# Analysis on the Development Countermeasure of Cultural and Creative Industry under the View of Big Data

Qunping Chen

Student Pursuing a PhD Degree from Dalian University of Technology, Dalian, China

**Abstract:** As an emerging industry, cultural and creative industries are increasingly showing the importance of their development. With the help of big data platforms, it is necessary to study the development of cultural and creative industries. Based on the new perspective of big data theory, the article analyzes the role of big data in promoting the development of cultural and creative industries, and analyzes the problems existing in the development of cultural and creative industries under the perspective of big data. The countermeasures for the development of cultural and creative industries under the view of big data are proposed, which has certain forward-looking and practical significance.

**Keywords:** Big data; Cultural and creative industry; Development; Countermeasure

## 1. Introduction

With the development of technologies such as the Internet, the Internet of Things, and cloud computing, the traces of human activities have been transformed into various types of data, and the scale of data has increased. Capturing, recording, storing, analyzing and utilizing these massive data can present behavioral patterns of different groups of people and have broad application prospects. This technology has broken through the fields of finance, securities, IT, etc., and has been gradually applied to the field of cultural and creative industries. The advent of the era of big data provides an opportunity to comprehensively innovate the creative content, production methods and channels of cultural and creative products.

## 2. Big Data and Its Technical Overview

### 2.1. The definition of big data and its principle

The so-called big data era, in a nutshell, is an era of mass production, sharing and application of data. Its rise has a profound realistic foundation. Taking China as an example, as of December 2014, the number of Internet users in China reached 649 million, and the Internet penetration rate was 47.9%. Hundreds of billions of data are generated every day. These network data have undergone a process of evolution from recording, analysis to utilization, and have become a new economic asset. Most of the starting points for the definition of big data are based on their characteristics, that is, big data must be described in terms of volume, diversity, and velocity. In which, the definition of 3V is the most typical.

### 2.2. Type of big data

In general, it is data that is stored in a database and can be implemented via the structure of a two-dimensional table - structured data; In addition, there is a type of semi-structured data that is content-based and can be searched for including email and office processing documents and information stored on the web; Finally, unstructured data containing information that can be perceived. The analysis results obtained by the company are closely related to the comprehensiveness of the analyzed data. Enterprises will integrate their business details through big data analysis to gain new insights.

### 2.3. Technical characteristics of big data

Corresponding to the 3V characteristics of big data, big data technology is a collective term for a series of technologies that quickly obtain information from various types of massive data. It mainly includes big data collection, preprocessing, storage and management, analysis and mining, presentation and application (big data retrieval, visualization, application security). First, cloud computing technology is fundamental to supporting big data for industrial practice. Second, distributed processing technology is a direct means of big data for industrial practice. Many computers connected by communication networks are in different locations, have different data, and have different functions. Only when they are placed in a distributed processing system can information processing tasks be completed in a consistent, standardized and orderly manner. Finally, storage technology is the back guarantee for big data for industrial practice. If big data analysis technology is in front of the

fire line, big data storage technology is the rear ammunition depot, the two complement each other.

## 3. The Role of Big Data in Promoting Cultural and Creative Industries

### 3.1. Quickly and effectively find cultural creativity points

Big data can help us analyze and process many data, whether it is Chinese or the world, historical or modern. As long as there is a huge amount of information, we can use this information to analyze the cultural needs of a certain period of time, people in a certain area, and cultural consumption. It points to a fast and effective path for the creative design of culture.

### 3.2. Analysis of contemporary audience needs

In the era of big data, the first way we need to change is to not rely on random sampling, but to analyze large amounts of data. Big data can help us determine what the audience needs more. For example, the shooting of the American online drama TV series "House of Cards" launched by the streaming media website Netflix is the product of big data application. Through the information on the user's browsing, watching videos, comments and other information, the website analyzes and predicts the information through big data, and invests in the "House of Cards". The male and female actors are selected according to the information, the accuracy of big data analysis and prediction determines the success of this TV series.

### 3.3. Optimization of the operation mode of cultural and creative industries

Due to the information superiority of big data, it can help us better allocate resources for cultural and creative industries, which provides a better platform for cultural and creative product design. Under the guidance of big data, all kinds of resources are efficiently market-oriented in different fields, and cross-border derivation becomes the norm. The design of cultural products is no longer a single fight. It can be combined with the development of many fields such as literature, film and television, and games to form a larger industrial chain. The single mode of operation of the cultural and creative industries will be broken, and replaced by the broad prospects of integration of various fields.

### 3.4. Open the door to success for Makerspace

In 2015, China proposed the "Makerspace", aiming to build a new platform for entrepreneurial innovation. Since the group targeted by Makerspace is the masses, it is indeed difficult to allocate resources, but the application of big data can help alleviate this problem. Big data information often comes from the Internet, and information can be obtained through certain channels. Of course, the information channel is not completely open. However, compared with the past, the way to obtain such information still saves a lot of manpower, material resources and financial resources, which undoubtedly provides the possibility of the rapid development of "Makerspace".

## 4. Problems in the Development of Cultural and Creative Industries in the Era of Big Data

### 4.1. Weak sense of self-protection awareness of intellectual property rights, insufficient intellectual property protection

Most Chinese people have a weak sense of self-protection of intellectual property rights in cultural and creative industries. Some people do not even know what intellectual property rights are in cultural and creative industries, and they have low awareness of intellectual property rights in cultural and creative industries. Some people lack respect for the intellectual property rights of others and do not cherish the fruits of others' labor. Vicious competition, plagiarism, and similarity have led to low internal competitiveness of cultural and creative enterprises. The state has not introduced and improved the relevant intellectual property legal system, and the protection of intellectual property rights in cultural and creative industries is not strong enough, which let some lawbreakers break the law.

### 4.2. Insufficient effectiveness of industrial guidance policies from the perspective of R&D expenditure

In China's proportion of industrial R&D expenditure and GDP, it can be seen that the competent authorities of the industry use policy levers to promote the effectiveness of industrial development. In 2016, the Ministry of Finance made major adjustments to the special fund management model for cultural industry development. First, it arranged for 1 billion yuan to participate in 14 national outstanding cultural industry funds, and improved the funding model of the financial participation fund; Second, the central government invested 560 million yuan to drive the supporting funds of 4.68 billion yuan to explore the credit investment support program. Due to the lack of matching statistics on the total amount of R&D investment of cultural and creative enterprises, the R&D investment situation of enterprises is compared and analyzed: In 2015, China's R&D expenditure was 1,419.988 billion yuan, accounting for 2% of GDP. From the data logic, after comparing the total amount of China's cultural and creative industry support with the total R&D investment of enterprises, the coefficient obtained is the spur coefficient of fiscal funds used for industrial development guidance. This coefficient can be used as one of

the objective evaluation criteria for the effectiveness of policy formulation and implementation.

### 4.3. The backwardness of the construction of urban cultural and creative industry data platform under the background of big data

In the era of big data, some new technologies, such as the Internet and big data, have merged with the production service industry and cultural and creative industries to become an innovation and become a new driving force for economic growth and industrial development. From the perspective of the cultural and creative industries themselves, the construction of the cultural industry platform is very backward, and cloud computing technology and big data technology are not effectively utilized. "Internet +" does not only refer to the Internet mobile, widespread and applied in specific areas, but also adds knowledge such as knowledge and data. Such innovations are everywhere. These innovations are an open and collaborative innovation that adopts a new way of working, living and producing, and is the "new normal" that guides innovation-driven development. However, due to the backward construction of the cultural and creative industry platform, the sharing of resources cannot be realized, and the cost of expenses has increased, which has hindered the innovation between each other and delayed the upgrading of the cultural and creative industries.

## 5. Countermeasures for the Development of Cultural and Creative Industries under the Background of Big Data

### 5.1. Improvement of the investment and financing channel system

In March 2011, several government departments, including the Ministry of Culture, jointly issued opinions on supporting the revitalization and development of cultural and creative industries to assist in the revitalization of cultural and creative industries. It is the first cultural and creative industry that combines the policy documents of the financial industry to explore in-depth cooperation with some financial institutions such as banks. It is very important that some local governments have introduced public services for investment and financing in cultural and creative industries, making the cultural and creative industries more successful in financial investment. On the one hand, it collects relevant data, grasps the industry dynamics with data, and understands the needs including financing; On the other hand, it is also possible to integrate related industries, and at the same time, it can better use the development model of Internet + finance to broaden the way of industrial development.

### 5.2. Building a big data platform

The author believes that the basic value refinement of the cultural and creative industry lies in the compatibility of content creativity and marketing promotion. Only by ensuring the full use of resources in all links of the industrial chain can we form a basic support. Therefore, big data promotes the development of cultural and creative industries, it is necessary to build a big data platform, giving platform product consulting, human resources services, financial services network information and infrastructure functions. After the functions of the entire platform, we pursue the content creation and marketing promotion of the industry, and finally achieve the integration of resources in the industry.

### 5.3. Strengthening the protection of copyright, patent and trademark rights of cultural and creative industries in China

China is not only a cultural creative worker who is not aware of intellectual property rights, and the cultural and creative industries are not satisfied with their protection awareness and rights protection. Therefore, it is very important to strengthen the protection of copyright in China's cultural and creative industries, the protection of patent rights and the protection of trademark rights. With these protections, creative workers can safely and confidently use their imagination, without worrying that their work will be copied or used to do bad things, to protect the work of creative workers.

### 5.4. Strengthening cooperation with network platforms and e-commerce

Governments or civil society organizations can strengthen their alliances with online platforms and e-commerce to gain access to their big data information. On this basis, the information base of the government or non-governmental organizations will be established, which will make the construction of the information base platform faster, more comprehensive and more authoritative. The information base thus established can help the creative enterprises and individuals to start their own businesses in a targeted manner, so that they can quickly and directly understand the market and needs, and achieve the effect with half the effort.

### 5.5. Big data technology update

Big data is not limited to a certain kind of technology. With the development of information technology and the promotion of demand by the cultural and creative industries, it is necessary to update big data technology in a timely manner. After entering the era of big data, the author suggests that we are good at obtaining user behavior data through the Internet. After mining and analyzing massive amounts of data, based on the user's perspective, acquiring cultural creativity and the probability of its formation, it is able to closely follow the psychologi-

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cal needs of users. From the perspective of innovation, we conduct reasonable new media marketing and launch creative products that meet the target users. Of course, we can't rely too much on big data analysis technology, but from a dialectical point of view, taking into account the trends and cultural consumption of big data. The cultural and creative products developed in this way can continue to be competitive and avoid the blindness and obscenity of cultural consumption.

## 6. Conclusion

Through research, the article basically clarifies the promotion of big data to cultural and creative industries and its development strategy. However, considering the complexity and variability of the cultural and creative industry development environment, we must closely follow the actual needs of industrial development when using big data to promote the development of cultural and creative industries. The flexibility of the above development strategies can be used to ensure the applicability of these strategies.

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