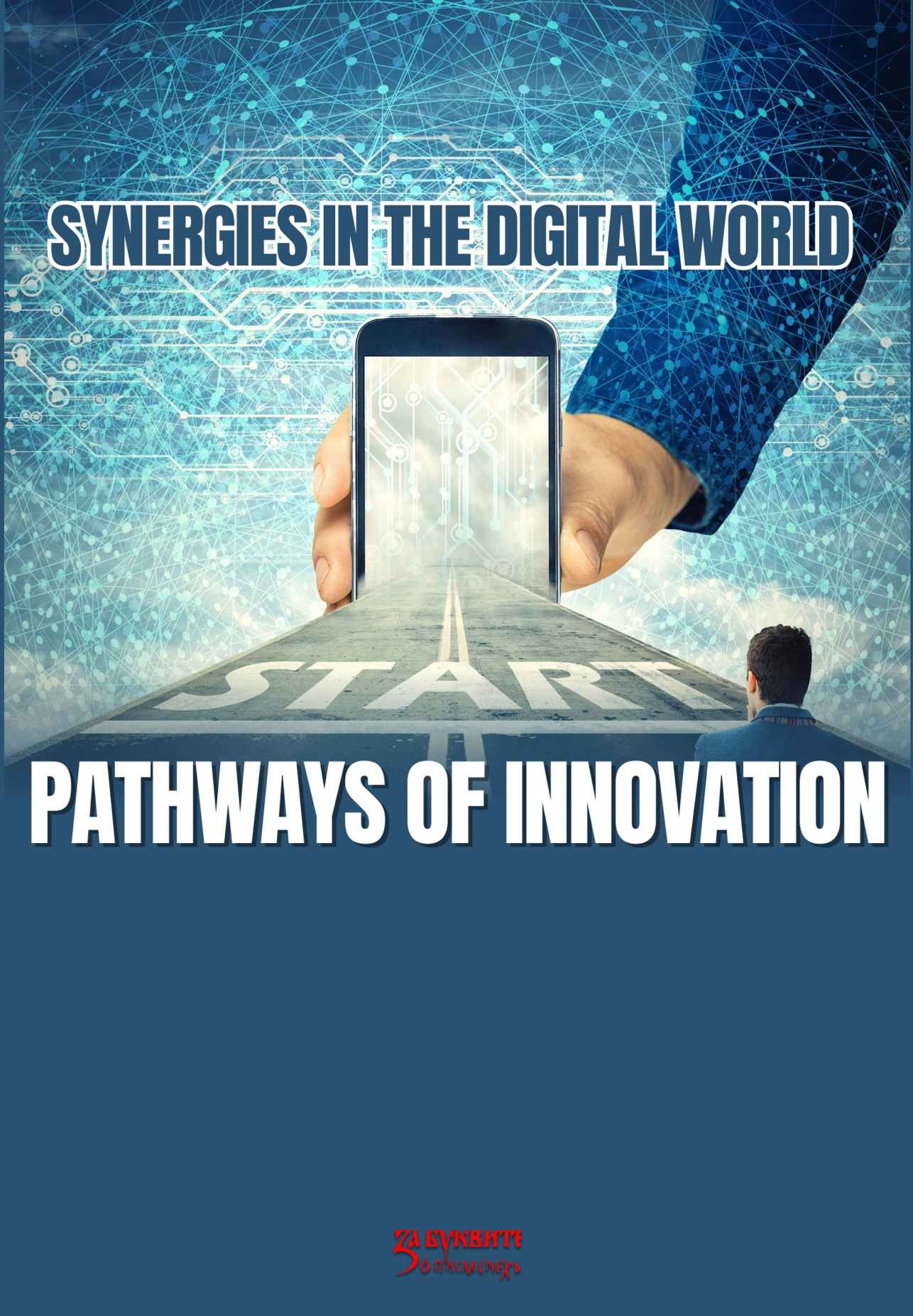




SYNERGIES IN THE DIGITAL WORLD

PATHWAYS OF INNOVATION

ЗА БУДУЩЕ
ПОПРЕДНЕНИЕ

ROUND TABLE
“SYNERGIES IN THE DIGITAL WORLD –
PATHWAYS OF INNOVATION”

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ЗА БУКВИТЕ
ДОПИСМЕНЕХЪ



The collection “Synergies in the Digital World – Pathways of Innovation”, the result of a scientific symposium (round table), includes scientific work (papers, articles, scientific communications) that present various aspects related to international business, socialization of cultural heritage, cultural tourism, innovations, new technologies, aspects of national security in the context of globalization.

The authors bear full responsibility for the content of their papers and the opinions expressed therein, and this can in no way be taken as the position of the Bulgarian Science Fund or the Ministry of Education and Science.

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IN SEARCH OF INNOVATIVE MODELS AIMED AT PRESERVING CULTURAL IDENTITY AND DEVELOPING CAPACITY

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Abstract: *The article examines the need to develop and implement innovative models aimed at preserving cultural identity and developing capacity in the context of dynamic socio-economic changes, globalization and technological progress. The growing role of digitalization, social media and interactive platforms in the preservation and transmission of cultural heritage is emphasized. The study examines good practices from Bulgaria, highlighting how new technologies and interdisciplinary approaches can improve the effectiveness of cultural institutions. The study also identifies key factors and mechanisms for capacity building and offers practical guidelines for sustainable preservation of cultural identity. The central hypothesis suggests that the integration of innovative models, digital tools and educational initiatives will significantly contribute to the preservation of cultural identity and the strengthening of cultural institutions.*

Keywords: *cultural identity, cultural heritage preservation, innovative models, digitalization, capacity building, cultural institutions, interdisciplinary approaches, cultural policies.*

INTRODUCTION

Essence of the problem: In the context of dynamic socio-economic changes, the cultural identity of peoples and communities faces a number of challenges, provoked mainly by the processes of globalization and technological progress. They leave a serious mark and change the ways and approaches related to the preservation and transmission of the preserved cultural and historical heritage through generations. Traditional forms of cultural expression – such as language, folklore, crafts, and other practices – are gradually giving way to new models where digitalization, social media, and global communications play a crucial role. *To a large extent, these innovations are becoming the primary, and often preferred, method of transmitting accumulated knowledge.* This raises the questions: *How can tradition and innovation be combined to ensure the sustainable preservation of cultural identity? What strategies can make cultural heritage both accessible and engaging for current and future generations?* In response to these challenges, cultural institutions such as museums, libraries, and cultural centers are increasingly adopting innovative methods. These methods include virtual and interactive platforms, digital archives, and multimedia presentations. Implementing these tools not only enhances the preservation of cultural traditions but also ensures their accessibility to a broader audience. Capacity building is a key factor in this process, as cultural and educational institutions must develop the ability to adopt new technologies, foster sustainable partnerships, and cultivate the competencies necessary for effective cultural heritage management.

Relevance of the problem: In many countries, there is growing interest in studying, developing, and implementing models that integrate cultural policies with

digital technologies. The European Union has launched initiatives such as the “European Year of Cultural Heritage” and the “Creative Europe” program to emphasize the importance of innovation in the cultural sector. In Bulgaria, several institutions and organizations are exploring new methods to preserve and promote national cultural heritage. However, despite these efforts, there is no comprehensive strategy for implementing innovative models in this field. This gap underscores the urgent need for coordinated action. Cultural organizations, including both state and non-governmental institutions, play a vital role in preserving cultural identity. Among them, community centers (chitalishta) stand out as one of the oldest and most significant cultural organizations in Bulgaria. Nevertheless, all these institutions face the challenge of adapting to contemporary demands through digitalization, interactive learning methods, and the engagement of younger generations.

Main objective of the study: This study aims to analyze existing innovative models for preserving cultural identity and enhancing institutional capacity, focusing on cultural institutions and their intersection with educational institutions. Through a systematic review of good practices from Bulgaria and abroad, the study seeks to identify key factors that can foster the development of new cultural policies and contribute to the successful integration of digital technologies and methodologies. The study addresses the following research questions:

1. What innovative models are used in different countries to preserve cultural identity?
2. How can these models be adapted to the Bulgarian context?
3. How can digitalization and new technologies support the processes of cultural heritage preservation?
4. What capacity-building mechanisms are most effective for cultural institutions?

Hypothesis: The main hypothesis of the study is that developing and implementing innovative models based on digitalization, interdisciplinary approaches, and educational initiatives will contribute to more effective preservation of cultural identity and sustainable capacity-building in cultural institutions.

RESEARCH METHODOLOGY

This study employs a combination of qualitative research methods to test the hypothesis, including:

1. Literature analysis: A review of scholarly publications, reports, and strategic documents on cultural policies, digitalization, and innovative models for preserving cultural identity.
2. Comparative analysis: A comparison of successful practices from different countries that have implemented innovative cultural models.
3. Case studies: Examination of specific examples of museums, community centers, and digital archives that have adopted innovations in the cultural sector.
4. Synthesis of results: Systematization of conclusions and recommendations for the Bulgarian context.

RESULTS

Theoretical framework: Defining “innovative models” in a cultural context.

In the contemporary context of preserving cultural identity, “innovative models” refer to a broad range of approaches, methods, and technologies that aim to safeguard cultural heritage while adapting to digital and socio-economic realities. These models integrate digital technologies, interdisciplinary methods, and new forms of collaboration between institutions, civil society, and educational organizations.

The innovative model can be seen as a strategic approach that includes innovative techniques for documenting, preserving, disseminating and interpreting cultural heritage. Among them, digitization, virtual and augmented reality (VR/AR), artificial intelligence in archiving and cultural entrepreneurship stands out. The main goal of these models is to make cultural heritage accessible to a wider audience and integrate it into the dynamic modern world.

Of increasing importance is the issue related to the role of cultural institutions and their adaptation to modern challenges. Cultural institutions themselves – museums, libraries, archives, centers, etc., play a significant role in the process of preserving cultural identity. However, their traditional methods often prove insufficient in the conditions of globalization and digital transformation. That is why the adaptation of innovative models becomes a necessity, not an alternative. Institutions that manage to implement new technologies and methods of interaction with the audience not only increase their efficiency, but also create conditions for sustainable development of the cultural environment.

In the context of the above, it is important to point out the main concepts of development that have a key bearing on the processes related to the development and implementation of innovative models in the field of cultural identity preservation: digitalization, cultural entrepreneurship, interdisciplinarity. By their very nature, they are also related to the development of new technologies, business relations and deploy a new attitude to development:

1. Digitization – the process of converting physical cultural objects and archives into digital format for the purpose of their storage, analysis and accessibility. It includes the use of 3D scanning, digital archives, interactive platforms and blockchain technologies for the authentication of cultural artefacts. Its development requires the development of new technologies, models for their application in practice, as well as the introduction of accessibility options for the widest audience.

2. Cultural entrepreneurship – a model in which cultural institutions develop sustainable economic strategies based on the combination of culture and business. This includes the creation of digital products, organizing cultural events with commercial potential, and using crowdfunding models for financing.

3. Interdisciplinarity – combining different scientific approaches and technologies to preserve and promote cultural heritage. For example, combining history, anthropology, and artificial intelligence can lead to new methods for analysing and interpreting cultural artefacts.

This theoretical framework provides the basis for the subsequent consideration of specific innovative models and their impact on the preservation of cultural identity and the development of institutional capacity.

Digitization as a means of preserving cultural identity

In recent years, there has been increasing talk about the need to introduce digitization of various cultural values, which is done not only for the purpose of their preservation, but also for a more complete study, as well as presentation to the widest possible range of users. In this sense, digitization is one of the most effective tools for preserving and promoting cultural heritage. Thanks to modern technologies, various elements of the tangible (movable and immovable) as well as intangible cultural heritage, including mainly manuscripts, archival documents, works of art, architectural objects, recordings of traditional folklore elements, can be stored in different digital formats and made available to the global audience. This shows that digitization not only preserves cultural artefacts, but also makes them accessible to people from different parts of the world. Online platforms and increasingly widely used mobile applications that have emerged in recent years allow users to touch historical values, regardless of physical distances. It should be noted that in addition to getting acquainted with elements of different communities, this is of particular importance for the numerous national diasporas, which also maintain contact with their roots through digital resources.

The use of various elements of digitization and the gradual transition to a full digital transformation of cultural heritage can be illustrated by several frequently used and popular digital practices. Here we can point out:

- ▷ The construction of virtual museums and 3D reconstructions – many world and Bulgarian museums offer virtual walks through their exhibits. For example, the National History Museum in Bulgaria provides digital exhibits that allow for detailed viewing.
- ▷ Digital archives and digital libraries – projects like Europeana and Google Arts & Culture bring together thousands of digitized artefacts, accessible to researchers and the public.
- ▷ Using blockchain for authentication and protection of cultural heritage – this technology can ensure the authenticity of digital copies and prevent counterfeiting.

Noting all the above, we can identify some problems accompanying the digitization processes. Despite its undeniable advantages, the digitization of cultural heritage faces the following three main challenges:

1. Technical and financial constraints. The introduction of digitalization requires significant investments in equipment, software and specialized personnel. In many cases, projects in this direction rely on limited funds from EU programs or private initiatives, which makes their sustainable development difficult. Countries allocate different financial resources in their national budgets. However, it should be borne in mind that this challenge is to varying degrees in individual countries. In many

places, the common denominator is that there is not always a clearly defined long-term financial support. And last but not least, there is the need for better coordination between the various institutions working in the field of identification, preservation and promotion of cultural heritage.

2. Legal and ethical issues, including issues related to copyright and intellectual property, often slow down digitization processes. Here too, it is necessary to point out that, overall, there is insufficient development of the legislative framework and, above all, its updating, so that it adequately responds to contemporary realities and ensures a clear mechanism for the protection of cultural values in the digital environment. This includes not only copyright on digitized materials, but also access to them, with a view to educational and scientific purposes. The prospects for overcoming these challenges lie in the development of public-private partnerships, strengthening international cooperation and the introduction of new technologies such as artificial intelligence and virtual reality for more effective presentation and preservation of cultural memory.

3. Risk of loss of authenticity – despite the high quality of digital copies, physical objects remain carriers of unique characteristics that are difficult to recreate digitally.

Concrete examples of successful models

- ▷ Collaboration with technology companies – developing augmented and virtual reality applications that allow for interactive experiences of cultural artefacts, as implemented in projects such as Google Arts & Culture.
- ▷ Financial instruments for sustainability – creation of digitalization funds in which the state, the private sector and international organizations can participate, such as the European programs “Creative Europe” and “Horizon Europe”.
- ▷ Educational and youth initiatives – integrating cultural heritage into the educational system through interactive methods and practices, such as the “Living History” program.
- ▷ Development of local communities – involving artisans, historians and young professionals in cultural projects that not only preserve traditions but also create economic opportunities, like the “Masterpiece House” initiative in Bulgaria.

Inferences: Innovative models for preserving cultural identity and developing capacity offer new opportunities but require a comprehensive approach to overcome existing barriers. Through strategic investments, international cooperation and active involvement of society, cultural heritage can not only be preserved, but also dynamically developed in the future. It is important to emphasize that digitization is one of the main innovative models that can guarantee the preservation and accessibility of cultural heritage for future generations. Despite the challenges, strategic investments in digital technologies and international cooperation will continue to play a key role in this process.

Development and implementation of interdisciplinary and educational training models aimed at capacity development

Interdisciplinary and educational models that are being developed and implemented in practice play a significant role in the individual stages related to the training of specialists and programs aimed at studying, preserving and promoting cultural identity. They combine methodologies from several scientific fields and encourage the active participation of different social groups in the process of cultural inheritance.

By bringing together knowledge from several fields, new methods for studying and transmitting cultural heritage are being created. These models often integrate qualitative and quantitative research approaches, including ethnographic methods, analysis of cultural artifacts, and oral history. The application of comparative analysis and historical reconstruction allows for a deeper understanding of cultural processes and their dynamics. Additionally, the use of innovative digital technologies – such as digitization, virtual archives and interactive platforms – expands the reach and accessibility of cultural heritage. The application of a project-based approach and active learning methods stimulates practical participation and the development of specific skills. An important part of the methodology is the inclusion of participatory models, in which representatives of local communities actively participate in the process of collecting, interpreting and sharing cultural knowledge. These models not only preserve cultural identity, but also create a sustainable connection between the past and contemporary cultural practices, thus ensuring the sustainable transmission of heritage to future generations.

Conclusion: In summary, the application of interdisciplinary and educational models creates a comprehensive and dynamic approach to the preservation of cultural identity. By combining traditional and innovative methods, not only the preservation of cultural heritage is guaranteed, but also its adaptation to modern conditions. This supports the construction of a sustainable cultural environment in which the past and the future intertwine and enrich each other.

Illustration of interdisciplinary models through good practices

Research and practical examples reveal that the application of interdisciplinary and educational models leads to the creation of sustainable practices and policies for the preservation of cultural identity. The involvement of various stakeholders – scientific institutions, cultural organizations and local communities – provides a broader platform for sharing knowledge and experience, thus strengthening the connection between the past and the future. The following examples, which are from Bulgarian practice, illustrate how these models find real application and what positive results they achieve in different contexts.

An example of a successful interdisciplinary approach is the “Digital Cultural Heritage” program of the Institute of Balkan Studies with the Center for Thracology at the Bulgarian Academy of Sciences, aimed at digitizing cultural content, creating databases and virtual exhibitions.¹ Developed in collaboration between research

units from institutes, universities and museums, and involving various technology companies, the program integrates knowledge from the humanities, information technology and the arts, providing new opportunities for the digitization and presentation of cultural artefacts. In addition, the Institute of Mathematics and Informatics, also at the Bulgarian Academy of Sciences, participates in projects such as a virtual encyclopaedia of Bulgarian iconography and 3D representation of murals. Another example related to this program is the course “Digitization Cycle: Creation, Processing, Online Exhibition and Types of Access to Digital Cultural Heritage”, which covers the processes of creation, processing and online presentation of digitized cultural objects. It is part of a modular training on digitization, conducted during the period March – May 2013 by Sofia University “St. Kliment Ohridski” in cooperation with the Sofia Municipality and the Institute of Mathematics and Informatics. The aim of the course is to provide in-depth knowledge of the processes of digitization of cultural heritage, covering the stages from creation and processing of digital objects to their online exhibition and provision of different levels of access. The lectures focus on the technical, legal and administrative aspects of digitization, as well as on the management and quality control at each stage of the process.²

Another example is the Living History project, which combines historical reconstructions with interactive teaching methods. The project is an initiative of the Pencho Slaveykov Regional Library in Varna, which is part of the Lifelong Learning Programme, a Grundtvig sectoral programme of the European Commission. It brings together the efforts of representatives from eight countries: France, Slovenia, Sweden, Latvia, Turkey, Hungary, Spain and Bulgaria. Among them are authors of historical novels, anthropologists, library and museum specialists, managers and teachers. Pupils and students participate in simulations of traditional crafts, historical events and cultural practices, thus acquiring knowledge through practical experience. This project combines historical reconstructions with interactive learning methods, allowing participants to immerse themselves in the past through hands-on experience. It emphasizes the importance of cultural dialogue and knowledge exchange between different specialists in the field of culture and history, encouraging the sharing of experiences and the implementation of new practices.³

The project “The Bulgarian Medieval Costume” plays an important role in the preservation and popularization of the Bulgarian cultural heritage, by providing the audience with the opportunity to experience authentic reconstructions of medieval clothing and weapons. Within the framework of the project, authentic replicas of medieval clothing have been created, and participants have the opportunity to get acquainted with traditional crafts and manufacturing techniques. The project has an important educational role, providing an opportunity for the public and specialized audiences to become acquainted with the Bulgarian cultural heritage. Through re-enactments, exhibitions and demonstrations, it offers an interactive approach that stimulates interest in history and facilitates the understanding of medieval cultural practices. The involvement of local communities in the restoration process encourages active participation and builds a lasting connection with the cultural

heritage. In addition to the national level, the project also has international significance, as participation in various festivals and cultural events promotes Bulgarian culture and encourages intercultural dialogue. Combining scientific credibility with a creative approach, the initiative demonstrates innovative methods for the preservation and presentation of cultural heritage. Its long-term sustainability and successful implementation serve as an example of an effective model in the field of cultural restoration and recovery, proving that the past can be brought to life and made accessible to future generations.⁴

Inferences: In the contemporary context of preserving and promoting cultural identity, good practices play a key role in promoting innovative approaches and sustainable models. They demonstrate how interdisciplinary and educational strategies can be successfully implemented in practice, combining traditional methods with the new opportunities provided by technology. Through the analysis of specific examples, the importance of joint work between cultural institutions, scientific organizations and local communities in the process of preserving cultural heritage is highlighted. Various initiatives not only preserve and restore tangible and intangible culture, but also create platforms for dialogue, learning and social engagement. The presented examples illustrate how innovative solutions and partnerships can ensure both accessibility and sustainability of cultural values, combining the past with the present and the future. The implementation of new approaches leads to increased interest in cultural heritage and provides sustainable mechanisms for its preservation and promotion among future generations. In summary, the following can be stated:

1. Educational programs containing innovative approaches aimed at preserving cultural identity are:

- ▷ Interactive learning programs aimed at different target groups – provide an opportunity to implement interactive platforms and methods such as gamification to facilitate access to cultural heritage for younger generations. For example, virtual classrooms and mobile applications can present cultural values in an attractive way.
- ▷ University programs – the inclusion of disciplines related to cultural heritage in university curricula helps to train specialists in this field.
- ▷ International educational projects – cooperation between different countries in the field of education and cultural exchange contributes to enriching perspectives and strengthening global understanding of cultural heritage.

2. Interdisciplinarity in research and practice

- ▷ Joint projects between historians, IT specialists and designers - the construction of digital replicas of historical sites through 3D modelling is an example of the successful combination of different scientific disciplines.
- ▷ Using artificial intelligence to analyse cultural artefacts – AI algorithms can aid in the identification and analysis of cultural objects, which provides new opportunities for their research.
- ▷ Working with local communities – integrating knowledge and traditions from

local communities into scientific research contributes to the authenticity and sustainability of cultural practices.

These approaches emphasize the importance of education and scientific innovation for the sustainable development of cultural identity.

CONCLUSIONS

In the search for innovative models for preserving cultural identity and developing capacity, the analysis showed that the integration of new technologies, educational initiatives and sustainable financial mechanisms plays a key role in the preservation and promotion of cultural heritage. Despite existing challenges, such as insufficient funding, the need to update legislation and better coordination between institutions, there are clear opportunities for development through international cooperation, public-private partnerships and the engagement of local communities.

Key findings include:

1. Technology is a catalyst for innovation: Digitalization, artificial intelligence, and virtual reality not only preserve cultural artefacts, but also make them more accessible to a global audience.

2. Education is an important tool for sustainable cultural development: By integrating cultural heritage into curricula and creating practical training initiatives, young generations can be active bearers of traditions.

3. Emphasized need for stable financial mechanisms: The long-term sustainability of projects depends on the availability of sustainable funds and support from international organizations.

4. Emphasis on the role of local communities: The active participation of artisans, historians and cultural organizations is a key factor in preserving identity at the regional and national level.

In conclusion, addressing contemporary challenges requires a holistic approach that combines tradition with innovation. By embracing interdisciplinary methods, digital technologies, and collaborative models, cultural institutions can ensure the sustainable preservation and promotion of cultural identity for future generations.

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NOTES

¹ https://www.balkanstudies.bg/bg/digitalno-kulturno-nasledstvo.html?utm_source=chatgpt.com

² https://digidultbulgaria.files.wordpress.com/2013/04/sotirova_pdfdigitization_1ot51.pdf?utm_source=chatgpt.com

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⁴ <https://badamba.info/index.html>

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