Research on the deep integration and development of "artificial intelligence+cultural industry" in China

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Abstract: With the rapid development of technology, artificial intelligence (AI) has gradually integrated into every aspect of people's lives and has formed a deeper integration with various industries. Among them, as an important carrier of inheritance and innovation, the deep integration and development of the cultural industry and artificial intelligence have not only brought revolutionary changes to the cultural industry, but also endowed it with more profound significance. Based on this, this article briefly analyzes the significance of the deep integration of "artificial intelligence+cultural industry" in China, and conducts in-depth exploration of the current situation of the deep integration development of "artificial intelligence+cultural industry". It proposes effective strategies to promote the deep integration development of "artificial intelligence+cultural industry" in China for reference.

Key words: artificial intelligence; cultural industry; deep fusion; development

1 Introduction

The development of information technology and intelligent technology has had a huge impact on human society and has gradually become a barometer of the technological revolution in human society. *The New Generation Artificial Intelligence Development Plan* initiated by the State Council in 2017 pointed out that "by 2020, the overall technology and application of artificial intelligence will synchronize with the world's advanced level, the artificial intelligence industry will become a new important economic growth point, and the application of artificial intelligence technology will become a new way to improve people's livelihoods". In addition, the 13th Five Year Plan also regards artificial intelligence as an important part of the development of emerging industries. With the increasing status of the cultural industry in the development of the national economy, the deep integration of artificial intelligence and the cultural industry is urgent. This is conducive to the upgrading of traditional cultural industries, and artificial intelligence technology also provides strong technical support for promoting the cultural industry to become a pillar industry in China.

2 The significance of the deep integration of "artificial intelligence+cultural industry" in China

2.1 Promoting cultural innovation and dissemination

Big data analysis, machine learning and other technologies have become the main manifestations of artificial intelligence, providing a massive amount of creative inspiration and resources for the cultural industry. The deep

integration of the two not only accelerates the pace of cultural innovation, but also provides effective technical support for the diversified and personalized development of cultural products. On this basis, with the help of digital platforms such as AR, VR, and social apps, the dissemination speed of multiculturalism has been greatly accelerated. More excellent cultural works can quickly enter the public's vision, cater to the general public, and effectively enhance cultural influence [1].

2.2 Improving the production efficiency of the cultural industry

Due to factors such as human and material resources, the production efficiency of traditional cultural industries is too low to keep up with the actual needs of the public. The deep integration of "artificial intelligence+cultural industry" greatly improves the efficiency of cultural production. By introducing artificial intelligence technologies such as automated editing and intelligent typesetting, production costs are reduced while injecting new vitality into the development of the cultural industry.

2.3 Meeting diverse consumer needs

With the advent of the information age, people's demand for cultural products is gradually becoming diversified and personalized. Introducing artificial intelligence can accurately capture the personalized needs of the public through deep learning and big data analysis, while providing them with specialized cultural products and services. This not only satisfies the diverse needs of the public, but also promotes market segmentation of the cultural industry and reduces differentiated competition.

2.4 Enhancing cultural confidence and international influence

In the context of the deep integration of artificial intelligence and cultural industry, cultural products in our country have presented more innovative, modern, and international characteristics, greatly enhancing our cultural confidence. In addition, with the support of digitization and intelligence, the international dissemination of Chinese culture has also been effectively supported, and a large number of excellent cultural works have been widely disseminated around the world, effectively enhancing China's international influence.

3 The problems in the deep integration and development of "artificial intelligence+cultural industry"in China

3.1 Technical bottlenecks

In recent years, China's artificial intelligence technology has made significant progress, but there are still problems in areas involving complex emotions, creativity, and aesthetic judgment, and the ability of AI needs to be improved. Many works in the cultural industry require high levels of creativity and deep emotional investment, and the technological bottleneck of artificial intelligence has prevented it from achieving deep integration with the cultural industry [2].

3.2 Problems with data privacy and security

In the process of deep integration of artificial intelligence and cultural industry, it is necessary to vigorously collect and use data, which also include a large amount of personal privacy information. The security and privacy of this part of data require security management, and current technology cannot fully prevent data leakage and abuse.

3.3 Conflicts between culture and values

There is an inherent contradiction between the objectivity of artificial intelligence technology itself and the emotional and creative nature of the cultural industry. At the same time, artificial intelligence has limitations in understanding and inheriting cultural traditions. The cultural works it creates lack humanistic care and depth, and cannot accurately capture and express the deep meanings of certain cultural elements. This seriously affects the innovation and development of the cultural industry.

3.4 Imperfect regulations and policies

The deep integration of artificial intelligence and cultural industry is becoming increasingly widespread, but it has also led to many problems of data abuse and copyright infringement. The root cause of these unqualified behaviors is that relevant laws and policies in China are not yet perfect, and the healthy development of AI in the cultural industry has not been effectively guaranteed.

4 Effective strategies for promoting the deep integration and development of "artificial intelligence+cultural industry" in China

4.1 Improving market mechanism and leveraging market role

As an important means of resource allocation, market mechanisms can promote technological innovation, optimize industrial structure, and thereby enhance economic benefits. In the process of deep integration and development of "artificial intelligence+cultural industry", in order to improve market mechanisms, it is necessary to establish sound market rules to ensure fair competition and mobilize the innovative vitality of market entities. In addition, it is necessary to leverage the regulatory role of market mechanisms to guide the flow of capital, talent, and other elements towards the integration of artificial intelligence and cultural industries, gradually forming a group of highly competitive artificial intelligence cultural enterprises. By improving the market mechanism, it will effectively enhance the cultural demand of the public, form a diversified cultural consumption market, and create a broader market space for the deep integration and development of "artificial intelligence+cultural industry".

4.2 Improving the quality of practitioners and cultivating versatile talents

With the deep integration and development of "artificial intelligence+cultural industry" in China, the demand for interdisciplinary knowledge and technology composite talents is increasing. Such talents need to possess both profound knowledge of cultural industries and basic knowledge as well as skills in artificial intelligence technology. Therefore, in response to such phenomena, it is necessary to strengthen relevant education and training, enhance the comprehensive literacy of practitioners, and cultivate compound talents with equal emphasis on culture and skills. In addition, it is also possible to encourage cross-border cooperation between the cultural industry and the field of artificial intelligence, through practical projects, exchange and cooperation, to achieve knowledge sharing and experience exchange among talents, thereby cultivating the innovation ability of the entire industry, effectively enhancing its competitiveness, and providing a solid talent guarantee for the deep integration and development of "artificial intelligence+cultural industry".

4.3 Strengthening policy guidance and improving institutional regulations

In promoting the deep integration and development of "artificial intelligence+cultural industry", policy guidance and institutional norms play a crucial role. In response to the problems and challenges in the current integration process of artificial intelligence and cultural industry, the government should introduce corresponding policy measures, clarify development direction and goals, and provide financial, tax, talent and other support. At the same time, it is necessary to improve relevant regulations and systems to ensure that the application of artificial intelligence technology in the cultural industry complies with laws and regulations, and protect intellectual property and consumer rights. In the process of strengthening policy guidance and institutional regulation, a favorable external environment can be created for the deep integration and development of "artificial intelligence+cultural industry", thereby promoting the healthy, orderly, and sustainable development of the industry.

4.4 Guiding and encouraging technological innovation, with a focus on project implementation

As the core driving force for promoting the deep integration of artificial intelligence and cultural industry, technological innovation is the most important link. The government and enterprises should increase their research and investment in artificial intelligence technology, guide teams and individuals to make technological breakthroughs, and

focus on content creation, intelligent interaction, and other fields. In addition, attention should be paid to the actual implementation of the project, so that technological innovation can be maximally transformed into actual productivity. During the process, a special fund will be established to provide tax incentives, thereby supporting potential projects to move from the research and development stage to the market and achieve commercial operation. This will enhance the overall technological level of China's cultural industry, promote the widespread application of artificial intelligence technology in the cultural industry, and inject a continuous stream of innovative vitality into deep integration development.

5 Conclusion

The deep integration of artificial intelligence and cultural industry in China has not only brought revolutionary changes to the cultural industry, but also injected new impetus into the prosperity and development of Chinese culture, with broad prospects and enormous potential. However, there are still some problems and challenges in practical applications. Only with the joint efforts of the government, enterprises, and all sectors of society to strengthen technological research and application, can we promote the deep integration and development of "artificial intelligence+cultural industry" and achieve more significant results, promoting the prosperous development of the cultural industry.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

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