

# Intangible Cultural Heritage Innovation and Inheritance in the Digital Age

Ling Lv

Wuhan College of Arts and Science, Wuhan, Hubei, 430000, China

**Abstract.** The digital era has brought with it both previously unheard-of potential and difficulties for the preservation and transfer of intangible cultural assets. Rich historical memories and cultural values are carried by intangible cultural legacy, which is a significant component of human civilisation. But as modernisation picks up speed, many old cultural expressions are progressively fading or in danger of being extinct. Digital technology application offers fresh approaches to intangible cultural heritage innovation and preservation. By using technological tools like virtual reality, artificial intelligence, and big data, intangible cultural legacy may surpass temporal and spatial constraints and attain wider distribution and long-term preservation. In order to suggest the future development direction and strategy of digital protection of intangible cultural heritage, this paper examines the innovation and protection of intangible cultural heritage in the digital age, examines the role and difficulties of digital technology in cultural inheritance, and compiles successful cases both domestically and internationally. According to research, digital technology has a significant role in fostering cultural innovation and inheritance as well as serving as a vital instrument for the preservation of cultural legacy.

**Keywords:** Digital Age; Intangible Cultural Heritage; Protection and Inheritance; Cultural Innovation; Technological Application.

## 1. Introduction

The advent of the digital age has brought profound changes to human society in terms of information exchange and technology application. With the rapid development of technologies such as the Internet, artificial intelligence, and big data, the dissemination and protection of traditional culture have also ushered in unprecedented opportunities and challenges. As an important part of human civilization, intangible cultural heritage covers the unique forms of expression of various ethnic groups and regions in terms of language, art, festivals, etc., and is a precious wealth that carries human wisdom and historical memory. However, with the advancement of globalization and social changes, many intangible cultural heritages are facing the risk of decline or even loss [1]. In this regard, new opportunities for the preservation and transfer of intangible cultural assets are presented by the use of digital technology. In addition to maintaining the shape of these cultural legacies, it may give them fresh life in terms of reproduction and diffusion.

Intangible cultural heritage is not only a witness to history, but also a reflection of the cultural diversity of contemporary society, carrying the unique values and life wisdom of various ethnic groups. They cover many fields such as oral traditions, performing arts, festivals, and handicrafts, and are an important link for cultural identity, social solidarity, and inheritance. However, many old cultural forms have been progressively lost or are hard to adapt to the changes in modern society due to the pace of modernisation, and intangible cultural heritage is in danger of rapidly disappearing [2]. Therefore, how to protect these cultural treasures in the digital age has become an important issue that needs to be solved urgently.

The significance of this study is to explore how digitalization can provide solutions for the protection and innovation of intangible cultural heritage. With the support of digital technology, the preservation of intangible cultural heritage no longer relies solely on traditional physical preservation methods. Digital platforms and technical means enable cultural heritage to be spread globally, ensuring that its content and form can be passed on across time and space. The advent of the digital age has also promoted cultural innovation. Through the re-creation and re-expression of traditional culture, it can better adapt to the needs of modern society and achieve cultural revival and renewal

[3]. Therefore, digitalization is not only a means of protection, but also a source of power for inheritance and innovation. It has given new life and possibilities to intangible cultural heritage.

This article's structure will first go over the theoretical and practical underpinnings of digital technology for the preservation of intangible cultural heritage, then examine the fundamental function and technological tools of digitalisation in protection efforts, and finally examine the state of affairs and difficulties surrounding the innovation and inheritance of intangible cultural heritage. Finally, it will examine the successful experiences of digital inheritance through particular cases [4]. Finally, the article will combine the research results to propose the direction and strategy of digital protection of intangible cultural heritage in the future, and look forward to the possibility of deep integration of technology and culture to promote the protection and innovation of cultural heritage worldwide.

## **2. Definition and Characteristics of Intangible Cultural Heritage**

As an important part of cultural heritage, the core feature of intangible cultural heritage is that it relies on human creativity and collective memory, and carries the cultural identity and historical continuity of human society. According to the definition of intangible cultural heritage by UNESCO, intangible cultural heritage includes "traditions and expressions, knowledge and skills of various ethnic groups and communities, as well as tools, objects, crafts and cultural sites related to them." This definition highlights the cultural expressiveness of intangible cultural heritage and emphasizes its intangibility and vitality in inheritance, indicating that it is not just static objects or cultural relics, but more importantly, traditions and customs active in daily life [5].

From a more specific perspective, intangible cultural heritage has several significant characteristics. First, it is dynamic, which is manifested in the continuous evolution and adaptation with the changes of the times. Unlike material cultural heritage, intangible cultural heritage is not static, but is continuously updated and recreated through the daily practices and interactions of community members. Secondly, intangible cultural heritage emphasizes collectivity. It is a cultural wealth shared by a community or ethnic group, reflecting the identity, sense of belonging and values of the community. Third, intangible cultural heritage is inherited and usually passed on from generation to generation through oral transmission, master-apprentice teaching or collective practice, maintaining the vitality of traditional culture and the continuation of history [6].

There are many types of intangible cultural heritage, which can be classified from multiple dimensions. First, language and oral tradition are important components of intangible cultural heritage. It not only includes the preservation of specific languages themselves, but also includes oral literary forms such as stories, folk songs, proverbs, etc. transmitted through language. These oral traditions carry profound cultural connotations and historical memories, and are often closely linked to specific regional and ethnic characteristics. Secondly, performing arts, as part of intangible cultural heritage, cover a variety of forms of expression such as drama, dance, and music [7]. These art forms are not only a means of entertainment, but also an important way to express emotions, tell history, and convey values. Furthermore, traditional handicrafts are also an important category of intangible cultural heritage. It includes various traditional skills such as embroidery, pottery, weaving, etc. These skills are often passed down from generation to generation, condensing human wisdom and creativity. Finally, folk customs and festivals are also important contents of intangible cultural heritage, including religious rituals, festivals, traditional lifestyles, etc. They are the embodiment of cultural identity and social solidarity, and are important carriers of cultural inheritance and innovation.

Intangible cultural heritage has important value and function at the social and cultural levels. From the perspective of cultural value, it is the core of national identity and cultural confidence, and the embodiment of the common memory of social members. Through the protection and inheritance of intangible cultural heritage, the cultural identity of society can be enhanced, and cultural diversity and cultural inheritance can be promoted [8]. At the social function level, intangible cultural heritage plays a role in promoting social integration and promoting cultural innovation. It is not only a link for cultural exchanges between ethnic groups, but also a source of social innovation. With the advent

of the digital age, the inheritance method of intangible cultural heritage has undergone profound changes. The combination of traditional inheritance methods and modern technology has brought new vitality to it, and also provided new opportunities and challenges for its innovation and development. Therefore, intangible cultural heritage is not only a witness to cultural history in today's society, but also an important part of modern cultural innovation and social development.

### **3. The State of Protecting Intangible Cultural Assets in the Digital Era**

The use of digital technology in the area of protecting intangible cultural assets has steadily expanded due to the quick growth of information technology. Digital recording and archival preservation are the most basic and critical links. Through digital technology, traditional cultural performing arts, handicrafts, oral literature and other forms are converted into digital data, ensuring that these cultural heritage can be permanently preserved and preventing information loss. Many precious traditional folk stories, songs and dances are digitally archived through audio and video recording technology, thereby reducing the disappearance caused by time and environmental changes [9]. Digital archival preservation not only provides a modern storage method for traditional culture, but also greatly improves the accessibility and sharing of cultural resources, and promotes the global dissemination of cultural heritage.

The application of virtual reality (VR) and augmented reality (AR) technology has further expanded the display methods of intangible cultural heritage. With VR technology, users can immerse themselves in virtual historical scenes, experience traditional festivals or folk art in person, and gain an immersive cultural experience. AR technology, by superimposing virtual elements in the real environment, enables traditional cultural heritage to be reproduced in modern life. This method is both interactive and can enhance the dissemination effect of cultural heritage [10]. With the application of these emerging technologies, the popularization and inheritance of traditional culture around the world have gained new opportunities, and cross-cultural exchanges and cultural heritage education have become more vivid and operational.

Technologies like artificial intelligence and big data are becoming more and more significant in the transmission of intangible cultural assets. Through big data analysis, researchers can extract potential laws and trends about cultural heritage from massive amounts of data, providing a scientific basis for inheritance. Using data mining technology to analyze the historical evolution and regional dissemination patterns of a certain traditional craft can provide inspiration for the innovation of contemporary crafts. Artificial intelligence can provide support for the restoration and innovation of traditional art forms through pattern recognition and learning algorithms, such as simulating traditional music creation through artificial intelligence, or helping to restore traditional handicrafts that have disappeared [11]. Big data and artificial intelligence together have created previously unheard-of opportunities for intangible cultural heritage innovation and preservation.

Although digital means have brought many new opportunities for the protection of intangible cultural heritage, compared with traditional protection methods, digitalization has both advantages and challenges. Traditional protection methods usually rely on the protection of physical space and practice communities, and maintain the vitality of culture through master-apprentice inheritance, field visits and oral records. However, the introduction of digital means enables intangible cultural heritage to transcend the limitations of time and space and broaden its inheritance channels. Despite this, traditional methods still play an irreplaceable role in the process of cultural inheritance, especially at the level of reflecting cultural practices and community identity. Digital means cannot completely replace real cultural experiences. Therefore, traditional protection methods and digital means need to complement each other and jointly promote the multi-dimensional protection of cultural heritage.

Although the effectiveness of digital inheritance has been significantly improved, there are still certain shortcomings. First, the evaluation of inheritance effect is still a difficult problem. Since digitally preserved cultural materials usually lack interactivity with actual cultural activities in the community, many cultural elements may lose their original emotional and social functions after

digitization. This means that although simple digital records preserve the form of culture, they may not be able to effectively maintain the deep connotation and emotional value of culture. Secondly, the popularity and application effect of digital technology vary from region to region. Problems such as technological lag and insufficient equipment are still serious in some regions, resulting in the inheritance of some intangible cultural heritage relying on outdated technical means, affecting its protection effect.

Even more serious is the problem of cultural faults that may occur during the digitization process. Although digital technology can quickly transform cultural heritage into modern language, the differences in cognition and understanding of traditional culture between different generations, as well as the sense of cultural distance brought about by the popularization of technology, may lead to the gradual weakening of the younger generation's sense of identity with traditional culture. The inheritance method that relies on digital technology for a long time may gradually weaken people's actual experience and emotional connection with traditional culture, thus bringing about the phenomenon of "shallowness" in the inheritance of cultural heritage.

As a result, even though digital technology offers new tools and techniques for the preservation and transfer of intangible cultural heritage, issues like technological lag and cultural gaps must still be addressed during the implementation process in order to maximise the overall impact of digital protection and inheritance and guarantee that cultural heritage can be better preserved and innovated in the digital age.

#### **4. Inheritance and Innovation of Intangible Cultural Heritage in the Digital Age**

In the digital age, the inheritance path of intangible cultural heritage has undergone profound changes, and the promotion role of digital platforms and social media is particularly important. With the help of digital platforms, cultural heritage can be widely disseminated and displayed around the world. Through online video platforms and social media, traditional art performances, folk tales and handicrafts can be displayed to global audiences in real time, allowing more people to understand and participate in them. The interactivity of social media platforms further enhances the dissemination effect of culture. Users are not only passive recipients, but can also participate in the creation and sharing of culture, thus forming an ecosystem for digital cultural inheritance. The popularity of digital platforms has also broken the limitations of regions, allowing intangible cultural heritage to cross national borders, connect different cultural groups around the world, and promote cultural diversity and cross-cultural exchanges.

At the same time, the dissemination and popularization of digital works is also an important means of inheriting and innovating intangible cultural heritage. Through digital technology, the performance arts, festivals and handicrafts of traditional culture can be transformed into digital works, which can greatly improve their dissemination efficiency. Traditional folk art is re-presented through high-definition images and digital audio, which can accurately preserve every detail and emotional expression, so that cultural heritage can be presented to modern audiences in a richer and more vivid form. With the advancement of digital technology, the application of VR and AR technology enables intangible cultural heritage to be presented to the audience in an immersive way, enhancing the depth and interactivity of cultural experience. These innovative forms allow more young generations to understand traditional culture in a relaxed and interesting interaction, and stimulate their interest and recognition of intangible cultural heritage.

Another important connection between innovation and inheritance in the digital era is the transmission of digital intangible cultural assets via the educational system. As information technology continues to advance, new avenues for popularising traditional culture have been made possible by digital instructional tools. Schools and educational institutions use digital teaching tools such as online courses, virtual classrooms, digital museums, etc. to enable students to intuitively contact and experience traditional culture in the process of learning. Digital technology not only helps

students understand and master the basic knowledge of traditional culture, but also enhances students' sense of participation and interest in learning through interactive teaching methods. Digital educational resources also promote knowledge sharing between teachers and students. Teachers can communicate and cooperate with cultural experts around the world through online platforms, and students can understand the culture of other regions and ethnic groups through online platforms, so as to understand and inherit intangible cultural heritage from a global perspective.

Under the innovation-driven protection model, the integration of traditional art and modern technology has become an important direction for the inheritance of intangible cultural heritage. By combining traditional art forms with modern technology, it not only enhances the expressiveness and appeal of traditional art, but also promotes the innovative development of traditional culture. Traditional performing arts such as dance, music and drama can bring new visual and auditory experiences through the blessing of modern sound, lighting and imaging technology, attracting more audiences to participate. This combination of tradition and modernity not only gives traditional art new vitality, but also enables it to keep pace with the development needs of modern society and create more forms of expression and dissemination for it.

A fresh engine for the invention of intangible cultural assets is also provided by the convergence of the cultural and creative sectors with digital product creation. With the rise of cultural and creative industries, digital products of traditional culture have been more widely developed and applied. From digital handicrafts, traditional costumes, and derivatives of folk crafts to film and television works, games, and cultural commodities based on intangible cultural heritage elements, the combination of digitalization and creative industries has not only promoted the innovative expression of cultural heritage, but also provided new economic value for traditional culture. Driven by the cultural and creative industries, intangible cultural heritage has not only become a form of cultural expression, but also an industrial resource with market potential, thus promoting the innovative protection and sustainable development of traditional culture.

Digital protection and innovation have also had a profound impact on the cultural value reconstruction of traditional culture. In the process of modernization, traditional culture is facing various shocks, and how to achieve its modern transformation is an important topic. Through digital means, traditional culture can be inherited and innovated in a modern way. Through digital artworks, cross-media expressions and other forms, traditional culture can be combined with modern society to form cultural products that conform to contemporary aesthetics and lifestyles. This not only injects new vitality into traditional culture, but also enables it to find the value and meaning of existence in contemporary society.

Digital protection has played a positive role in promoting cultural confidence and cultural identity. Through digital means, the value and uniqueness of intangible cultural heritage have been widely disseminated, thereby enhancing national self-confidence and cultural pride. Digital protection is not only an innovation at the technical level, but also a re-recognition and re-evaluation of traditional culture at the cultural level. It allows the traditional culture of different ethnic groups and regions to be presented and recognized, thereby maintaining cultural diversity in the process of globalization and promoting the common development of human culture. Through digital inheritance, traditional culture has been more widely recognized and respected, and cultural identity has been deepened, promoting the sustainable development and innovation of culture.

## **5. Case Analysis: Successful Examples of Digital Protection and Innovation**

In the digital age, there have been many successful cases of the protection and inheritance of intangible cultural heritage. Domestic and foreign experience has demonstrated the application and effectiveness of digital protection in different cultural contexts. Internationally, the British Museum in the United Kingdom has digitized the cultural heritage in the museum, not only providing the public with the opportunity to visit a virtual museum, but also allowing the museum's precious collections to be spread across borders through digital platforms. India's "Digital Indian Cultural

Heritage Project" has also achieved remarkable results. Through the protection and display of traditional art forms, handicrafts and ancient documents with digital technology, these cultural treasures have been better preserved and spread, greatly promoting the modernization and inheritance of the country's traditional culture.

In China, digital protection has also been actively applied. For example, the "Palace Museum Digitalization Project" launched by the "Palace Museum" uses virtual reality, augmented reality and 3D scanning technology to digitally record the artworks and cultural relics inside the museum, so that the audience can immersively experience and learn Chinese traditional culture through online platforms without having to visit the site in person. In addition, the domestic "Intangible Cultural Heritage Digital Museum" has also achieved digital protection of traditional skills such as paper cutting, Peking Opera, and pottery. Through high-quality digital recording and display, not only the original appearance of these skills is preserved, but also the public's sense of cultural participation and awareness are enhanced. These successful domestic and international examples highlight the critical role that digital tools play in preserving and advancing intangible cultural assets. They provide fresh concepts for creativity and advancement in addition to advocating for the preservation of traditional culture.

As representative forms of digital protection and innovation, digital museums and virtual exhibitions are increasingly valued by cultural protection agencies in various countries. Through virtual exhibitions, intangible cultural heritage can be presented globally, which not only expands the scope of cultural heritage dissemination, but also provides valuable cultural experience for audiences who cannot visit the site in person. The "Paris Digital Museum" in France uses virtual reality technology to display French traditional dance, music and festivals. Global audiences can participate in it through virtual platforms anytime and anywhere, which increases their understanding and recognition of French culture. Similarly, in China, digital exhibitions not only allow traditional handicrafts to be spread globally, but also allow the younger generation to deepen their understanding and interest in traditional art through interactive digital experiences.

Although digital protection and innovation have achieved certain success in the field of intangible cultural heritage, they still face the challenge of combining technology and culture. In some cases, although the application of digital technology has effectively preserved the external form of cultural heritage, how to better restore cultural connotations and convey cultural emotions through technical means is still an urgent problem to be solved. Traditional culture often carries complex social significance and emotional value, and these deep cultural connotations are difficult to fully present only through digital records. How to maintain the "soul" of culture in the process of digitization so that the spirit and essence of traditional culture can be passed on is a major problem in digital protection.

In addition, the diversified needs of digital inheritance also bring challenges to protection work. The inheritance of intangible cultural heritage is not limited to the recording of text and images, but also includes elements closely related to cultural background, community lifestyle and social structure. In different regions and ethnic groups, there are significant differences in the forms of expression and inheritance of traditional culture. How to adapt the application of digital technology to these diverse needs and ensure that the uniqueness and diversity of each culture are not ignored is another major difficulty faced by digital inheritance. In the process of digitization, some forms of cultural heritage may lose their unique expression style and local characteristics due to their strong regional and community characteristics. How to balance the localization needs of technological protection and cultural inheritance has become a problem that must be faced in the current field of digital cultural protection.

In general, although digital technology provides innovative solutions for the protection and inheritance of intangible cultural heritage, the depth of the combination of technology and culture and the adaptation to diversified needs are still the key to future development. By drawing on successful cases at home and abroad and combining specific cultural backgrounds and traditional characteristics, we can better promote the in-depth development of digital protection and innovation and ensure that

intangible cultural heritage can achieve more efficient and sustainable inheritance and innovation in the digital age.

## **6. Future Prospects for the Protection and Inheritance of Intangible Cultural Heritage in the Digital Age**

The digital era has had previously unheard-of effects on the invention and inheritance of intangible cultural assets due to the ongoing progress in science and technology. The strategy for protecting intangible cultural assets will be significantly altered in the future by the potential use of new technologies like blockchain and artificial intelligence in cultural heritage. Artificial intelligence can help to more accurately digitize and analyze traditional art forms, languages, and handicrafts through deep learning and pattern recognition. AI can automatically restore and repair damaged cultural heritage by analyzing audio and video data, and even restore lost traditional skills by generating models. The use of blockchain technology may also successfully guarantee the immutability and validity of data throughout the cultural heritage digitisation process, offering a fresh safeguard for intangible cultural assets. The blockchain's distributed ledger technology may be used to combat piracy and inappropriate usage, guarantee the authenticity and copyright of digital cultural works, and improve the sustainability of cultural assets.

The integrated application of cloud computing and big data will also play a vital role in the protection of intangible cultural heritage. Through the cloud computing platform, cultural heritage data around the world can be stored and processed in real time, allowing heritage information to be widely shared and shared, while big data can provide more accurate prediction and decision-making support for the protection of cultural heritage. Digital archives of cultural heritage can understand the interests and needs of their audiences through big data analysis, so as to design inheritance plans that are more in line with the needs of the times. At the same time, through the cloud platform, countries and regions can achieve seamless connection and sharing of data, promoting the joint protection and inheritance of intangible cultural heritage around the world.

In the future, the sustainable development of intangible cultural heritage protection will be a systematic project. First of all, the support of policies and regulations will be an important basis for ensuring the digital protection and inheritance of intangible cultural heritage. The government needs to formulate more complete cultural heritage protection laws, encourage innovative digital technology applications, and provide policy support and financial guarantees for related projects. Especially in the context of transnational cooperation and multiculturalism, how to formulate a unified legal framework to protect the interests of all parties and cultural diversity will become a difficult problem for global cultural heritage protection. The balance and sustainability of cultural ecology are also important contents of intangible cultural heritage protection. While promoting digital inheritance, the ecological environment of traditional culture must be taken into account to ensure that digital means will not cause damage to traditional cultural values and social structure. When formulating protection measures, the inherent vitality and social functions of culture should be fully respected, and the authenticity and uniqueness of culture should be maintained while promoting digital inheritance.

The inheritance and innovation of intangible cultural heritage in the digital age also need the promotion of global cooperation and exchanges. Countries have accumulated rich experience in digital protection and cultural inheritance. In the future, the reference and cooperation of international experience will become an important driving force for promoting global cultural heritage protection. Through transnational cooperation, developed and developing countries can share advanced digital protection technologies and methods, learn from each other, and achieve the communication and sharing of technology and experience. International organizations such as UNESCO can play a greater role in promoting cross-border cultural heritage protection projects, building platforms for cultural exchange and cooperation, and promoting the common inheritance and development of cultural heritage worldwide.

Cross-cultural protection and innovative cooperation models are also a major trend in the future protection of intangible cultural heritage. Cultural heritage protection is not just the responsibility of a certain country or region, but a common cultural mission worldwide. Heritage protection experiences under different cultural backgrounds can be exchanged and complemented through cooperation models. In the future, cross-cultural cooperation will be more realized through digital platforms and online cooperation tools. Countries can jointly plan and implement cross-cultural intangible cultural heritage protection projects. Through innovative cooperation models, they can not only protect the uniqueness of cultural heritage, but also promote dialogue and understanding between different cultures, forming a more diverse and inclusive cultural protection system.

All things considered, the digital era has presented new chances for the preservation and transfer of intangible cultural assets, but it has also brought with it difficulties. The preservation and transfer of intangible cultural heritage will be more accurate, creative, and sustainable in the future due to the ongoing development of new technologies and the expansion of international collaboration and exchanges. The passing down of cultural heritage in the era of globalisation and digitisation is not just a continuation of the past but also an innovation and source of knowledge for the future.

## **7. Conclusion**

We may derive some fundamental conclusions from the study of intangible cultural heritage innovation and inheritance in the digital era. First, digital technology encourages the greater distribution of intangible cultural heritage and offers a creative avenue for its preservation. Traditional cultural heritage forms, such as art performances, folk festivals, and handicrafts, can be preserved and displayed by digital means, providing a more convenient and immersive cultural experience for global audiences. Through emerging technologies such as digital platforms, virtual reality, cloud computing, and big data, intangible cultural heritage can not only cross national boundaries in space, but also break through historical limitations in time, so that traditional culture can be preserved for a longer time and inherited more widely. At the same time, while promoting cultural innovation, digital technology has also brought about a rethinking and creation of traditional cultural expressions and dissemination methods, opening up a new direction for the future development of intangible cultural heritage.

However, the protection and inheritance of intangible cultural heritage in the digital age still faces some challenges and problems. How to find a balance between protecting the authenticity of culture and the need for innovation, how to better inherit the deep connotation of culture through technical means, and how to deal with the adaptability problems brought about by the rapid development of technology are still urgent problems to be solved. For future research, we can expect a deeper integration of technology and culture. In the future protection of intangible cultural heritage, technology is not only an auxiliary tool, but also a part of cultural expression and innovation. With the development of technologies such as artificial intelligence, blockchain, and virtual reality, we have reason to believe that these technologies will provide a more accurate and sustainable way of protecting cultural heritage.

The future protection of intangible cultural heritage requires cooperation in multiple fields. Cultural protection is not just work in the cultural field, it involves collaborative cooperation in multiple fields such as education, science and technology, law, and business. Only through interdisciplinary and cross-field cooperation can we ensure that the protection and innovation of cultural heritage in the digital age can achieve more comprehensive and diverse goals. With the deepening of the process of globalization, cultural cooperation between different countries and regions will become more important, and cross-cultural cooperation models will become an important force in promoting the protection of global intangible cultural heritage. With the help of international platforms and cooperation mechanisms, countries can share experiences, exchange technologies, jointly respond to the challenges brought by the digital age, and promote the innovative protection and inheritance of cultural heritage.

In summary, the digital era has raised the bar for intangible cultural heritage innovation and conservation while also presenting a wide range of possibilities. With the aid of technology, intangible cultural heritage innovation and inheritance will eventually be more closely aligned with contemporary society's demands, giving traditional culture a fresh lease of life in the face of globalisation. Driven by technology, policies and cooperation, intangible cultural heritage will usher in a brighter development prospect in the digital age.

## References

- [1] Feng, H. (2024, December). The application of digital technology in the protection and inheritance of intangible cultural heritage. In *Proceeding of the International Conference on Arts and Humanities* (Vol. 11, No. 1, pp. 1-13).
- [2] Wei, W. A. N. G., & Xin, X. U. (2024). Transformation and Development of Intangible Cultural Heritage through Technology. *Journal of Library & Information Science in Agriculture*, 36(1).
- [3] Xiong, Q., Luo, Z., Bi, W., Zeng, Z., Wen, Z., & Lin, W. (2025). Innovative Protection and Inheritance of Cultural Heritage in the Digital Age.
- [4] Yu, B., Sun, J., Wang, Z., Jin, S., & Bai, P. (2024). Digital Preservation, Inheritance, and Innovative Development of Intangible Cultural Heritage from the Perspective of Metaverse. *Lecture Notes in Education Psychology and Public Media*, 62, 1-6.
- [5] Juan, Z. L., & Ramli, S. (2024). Inheritance And Innovation of Lingnan Intangible Cultural Heritage: Application Exploration of Information Visualization. *Asian Journal of Research in Education and Social Sciences*, 6(2), 759-767.
- [6] Ning, W. (2024). Innovative frameworks for protecting intangible cultural heritage using advanced multimedia technology drawing on digital twins and 3D modeling. *Intelligent Decision Technologies*, 18724981241297204.
- [7] Stoyanova, P. (2024). Digital Cultural Heritage as a Strategic Resource for Innovations. *Стратегии на образователната и научната политика*, 32(1s), 108-115.
- [8] Cao, H. (2025). Application of Artificial Intelligence in the Digital Protection and Inheritance of Intangible Cultural Heritage. *Studies in Social Science & Humanities*, 4(1), 7-12.
- [9] Ma, Z., & Guo, Y. (2024). Leveraging intangible cultural heritage resources for advancing China's knowledge-based economy. *Journal of the knowledge economy*, 15(3), 12946-12978.
- [10] Zhao, J. (2024). Digital Protection and Inheritance Path of Intangible Cultural Heritage based on Image Processing Algorithm. *Scalable Computing: Practice and Experience*, 25(6), 4720-4728.
- [11] Liu, M. (2024). Digital Inheritance and Protection of Shandong Intangible Cultural Heritage—Taking Taishan Shadow Puppetry as an Example. *Academic Journal of Humanities & Social Sciences*, 7(1), 24-29.