remaining six questions (Q43–Q48) concerned how the participants had come to learn about the DCH-RP project and are not reported here. However, 28 participants requested a summary of the results of this survey and 21 participants expressed a willingness to be introduced to DCH-RP project members for further discussions.

6 LESSONS FROM E-JOURNAL PRESERVATION

Over the past 10–15 years a number of community-inspired organizations have emerged that are dedicated to the preservation of online scholarly journals. Together, these organizations now constitute a relatively mature preservation infrastructure. Since the content involved is digital in form, albeit largely text-based, EDItEUR believes there may be significant opportunity for knowledge transfer and exchange of experience between the e-journal and DCH sectors.

6.1 BACKGROUND AND OVERVIEW OF THE E-JOURNALS SECTOR

Electronic online versions of scholarly journals (e-journals) have grown rapidly in availability and popularity since the early 1990s, when they were launched alongside the original printed versions of the same journals. Today, e-journals represent by far the dominant vehicle for scholarly, peer-reviewed communication; they are of huge commercial importance to publishers and account for the major proportion of library spending among universities and other centres of academic and applied research.

Subscriptions to e-journal content are purchased in various ways. Individuals or their parent institutions may purchase directly from the publisher, but there is an increasing tendency for this function to be handled in part by consortia of institutes or national purchasing and licensing bodies, organized around either geographical or subject-area groupings. A third route is purchase via subscription agencies.

Methods for “consuming” or accessing e-journal content are also evolving. Where originally the predominant models for user authentication were username/password (for individuals) and IP address recognition (for individuals affiliated to an institution), there is now widespread use of e.g. Shibboleth authentication and federated access methods, allowing single sign-in access for a recognized individual to a whole range of subscribed and other resources.

The primary driver for subscription is still current access to the most recent and prestigious content (linked to brand reputation, high rejection rates for articles submitted for publication, and high usage factor metrics). However, there has been a clear tendency over recent years for pricing and negotiation also to include clauses related to access “in perpetuity” to resources subscribed for today.

The perceived criticality of the information in these e-journals, together with the very high prices typically involved, has led libraries to pay increasing attention to the long-term preservation of these resources. Initially this focused on the avoidance of short-term outages of access – for example due to technical problems at content hosting systems or, more rarely, the commercial failure of a publisher or other supplier or intermediary. But the concern for stable and reliable long-term preservation – implying not only storage but also such factors as maintenance of metadata, survival of technical obsolescence, avoidance of so-called “bit-rot”, etc. – gave rise to a number of community-inspired mechanisms to support these objectives.

6.2 ESTABLISHED PRESERVATION MODELS FOR E-JOURNAL CONTENT

A number of preservation models have evolved in the e-journal sphere and most of these are now being extended to encompass e-book content too. The original impetus and direction came from the user or “customer” community, and most particularly from the university and research libraries responsible for purchasing expensive e-journal content. This feature persists today, even though publishers responsible for creating the e-content are increasingly drawn into active partnership with their library user communities.

Collaboration between libraries has been widespread, since this has made it easier to achieve significant coverage of the content to be preserved as well as limiting costs of participation. Several major international preservation agencies have emerged, alongside a growing number of national libraries that have a specific digital preservation and/or legal deposit mandate. With explicit agreement from the originating publishers, the focus has been upon creating and expanding digital archives that become open to patrons upon the occurrence of defined “trigger events”, such as extended outages in service via regular channels, or situations in which a publisher either goes out of business or decides no longer to host content that has previously been available online to subscribers. In certain defined circumstances, a trigger event may cause a preservation agency to make the content concerned available to any reader – effectively, a fully open access arrangement.

The main e-journal preservation agencies (see next) are constituted as nonprofit organizations, and their operation is funded via a combination of annual membership subscriptions (typically, but not always) from both libraries and publishers, and endowments from various library benefactors or trusts. Those preservation agencies that are part of national libraries clearly rely on significant national government funding, but they too are keen to develop models that make their preservation activities to some degree self-funding.

The Digital Preservation Coalition has produced two excellent overviews of the current state of play in e-journal and e-book preservation for scholarly content:

- *Preservation, Trust and Continuing Access for e-Journals*, by Neil Beagrie, DPC Technology Watch Report 13-04, 2013, DOI: <http://dx.doi.org/10.7207/twr13-04>
- *Preserving e-Books*, by Amy Kirchhoff and Sheila Morrissey, DPC Technology Watch Report 14-01, 2014, DOI: <http://dx.doi.org/10.7207/twr14-01>

Both reports are available from the [DPC website](#).

6.3 KEY AGENCIES INVOLVED IN E-JOURNAL PRESERVATION

Three main types of agency can be distinguished, though collaborations or joint ventures across these types are common:

- University/research libraries, consortia and specialist centres
- Dedicated nonprofit archiving/preservation agencies
- National libraries with a particular digital preservation or legal deposit remit.

In all three types, it is noticeable that (a) significant pressure or encouragement to develop the services has come from the library/user community and (b) great attention has been paid to balanced supervisory or governance arrangements, such that the main constituencies are deeply involved in prioritization and decisions on future directions.

6.3.1 LOCKSS and public or private LOCKSS networks

One of the earlier initiatives to emerge in this field (1998/99) was the LOCKSS Program <http://www.lockss.org/> based at Stanford University Libraries. As mentioned earlier, the LOCKSS acronym stands for “Lots of Copies Keep Stuff Safe”, which neatly encapsulates one of its main tenets: by

linking and dynamically comparing essentially the “same” digital content but preserved by multiple libraries, a high degree of resilience, self-repair and redundancy is built into the network from the outset.¹

LOCKSS represents both the controlling software and protocols as well as the networks of collaborating institutions that use the system. Participating libraries each maintain a so-called LOCKSS Box. For the specific content to which the library subscribes, the LOCKSS Box carries out five functions:

- It ingests content from publisher sites or hosting platforms via web crawlers
- It preserves content, checking and comparing with the same content saved by other LOCKSS Boxes and repairs any differences
- It delivers content to readers when the publisher’s website is unavailable
- It provides various management functions for the librarian
- It dynamically migrates content to new formats as required for display, whilst leaving the underlying content unchanged.

The LOCKSS software and methodology continue to be maintained by Stanford University Libraries and the system claims to be OAIS compliant. More than 530 publishers now participate in LOCKSS activities and consent to their content being crawled for inclusion in LOCKSS repositories. Participating libraries pay an annual membership on a sliding scale based on their size and character. There is no cost to publishers, presumable to actively encourage participation and the availability of authoritative content.

Organizationally, there is a Global LOCKSS Network that collaborates on the preservation of what might be considered as general library collections and a number of Private LOCKSS Networks that provide facilities for more specialized collections of resources such as manuscripts, data sets, etc.

Finally, the LOCKSS system is also central to the operation of CLOCKSS (see below).

6.3.2 Portico and JSTOR

Based in the United States, but with a worldwide client base, Portico <http://www.portico.org/digital-preservation/> is one of a group of services offered by the nonprofit organization ITHAKA. Portico specializes in the preservation of e-journals, e-books and digitized historical collections (d-collections). It was created in the early 2000s, following the success of its sister organization JSTOR from 1995 onward.

At the time of writing, Portico counts over 200 e-journal publishers and nearly 60 e-book publishers as contributors of content to its service; 17,600 e-journals are so far preserved in whole or in part within its program. Funding comes from subscriptions by its library and publisher users. More than 900 libraries worldwide use Portico’s services and it has recently entered into a major partnership agreement with the British Library.

¹ It is perhaps also interesting to note the prescience of U.S. Secretary of State (and later President) Thomas Jefferson, who is reported as having offered the following advice in February 1791, although probably not exactly with *digitized* resources in mind: “... *let us save what remains not by vaults and locks which fence them from the public eye and use in consigning them to the waste of time, but by such a multiplication of copies, as shall place them beyond the reach of accident.*”

To support reliable long-term preservation, Portico carries out several migrations on the data ingested into its repository: first the original publisher's markup is transformed into the NLM archival standard and then the content of each article is repackaged into an archival information package. Portico's work is informed by a number of standards, including OAIS; it has undergone extensive TRAC audits and is certified by the U.S. Center for Research Libraries (CRL) as a trustworthy digital repository.

JSTOR <http://about.jstor.org/about>, also part of the ITHAKA organization, helps libraries digitize existing journal and book holdings and secure their long-term preservation. Unlike some of the other preservation agencies, JSTOR content has tended primarily to come from the humanities and social sciences.

6.3.3 CLOCKSS

CLOCKSS stands for Controlled LOCKSS: the LOCKSS system briefly described earlier is used to operate CLOCKSS – which is essentially a large-scale Private LOCKSS Network. The CLOCKSS Program itself <http://www.clockss.org/clockss/Home> is a nonprofit venture on the part of leading academic publishers and research libraries to provide a secure and resilient dark archive for scholarly publications.

Research libraries and publishers have an equal voice in determining CLOCKSS policies and in deciding the appropriate response to trigger events. Unlike LOCKSS, where locally “owned” content is preserved locally, CLOCKSS maintains copies of its complete content repository in 12 locations around the world (in North America, Europe and Asia), thus aiming to minimize political or environmental risk to the underlying digitized holdings.

Over 300 libraries and nearly 200 publishers participate in CLOCKSS arrangements to date and fund its activities via annual membership fees.

6.3.4 e-Depot of the KB

The e-Depot of the Koninklijke Bibliotheek (National Library of The Netherlands) is an interesting case of a national service that later became much more international in scope. The e-Depot <http://www.kb.nl/en/expertise/long-term-usability-of-digital-resources> was originally set up (based on the OAIS reference model) primarily to secure long-term preservation of Dutch electronic publications in the Dutch deposit library. Although this role continues, the fact that two very large international publishers – Elsevier and Wolters Kluwer – are domiciled in The Netherlands led to a major expansion of the e-Depot's activities and the eventual creation of an International e-Depot service. The Dutch government is a major sponsor of the e-Depot's work.

6.3.5 British Library

The British Library (BL) <http://www.bl.uk> is heavily involved in digital preservation activities. As the UK's national library, it has very substantial digital assets of its own, covering a wide range of subjects and media formats. BL also shares with several other leading libraries responsibility for maintaining archives of legal deposits – copies of every item published in the UK must be provided for legal deposit and recent legislative changes have extended this requirement to digital as well as print-based resources.

BL participates in many collaborative ventures in the field of digital preservation and research. It is a partner member of the Keepers Registry (see next) and in 2013 announced a large-scale collaboration with Portico for e-journal preservation.

6.3.6 The Keepers Registry

The Keepers Registry <http://thekeepers.org/thekeepers/keepers.asp>, a service provided by EDINA, which is the national data service centre at the University of Edinburgh, plays an increasingly important role in e-journal preservation. Developed in conjunction with the ISSN International Centre in Paris, the Keepers Registry has three main aims:

- To enable librarians and policy-makers to monitor who (if anyone) is preserving a particular e-journal
- To highlight gaps in the preservation records and e-journals whose content is therefore “at risk”
- To showcase those organizations (The Keepers) which are acting as digital repositories for e-journal access over the long term.

Currently ten preservation agencies are actively participating in the Keepers Registry. These include many of the organizations already mentioned (Portico, BL, the e-Depot of the KB, the Global LOCKSS Network, the CLOCKSS Archive) as well as five other agencies mentioned next.

6.3.7 Other players

Also included among the partners or “Keepers” in the Keepers Registry are a number of other important preservation agencies active in e-journal preservation:

- The Hathi Trust <http://www.hathitrust.org/>
- Archaeology Data Service <http://archaeologydataservice.ac.uk/>
- Scholars Portal <http://www.scholarsportal.info/>
- The National Science Library of the Chinese Academy of Sciences <http://english.las.cas.cn/>

The US Library of Congress <http://www.loc.gov/> is the latest addition to the list of Keepers.

This list is of course not exhaustive but is intended to convey the breadth of organizational involvement in this area.

6.4 VARIATIONS IN THE COVERAGE OF E-JOURNALS PRESERVED

A note of caution or disclaimer is in order here, in case the foregoing description gives the impression that all problems have been solved and no challenges remain. While there has been considerable success to date in the digital preservation of many e-journals, the situation is very variable in terms of individual journal titles.

The preservation coverage of the most prestigious journals, and particularly those in the so-called hard sciences and life science/medical fields is the most complete. Extensive volume/issue ranges of such journals have already been preserved by three or more of the established preservation agencies; this implies a relatively high degree of resilience *for those particular e-resources*.

However, the picture changes considerably for other e-journal groups: the numbers and extents of e-journals preserved are both much lower when looking, for example, at titles in the humanities. Another “at risk” group is the fast-evolving group of open access e-journals, which have relatively much lower

percentages of titles preserved. Perhaps this latter situation may have been predictable, in that lower revenue streams or investments are typically involved. But the prospect that increasingly important resources may have only sketchy provision for preservation is already alarming librarians.

Finally, some recent work undertaken by the Keepers Registry, in conjunction with the International ISSN Centre, indicated that only around 20% of a sample group of e-journals had in fact been the subject of preservation efforts by *any* of the established agencies.

Summarizing these observations it appears clear that:

- Technical and infrastructural solutions are in place and working efficiently for the preservation of e-journals
- Where the perceived value of the resource, or the risk of losing it, are high then largely complete and multiply redundant preservation efforts are achievable
- But when some or all of those factors (perceived value and usage, high visibility, sufficient associated revenues) are absent, then preservation coverage can be incomplete or non-existent.

6.5 IS E-JOURNAL EXPERIENCE TRANSFERRABLE TO THE DCH DOMAIN?

Clearly much has been achieved in the e-journal domain in terms of evolving mechanisms and organizations to look after digital preservation. Much remains to be done, particularly related to the coverage of these preservation activities. But, crucially, the technical, organizational and even financial challenges have proved to be solvable, given strong commitment from the various communities involved.

E-journals are composed of digital content. Predominantly this is at present text-based, although there are increasing amounts of illustrations, video and other multimedia files, and of course “raw” experimental data files associated with the “written word”. (Indeed, one fast-growing e-journal, the Journal of Visualized Experiments <http://www.jove.com> consists almost entirely of audio/visual sequences showing real experimental techniques.)

For this reason, there appears to be no intrinsic technological barrier to considering some of the approaches – multiply delocalized storage, distributed user bases accessing the materials over the internet, frequently via federated access methods, etc. – to inform the work being done in DCH-RP.

Perhaps just as important, however, may be the ways in which communities or linked constituencies (of libraries, publishers, infrastructure providers, funders, and so on) have organized themselves to bring about long-term agreements and infrastructures to make e-journal preservation happen. The governance arrangements that have been developed have generally been carefully designed to involve, and keep on board, a variety of potentially competing interests to achieve a shared common good – and one that can in principle be sustained far into the future. Technical and methodological audits have been employed to verify the trustworthiness of the organizations involved and there is clearly a good deal of “institutional trust” between the main players involved.

EDItEUR recommends that we continue to seek input and suggestions from the e-journal preservation community as to which of these approaches may be applicable or useful in the admittedly rather different DCH domain.

7 ONGOING COMMUNICATION

As part of our network building activities and more generally to spread the word about DCH-RP in the publishing world, EDItEUR has been communicating via a number of channels:

- Bimonthly pieces have been included in the EDItEUR Newsletter, emailed to over 100 member organizations internationally and to over 500 individual contacts.
- We have set up a dedicated DCH-RP page <http://www.editeur.org/155/DCH-RP/> on the EDItEUR website, to give overview information and to push traffic toward the main project website and the DigitalMeetsCulture showcase pages.
- At our regular EDItEUR meetings during the Frankfurt and London Book Fairs (each typically attracting about 40 senior representatives of all areas of the international publishing community) and other industry meetings, we have spoken publicly about DCH-RP and invited questions or expressions of interest.
- We have passed on targeted mailings, both to the contact organizations named in Section 4.1 earlier and to the memberships of wider organizations such as ALPSP, STM, the Publishers' Associations in the UK, Spain and Italy, and others.

These activities will continue as the project nears completion, as will a number of conference calls around the specific themes of Factors Influencing Publisher Participation and Learning from the Experience of e-Journal Preservation.

APPENDIX A: QUESTIONS POSED IN THE DCH-RP SURVEY

About you and your organization

Q1: Your name

Q2: Your email address

Q3: The name of your organization

Q4: Your department

Q5: Your job title or function

Q6: How would you describe your organization's primary role? *[Controlled list]*

Your digital preservation arrangements or requirements

Q7: Is maintaining a set of digital assets or resources important to your organization's mission?

Q8: Is it important to your organization's mission that your digital assets be securely preserved for the foreseeable future?

Q9: Do you already have arrangements in place for the preservation of your organization's digital assets? (If you answer "No" to this question, please skip the intervening questions and go to Question 16.)

Q10: Are your preservation arrangements provided within your organization (in-house) or are they outsourced?

Q11: Does your organization use only one or more than one preservation arrangement?

Q12: Does your organization require replication of copies of your preserved content to geographically separated repositories?

Q13: Does your organization require an exclusive repository for its content or is it prepared to share preservation facilities with other organizations?

Q14: If you use shared preservation arrangements, what safeguards do you demand of the preservation service suppliers? *[Controlled list: select one or more options as appropriate]*

Q15: Does your organization ask for evidence of formal audits of any of the following? *[Controlled list: select one or more options as appropriate]*

Reasons for sharing

Q16: Do you see a need for such a shared infrastructure on the grounds of any of these factors? *[Controlled list: select one or more options as appropriate]*

Q17: Would the existence of such a shared DCH infrastructure be of interest to your organization?

Q18: Would your organization consider using the DCH infrastructure to preserve your own digital content?

Q19: Do you think such an infrastructure could support the requirements of both preservation and some commercial exploitation of the DCH content?

A multi-purpose infrastructure: preserve AND monetize?

Q20: Is there commercial value in a shared infrastructure that makes it possible to publish DCH content alongside the original preservation function?

Q21: What additional functions might need adding to the infrastructure to support monetizing the content?
[Controlled list: select one or more options as appropriate]

Q22: Would you consider using a shared DCH infrastructure to serve content to your customers or clients?

Q23: Would you consider using a shared DCH infrastructure to support e-commerce transactions with your customers or clients? (These transactions would primarily concern rights for publication and re-use of the cultural heritage content.)

Q24: Would you consider advertising within such an infrastructure or sponsoring selected features or areas of the infrastructure?

New or novel forms of content

Q25: Would the availability of new digital content be an important factor when considering possible partnerships?

Q26: Would it be important to have clear statements of the rights associated with each item of DCH content?

Q27: Would it be valuable to have carefully created descriptive metadata associated with each item of DCH content?

Q28: Would it be necessary for the new content to be complete and self-standing?

Q29: Would supplementary or supporting digital material also be useful to enrich your own existing digital offerings?

Q30: Would you be primarily interested in DCH content from subject areas close to those covered by your existing publication programmes?

Q31: Please rate the potential importance to your organization of the following factors *[Controlled list]*

Software, toolsets and techniques

Q32: Does your organization create products to improve or enhance the daily routines or workflows of your customers?

Q33: Is your interest limited to DCH content, or might you also be interested in new software or tools for using and/or enhancing the usefulness of the content?

Q34: Please rate the importance for your product range of the following factors *[Controlled list]*

Q35: Are there other types of software or techniques that would be of particular interest (please specify)?

Terms of trade, rights and licensing

Q36: For the purposes of THIS SECTION OF THE SURVEY, please characterize your organization as one of the following [*Controlled list*]

Q37: Would you need to retain or acquire exclusive rights in order to commercially publish particular formats of any DCH content?

Q38: Could you enter into co-publication arrangements, thus without exclusive rights?

Q39: Has your organization significant experience in co-publishing arrangements?

Q40: Has your organization specific experience in co-publishing with institutions in the DCH domain?

Q41: Please rate the following factors in terms their importance in encouraging publication agreements with CH institutions [*Controlled list*]

Q42: Are there other terms of trade or commercial aspects that would particularly influence your opinion on partnerships with CH institutions (please specify)?

You and the DCH-RP project

Q43: Before receiving this survey, were you aware of the DCH-RP project?

Q44: How did you hear about DCH-RP and this survey? Select one or more options as appropriate [*Controlled list*]

Q45: Would you be prepared for EDItEUR to introduce you to DCH-RP project members to discuss these issues further?

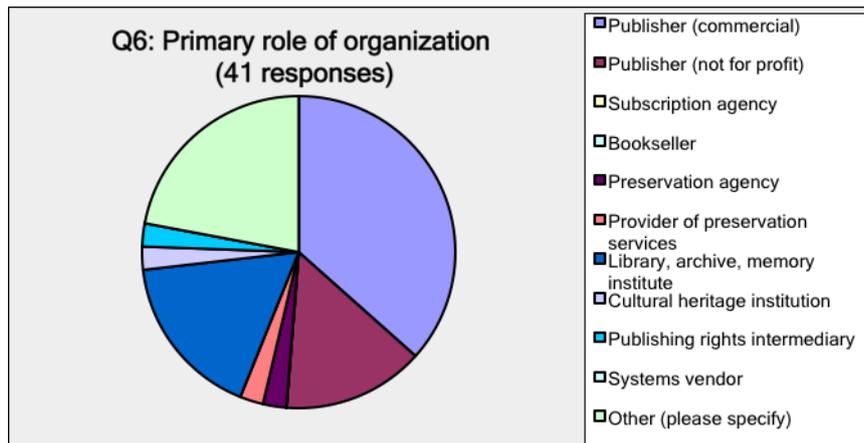
Q46: In general terms, do you see opportunities for cooperation or partnership between your organization and the CH institutions represented in the project?

Q47: Would you like to receive a brief consolidated report on the results of this survey?

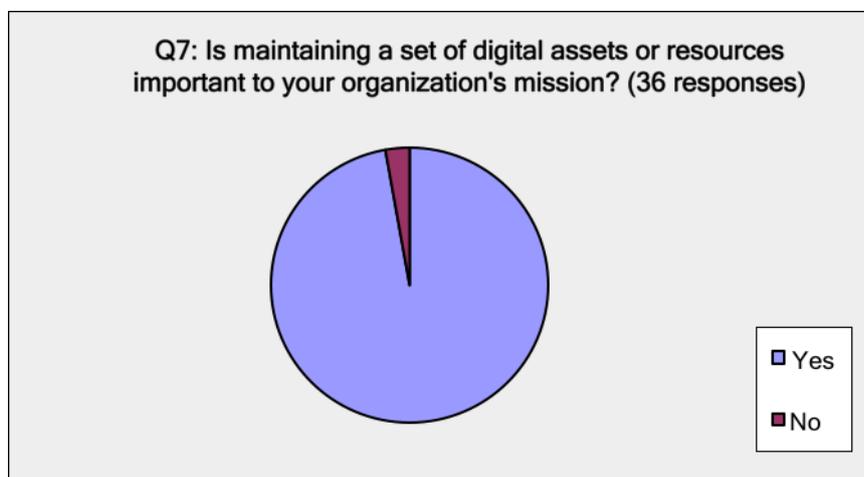
Q48: Would you be prepared to participate in a follow-up conference call to validate the survey's findings?

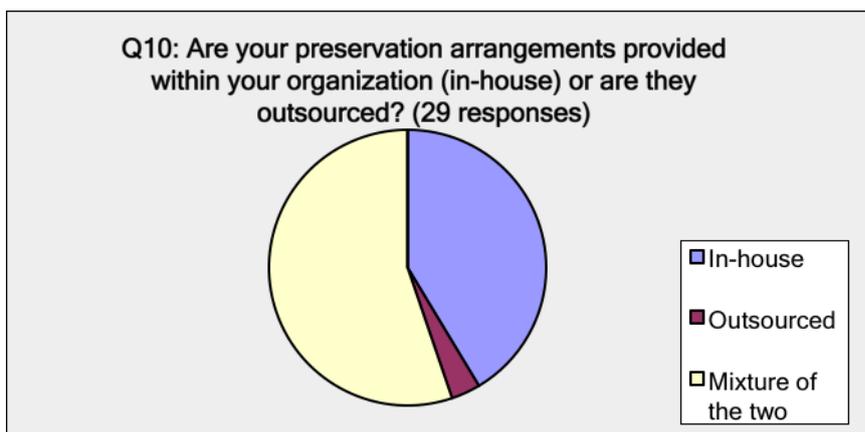
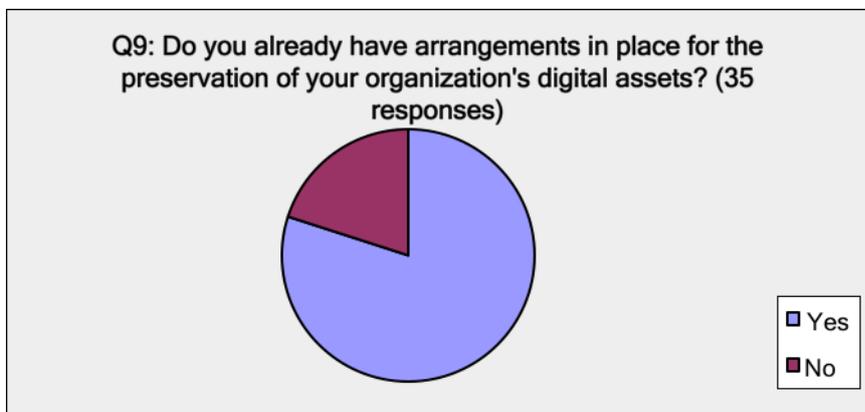
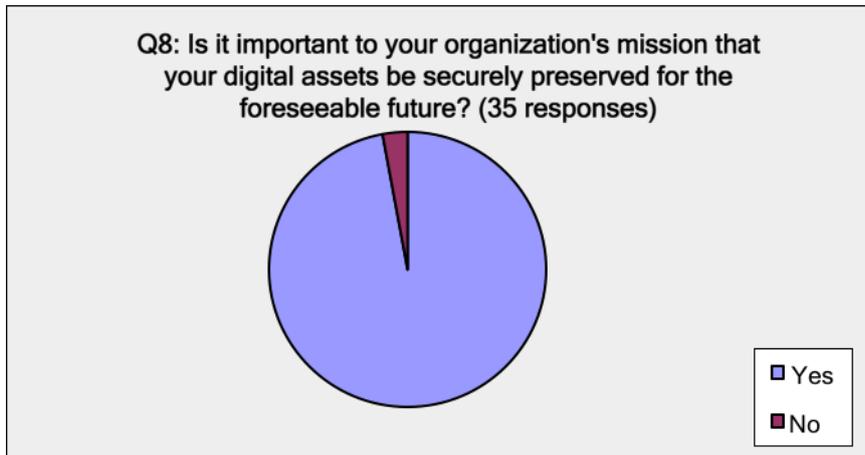
APPENDIX B: GRAPHICAL SUMMARY OF SURVEY RESPONSES

NOTE: Questions 1-5 concerned the identities and contact details for survey participants; these were anonymized and are not reported here.

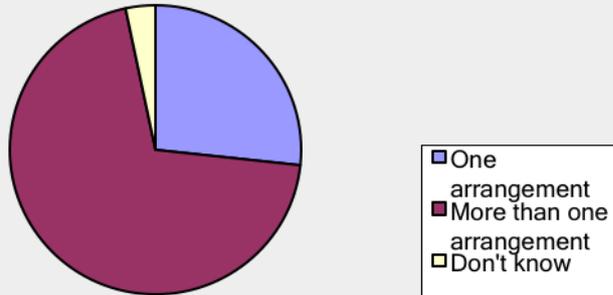


“Other” includes here government department, ministry, not-for-profit trade association for publishers, e-infrastructure provider for European academic sector, collections management advice agency, publishers association, and international federation.

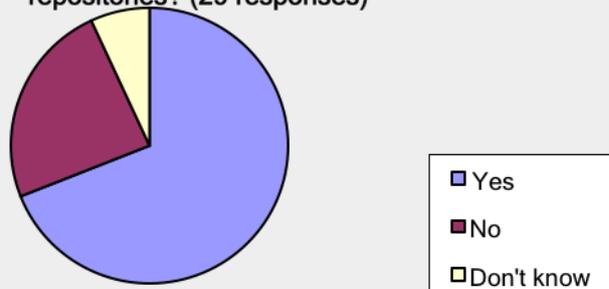




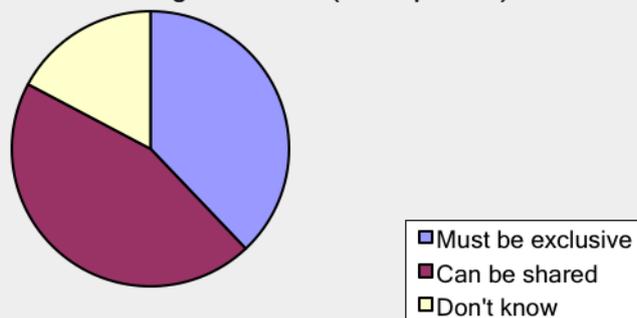
Q11: Does your organization use only one or more than one preservation arrangement? (30 responses)

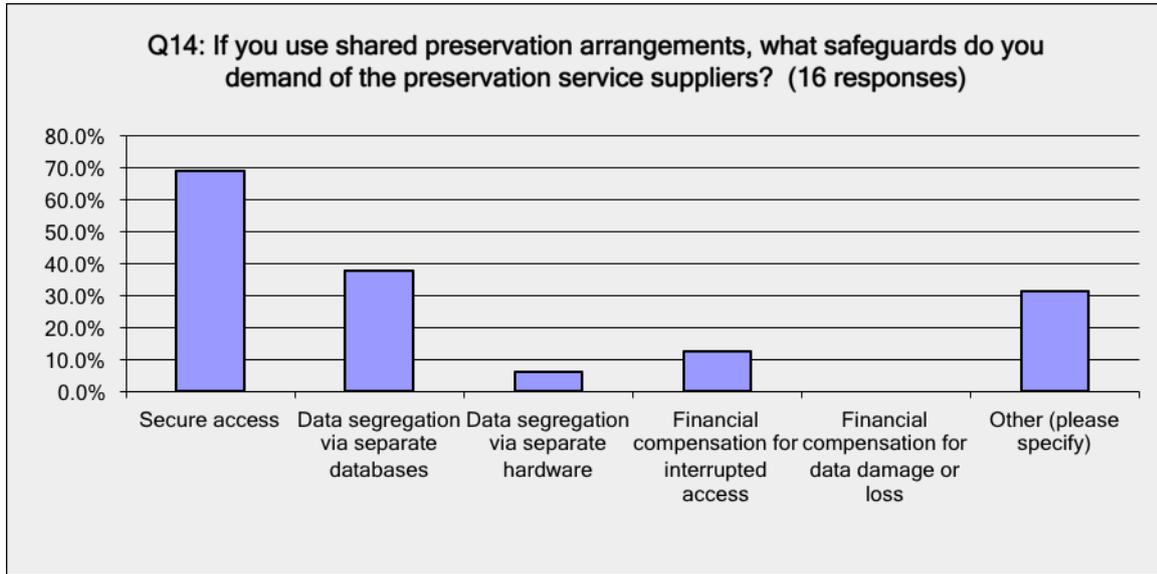


Q12: Does your organization require replication of preserved material to geographically separated repositories? (29 responses)

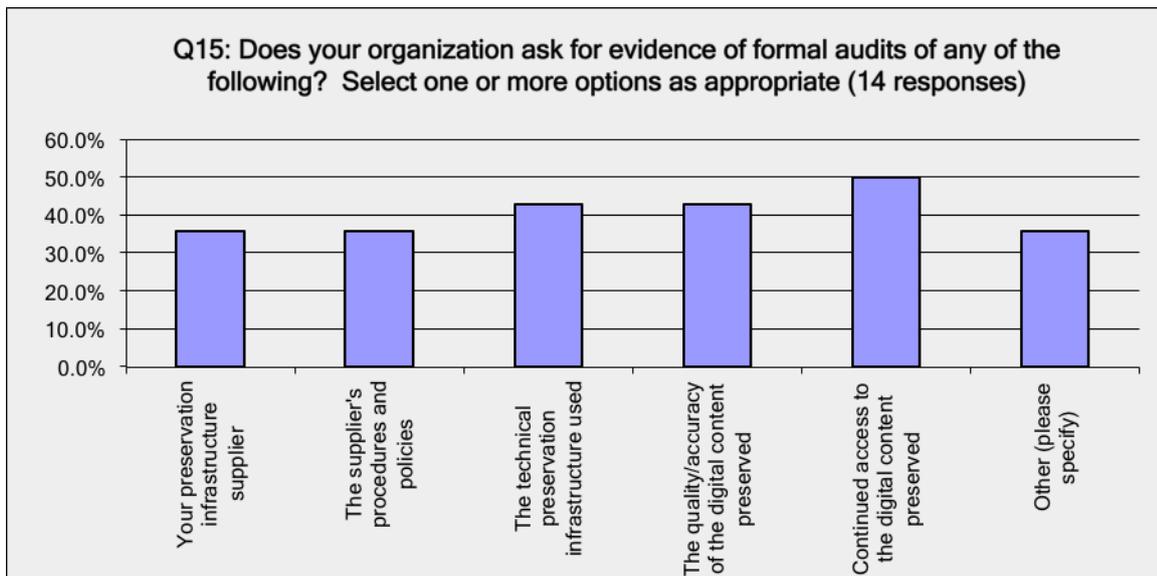


Q13: Does your organization require an exclusive repository for its preserved content or is it prepared to share with other organizations? (29 responses)

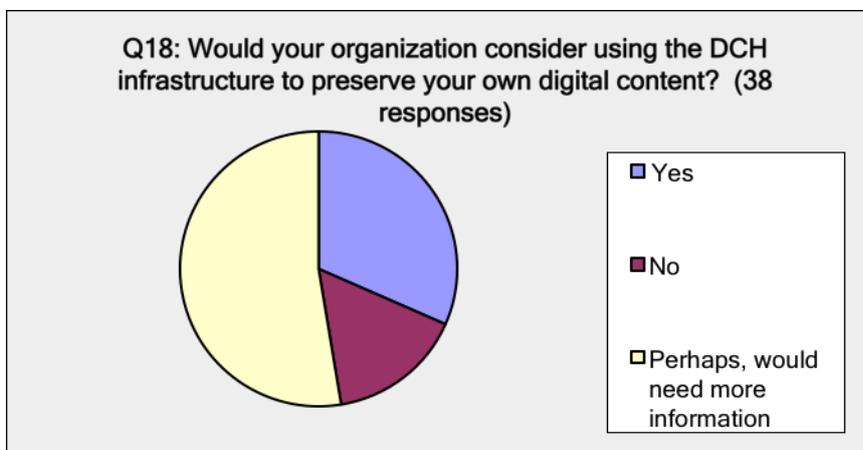
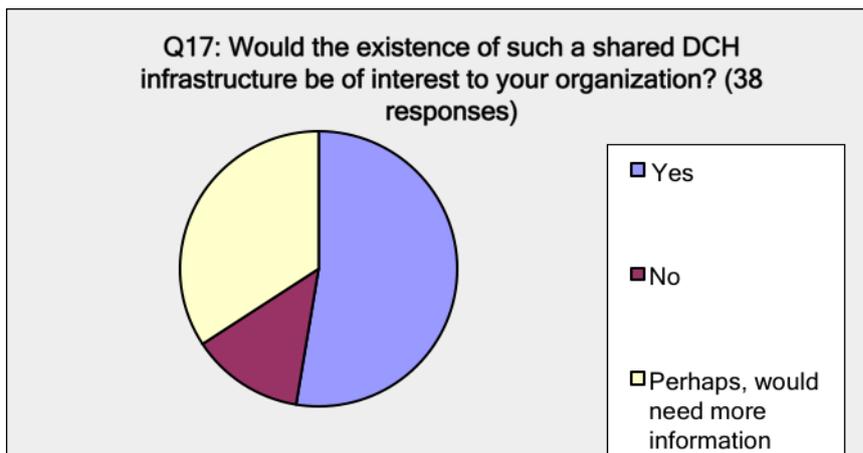
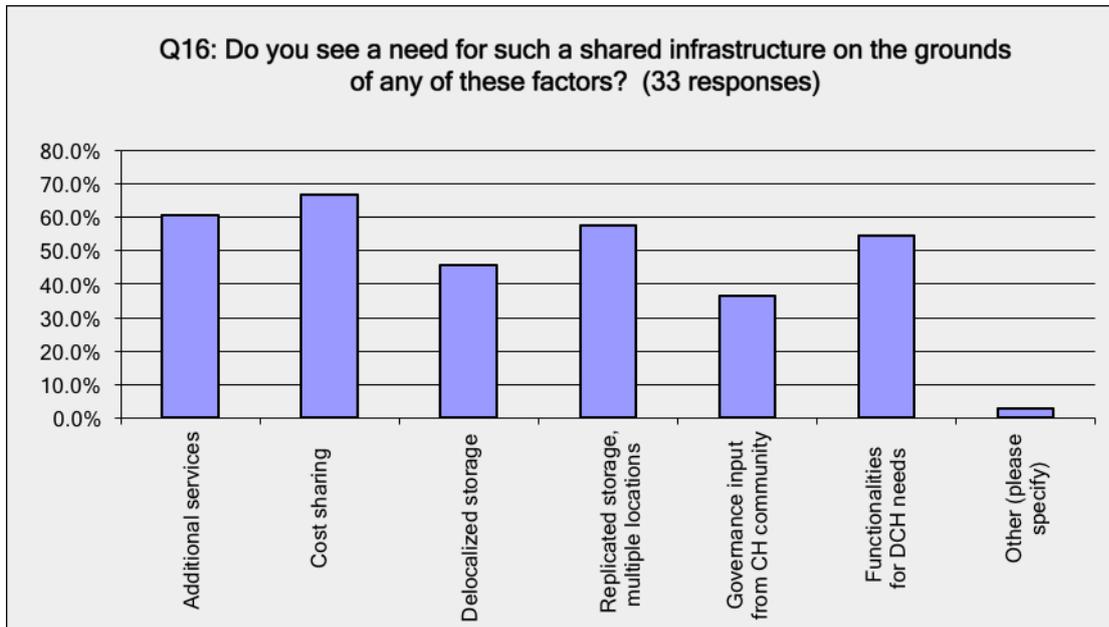


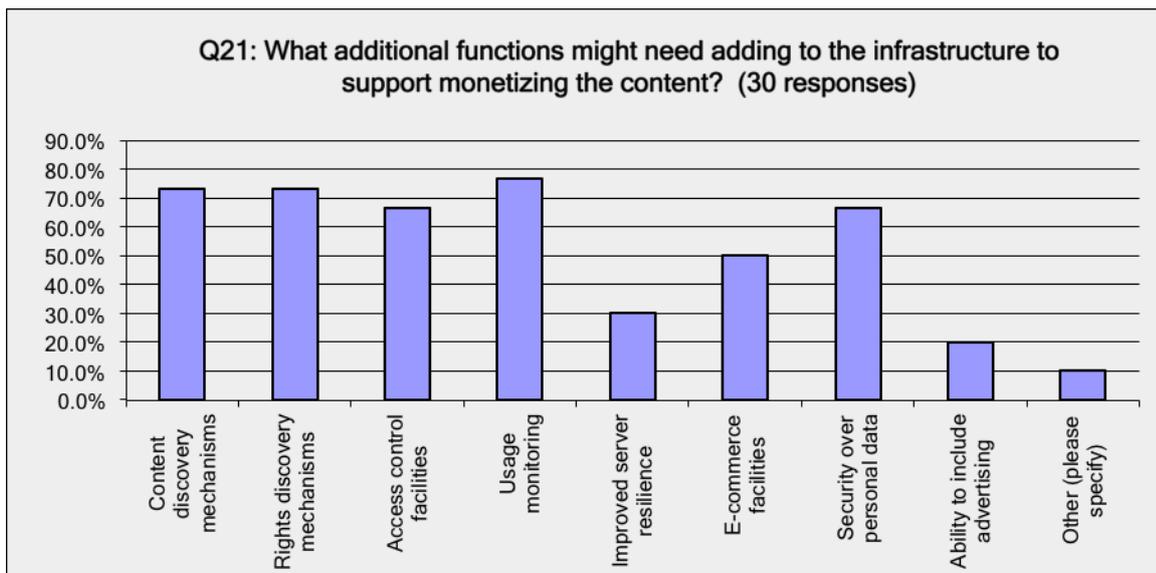
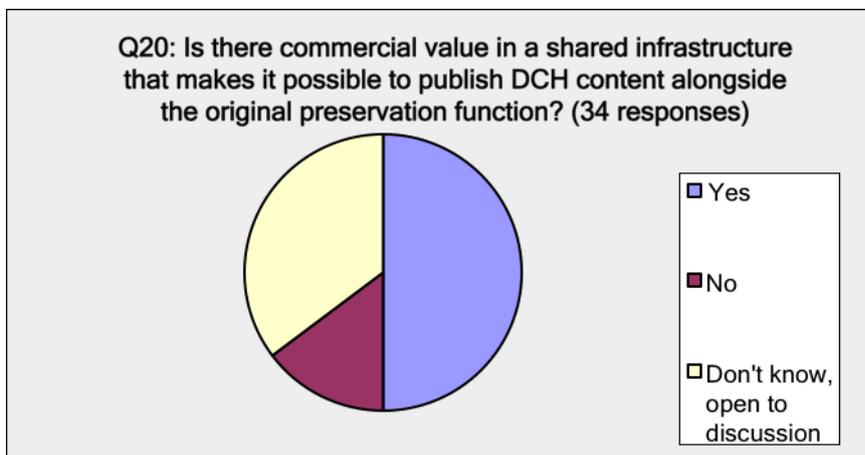
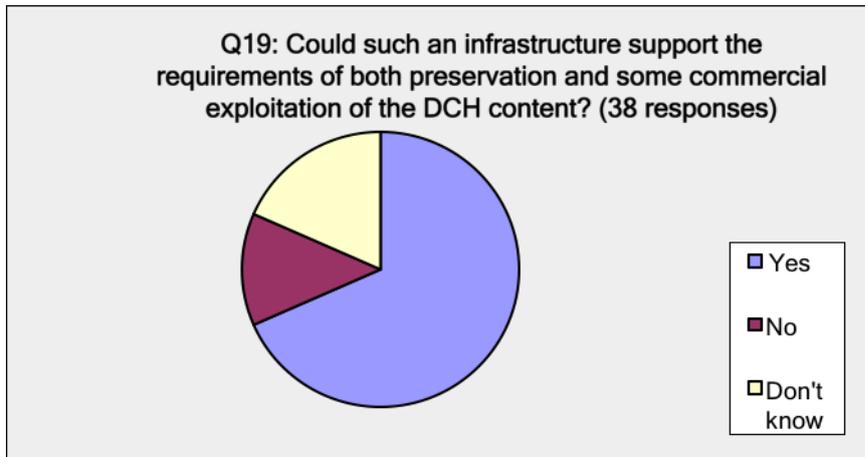


“Other” includes here separation at file system level, developed with external parties but maintained/offered exclusively by ourselves, not yet formalized, and don’t know.

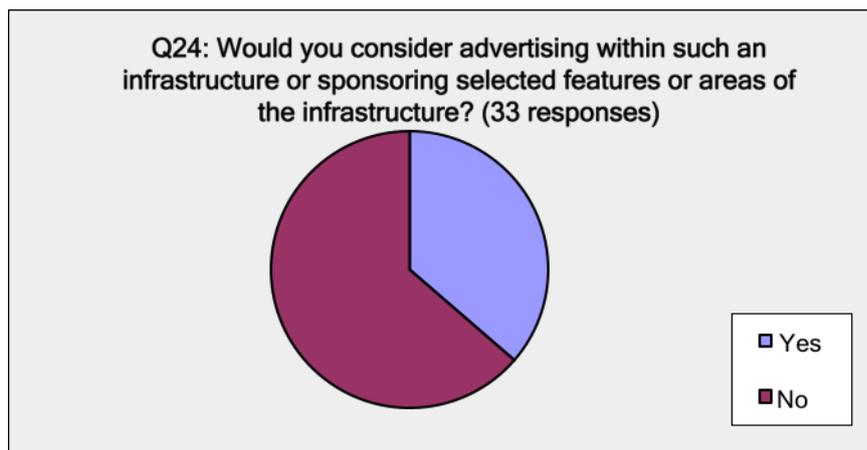
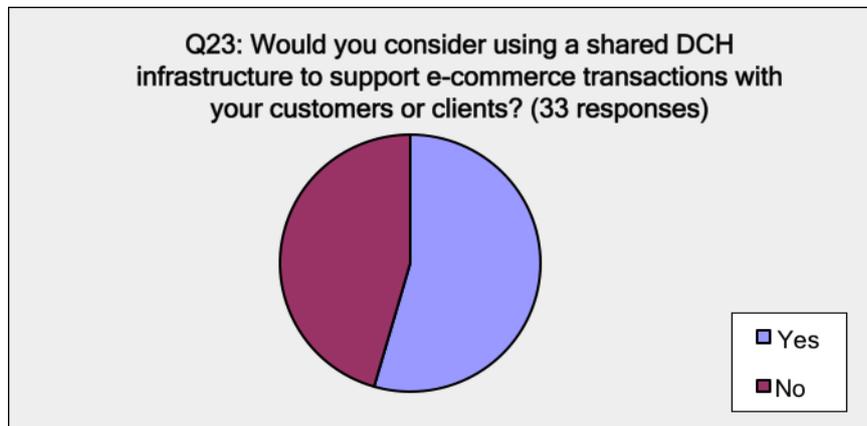
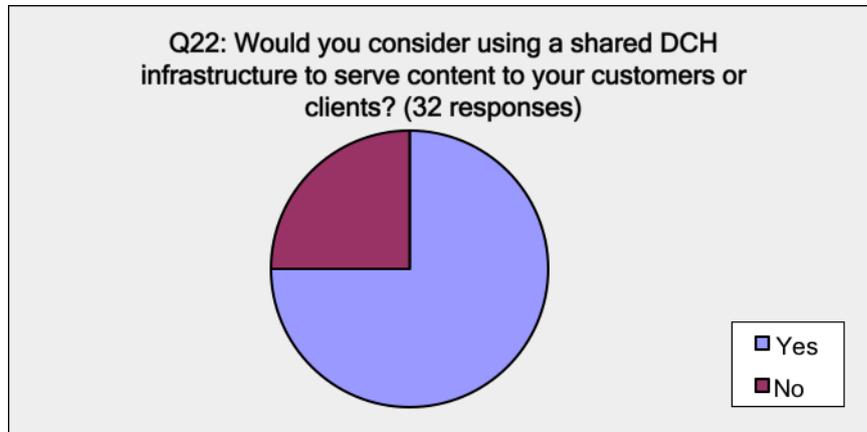


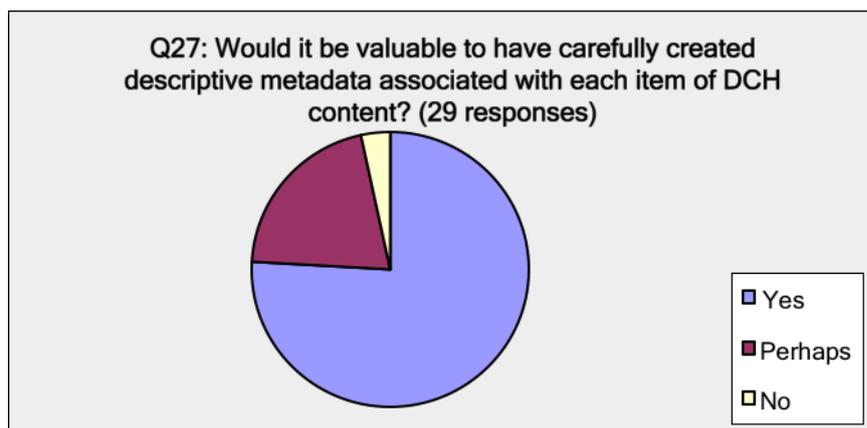
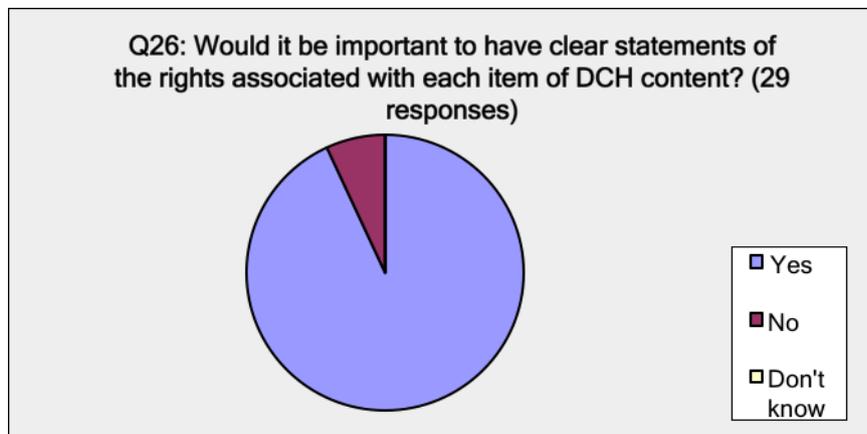
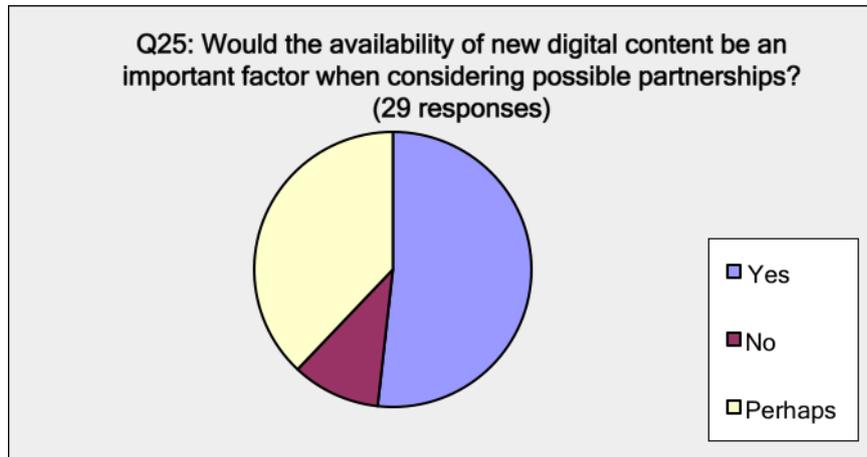
“Other” includes here regular auditing of preserved material, in process of establishing a standardized/periodic audit, and don’t know.

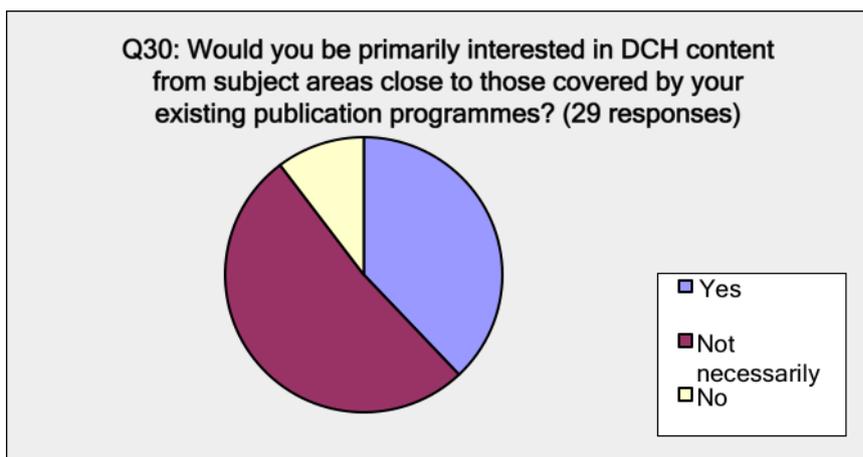
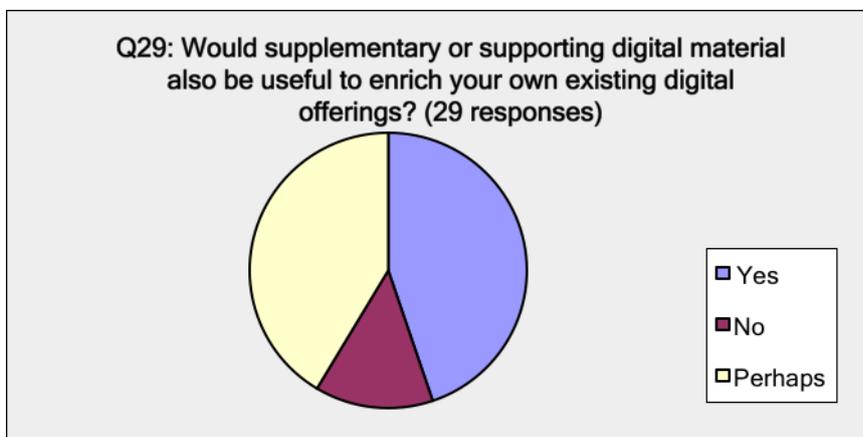
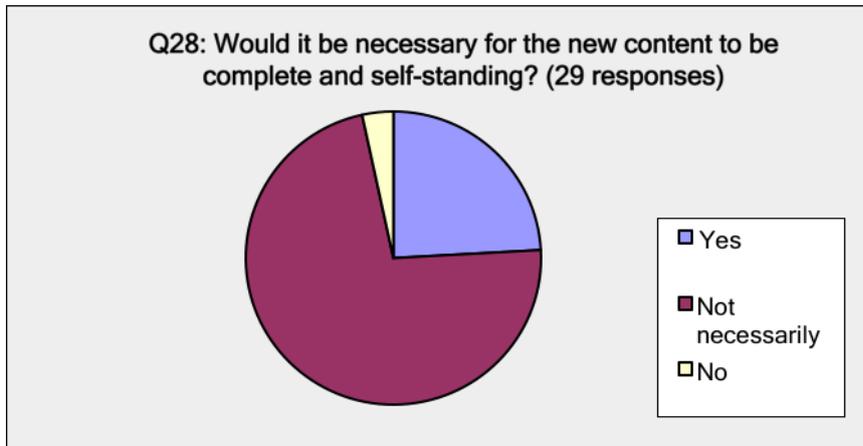


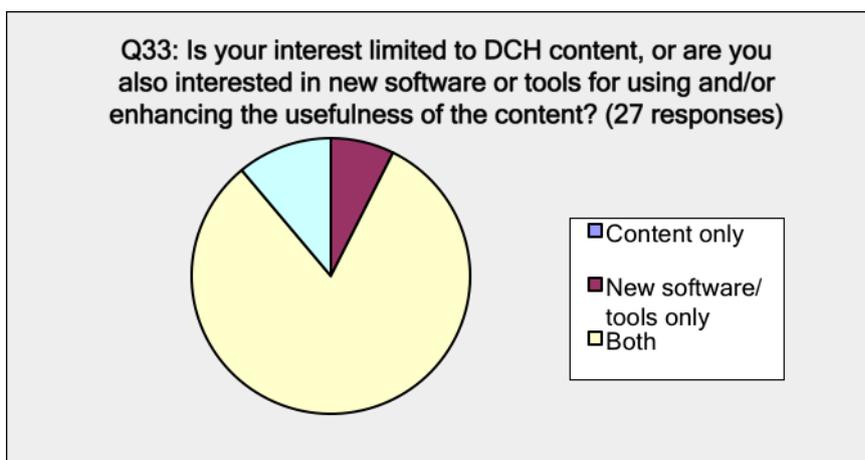
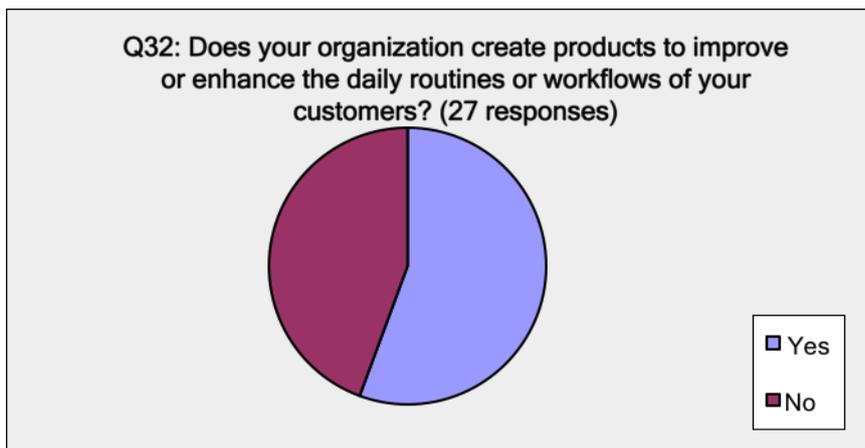
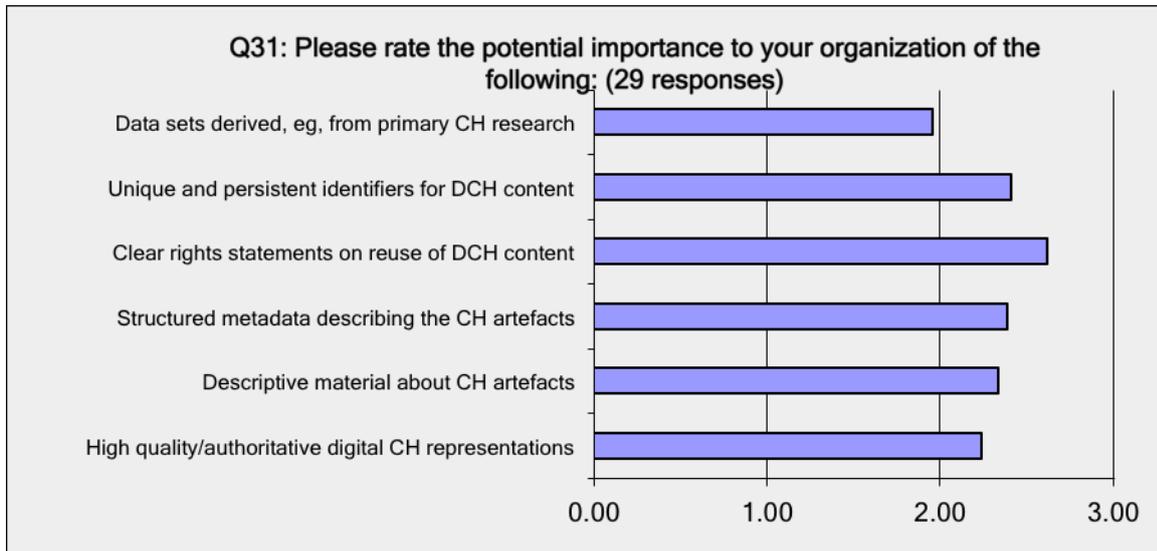


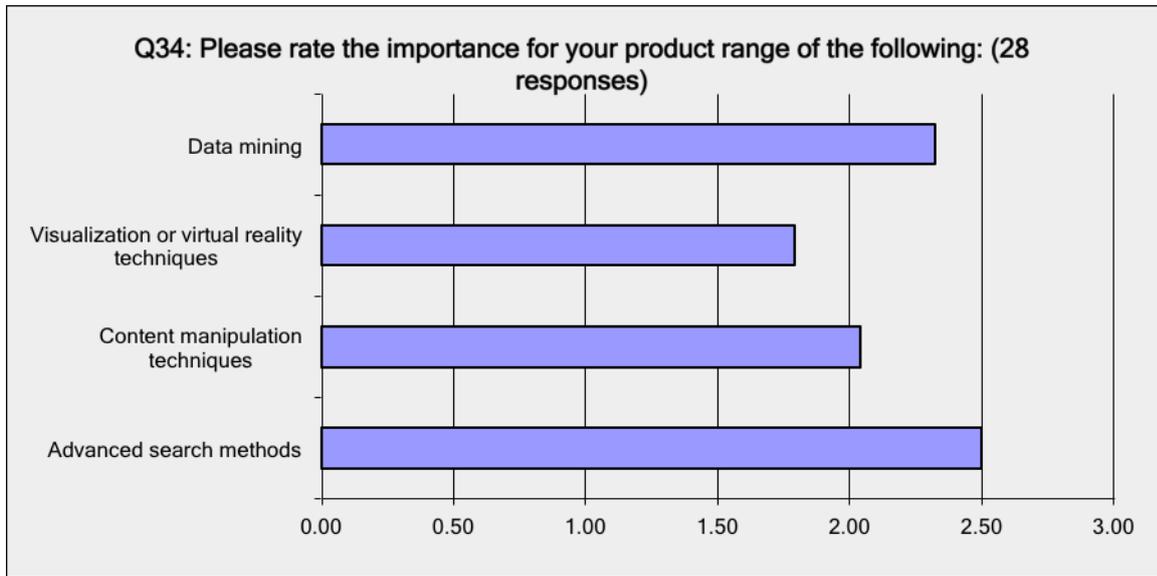
“Other” includes here tools for combining separate DCH entities to derive new insights, other metrics, clarity regarding which is the 'version of record', curation services; simplicity of offering "mash-up" services over the content of multiple DCH institutions; as in Archives Portal Europe which correspondent is already using; detailed analytics, including recommendation engine.



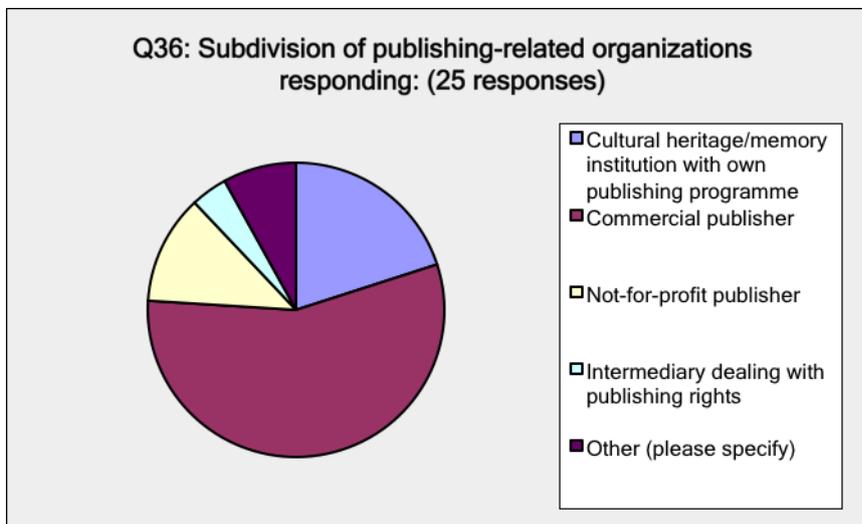






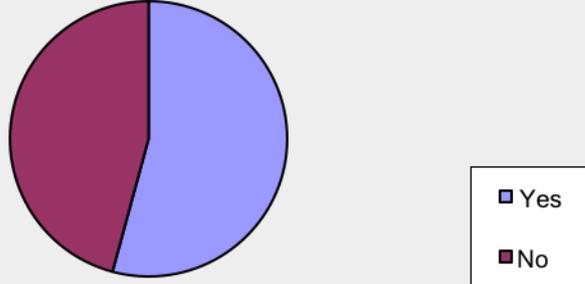


Q35 requested free-text responses. Suggestions made for other software or tools include these: Semantic Web related tools; ability to build connections between entities according to user behaviours, usage and other metrics, assesment of material; crowd-sourcing tools; facility to index digital images with one or two keywords, a search facility; and personalization.

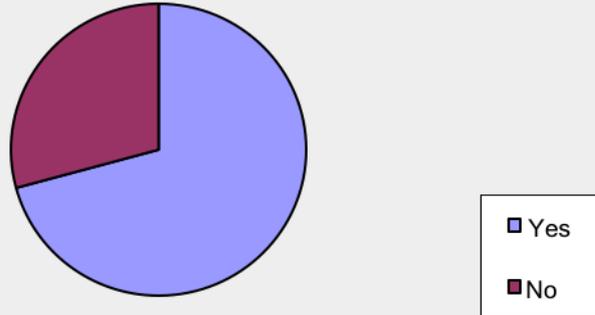


“Other” includes here: ministry and education & research.

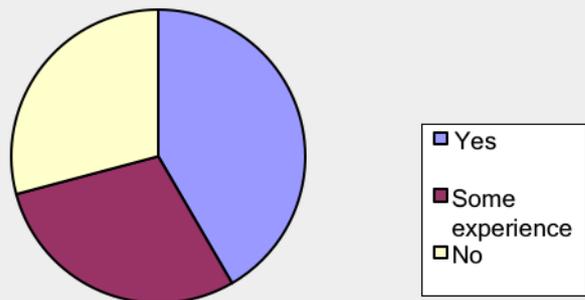
Q37: Would you need to retain or acquire exclusive rights in order to commercially publish particular formats of any DCH content? (24 responses)

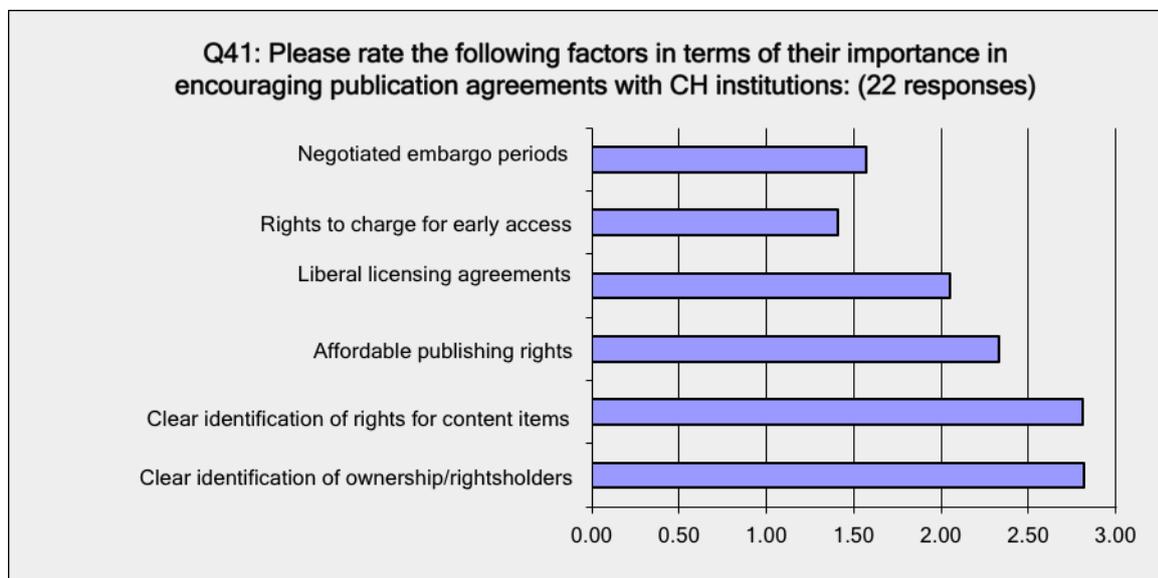
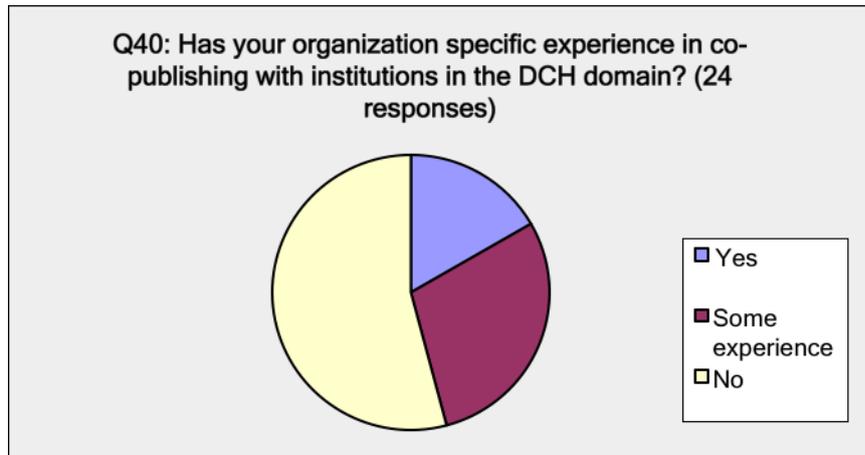


Q38: Could you enter into co-publication arrangements, thus without exclusive rights? (24 responses)



Q39: Has your organization significant experience in co-publishing arrangements? (24 responses)





Q42 requested free-text responses. Suggestions made for other terms of trade or commercial aspects that might encourage publisher involvement included these: interest in developing new products and services together; potential long-term relationships; links beyond the content itself, e.g. relevant events, film tie-ins etc.

Q43-Q48 concerned how the participants had come to know about the DCH-RP project and are not reported here. However, 28 participants requested a summary of the results of this survey and 21 participants expressed a willingness to be introduced to DCH-RP project members for further discussions.