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Digital Technologies and the Cultural Heritage of N. Macedonia

Abstract
In this paper, I will refer to the degree of digitization of the Institutions dealing with conservation, research and preservation of cultural heritage in the Republic of S. Macedonia. First, an introduction to digitization and the digital age, that is, the use of digital technologies for the stated purposes. Some believe that the digital age has brought nothing more than a simple rethinking of already existing types of content in new, digital formats. In addition, that it is rather an evolution than a revolution, because the technological invention is only a carrier of information derived from the humanities and social sciences. However, this interaction between technology and humanistic creativity is being expected, eventually, to produce completely new forms of social relations from social actors who will be able to connect the beautiful with the technical, and the social with the digital - innovators who assert themselves at the intersection of the humanistic and the technical, which allows them to master both.

Key words: Cultural heritage, digitalization, preservation, North Macedonia

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Introduction

Cultural heritage is the legacy of physical artifacts and intangible assets of a group or society, inherited from the past, with historical, aesthetic, archaeological, scientific, ethnological and anthropological significance. As a collective historical memory and contemporary affirmed cultural recognition, it represents a bridge between the past and the future, encouraging multiple levels of cultural concepts of spiritual and creative values, which are being transferred into the contemporary perception of the tradition of a certain area. Recognized and experienced as cultural heritage, they are the totality of creations or phenomena in the material and spiritual life of each nation.

For the Macedonian Association, cultural heritage is a platform for building inter-ethnic and religious tolerance and as a cultural and civilizational benefit in the struggle for a prosperous and democratic society, it is not only a relic from the past that we are obliged to take care of, but also relevant, useful and very an important segment of our identity that represents a significant social potential for our further cultural and economic development.

Creation, use and maintenance of digital heritage

The group of material goods (physical artifacts) includes visual arts, sacred and secular buildings, monuments, literary sources (books), handicrafts, clothing, food etc. Intangible cultural goods refer to linguistic treasures, signs and symbols transmitted orally. Traditions, myths, legends, folklore, customs, value systems and rituals, music, but also traditional spiritual values such as respect, generosity, gratitude, understanding, sociability and other virtues that were once part of a climate and marked its culture, and which, through the tools for the preservation of cultural heritage, are passed on to the following generations. The preservation and transmission of cultural heritage in the present is of fundamental importance for a society, as an important element for the identity of smaller and larger communities, of a system or state, in building and nurturing a sense of belonging, it satisfies the need to identify with the land on which we live in, binds us to the past and thus lays the foundation on which we build the future.

In the past, cultural heritage was mostly transmitted through museum collections, cultural monuments, written sources, but also through traditional, folklore and craft societies. Conservation of cultural heritage refers to the measures taken in order to extend its life, while conveying its significant messages and values. With new technologies, the tools for preserving and transmitting cultural heritage are changing significantly. Historically speaking, this so-called period information age, characterized by a rapid transition from traditional industry to an economy based on information technology. The benefits of this rapid information technology progress are also visible in the way cultural heritage is preserved through the process of its digitization. In this process there are three basic pillars vital to the creation, use and maintenance of digital heritage. The first process is digitalization, i.e. conversion of analog objects/materials into digital form. The second important segment is enabling access to digital cultural heritage. This does not mean that the user can only "see" the object, but also have access to intuitive tools for investigating the problem. The third part is guaranteeing the long-term sustainability of these digital files, or it is a guarantee that digital "objects" created in the past would be available not only in the present, but also in the future. These three pillars enable the creation of a digital

object, a digital collection and meta data whose function does not only include the protection of cultural heritage and its long-term storage, but also its scientific and tourist promotion as well as the dissemination of that data to the wider user population. The process as a whole requires the introduction of standards for its implementation, which implies their unified use in the institutions, as well as the application of a unique methodology in the operation. The appropriate implementation of the standards in the operation enables a quality digital copy that would serve for permanent use.

The responsibility for the preservation of cultural heritage

Each country has its own way of financing, organizing and prioritizing the digitization process. The responsibility for the preservation of cultural heritage in the Republic of Macedonia lies with the Administration for the Protection of Cultural Heritage (UZKN).[2] In this institution, starting from 2004, in the Digitization Department, a digital archive of the professional documentation belonging to the Macedonian immovable cultural heritage is being created. That archive includes technical, photo and descriptive documentation kept by national institutions dealing with the issue of cultural heritage protection. In this process, together with the digitization department, about 20 institutions responsible for the protection of cultural heritage are involved (institutes and museums, national institutions, Cinèmatique of the Republic of Moldova, MANU, Archives of the Republic of Macedonia...). Up to now, over 500,000 documentation units (photo-documentation, technical and descriptive documentation) have been digitized. The materials that are digitized are processed exclusively by the employees of the department, without the help of other private entities that deal with that activity. The data from this process are available on the niskn.gov.mk web portal.

The Department for Digitalization of Cultural Heritage employs six experts, three of whom are art historians with archeology, one graduate architect, one graduate photographer and one graduate painter. The equipment used includes several types of scanners specialized for the digitization of analog materials, basic photo equipment for photographing large plans, a video beam, a DVD converter, several printers and external hard drives.

The Administration for the Protection of Cultural Heritage through the Department for Digitization of Cultural Heritage has been actively working on the digitization of the collections of several institutions since 2010: National Conservation Center, Conservation Center-Skopje and Institute of Macedonian Language, Krste Petkov Misirkov.[3] Standardization and recommendations from the Lund Action Plan adopted by the European Commission in 2001 and the Minerva project (Ministerial Network for Valorizing Activities in Digitization) are applied in the digitization work process. The Minerva project unites in a network the ministries of the countries of the European Union for connecting and harmonizing the activities related to digitalization, with its recommendations and guidelines, as well as with long-term access and protection. In the preparations for the Manual for the use of standards and guidelines in the

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[2] Republic of Macedonia Ministry of Culture. *Cultural Hertige Protecion Office*. http://uzkn.gov.mk/default_en.html (accessed by: 16.07.2024).

[3] Republic Noth Macedonia. *NI National Conservation Centre-Skopje*. http://heritage.gov.mk/ (accessed by: 31.10.2024)

digitization of cultural heritage, prepared by the expert staff in the Digitization Department, the standards of work with written (descriptive) documentation, the criteria for its selection, preparation of the material, methods of its processing are specified, standardization in the processing of photo documentation (transparent and non-transparent materials) and video documentation.

The digitization process

The digitization process applied in the department is detailed in the New South Wales Public Library's Digitization Regulations. It contains the following steps:[4]

- Selection of work
- Metadata/catalog number creation
- Scanning of the material (photo, book..)
- File management and back up procedures
- Link from file to metadata
- Data transfer to a web page or server
- Availability of materials on the website

The Administration for the Protection of Cultural Heritage, according to Article 115 of the Law on the Protection of Cultural Heritage, is responsible for managing the national information system. Its fundamental change is in progress by working groups from the Administration and Telecom, which received that task based on an appropriate tender procedure.

The software solution will offer practical networking solutions to all institutions working in the field of cultural heritage protection and museums, including registration, recording and digitization of cultural heritage. All individuals and legal entities, regardless of whether they are domestic or foreign, have free access to information of a public nature from UZKN. For access to information of a public nature, it is necessary to submit a request (oral, written or in electronic form) to the owner of the information - Administration for the Protection of Cultural Heritage. The request is sent to the official of the UZKN responsible for handling requests for access to information of a public nature. It should be titled as follows: Administration for the Protection of Cultural Heritage, Ul. Pavel Shatev no. 3, 1000 Skopje, Official: Marija Pujaz, and to be sent to the following email: m.pujaz@uzkn.gov.mk

Upon that request, the Digitization Department issues a copy of the requested documentation to the institution or natural person, which is mostly used for projects related to the conservation of objects under their authority.

UZKN has a National Register of Cultural Heritage, which is divided into immovable, movable and intangible cultural heritage. The register of immovable cultural heritage includes objects/monuments classified according to whether they are in danger, of special importance,

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[4] Derek Whitehead, *Digital Practice – Guidelines for digitizing images in NSW public libraries*. Sydney: State Library of New South Wales, 2005; Regina Varniene – Janssen, *Methodological and Organizational Aspects of Digitization and Bibliographic Access of the Cultural Heritage*. Vilnius, Lithuania: Martynas Mazvydas National Library of Lithuania, 2012.
http://eprints.rclis.org/17844/1/Varniene_Methodlogical_and_organisational_aspects_ofDigitisation_and_bibliographic%20access_ofthe_cultural_heritage.pdf (accessed by: 31.07.2024).

under temporary protection, archaeological zone and/or archaeological zone in danger. In movable cultural heritage, the registers are similarly divided into goods of special importance, in danger and/or under temporary protection. Intangible cultural heritage is recorded in three registers, one of which is a general classification, and the other two are intangible cultural heritage in danger and of special importance. The complete composition of all these registers is available to the entire public on the website of UZKN, at the link http://uzkn.gov.mk/mk/registri/.[5]

One of the benefits of the digitization of cultural heritage is the creation of publications and their free public access. UZKN has a huge number of publications issued as part of the process of documenting part of the Macedonian cultural heritage, available at the link zkn.gov.mk/mk/publications/. All these publications are translated into English, at the same link.

Among the first digitized publications is Macedonian Cultural Heritage - Archaeological Sites (2004), which is a concise, general, but also visually impressive presentation of the most important Macedonian archaeological sites with about 150 color photographs. Out of a total of 4700 archaeological sites recorded in the Macedonian climate, this publication "presents 28, which in some way reflect this country in an archaeological sense, which, regardless of the circumstances, still represents a European archaeological oasis and more widely, within the Mediterranean cultural complex." Some of these localities are from Skopje and its immediate surroundings, other ancient and Neolithic settlements, cities, towers, baths and other localities throughout Macedonia such as Markovi Kuli, Golem Grad, Heraclea Linkestis, Vrbjanska Čuka, Vardarski Rid, etc. Apart from this, the following digitized publications, issued in the period from 2004-2018, are also available on the site, all available in English:[6]

- Macedonian cultural heritage - Christian monuments
- Macedonian Cultural Heritage - Ohrid - World Heritage
- Macedonian cultural heritage - Ottoman monuments
- Heracleia Lyncestis
- Zrze Monastery
- Visoka and Staro Bonče
- Saint Panteleimon Nerezi
- Carevi Kuli
- Ceramic relief plates from Vinica
- Colorful Tetovo Mosque
- Tetovsko Kale
- Church of St. Mother of God Eleusa – Veljusa
- Stibera
- Church of the Holy Mother of God - Matejče
- Scupino – Colonia Flavia Scupinorum
- Church of St. George in Kurbinovo
- Skopje Kale
- Tumba Madzari – Archaeological site and Neolithic village
- Treskavec Monastery

[5] National Register of Cultural Heritage. http://uzkn.gov.mk/mk/registri/ (accessed by: 18.09.2024)
[6] *Archaeological sites*, Skopje: Cultural heritage protection office, 2009, 11.

- Taor (Ancient settlement – Tauresium)
- Markovi Kuli, Varoš – Prilep
- Bargala
- Stobi
- The large bath from the late Roman thermal spa in the village Bansko
- The history of the discovery of the Isar - Marvinci site
- Kokino – Holy Mountain and observatory from 4000 years ago
- Medieval fortress Isar – Štip
- The ancient kingdom of Macedonia and the Republic of Macedonia

Apart from the publications, the website of UZKN also has several links that lead directly to the websites of the Museum of Macedonia, the Macedonian Archaeological Scientific Society, Tumba Madjari Archaeological Site, Stobi Archaeological Site, Terracotta Museum where the site/institution is discussed in much more detail.[7]

National Strategy for the Protection and Use of Cultural Heritage
This is a small part of the national cultural heritage and it seems that the digitization process is at the very beginning. The Macedonian climate has an extensive and complex treasury of monuments, works of art, artifacts and localities, and for its permanent preservation and maintenance, serious changes in the approach to this problem are necessary. Despite all the attempts for full digitization of cultural heritage in Macedonia by UZKN, the lack of adequate legislation is the main culprit for the inconsistency of this process. Legislation is the only mechanism that can ensure maximally successful digitization of institutions, their continuous financial support and sustainability in the process of digitization of the national cultural heritage. In the National Strategy for the Protection and Use of Cultural Heritage (2021-2025) the concern for the lack of budget funding for these processes is clearly expressed, where it is emphasized that the three institutions responsible for the national cultural heritage in Macedonia (National Information System for Cultural Heritage - NISKN , National Register of Cultural Heritage and Regional Center for Digitization of Cultural Heritage Documentation - current Digitization Department within the UZKN) have not been fully functional for a long time due to lack of financial resources.[8]

According to the National Strategy for the Protection and Use of the Cultural Heritage (2021-2025), the introduction of new technologies in the protection of the national cultural heritage is still in its infancy. The greatest progress has been made in library activity through the Cooperative Online Bibliographic System and Service (COBISS) since 2004, the Center Virtual

[7] *Archaeological sites*, Skopje: Cultural heritage protection office, 2009, 12-94; Здравковски, Драгиша, Драги Митревски, Ленче Јованова, Киро Ристов, Кирил Трајковски, Зоран Георгиев, Лилјана Кепеска и Костадин Кепески. *Археолошки локалитети – Македонско Културно Наследство*. Скопје: Министерство за култура на Република Македонија, УСКН, 2008; *Република Северна Македонија. Министерство за култура, Министерство за култура, Управа за заштита на културното наследство*. http://uzkn.gov.mk/mk/ (accessed by: 30.10.2024)

[8] Министерство за Култура на Северна Македонија, *Националната стратегија за заштита и користење на културното наследство (2021-2025)*. Скопје: Министерство за Култура на Северна Македонија, 2021, 21-22, 36. http://uzkn.gov.mk/mk/wp-content/uploads/2021/05/превземи-1.pdf (accessed by: 5.9.2024).

Library of Macedonia (Centar VBM),[9] as well as through the digital library and the portal dlib.mk (where there is an art collection of graphics and drawings of Macedonian artists). So far, old Slavic and oriental manuscript books, old printed and rare monographic and serial publications, cartographic material, drawings, music manuscripts and postcards, books in the Macedonian language published in the period 1935-1950 and 195 rare books have been digitized.[10]

In the field of audiovisual goods, films originally recorded on film tape are also digitized. Archival funds are microfilmed, but not digitized, and some museums present their collections in digital formats.

One of these museums is the Museum of the City of Skopje, which, since its foundation in 1949, has been a place of documenting the historical, social, economic and cultural life of the city. As an important cultural center, the work of this museum is composed of 5 basic components: history, archaeology, ethnology, history of art and architecture. Thus, the preservation and digitization of the cultural heritage in this institution takes place in these five areas, as well as through its own publishing activity.

In the documentation department, the cultural legacy owned by the museum is completely archived, and only a part of it has been digitized. In the Department of History, which has old weapons and military equipment, manuscripts, documents, photographs, postcards and military decorations, etc., under the leadership of Zoja Bogdanovska, the following collections of objects have been systematized and digitized and 2814 objects are in the preparation phase:[11]

1. Old weapons and auxiliary military equipment (period of the Ottoman rule and between the two world wars) 104 items

2. Old books and manuscripts (period of Ottoman rule and between the two world wars) 26 items

3. Documents (period of Ottoman rule) 26 items

4. Photographs (period of Ottoman rule) 54 items

5. Postcards for Skopje (end of the 19th - end of the 20th century) 766 items

6. Newspapers and Proclamations (period of Ottoman rule) 5 subjects

7. Military decorations (period of Ottoman rule – Balkan wars)

(40 copies are under one inv. no.) 52 items

8. Railways in Skopje (Ottoman rule until today) 53 cases

[9] The Virtual Library of Macedonia. https://www.cenl.org/bursaryreport/2017-macedonia/ (accessed by: 18.10.2024); Regina Varniene – Janssen, *Methodological and Organizational Aspects of Digitization and Bibliographic Access of the Cultural Heritage*. Vilnius, Lithuania: Martynas Mazvydas National Library of Lithuania, 2012. http://eprints.rclis.org/17844/1/Varniene_Methodlogical_and_organisational_aspects_ofDigitisation_and_bibliographic%20access_ofthe_cultural_heritage.pdf (accessed by: 31.07.2024).

[10] *North Macedonia and the Macedonian Collections in the Library of Congress: Rare Materials*. https://guides.loc.gov/macedonian-collections/special-collections-rare-book (accessed by: 30.10.2024); ICOMOS https://macedonia.icomos.org/vebinar-digitalizaczija-na-kulturnot/, (accessed by: 10.07.2024).

[11] Зоја Богдановска, Киро Ристов, Татјана Ѓорѓиовска, Јасминка Намичева, Викторија Грозданова Коцевски, Соња Апостолова и Милица Пандилевска. *Музеј на град Скопје 1949-2011.* Скопје: Музеј на град Скопје, 2011.

9. Postcards – various 10 items

10. Objects and materials from the period between the two world wars 47 objects

11. Subjects from the Socialist construction period 12 subjects

12. Collection – July 26, 1963 847 items

13. Telegrams 5 items

14. Earthquake 20 items

15. Collection – Solidarity 29 items

The following collections of objects are also documented in this department, and 6916 are ready for further digitization:

1. Weapons 27 items

2. Subjects from NEW 4 subjects

3. Partisan uniform and shoes 2 items

4. Photographs of NOB 120 items

5. Photos of the period between the two world wars 10 items

6. Socialist construction 3 subjects

7. Items from the Memorial Museum of Illegal Weapons Manufacturing Workshops in Skopje during NOV 96 items

8. The archaeological collection of the Museum of the City of Skopje has over 90,000 archaeological objects from various raw materials, representatives of the material Neolithic culture in Macedonia, the largest number of which is limited to the sites in Govrlevo and Zelenikovo. The Department of Archeology has archived and digitized the largest number of objects according to the following systematization[12]:

1. Neolithic 1838 items

2. Iron Age and Late Antiquity 1479 objects

3. Early Antiquity 12 subjects

4. Expensive – imperial and late antique period 8448 objects

5. Medieval period 1 subject

6. Ottoman period 1049 items

In the Department of Architecture, divided into departmental subgroups, the following materials have been digitized:

1. Department of History of Ancient Architecture and Stone Plastic 146 items

2. Department of Contemporary Architecture, Urbanism and Design 157 subjects

3. Department of History of Architecture, Urbanism and Architectural Design from the end of the 19th to post-earthquake Skopje 19 subjects

The rich collections of the Department of Ethnology contain unique museum objects dating from the middle of the 19th century to the second half of the 20th century. Ethnological collections digitized according to the following schedule:

1. Collection of folk costume 819 items

2. Collection of city costume 632 items

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[12] Емил Алексиев, Фросина Зафировска, Зоја Богдановска и Лазо Плавевски. *Музеј на град Скопје 1949-2019.* Скопје: Музеј на град Скопје, 2019; *The Archaeological Museum of Republic of North Macedonia*, https://amm.org.mk/en/about-archaeological-museum-of-the-republic-of-north-macedonia/

3. Collection of household textiles, 730 items

4. Collection of metal household items, 608 items

5. Collection of wooden household items, 400 items

6. A collection of household items made of clay, ceramics, porcelain, glass, plaster and stone 191 items

7. National economy collection, 96 items

8. Collection of crafts and trade 102 items

9. Collection of items related to folk beliefs and customs, 69 items

10. Specialized (technical) collections 111 items

11. Collection of original photographs 406 items

12. Collection of Photographs of Old Skopje Families, 492 items

13. Collection of photographs from Skopje and Skopje with ethnological content. 461 subjects

14. Collection of original documents 88 items

15. Niazi Limanoski – National costume 134 items

The collection in the History of Art department includes original medieval fragmented frescoes and copies of frescoes made in the period 1949-1983, on medium canvas, but of the same museum value. The collection of icons consists of works dating from the 19th and the beginning of the 20th century. The collection of art works includes works by artists from the city and works with motifs from the city, including art works made in all techniques, drawings, graphics and photographs. The museum also has three branches in Skopje, the "Open Graphic Studio", the gallery "Justina and Rodoljub Anastasov",[13] as well as the museum of the old Skopje bazaar Suli An.

The works from the total collection of the History of Art department are divided by period, digitized in the following order:

PERIOD FROM THE END OF THE 12TH CENTURY TO THE END OF THE 18TH CENTURY[14]

1. Copies of frescoes, 40 items

2. Original frescoes 7 objects

3. Small-format applied art and liturgical equipment

from the 16th to the 19th century, 128 items

4. Archaeological objects from the Middle Ages 265 objects

5. Coins from the Middle Ages 496 items

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[13] https://skopje.gov.mk/en_us/skopje/kulturni-ustanovi/

[14] Елизабета Димитрова, Снежана Филипова, Гордана Велков, Венета Иљоска, *Седум споменици на културата во Скопје и Скопско,* Македонида, Скопје 2009; Елизабета Димитрова, Филип Нивонер, Ристо Палигора и Гордана Велков, *Седум цркви во регионот на Пелагонија, Мариово и Преспа*, Македонида, Скопје 2019

ICONS OF THE 19TH AND EARLY 20TH CENTURIES 48 items

CONTEMPORARY ART

1. Collection of works of art from the period of the 20th century, 338 items
2. Collection of photographs from the period of the 20th century, 72 items
3. Blagoja Drnkov 188 subjects
4. Mother Teresa 25 items
5. Collection of graphics in the Open Graphic Studio 42 items
GALLERY "Justina and Rodoljub Anastasov" 373 items
Ljubomir Belogaski COLLECTION 165 objects

The entire public has access to the entire digitized documentation of the Museum of the City of Skopje, and this is made possible by a written or electronic request to a responsible person in the museum, which states which documentation is required and for what purpose. The request can be sent to the director of the institution, who is currently Dr. Panče Velkov, and to Nikolina Acevska Kraguević, documentation technician person in the Documentation Department.

The initiative to preserve the Macedonian cultural heritage through its digitization, which began almost 20 years ago, is of the utmost importance for the preservation of history in the country. Digitization erases the boundaries between different media, because the end product is no longer a printed book, magazine, photo, film or music on CD. Digitized materials are stored in files ready for redistribution, rather than on sheets of paper. This completely changes the concept of library work, new digital libraries are created that are an innovative challenge for responsible institutions and grow into a digital internet archive for the entire digitized documentation of cultural heritage, which now finds its home instead of on library shelves in the infinite internet space.

"Culture is freedom. Freedom of the creative act, expression, preservation of different identities... Wealth that actually manifests itself in diversity. It is an area of human action that is always the first to appear and the last to retreat. And when all else fails, it is culture that endures and reminds people of what they really are – creators in every sense of the term."

In addition to this method of digitization through the institutions, and in Erasmus projects and other projects that are reported, approved or applied for and are managed or supervised by professors from the Institute for the History of Art and Archeology (Viktor Lilčić, Antonio Jakimovski, Snežana Filipova, etc.) .n.) or project consultants (Elizabeta Dimitrova) digitalization of part of the cultural heritage is planned, and part of the material will be adapted for people with special needs, blind, etc.

I will also highlight the contribution of the non-governmental association "Concept for Culture" which has so far created several digitization projects of important monuments of cultural heritage and through a virtual walk in the monuments brings the viewer and the tourist closer to them. This is how the initiative to visit and get to know cultural monuments directly increases. So far, the association has made virtual walks with the help of a drone and a digital camera through the church of St. Nikola Toplički, village Babino, municipality of Demir Hisar, through the Church of the Nativity of the Holy Virgin, village Slivnica, Prespa, then through

Introduction of the Blessed Virgin Mary (St. Saviour), village Kučevište, municipality of Čučer-Sandevo as well as through the Church of Holy Virgin, village Drenovo, municipality of Kavadarci; through the monastery of the Assumption of the Blessed Virgin Mary, Matka; through the church of St. George The victory bringer (Pobedonosec), village Mlado Nagoričane, then through the church of Holy Virgin of Hospitality - Ohrid, Saint John the Theologian Kaneo, the Rotunda in Konjuh, the Church of St. Nicholas, v. Ljuboten, and from the new cultural institutions, presented the Memorial House of Mother Teresa. As part of the promotion of the immovable cultural heritage of the municipality center, the association prepared a virtual walk through the house of Lazar Ličenovski, the Church of St. Demetrius, Shkaperda Community House, "Osma Udarna Brigada" Street, no. 22, Several buildings on Bulevar Ilinden no. 41, 63 and 68, Children's Cultural Center - Karpoš and the old Railway Station in Skopje. But the Association also created walks through archaeological sites, such as the Vardar Hill Archaeological Site.

The Haemus Association also contributes with several projects, the latest of which is a virtual game. It also published a Tourist Guide around Skopje for young researchers and the "Byzantine Heritage of Skopje" guide in 2020.[15]

And the *Makedonida Association*[16] recently completed the project for the digitization of Ohrid's cultural heritage. *Maedonida* was founded in Skopje in 1998, to support the implementation of the original project One school - one monument, in which part of the text and translation into English was prepared by Professor Filipova Snežana, and the purpose of which was to bring cultural heritage into the education of young people generations in Macedonia. This project turned out to be extremely successful. The association then continued with publishing activity, first with the seven most important monuments in Skopje and its surroundings (authors Elizabeta Dimitrova, Snezhana Filipova, 2009)[17], and then with an overview of monuments in Prespa, Pelagonija, Mariovo, etc.

Thus, the contribution of these associations is great both for tourism and for the popularization of Macedonian cultural heritage and publicity in the field of cultural heritage.

Conclusions

The integration of digital technologies in the preservation and distribution of cultural heritage in North Macedonia represents an important advancement in this field. Through digitization, institutions have managed to increase access to cultural resources and ensure that these digital assets remain protected for future generations. This not only protects the country's rich cultural heritage, but also fosters cultural engagement and identity formation among present and future generations. The digitization process and the development of clear standards are

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[15] https://haemus.org.mk/; https://haemus.org.mk/wp-content/uploads/2019/05/CV_HAEMUS_2024.pdf (accessed by: 30.07.2024).

[16] Foundation for Heritage Education, Promotion and Preservation. https://makedonida.org/ (accessed by: 30.07.2024)

[17] Елизабета Димитрова, Снежана Филипова, Гордана Велков, Венета Иљоска, *Седум споменици на културата во Скопје и Скопско,* Македонида, Скопје 2009.

essential to guarantee the quality and sustainability of these resources, thus contributing to a more informed society and more connected to its history.

The digitization of the cultural heritage in North Macedonia is a developing process, but of exceptional importance for the preservation and promotion of the country's cultural assets. The National Strategy for the Protection and Use of Cultural Heritage (2021-2025) indicates that progress in this area depends on the creation of a strong legal framework and financial support, which is necessary to ensure that cultural institutions function effectively. .

Despite continuous efforts by UZKN and other organizations, the lack of sufficient financial resources prevents the proper advancement of the digitization process. Numerous initiatives by museums and non-governmental organizations are important to raise awareness and make cultural heritage more accessible to the public.

The future of cultural heritage in Macedonia depends on the commitment to improve technologies and institutional support. This will help create a rich digital archive that will contribute to the preservation of the country's cultural and historical identity for future generations.

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