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## DIGITALIZATION OF OLD ARCHIVES

### Abstract:

Digitalization of archives has become a part of the regular activity of many libraries and archives. Implementing digitalization of old documents depends mainly on the preparation of persons who are going to implement this very complex process. It is a complex process because it deals with documents, which are very sensitive due to their age and their use, and due to the quality of paper which does not match the quality of paper used nowadays.

In this paper, digitalization is elaborated as one of the key protection measures of these documents, in order to be creative in ensuring and improving access to information contained in these different types of old and extremely important documents in a printed form or manuscripts. We will also notice that digitalization supports and facilitates the scientific and research work by preserving better the original in the source paper and providing researchers easier use of these documents. In order to achieve this, digitalization projects have to be well prepared, i.e., define the criteria for the selection of the material which is to be digitalized and digitalization techniques. In order to implement this, considerable funds have to be provided.

### Key words:

digitalization, archives technique, selection, documentation

### Izvleček:

#### Digitalizacija starejšega arhivskega gradiva

Digitalizacija arhivskega gradiva je postala del vsakdanjih aktivnosti mnogih knjižnic in arhivov. Izvajanje digitalizacije starejšega arhivskega gradiva je odvisno predvsem od priprave kadra na ta zelo kompleksen postopek. Njegovo kompleksnost potrjuje dejstvo, da gre za digitalizacijo zelo občutljivega gradiva, ki ga moramo zaradi njegove starosti in uporabe kakor tudi kvalitete nosilca obravnavati še posebej pazljivo.

V prispevku je digitalizacija obravnavana kot glavni varnostni ukrep za zaščito takšnega gradiva z namenom zagotovitve dostopa do informacij, ki jih vsebujejo. Digitalizacija tako omogoča lažje raziskovalno delo, saj ohranja original in raziskovalcem omogoča lažji dostop do virov. Uspešen projekt digitalizacije mora biti skrbno načrtovan, določeni morajo biti točni kriteriji za izbiro gradiva za digitalizacijo in tehnike digitalizacije. Prav tako pa je potrebno priskrbeti tudi ustrezna finančna sredstva.

### Ključne besede:

digitalizacija, tehnika, izbira, dokumentacija

According to experts' considerations, the connection between computer and microfilm is experiencing an increasing growth, and in this field the role of microfilm is increasingly greater. (Aliu, 2005, p. 391) There are decades that the paper documentation is being transferred into another medium. In other words, library and archives have begun with microfilming of their funds, in order to enable

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the use of this archival material, access to which has been limited for certain reasons. (Katic, 2003) Tasks, which are required to be completed nowadays in archiving are adequate, but further technology development requires an improvement, in order to be in trend with modern techniques.

Hence, digitalization of archival material is considered as protection for it. Digitalization was actualized when archives and libraries faced natural and accelerated destruction, because of non-qualitative paper. Along with the problems of this type, the archivists of Kosovo in the period 1990-1999 faced the necessity to protect documentation from war destruction.

Through microfilming the documents, inventory and catalogs, especially the old archival materials, it is wished that at least information about the fond is maintained (Aliu, 2005, p. 394).

While nowadays, microfilming is used as a universal output of data and information from computer as a mean of carrying out specific work into entering coded and OCR read data. (Aliu, 2005, p. 394) We are witnesses of fast transfer of audio-visual means into electronic form. Use of microfilms is quite broad, it is used in a range of various cases thus making it necessary to determine the limits in special cases which we face. As it is generally known, microfilms are used only by public archives, which means that they are used as instrument of scientific work which serves for solving several archival documents. However, microfilm is not the latest tool. Its mere use is simply to replace traditional elements of archives such as documents, dossiers, links and registries. Therefore, we must regulate the use of it in function of all these elements. (Knoppers, consulted on 8. 12. 2015) Classical operations of archiving, selection, classification, inventorying, description must continue to be used as in the past, microfilming serves only as a new tool into carrying out the work which was done in the past (Osmani, 2015, p. 340).

Microfilming is an operation which is totally different from earlier tradition of archives, libraries and documents.

In this paper we discuss what must be reviewed before beginning with digitalization of old materials and its aim, where it is first required to make a selection, choose the manner of processing, techniques of digitalization, manner of use, etc.

Digitalization of old archival documents is an advantage when archives are overloaded with high volume of paper and are at risk of being damaged, because of the age and inadequate conditions of preservation and inability of finding suitable places for their storage.

Considering that protection is a problem, the purpose of digitalization would not only be a mechanical transfer to another medium for longer care. Digitalization must play the role of protection and in the function of securing and improving access to archival documents. Therefore, digitalization must be considered as a form of protection in function of access.

To achieve this purpose, we must take into consideration the possibility of using digitalized documents. The use of archive material was in a way prevented due to the risk of harming or destroying it during the use, so, the digitalization would enable its use for scientific and research work, and to present collections of old archival material thus enabling its use by a broader range of users, without damaging the original document (Aliu, 2012, p. 103).

In the case of digitalization, we must consider the definition of the document, its content and further protection. Besides that, old document researchers may also see an extraordinary importance at the specifications of a certain copy (Katic, 2003).

Procedure of digitalization cannot include all the documentation in the process of digitalization and ensure integrity of digitalized documents. Based on circumstances and needs, it must be accompanied by a digital registry (e.g. letter or cover of the .xls, or .scv table), where we find the name of the person who has completed the digitalization, date of work, resolution, equipment used and the list of digitalized documents. This may be filled in particular by directly adding meta-data of digitalized documents (Knoppers, consulted on 8. 12. 2015).

Selection of digitalized documents will depend on criteria approved for selection of the material for digitalization.

Some parts of digitalized documents must be included in the meta-data records. Digitalized photographs represent additional value for bibliographic records, whereas for scientists it is a supporting point for their research (Katic, 2003).

Nowadays in archives, digitalization of archival material can be carried out in all works which are traditionally done by microfilming as a process of important obligations of archives. Advantages mentioned above, which derive from digitalization of old archival documents and archival documents in general, could cover all types of microfilming (Osmani, 2015, p. 341 - 342).

Therefore, having in mind the above given elaboration, the main aim of digitalization of old documents from paper into electronic form is to preserve the original document from use, thus not risking it to be damaged. The first and most important step to be done is planning a digitalization project (Aliu, 2010, p. 81). For digitalization of such documents, a decision must be made in the stage of projecting an information system, namely before creating the first document. This decision cannot be made without prior consultation with the competent archive. A precondition for its functioning is the appropriate and understandable creation of a logical scheme. It is necessary to ensure maintenance of the database with all the records it contains, results, meta-data and documentation, data, datasets etc. (Osmani, 2015, p. 339).

Such projects serve for good cultural purposes, to be available for researchers endangered documents can be preserved from physical impact, etc. They can also derive as a result of cooperation between the inheriting institutions and fonds creating ones, respectively they become part of such programs.

Preparation of documents before and after digitalization - prior to all work actions, old documents must be prepared for digitalization, in order to facilitate the digitalization operation and to reduce the risk of damaging the documents and equipment. Pages or original documents must be classified based on a proper order, to separate pages from each other and to remove all elements which can impede the operation (metal clips, glue etc.). After all these, we have the possibility of counting the pages or checking the quality of original documents which must be digitalized. Following digitalization, we must spare time for reorganization of documents, be it to enable their reuse or for re-digitalization of any missing document (Daniels, 1984).

Digitalized documents can also be used for reprinting the rare and endangered archival material, for working or processing monographs, other studies and publications, for legal or private matters, without endangering the original document.

Operation of digitalization can be completed inside the institution or it can be entrusted to a company licensed for this work. There are frequent cases when both of them cooperate to respond to the needs of the time. Key advantages of digitalization of old archival documents include: quick access to documents, reducing the risks during the use of fragile/damaged documents, better quality control and making an institutional expertise. As a finalization, internal and/or external operations must be completed, it is important to ensure that the digitalization procedures are carried out in accordance with the law on archives or based on the law on information technology (Osmani, 2005, p. 307-310).

### SELECTION OF DOCUMENTS FOR DIGITALIZATION

Having in mind the aim of this paper, selection of materials which should be digitalized is one of the central topics of any digitalization project for all collections, dossiers or fonds of old archival documents, ideal would be the digitalization of all fonds and collections, but in majority of cases this is not possible.

To digitalize old archival documents, firstly their appraisal must take place, having in mind limitations about the documents, technical obstructions for digitalization etc. (Aliu, 2010, p. 81).

One of the evaluation criteria, which can be qualified as the most important is the specificity of the document. Specificity as a criterion that can be problematic at manuscripts because each handwriting is unique. Since it is not possible that each handwriting is digitalized, for this reason priority must be given to old manuscripts, rare copies of books, which have not been republished etc. (Katic, 2003).

That category necessarily includes old newspapers, which, because of the paper type, are almost decomposed. According to this, the materials from the second half of 19<sup>th</sup> century and on are more at risk than the books published five hundred years ago. In such cases, replacement in a digital manner is the only way to access these materials (Katic, 2003).

The procedure of digitalization of old archival documents represents a very good tool to determine the duties, legal obligations and technical requirements. This can be used when digitalization is done part by part by the staff of an organization or by a team assigned to conduct the digitalization.

Digitalization procedure consists of these elements:

1. Defining the aim;
2. Names of persons assigned to conduct the digitalization of documents;
3. Different intervention responsibilities;
4. Measures that need to be undertaken for the physical preparation of files and documents, before starting with the digitalization operation;

5. Technological tools and procedures for necessary transfer (security, type, characteristics and configuration of digitalization, the programs used and guarantees provided by the program in terms of integrity);
6. Selection of treatment, resolution and format of digitalization;
7. Policies which need to be adhered to when dealing with access control;
8. Quality and quantity control elements which have to be implemented in order to participate in the integrity of the digitalized document. (Knoppers, consulted on 25. 11. 2015)

However, as mentioned above, the digitalization procedure cannot constitute the whole documentation of the digitalization process and ensure the integrity of the document (Knoppers, consulted on 25. 11. 2015).

Digitalization is extremely suitable for the easier use of texts, such as posters, flyers, publications on one page, illustrated books, etc. But not only for this reason, the material which could be wrongly called *short-lived* (ephemeral), in terms of content it could be very interesting for the research of various socio-cultural and historical phenomena, such as: learning reading-writing, education, habits and rituals of various groups in a community, etc. (Katic, 2003).

However, it can be said that digitalization of documents is not intended for long-term storage of archive material, because there is a problem of inability to ensure longevity of electronic documents, since it has not proven itself as a safe option, thus, it can be said that the loss of electronic documents is possible (Aliu, 2012, p. 103). Considering the potential unreliability of digitalized documents, we are definitely obliged to preserve original documents also on paper media.

From the archival point of view, the link between the mass conservation, microfilming and digitalization in an integrated work process has enormous advantages. Transportation of old archival documents, which is closely linked to physical, chemical and biological damage, for example, by climate change (temperature, humidity, etc.) is reduced by a third. In addition to preserving these sensitive documents, it also results in reduction of cost and it saves time, which could be used for other important work in the archives (Aliu, 2012, p. 110-111). For this reason, digitalized documents, particularly the old ones, should be also supported with transcription and other supporting tools in order to facilitate their use.

Digitalization of old documents - should be conducted by respecting the rules of access and security, and handling with care in order not to damage the documents (Knoppers, consulted on 25. 11. 2015).

Quality and quantity control - at various stages of digitalization and prior to the digitalization of archive documents, is essential to assess the results. The control is performed in two ways: the quality and the quantity control.

Quantity control - it is more than necessary to ensure that all documents or all the pages of documents are digitized. In order to do this, manual or automated techniques must be used. Quality Control - during the digitalization of documents it is important to check the integrity of their contents. We must make sure that the text, headings and subheadings are legible and visible, that no sentence, photograph or illustration is cut, and that the resolution is very clear. In short, it is important to ensure that digital reproduction mirrors reliably the source document

and that its resolution is high depending on the type of the document and for what use it is intended (Knoppers, consulted on 25. 11. 2015).

Furthermore, the control of quality and the content of an electronic document has to do initially with the quality of reproduction (illumination, contrast, color, etc.).

Therefore, it can be said that digitalization of old archive material is a specific process and very important, which in addition to protecting that material from potential damage during its use and avoiding the possibility of alienation, digitalization facilitates the search, even without being present at the place where the documentation is stored (Osmani, 2015, p. 342).

In addition to being a complicated process, digitalization is a very expensive process, because it requires skilled staff with superior qualifications and quality electronic equipment (Osmani, 2008, p. 65).

Thus, the implementation of digitalization of documents depends mainly on how well the persons who will implement this very complex process are prepared. We say complex because it deals with old documents and manner how they should be used, and because of the quality of letter bearer which may be very sensitive for use.

In our country it is impossible to allocate funds for the implementation of such a project, but it would be desirable to seek sponsors from abroad for well planned projects. It can be assumed that in case of financing such a project, interests of both parties should be harmonized, by also warning the potential donor about risks. The donor should also present archiving conditions as well, i.e., to define what will be digitized, thus linking it with its work plans and programs (Katic, 2003).

## ADVANTAGES AND ACCESS TO DIGITALIZED DOCUMENTS

The digitalized documents upon which the right of a creator and owner derives, archives or any other institution as the owner of original documents can restrict their use to potential users only for personal, scientific research, etc., and can allow their reproduction only under certain conditions (Katic, 2003).

With restrictions, technical data on the quality are provided and if attempted to select some other options of unauthorized reproduction it is prevented with poor quality of the documents, in other words, if a user wants more qualitative documents, he/she is obliged to contact the competent body.

Based on what was said above, it can be concluded that digitalization of documents in addition to saving space and equipment, reducing the number of workers during the processing and protection of documents, and easy and fast access to information, it also provides the possibility of defining the access and finding the digitalized contents (Osmani, 2015, p. 343).

Thus, we can consider that the digitalization of old archive materials can be qualified as one of the primary protectors of documents, so that they can be as creative and in the function of securing and improving access to information contained in these various types of documents which are extremely important and without putting them at risk during their use (Technical Guidelines, consulted on 19. 12. 2015).

## CONCLUSION

Based on all the studies and on what was said above, it can be concluded that digitization of old documents, in addition to preserving the original documents, provides the use of information and data by a large number of users in an efficient way without jeopardizing the original document. I think it is essential for the benefit of the organization and the clients, to conduct the digitalization of old archival material, in order to enable a functional service for the researchers of this delicate material.

The need to preserve different documents which are generated by physical and legal persons, including administration, made the creation of digitalization of documents in archival institutions necessary.

The digitalization of documents is carried out in archival institutions in order to manage those documents for the benefit of the society as a whole. An archival institution must have a special character distinguishing it from mere data management, thus giving it a scientific-cultural dimension.

It is well known that any activity which is carried out, leaves behind the evidence of work done and such evidence consists of different documents which reflect the past good or bad.

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## POVZETEK

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### DIGITALIZACIJA STAREJŠEGA ARHIVSKEGA GRADIVA

Digitalizacija starejših arhivskih dokumentov se šteje za primarno zaščito let, tako da jih lahko neomejeno uporabljamo in zagotavljamo dostop do informacij, ki jih vsebujejo ti zelo stari in pomembni dokumenti.

Digitalizacija starejšega arhivskega gradiva predstavlja prednost v primerih, ko pretirana uporaba teh dokumentov predstavlja resno tveganje za nastanek poškodb na gradivu. Iz tega razloga so dokumenti pogosto nedostopni, saj obstaja nevarnost, da bodo uničeni. Digitalizacija pa omogoča, da postane starejše gradivo dostopno za raziskovanje večjemu številu raziskovalcev, brez da bi pri tem poškodovali original. Digitalizacija starejšega gradiva je specifičen, zelo pomemben proces, ki poleg tega, da varuje original, daje možnost pregledovanja dokumentov tudi izven arhivske ustanove.

Prvi in najpomembnejši korak pri projektu digitalizacije je njegovo načrtovanje. Zahteva visoka finančna sredstva, visoko usposobljen kader in kvalitetno opremo. Na Kosovu je takšne projekte zaradi pomanjkanja finančnih sredstev težko izpeljati.

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