

Reuse of documental heritage: threat or opportunity?

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Abstract

Digitization and Internet access represent unimaginable possibilities for the libraries, archives and museums management. However, most of these European information units intend to get economic resources which do not come from public funds. In December 2011, the European Commission's proposal on the amendment of Directive 98/2003 on the reuse of public sector information was presented in Brussels (COM (2011) 877 final, 12.12.2011) and has been approved in 2013 (2013/37/EU). According to the changes introduced by this European amendment, libraries (including university libraries), archives and museums are included in the reuse of public information scope, being expressly excluded up to now. In this way, collections of these institutions -some of them with great potential for new uses in the digital context and without intellectual property restrictions or personal data protection- could be available to citizens or companies so that value added activities could be done with a commercial and non-commercial exploitation, according to the Directive principles. Certainly, disseminating the documentary heritage in this way allows us to discuss the digital future of libraries and the management of these organizations. In particular, specific aspects such as: What is the potential of these cultural institutions to do business with the private sector? Is it convenient? What are the most appropriate activities? How can these new activities and services affect in the libraries funding? What problems can arise between infomediaries and citizens to access to cultural heritage?

Keywords: cultural heritage; digitization costs; public information re-use; re-use at cultural institutions; Europe

1. Introduction

For a decade now, the re-use of public sector information is an activity promoted by the European Commission which involves the generation of applications (Apps) by the private sector and citizens, as well as the creation of a large number of national open data portals. In June 2013, a new European Directive on the re-use of public sector information was approved by the European Parliament and the Council, amending some aspects of the previous Directive and extending its scope to libraries (including university libraries), archives and museums.

The re-use of the public sector information is the result of mixing Information and Communication Technologies (ICT) with public information that is processed in digital format. This combination has had a revolutionary effect, both the possibilities that information provides to citizens, companies and social institutions as well as the new way of understanding the information produced by public bodies.

Thus, this paper provides a review of the most important features of the information re-use as well as the application of the new European Directive in the cultural sector: object, general principles, conditions, inclusion and exclusion of documents,...A cost estimate to digitize European cultural materials is also provided, which can be considered as a fundamental activity to re-use the materials and generate added-value services. Finally, some conclusions are presented as a result of this research.

2. The information re-use in libraries, archives and museums

The objective of the first European Directive 2003/98/EC (European Union, 2003), is to establish a minimum set of rules that regulate the re-use of documents kept by public sector bodies in the Member States. These regulations establish which documents are to be included and excluded, how to apply for them and the conditions for reuse; that is: (electronic) reusable formats, prices and licences, transparency principle and non-discrimination and, lastly, the exceptional nature of exclusive agreements.

From when beginning to draw up a policy to drive an information market in Europe, it became apparent that there were some categories of information that should be excluded (European Commission, 1998, p. 20). Thus, the said Directive 2003/98/EC on the re-use of public sector information excluded those documents kept by cultural, educational and research institutions such as libraries, archives and museums. Although the reasons for that exclusion were not justified in the final text of the Directive, this is due to their scarce interest as an object for commercial purposes, to unknown factors or management difficulties that may arise from a massive demand for documents, as well as the application of the so-called “cultural exception”, a concept introduced to protect the “cultural industry” in the 1990s.

In the review implemented in 2013 (European Union, 2013) -Directive 2013/37/EU of 26 June by the European Parliament and the Council-, libraries, archives and museums have joined the scope of the Directive with specific rules. The incorporation of these institutions aims at ensuring a “minimum harmonisation of national rules and practices

on the re-use of public cultural material in libraries, museums and archives” (recital 17). The new Directive is based on the idea that digitization is the most important activity to access and re-use cultural material, as well as to favour educational, economic and leisure opportunities. In other words, including cultural institutions within the scope of the information re-use is to promote digital products and services arising from digitization, that give rise to major expectations regarding their economic and cultural value.

The digitization initiative by Google in 2004 and the cultural and political controversy that arose in Europe due to the reaction by the director of the National Library of France (Jeanneney, 2007) are not far from the decision that has led to those institutions adhering to the scope of the European Directive on the re-use of public sector information. This inclusion is based on many resolutions that back the economic opportunities that digitization offers to boost job creation and economic growth. In that context, Europeana brings together the economic and cultural objectives of a common European digital heritage.

There are three major documents that back the inclusion of cultural institutions within the scope of new European Directive. The first one is the recommendation by the European Parliament on Europeana, which states the need to resolve the “digital black hole” in which works and papers of the 20th and 21st century have fallen into disuse. In that sense, all countries are encouraged to contribute to Europeana, so it may become a benchmark for education, research and cultural cohesion within the European Union. The second one is a recommendation by the European Commission (2011a) aimed at organizing and financing digitization, online accessibility of public domain works and orphan works, strategies for digital conservation and the development of Europeana. Lastly, the third one includes the conclusions of the Council of the Union on digitization, online access and digital preservation (Council of the European Union, 2012). It also proposes some measures such as boosting digitization and the public-private collaboration. Moreover, there are other important documents; for instance, the communication by the European Commission on open data (European Commission, 2011b) as well as the objectives of the European Digital Agenda.

From this, it may conclude that the principles that back the inclusion of libraries (including university ones), archives and museums to the scope of information re-use activities are as follow:

- Creating a harmonised and uniform framework so as to re-use public domain works and materials kept in European libraries, archives and museums. In this regard, diverse regulations preventing the creation of a digital European cultural heritage are avoided.
- Promoting the digitization of the cultural materials, pointing to Europeana as the main cultural portal on the Internet.

- Identifying the “black hole”, putting online both textual and audiovisual materials that have fallen into disuse. The majority are public domain works, orphan works and out-of-print works which are privately owned.
- Boosting the public-private collaboration in the digitization activities, whose cost is about 100 €bn, which is unaffordable for the public sector bodies due to the budget restrictions affecting European countries.
- Citizens’ enjoyment of public domain works.

3. Documents excluded at cultural institutions

Firstly, it is necessary to state that exclusion is recommended sometimes by the public body that keeps the information or documents. However, in other cases, it is due to its content; that is, content lies beyond the scope of the public service mission, there are third parties hold intellectual property rights or the document may include personal data.

The Directive 2013/37/EU does not establish any special requisite concerning the availability of documents to be re-used. In this line, specific aspects affecting documents kept therein are pointed out:

- a) Documents whose supply is an activity beyond the scope of the public service mission of the public sector bodies concerned.
- b) Documents whose intellectual property rights are held by third parties. Although, the Directive does not especially protect intellectual works created by public sector bodies, it protects the financial and moral rights of their employees. Moreover, the Directive states that its application shall only arise when compatible with international provisions on copyright. In the case of cultural institutions, it is argued that if a third party holds intellectual property “that document should, for the purpose of this Directive, be considered as a document for which third parties hold intellectual property rights” (recital 9). In this regard, these documents must be excluded from the re-use activities.
- c) Documents that may not be accessed on the grounds of national security and commercial or statistical confidentiality. In libraries, archives and museums it might be the case of exclusive agreements that shall mention later.
- d) Documents kept by public broadcasters and their subsidiaries to fulfil the public service mission. The exclusion of new products created by public radio-broadcasting companies is due to legal charter of these bodies, which have accumulated a valuable audiovisual heritage. However, that exclusion is not applied to audiovisual materials produced by those public sector bodies that are kept at cultural institutions (mainly at libraries and museums).

- e) Documents kept by educational and research institutions, including organisations established for the transfer of research results. However, university libraries are not excluded.
- f) Documents kept by other type of cultural institutions such as orchestras, operas, ballet and theatres.

4. Conditions for information re-use in libraries, archives and museums

As aforementioned, digitization projects implemented in the European Union have shown that collections of cultural institutions (libraries, archives and museums) are a source of resources to create innovative digital products and services in the field of education, entertainment or tourism. Likewise, the European Directive aims to harmonize the re-use of cultural information owing to the fact that there is a great variety of cultural institutions with different financial status as well as different digitization and online display activities.

Until now, European cultural sector has adopted a wide range of access and re-use models for digitized material. Mainly, they are public domain works, so anybody may access and use them free of charge.

In spite of this, open access practices cohabit with subscription mechanisms or charges to download materials, including those that are in the public domain (European Commission, 2011c, p. 14). Some specific reports say that 76% of institutions provide their users open access content, while the remaining 24% sets some kind of charge with a clear distinction between ordinary use and commercial reuse (Davies, 2009, p. 20). Another relevant report concludes that re-use activities are not widespread and their revenues lie in the 0-4% range of the institution budget, without variation between 2005 and 2009 (Curtis+Cartwright, 2011).

The Directive policy aims to boost the re-use of data and documents under the open data principle. That principle is known as *Open Government Data* (OGD), which proposes data accessibility in open formats with licences that allow the re-use for commercial and non-commercial purposes. The most well-known licence is the *Open Knowledge Definition*, which is the licence adopted by the British open data portal. Its principles are also included in the open data licences of the French, Italian and Spanish Governments. It defines “Open government data” as: “Data produced or commissioned by government or government controlled entities. Data which is open as defined in the Open Definition – that is, it can be freely used, reused and redistributed by anyone” (Open Government Data).

However, cultural sector institutions fall outside the scope of that general principle and they are allowed to apply a charge based on total costs when the re-use is authorised, including a reasonable return on investment (Article 6.3). This special treatment concerns to the re-use conditions, charges and exclusive agreements.

4.1. Charges

It is necessary to specify that this new version of the re-use Directive contains a change in the general charge criteria. While charges in Directive 2003/98/EC were based on total costs, new charges must be limited to marginal costs incurred for document reproduction, provision and dissemination.

In this point, this new general principle of open data may not be applied to public bodies which must generate income to cover reproduction and dissemination costs as well as libraries, archives and museums. That exception is subject to two requisites:

- a) Public interest as well as the application of objective, transparent and verifiable criteria.
- b) If charges are established by cultural institutions, total incomes derived from re-use activities “shall not exceed the cost of collection, production, reproduction and dissemination, together with a reasonable return on investment” (2013/37/EC. Article 6.3). That accounting calculation shall consider the costs of the sector and the criteria used must be public.

4.2. Licences

With regard to the licences that regulate the re-use conditions, it may be established without conditions or through a licence. Such conditions must not restrict the re-use or competition. The Directive 2013/37/EC does not adopt any specific precaution in this context regarding museums, libraries or archives, so the re-use may be based on charges as well as under an open data scheme, which is the general scheme to re-use documents in the remaining sectors. In fact, the report by experts on digital libraries (i2010 European Digital Libraries Initiative, 2008, p.23) recommends the use of open information licences: “cultural institutions can consider the use of a creative commons licence if they wish to allow digitised content to be available for re-use”.

4.3. Exclusive rights and agreements

One of the specific points of Directive 2013/37/EC refers to exclusive agreements for commercial purposes derived from digitized cultural resources, whose period of exclusivity shall not exceed 10 years. That exclusiveness consists of limiting competition by means of agreements or commercial practices that generate lack of transparency and unequal treatment.

Exclusive agreements between public bodies and private entities are one of the three objectives established. On one hand, it aimed to prohibit these agreements to boost the public information market in the European Union. On the other hand, it aimed to limit them in the event of being necessary in the scopes in which they would fulfil a function of public interest. Lastly, they intended to maintain them under transparency conditions. The European Commission has had such an interest in combating exclusive agreements that national studies were prepared to detect the existence of exclusive agreements

which limit transparency and equal treatment (European Commission, 2013), Exclusivity agreements have notoriously disappeared when new Directive is applied in cultural institutions. Nevertheless, the following situations must be considered:

a) Exclusive agreements after approval of the Directive 2013/37/EC:

- These agreements are an exception to the general principle, which prohibits exclusive agreements.
- If exclusive agreements are approved, they shall be transparent and publicly known.
- If there is an exclusive agreement, the period of exclusivity shall not exceed “ten years, in general terms”. If it is longer, it shall be reviewable in the eleventh year and every seven years thereafter.
- When there is an exclusive right for commercial exploitation derived from cultural resources digitization, that agreement must include the obligation to deliver a free digital copy of the digitized resources to the cultural institution, which will be available for its re-use once the period of exclusivity has ended.

b) Exclusive agreements in force after approval of the Directive in 2013. This section is confusing. In the cultural sector, it appears to refer to the digitization agreements in force at libraries, archives and museums that neither consider the transparency principle nor offer a copy of the digitized materials at the end of the exclusivity period. If that were the case, those agreements would disappear by application of the Directive “at the end of the contract or in any event not later than 18 July 2043” (European Union, 2013, article 11.d). In any event, this deadline seems to be difficult to justify since a period of six years is considered in the initial proposal by the Commission as well as in the draft by the European Parliament (2012, p.33/90). In spite of being surprising a period of 30 years can be included in the Directive, one explanation is provided by the Council of the European Union (2013, p.13), stating that such agreements should “continue to exist for a sufficiently long period to allow the parties to take appropriate measures”.

c) Exclusive agreements affected by the adaptation of Directive 2003/98/EC. This section refers to agreements that are in force as of July 2005 and “shall be terminated at the end of the contract or in any event not later than 31 December 2008” (European Union, 2013, article 11.c).

The existence of agreements between public bodies and the cultural sector is common and mentioned in some documents prepared by expert groups of the European Union, such as in *European i2010 Digital Libraries Initiative* (2008). This report, which examines the public-private partnership for digitization and online accessibility of European cultural heritage, is clearly contrary to exclusive agreements: “The sub-group recommends that exclusive arrangements for digitising and distributing the digital assets of cultural institutions are to be avoided” (p.22). In this regard, the Comité des Sages (2011) recommends that this type of collaboration does not mean a commercial discrimination. The survey requested by the Comité (European Commission, 2011c) shows that 76% is opposed to any form of exclusive agreements concerning public domain works. More bluntly, the Europeana Public Domain Charter (2010, p.2) explicitly states that public domain works remain in the public domain: “Exclusive

control over Public Domain works cannot be re-established by claiming exclusive rights in technical reproductions of the works, or by using technical and or contractual measures to limit access to technical reproductions of such works”.

5. Digitization of the cultural heritage

Digitization of the European cultural heritage and its dissemination on the Internet has become one of the most important objectives of the European Digital Agenda, an initiative established in 2010 whose objective is to help citizens and companies to use information and communication technologies.

However, legislative fragmentations, agreement complexity as well as the cost of digitising Europe’s cultural heritage have led the authorities to create a context of private partners in all digitization activities. At the same time, Directive 2013/37/EU states that digitization is an essential means to provide social access and, thus, the re-use of cultural materials. Consequently, one of the main conclusions of the report, entitled “The New Renaissance” (European Commission, 2011c), states that Member States of the European Union must increase their budgets to boost the cultural heritage digitization.

Moreover, although financial difficulties of the Member States hinder such an aim, European cultural resources will be digitized thanks to the digital copy that reusers are obliged to deliver to public cultural bodies. In that sense, the following digitization costs are for guidance only since significant changes will have arisen in the costs of cultural resources in the last three years (Poole, 2010).

In that regard, absolute values of the Poole’s report have been used and averages have been calculated to obtain the following conclusions concerning the digitization costs at the three major cultural centres: libraries, archives and museums.

5.1. Digitization costs at European libraries

It is estimated that there are 409,067 libraries in Europe, which are divided into 5 categories: National libraries (0.011%), public libraries (50.20%), university libraries (2.49%), school libraries (40.20%) and special libraries (7.12%). The report also states all these public institutions keep approximately 77 million titles.

With regard to the cost per page and cost per image, these are calculated according to the type of library collections (books, rare books, archival material, newspapers, maps and photographs). In that sense, the digitization costs are estimated in 19.7 €bn.

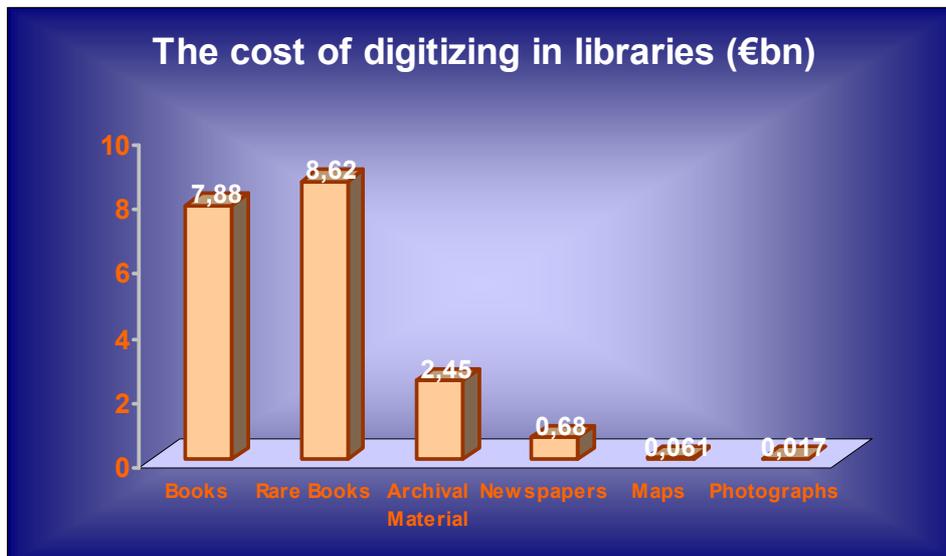


Figure 1. Estimated costs to digitize cultural materials in European libraries. Data obtained from the Poole's report (2010).

5.2. Digitization costs at European archives

It is a complex calculation as there is a great diversity of archival holdings. Moreover, there is no a good source of statistical information for that purpose. Due to this, the European report is based on information provided by the national archives to estimate the digitization costs of archive materials. These national archives and the following archive institutions keep all the archived cultural material (Poole, 2010, p. 58-59):

Type of archive	Simple materials list
National archives	Legal records Personal records Company/institutional Photographs Audiovisual material Electronic records
Local and provincial archives	
University archives	
Archives of Foreign Ministries	

Table 1. Type of archives and list of materials. Source: Poole's report for the Comité des Sagés (2010).

In general terms, the digitization costs amount to 41.8 €bn, distributed as follows:

- Archival records. The average calculation of such material is based on linear metres of shelving, taking the amount of 6,000 pages per metre of shelf. Once

the digitized pages have been estimated and a cost per page of 4 € is established, the total cost of the archival records amounts to 41.8 €bn.

- Photographs. The cost calculated to digitize photographic material is 64.51 €m, as the collection of each national institution is estimated at 331,788 photographs.
- Microforms. As total costs are based on 25 National Archives, the digitization of 17,322,700 microforms (692,908 units in each archive) amounts to 11.9 €m (the average cost is 0.96 €).

5.3. Digitization costs at European museums

According to the European report we took as documentary reference, in Europe there are 17,673 museums: 7,776 are artistic, historic or archaeological museums; 6,716 are classified as scientific or technological museums and, lastly, the remaining 3,181 are identified under the heading “Other types”.

Digitizing all their materials -nearly 820 million units- would require a financial investment of approximately 38.6 €bn. An interesting distribution can be seen in the following table.

Material	Percentage
Man-made objects	39.61%
Natural materials	41.9%
Works of art	11.29%
Photographs	7.2%

Table 2. Cultural material kept by European museums

Table 3 provides a summary of all the averages required to identify the total costs for the cultural resources digitization. Considering the museum types and the materials liable to be digitized, the average proportion of their cost is established for each one of the museum types (see *Total 1*). However, it is necessary to mention suppression of 28% both of total materials as well as the total costs, as this represents the estimated amount of materials that are not adequate to undergo the digitization process (security measures considering the physical state of the material) as well as those that have already been digitized (see *Total 2*).

Type and number of museum	Man-made objects		Natural materials		Works of art		Photographs	
	Number of objects	Median cost: 80.50€	Number of objects	Median cost: 73.50€	Number of objects	Median cost: 80.50€	Number of objects	Median cost: 7.95€
ART/ HISTORICAL/ ARCHAEOLOGICAL museums (7,776)	135.8m.	10.9€bn.	0.723m.	0.053€bn.	33.11m.	2.665€bn.	77.76m.	0.618€bn.
SCIENCE/ TECHNOLOGY museums (6,716)	95.3m.	7.6€bn.	250.9m.	18.441€bn.	32.44m.	2.611€bn.	359.98m.	2.862€bn.
OTHER TYPE of museums (3,181)	33.4m.	2.6€bn.	55m.	4.045€bn.	9.86m.	0.793€bn.	47.71m.	0.379€bn.
Total 1:	264.5m.	21.1€bn.	306.623m.	22.539€bn.	75.41m.	6.069€bn.	485.45m.	3.859€bn.
	-28%							
Total 2:	190.44m.	15.19€bn.	221m.	16.23€bn.	54.30m.	4.37€bn.	352.524m.	2.78€bn.

Table 3. Estimated costs to digitize cultural materials in European museums. Data obtained from the Poole's report (2010).

Considering the economic estimates presented in the tables of this section –it is more than 100 €bn.-, the costs of audiovisual material digitization must be added. (Poole, 2010, p.73). The cost of that collection amounts to 4.94 €bn. and it has been analysed independently, as their presence is common at all the cultural institutions previously analysed.

Finally, it can be said the digitization costs of the European cultural heritage exceeds 105 €bn., the highest digitization costs being those related to collections in archives and museums.

6. Conclusions

Many questions arise concerning the re-use of information in the cultural sector. Undoubtedly, digitization activities and documents re-use by private entities are positive and may be considered as a new funding source for the public sector cultural bodies. They can benefit from re-use charges and also receive a digital copy of the material digitized by reusers.

There is a lack of knowledge on how re-use activities can benefit cultural institutions, which may have a detrimental effect on the incomes as well as a decrease in the rate of documents digitized. In order to prevent this happening, a greater number of dissemination activities should be carried out.

A noteworthy point concerns the type of documents that can be re-used; these are public domain works versus those which have author's rights and, consequently, are excluded from the Directive. In order to provide greater dissemination of cultural heritage and to

benefit both rights holders as well as users, it would be desirable to implement mechanisms or diligent actions that allow the re-use of materials protected by author's rights, among which orphan works or out-of-print works are included.

In 2013, the European Union has included publicly owned libraries, archives and museums in the same regime of access and re-use that is already applicable to other public bodies. The aim of that measure is to boost a massive digitization and putting European cultural heritage online.

Inclusion of libraries, archives and museums in the re-use activities requires a major financial investment. At the same time, it aims to generate added value activities within the context of the information economy.

The evolution of information technologies and new business models generate a great deal of uncertainty, so a charges and exclusive agreements scheme has been foreseen in the Directive in order to generate restrictive conditions for access to the digitized cultural heritage. This is very important in the case of public domain works.

It would be desirable that both Governments as well as cultural institutions restrict the implementation of such exclusive agreements.

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