

# The Construction of Cultural and Creative Industry Policy Ecosystem Based on Big Data Platform

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**Abstract.** With the arrival of 5G era, a variety of new technologies emerge in an endless stream. With the Internet and computer as technologies, multiple types of technical means are extended, such as cloud computing, big data technology, etc. The development of big data technology has brought new opportunities and turning points to more fields. Cultural and creative industry is a newly emerging industrial culture in recent years. It is a new industry centered on creativity born under the background of economic globalization. It covers a wide range of areas, including film and television, audio, performance, environmental art and so on. Due to the wide scope of the industry, the previous development mode has been unable to adapt to its changes, and it is urgent to find a new platform to carry the development power of the cultural and creative industry. Under the background of big data, this paper introduces how to seek and build a policy ecosystem of cultural and creative industry based on big data platform, and makes a specific analysis from the aspects of problems existing in the construction of the policy ecosystem of cultural and creative industry based on big data platform, construction strategies and so on.

## 1 Introduction

With the mature of computer technology, in recent years, and studies the analysis data and data mining technology of data, and the construction of big data platform has been at the top of the research status, and the value of big data mining also has become a development update other areas and the one of an important means of the industry, to find the people to the naked eye can't find the data value, promote the development of the industry, cultural and creative industry policy ecosystem is also an emerging industry <sup>[1]</sup>. Driven by the characteristics and advantages of big data, it has great research value and practical significance, laying a solid foundation for the future development of cultural and creative industry.

The cultural and creative industry ecosystem is a dynamic system composed of creative producers, consumers, and their political, economic, and cultural environments within a certain time and space range. The ecosystem of cultural and creative industry policies ensures the formation of an organic whole with self-regulation functions and symbiotic relationships in the cultural and creative industry. In the context of big data, the formulation of cultural and creative industry policies should fully utilize data to analyze consumer behavior and produce marketable products; By utilizing data to predict industry development trends, mining hidden information, and conducting precise marketing, we aim to save costs and improve efficiency by integrating cultural creativity with industry creativity, achieving business model innovation, and injecting new thinking.

The common problems in the current cultural and creative industries include low level of creativity, lagging data platforms, low data value, and low popularity, as well as many shortcomings. The addition of big data can help them overcome and eliminate many problems, and ensure the orderly operation of the creative industry policy ecosystem., and figure 1 shows the specific big data platform of relevant technology and construction model, with its characteristics, build an ecosystem of cultural and creative industries based on big data platform to lay a foundation for subsequent analysis.

Its technical advantages combined with the characteristics of the cultural industry in the past, the original development experience and accumulated historical resources of the cultural creative industry have a great possibility of innovation and development, and the two are deeply integrated to improve the relevant innovation system.

In addition, China's cultural and creative industry currently covers a wide range, and a considerable part of the field has not completed the construction of the information system. Therefore, in this context, the study on the construction of the ecosystem of cultural and creative industry based on the big data platform has great research value.

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**Fig. 1** Technologies related to big data

## **2 Problems existing in the construction of cultural and creative industry policy ecosystem based on big data platform**

### **2.1.The realistic dilemma of constructing cultural and creative industry policy ecosystem based on big data platform**

Based on the PEST theory, analyzing the environment of the cultural and creative industry ecosystem from four dimensions of politics, economy, society, and technology, it can be seen that the environment faced by China's cultural and creative industry ecosystem is gradually improving. In terms of political environment, China has introduced a series of relevant policies, laws, and regulations. Since 2000, the "cultural industry" was first included in the central document, and in 2002, it was first included in the report of the 16th National Congress. After ten years of exploration, in 2012, the sixth part of the report of the 18th National Congress specifically discussed cultural development and cultural power. A series of reports and resolutions have provided a solid political foundation for the development of the cultural and creative industry. In terms of economic environment, the emergence of cultural creative economy has well solved new problems such as the adjustment of industrial structure and urban renewal. At the same time, the country has introduced measures such as the cultural industry doubling plan, cultural financial support policies, cultural discounts, and export subsidies to further optimize the ecological environment of the cultural and creative industries. In terms of social environment, various regions continuously explore cultural resources, improve the education and consumption levels of the people, and provide a good social environment for the cultural and creative industries. In terms of technological environment, the constantly emerging new technologies have provided technical support for the cultural and creative industries.

However, there are still many difficulties in building a policy ecosystem for cultural and creative industries based on big data platforms. First of all, the development of cultural creative industry in our China still continue to use previous track, failed to keep pace with The Times, era and the development of science and technology, to driving the development of most areas in China's, realize

the qualitative leap, but the cultural creative industries in the technology of low, innovation strength is relatively low, lacking the support of science and technology, unable to grasp the development of the basic elements, Seriously affect the ecological development of cultural and creative industries; Second, do not pursue the core of cultural creative industry innovation, the introduction of foreign technology blindly, not combined with its own development situation and the development trend of China's market, the introduction of the technology does not suit oneself, could not reach the highest level of innovation requirements, that involves the related industries, price and cost is high; Finally, the financial system of cultural and creative industries is not sound<sup>[2]</sup>.

As early as early as 2010, the Ministry of Culture launched the "Public Service Platform for Investment and Financing in the Cultural Industry of the Ministry of Culture". This platform relies on the China Cultural Industry Network to effectively integrate various capital market resources, aiming to build a collection of government guidance policies for external release, cultural industry investment and financing information exchange, online financial business processing, financial product issuance, project consulting and investment, product display and trading A comprehensive public service platform that integrates various cultural industry investment and financing services such as industry knowledge popularization and training. In March 2011, nine departments including the Central Propaganda Department, the People's Bank of China, the Ministry of Finance, and the Ministry of Culture jointly issued the "Guiding Opinions on Financial Support for the Revitalization, Development, and Prosperity of the Cultural Industry", which serves as a supporting document for the "Cultural Industry Revitalization Plan" and is also the first policy document for the integration of the cultural industry and the financial industry. It deeply explores the mechanism of "departmental bank cooperation" with banking financial institutions. Although China has made remarkable achievements in the development of economic globalization, there are still insufficient funds invested in the cultural and creative industry in China. The financial system of the cultural and creative industry is not perfect, and the scale of funds is small, so it cannot play a significant role in the capital flow in the development.

### **2.2.Practical problems existing in the construction of cultural and creative industry policy ecosystem based on big data platform**

So far, there are many practical problems in the development of cultural industry. The following aspects introduce the practical problems in China's cultural and creative industry: on the one hand, on the computer technology and security problems in the technology of data is always a difficulty in the development of the world, this will directly cause our country culture creative industry the relevant person in charge of the technology of the computer program and big data technology holds a conservative attitude, for the large

amount of technology has taken a wait-and-see attitude, lead to the development of cultural creative industries in China lag; cultural creative industry in our country, on the other hand, never reaches a certain height, the development of enterprises to accumulate strength is insufficient, not enough to support the industry's innovation and development, to innovation, it'll take a lot of money and experience, early once the enterprise strength is insufficient, can lead to the entire industry in the process of collapse<sup>[3]</sup>.The cultural and creative industry has the characteristics and reasons of high risk, light assets, unpredictable returns, and poor information between the cultural industry and the capital market. For a long time, financing difficulties have been a bottleneck that hinders the rapid development of the cultural industry.Finally, without fully considering the historical resources and elements of the combination of new era, the history of the resources was left and summarizing the predecessors' old elements, and the element of the development of the new era of age collided with it, may result in a combination of both do not meet the requirements, or historical elements breath is overweight, can't achieve the goal of innovation, or new age breath is overweight, loss of the essence of historical resources, the lack of cultural inheritance and dissemination.

### **2.3.Reflections on the construction of cultural and creative industry policy ecosystem based on big data platform**

Richard Florida believes that technology, tolerance and talent are the troika of creative economy development. Big data is technology, and the application and development of technology cannot do without talent, nor can it do without a tolerant social environment that seeks common ground while reserving differences. Technology, tolerance, and talent all need to be achieved through education. Therefore, the construction of a comprehensive ecological industrial chain based on the talent cultivation system is the key to industrial development and talent cultivation.At present, our country's big data technology improve and perfect the talent cultivation system is not enough, and in the cultural creative industry based on big data platform field of various industries need to develop different industry technical mastery of the personnel training goals, so far, involved in the cultivation of the big data technology university curriculum pattern machine-made, serious homogeneity, no actual consider loopholes existing in the current industry development, and the characteristics of the industry, in college students after graduation, into the areas of culture creative industry practices, can not use knowledge to the industry upgrading high and dry, or continue to use the old development model, innovation mechanism is still not updated, the development is still lagging.

### **2.4.Root analysis of problems in the construction of cultural and creative industry policy ecosystem based on big data platform**

At First, in view of the cultural creative industry unreasonable situation of industrial development planning, development of its need to develop a detailed development plan, investigate its developing background and current situation of the development of such issues, formulate a reasonable plan, although our country's creative industry is the development of science and technology advantages, but there is still no consideration of the development of basic requirements. There is no reasonable planning and analysis of their own status quo and the organic integration of technology.

Second, the current prevalence of shanzhai, the government's efforts to crack down on the insufficient. With the development of computer technology in the field of cultural creativity, plagiarism has become a big taboo in the development of cultural industry <sup>[4-5]</sup>. People's thoughts of peace and happiness are heavy. People do not seek for new creative thinking, but copy others' works, which leads to a serious tendency of homogenization in cultural and creative industry.

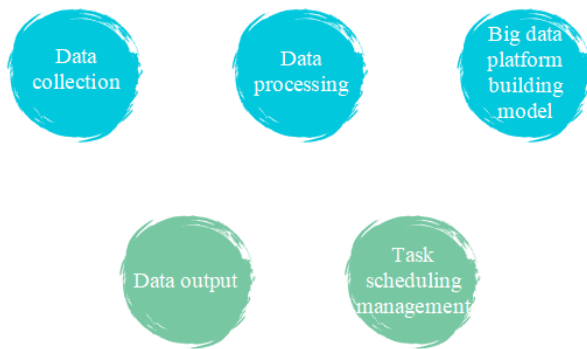
Finally, the current development mode of cultural creativity industry is not mature. In new technologies into the limelight at the same time, also are exploring the combination of new technology industry development, the development of the model is not mature, the accumulation of development experience is also at groping state, in the development of cultural creative industry, its operating model and operating platform in the market proportion of small, lead to the development of the form and development of the model are very immature in form.

## **3 Strategies for constructing cultural and creative industry policy ecosystem based on big data platform**

### **3.1.Increase the proportion of big data technology in the cultural and creative industry policy ecosystem**

China's big data technology has low cost, fast data mining, data value higher advantage, cultural creative industry is more traditional culture industry in our country, to build a new type of cultural creative industry policy of ecological system, need on the basis of the original development, to join the emerging technology, and technical advantage of big data will broaden the cultural creative industry's further development, more flexible to drive the development of the industry, industrial transformation and upgrading and the sustainable development of cultural and creative industries <sup>[6-8]</sup>. Culture creative industry characteristics such as wide coverage, means that people lurking unseen data in industry value, through the development of human and intervention is difficult to find greater value to promote the rapid development of cultural industry, and technical advantage of big data is just to solve this problem, through the analysis of vast amounts of data, mining the data value, and the new development pattern, adapt to the development of The Times and promote the

ecological development of cultural and creative industries. Figure 2 shows the model construction of big data in detail.



**Fig. 2.**Big data platform construction model

### 3.2. Build a policy ecosystem system for cultural and creative industries based on big data platform

First, improve the talent training system of cultural and creative industries. In order to develop the industry, it is necessary to cultivate talents that adapt to the characteristics of the industry to promote the fundamental development of the industry. Talent training is to reserve professional talents for the cultural and creative industry [9-10]. Only by understanding the characteristics and basic conditions of the industry can a reasonable development mode of the cultural and creative industry be formulated according to the basic conditions. Second, improve the relevant laws and regulations of the cultural and creative industry and put an end to plagiarism. Strengthen the crackdown, eliminate plagiarism from the root cause, realize new creativity and innovation, avoid homogenization and other problems, and give play to the differences of the cultural industry. Thirdly, the development of cultural and creative industries should be rationally planned. Based on the market situation and the international background, an ecological development system suitable for the cultural industry should be formulated. Before the innovative development, preliminary research and analysis should be carried out, and development plans should be formulated based on relevant conditions to avoid new development difficulties caused by the introduction of the technological advantages of big data. Fourth, improve the financial system of China's cultural and creative industries. Increase capital investment in the cultural and creative industry, establish a stable and efficient capital system for the cultural and creative industry, and increase the scale of capital to provide powerful power support for the emergence of new development problems.

## 4 Conclusion

With the development of computer technology and big data, it has been an inevitable trend for the cultural and

creative industry to introduce new technologies. However, there are also many problems in the development of cultural and creative industry. This paper mainly analyzes the cultural creative industry based on big data platform policy problems, the problems in the process of ecosystem building root knot analysis as well as build strategy and model building, etc., from various aspects to introduce the cultural creative industry, the necessity of introduction of big data technology and computer technology, has been clear about the technology of data in the cultural industry of the important driving force.

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