

The Present Situations and Challenges of Culture and Art Management in the Intelligent Era

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Abstract: Artificial intelligence technology's quick development has had a significant impact on social and cultural life. Strengthening the management of culture and art is a crucial undertaking because it is a key component of the cultural industry's production process. The traditional culture and art market has evolved as a result of intelligent production, dissemination, and management methods, necessitating managers' adaptation to the new model and requirements. Starting from how the intelligent era affects culture and art management, this paper analyses and researches the current situation and challenges facing culture and art management in the intelligent era, and then discusses what managers should do in the intelligent era.

Keywords: artificial intelligence, intelligent age, culture and art management, art

1. Introduction

The fourth industrial revolution is taking place right now, and the quick advancement of artificial intelligence technology has sparked a remarkable worldwide cultural revolution. The strategic deployment of AI is being actively participated in by nations all around the world. Competition in the arts and culture market is significantly intensifying, and traditional arts management practices are unable to meet the ever-changing market demands. The arrival of the Intelligent Era will revolutionise the ecosystem of the cultural industry, integrating technology into the production, dissemination and consumption of cultural products, thereby enhancing their technological content. Revolutionary technological innovation will drive the cultural industry towards a new stage of digital development. Embracing digitalisation and digital transformation has become a common global trend. [1]

Culture has specificity and diversity, and there are many difficulties in management, but when artificial intelligence enters the art and culture management system, it promotes the in-depth integration of the field of culture and art and technology, and brings more possibilities for the development of culture and art, and the efficient allocation of cultural resources helps the construction of society. At the same time, AI's ability to use its real-time updating and deep learning can improve the fairness of decision-making in various cultural and social organisations, predict the development trend of culture and art, help to improve the loopholes at the management level, and provide managers with the ability to effectively utilise the data in order to formulate a new strategic approach. The new cross-cutting field of artificial intelligence technology and culture and art also helps to explore the possibility of integrating culture and art with technology. When confronted with

enormous amounts of information processing, AI also exhibits its better data storage and computation capabilities. The former U.S. President Clinton and President Obama's museum mail volumes were compared by the American Association of Museums; the former's mail volume was within the management capacity of the latter, which required managing more than 1 billion emails; artificial intelligence can manage the number of so-called hit files. In the past, the cultural administration in the research and decision-making will waste a lot of labour costs, layers of declaration and approval process is the need to spend a lot of time costs, and artificial intelligence technology using big data, can greatly improve the efficiency of the work of omitting redundant links, which to a certain extent so that the social public service can achieve the most extensive, most comprehensive, optimal allocation of cultural resources. The arrival of each revolutionary technology will inevitably lead to the deconstruction and reorganisation of the old structure, and a new form of structure will emerge. The use of artificial intelligence in the field of culture and art, better attention to the personalised needs of people for cultural and artistic products, thus improving people's consumption experience and promoting the economic development of the field. The means of dissemination of culture and art in the age of intelligence have become more diversified, and the reduction of production and mobility costs has broken the barrier of spatial distance, while also contributing to the exchange and integration of culture.

2. Management of Culture and Art

As an ideology, culture and art enrich people's spiritual world and enhance cultural self-confidence, in which the role of art managers is like a bridge connecting artists and audiences. The ultimate goal of culture and art management is to satisfy the spiritual and material needs of human beings, and in order to achieve this goal, scientific and reasonable management is particularly important.

As early as the second half of the 20th century, arts management became a specialised academic field and profession. Traditionally arts management has often been thought of as specialising in the management of not-for-profit public arts and cultural organisations. [2] However, with the growth of all types of arts organisations and the increasing need for effective management, arts administrators have begun to recognise the differences that exist between traditional fine arts management and the wider management of culture. Firstly, the drive towards globalisation has led to a diversification of the cultural sphere, with traditional arts management focusing on the preservation, display and sale of works of art, whereas arts and culture management looks at a wider range of social, economic and other factors. Secondly, the concepts of art and culture are gradually blurring, with works of art no longer limited to paintings but encompassing a wide range of art forms, including film, theatre, photography and so on. In addition, more and more non-profit organisations (organisations that do not operate for profit and are often civic, autonomous, voluntary, etc.) are also promoting the development of arts management to arts and culture management, these organisations are usually dedicated to the protection and promotion of local cultural heritage, through the development of culture to promote social communication will be artificially influenced by the arts and culture in order to achieve the desired goals, so as to show the most perfect arts and culture effect.

Simply put, arts management and arts and culture management are two related but different concepts. The goal of arts management is to ensure that arts organisations operate normally, improve their efficiency and develop sustainably. The goal of arts and culture management is to maintain the arts organisation while also focusing on the prosperity, dissemination and social development of culture. The difference between the two is that arts management focuses on the operation of organisations and institutions, while arts and culture management focuses more on the development and operation of the arts and culture ecosystem. [3] For the modern art industry, the above two specialised management and planning, for the sustainable development of the entire art

ecosystem to help, and to promote the dissemination of art and cultural prosperity. These changes and trends show that the field of arts and culture management requires managers to possess in-depth cultural awareness and leadership skills, as well as knowledge in multiple fields of art and culture, and to promote the development of the arts and culture through effective management planning.

3. The Present Situation of Culture and Art Management in the Intelligent Era

3.1. Current Situation

The level of a nation's thought determines how civilized it is. Humans' artistic thinking helps to create a healthy social and cultural environment, which creates a stable atmosphere for scientific advancement. Science and technology are the first productive forces of human growth, but they are not the only ones. The world is in the midst of the torrent of the fourth industrial revolution, which has brought great impact on traditional culture. Specifically manifested in people's cultural life on the way of thinking, the concept of change, culture as an important ideology, its management activities have also quietly transformed. [4]

The conversation and sharing of cultural and artistic items and AI has led to a drastic change in the traditional culture and art business. Artificial intelligence systems are a prominent product in the fourth industrial revolution and support production in many ways. In the sphere of cultural media, the Associated Press and Automated Insights, Inc. cooperated as early as 2014 to employ an automated writing tool to finish a newsletter in minutes and produce articles 10 times more quickly than before. In the Artificial Intelligence Workbook released by the Associated Press in 2017, there are five main categories of technologies that are most frequently applied by AI in journalism, including machine learning, natural language technology processing technology, speech recognition technology, machine vision and robotics [5] Through the deep learning of the machine, it can analyse the reading preferences of the readers and thus achieve the customised push of content, which, to a certain extent, provides a market research. This, to a certain extent, facilitates market researchers, helping them to more quickly obtain the preferences of market customers and the audience groups of different news, and better improve the retention rate of viewers. At the same time, AI can provide a keen insight into changes in the audience's emotional attitudes towards information content and make timely changes to push content for effective market management and marketing.

Additionally, text creation and image creation are both aided by artificial intelligence. Artificial intelligence's involvement in the pre-production of the movie may open up more opportunities for the director throughout the making of the movie. The United States' "Watson" (Watson) artificial intelligence system was introduced in 2016. Fox Film Corporation produced the trailer for "Morgan", through the large number of pre-training in the process of making the trailer. The AI will analyse the scenes, so as to filter out suitable trailer scenes and edit them in a short period of time. Recently an AI team has developed script writing software, using which dynamic subplot scripts are generated instead of traditional hand-drawn subplots. [6] From a business perspective, the help of AI effectively reduces the cost of trial and error in films, and the efficiency of filming is greatly improved. [7] In addition to the box office as the commercial development goal of the film industry, the thoughts and emotions that it wants to express also meet the needs of social and cultural development. Through the analysis of artificial intelligence on box office information, scheduling, the number of moviegoers and other information, the digital portrait of the user to give the optimal publicity strategy.

Similar to how artificial intelligence has stirred up controversy in other fields, art has also been no exception. On October 25, 2018, the New York Christie's auction house held a sale of a piece of art titled "Portrait of Edmond de Bellamy" that ultimately brought in 350,000 dollars. Unlike

traditional paintings, this piece was created by three programmers, making it the first successful auction of an artificial intelligence-created piece in history. Just four years later, another work drawn by AI called “Space Opera House” beat a number of contestants in the category, and one can’t help but ask the question of whether works produced by AI are considered art. Is the author of this work a programmer or a computer?

3.2. Transmutation in the Field of Culture and Art under the Intelligent Era

People’s creative lives have become more varied and rich as a result of the growth of the cultural and art industries in the age of technology. Technology, culture, and people are becoming more and more intertwined, which gives managers greater chances. Having a user attitude is now essential for managers of the arts and culture due to intelligent technology and digital reforms. Managers need to focus on a “user-centric” mentality in order to improve the user experience while arts institutions and cultural organizations use digital platforms and social media to increase their audiences. Both immersive and interactive experiences fall under this category.

The theory of immersion, first proposed in the 1970s, describes a state of intoxication when people participate in an activity, focusing on the situation and filtering out irrelevant perceptions, a state known as the “state of intoxication”. In this state, the individual’s perception of the surrounding environment and awareness is almost entirely focused on the activity itself, and the response to other stimuli and interference is relatively weakened. Immersive experience in the smart era has a very large space for development, and today the field of smart culture shows a high degree of dependence on digital carriers, technology and equipment in the development of the current situation. [8] Museums essay an important part of the culture and art industry, and have recently become popular with the public. Museums use Virtual Reality and Augmented Reality to build virtual visual scenes in the process of array display, using immersive experience to enrich the comprehensive senses of the audience. People can immersively participate in the virtual world, feel the presence and movement of the body, and interact with the virtual environment. This sensation can stimulate people’s perceptual experience, making their perception of the virtual scene more realistic and intuitive, and providing them with more comprehensive, rich and in-depth cognition and experience.

In order to establish user identification, trust and user stickiness in marketing cultural and artistic products, interactive participation with users is crucial. This requires a blend of trust thinking, emotional thinking and higher-order cultural marketing that caters to the user’s way of thinking. [4] By taking advantage of the unique scarcity and special cultural value of museum resources, museums have adopted the business approach of digital content licensing to transform museum IP content into creative products that enter the daily lives of a wide range of users, while giving rise to the museum economy. This way of operation is combined with the interactions of users, providing more opportunities for users to participate and interact, and making cultural and creative products an important carrier connecting museums and the general public. Through interaction with users, museums create more cultural value and provide a new economic model for the sustainable development of museums. The new cultural industry of museums also suggests the transition from offline to online, and managers will give cultural artifacts their emotional value. They will also use storytelling to communicate the fundamental ideas and principles of the products, sparking user resonance and forging an emotional bond with them that will lead to user trust and loyalty. In order to increase user stickiness, managers must afterwards actively contact with users to get feedback. This will allow users to feel as though they have contributed and are a part of the process.

In addition, digital and social media provide arts and cultural institutions with a wider range of publicity and marketing channels, and accurately locate and attract target audiences; the use of digital tools provides institutions with the ability to analyse data, helping managers to optimise the

layout of exhibitions and designate activities that cater to the public's preferences; and digital technology provides arts and cultural creators with new creative tools, helping them to realise innovative and interactive works. Digital technology provides creators with new creative tools to help them realise innovative and interactive works. This requires arts and culture managers to move beyond tradition towards openness and the ability to understand and construct relations of production in an international perspective.

4. Challenges to Arts Management in the Age of Intelligence

Intelligence in the field of culture and the arts in the improvement of management efficiency, along with some new problems. So how should arts managers as a new era respond to this change?

Firstly, AI has changed the structure of the workforce by replacing repetitive and tedious low-skilled jobs, putting pressure on people to find employment. The jobs that have not been replaced place higher demands on workers, meaning that staff need to have more advanced skills to adapt to market demands. At the same time the income gap emerges, new social contradictions and unstable factors will arise. Secondly, the ethical and legal problems faced by AI in the field of culture and art management. In the past, human beings were the only subject of the construction of cultural undertakings, while the emergence of artificial intelligence declares that human beings are no longer the only subject of cultural construction. [9] "The ethics of administration in all human societies requires adherence to the fundamental principle that the exercise of power and decision-making must be determined by an organisation made up of individuals who are also human. Whatever the form of this organisation, this principle is the cornerstone of human social organisation. No non-human entity has ever been able to adjudicate on human behaviour." [10] Artificial intelligence technology is capable of generating and modifying works of art; does such art have its own independent will and the emotions it seeks to express? The same raises the question of copyright: who owns the copyright to AI-generated artworks? How can such technology be reconciled with existing copyright laws?

Every significant shift in the method of production is accompanied by a vibrant cultural life that supports people spiritually and creates new historical and cultural patterns. Culture and art management predates the pre-Qin era and is not a contemporary invention. People need to be more conscious of the significance of managing culture and the arts because traditional Chinese culture has been profoundly influenced by Western philosophy and culture over the years of cultural exchange. Data analysis and market research in the intelligent era has put forward higher requirements for the management of culture and art, through the analysis of data combined with the current situation and needs of the market, effective marketing strategy development. At the same time, we should actively cooperate with science and technology enterprises to broaden the new path of cultural and artistic development, always adhere to the originality and uniqueness of art, and promote the sustainable development of culture and art.

5. Conclusion

The application of artificial intelligence in the culture and art industry is still in the primary stage, but the future development potential and application prospects are vast, and may even exceed our current imagination. In addition to affecting the structure of the cultural industry, changing production methods, and improving production efficiency, the impacts brought about at the same time should not be ignored, and the lack of culture and the problem of product copyrights brought about by over-reliance on intelligence should also be of concern to the public. The application of artificial intelligence will bring more opportunities and challenges to artists, audiences and managers. However, no matter how advanced technology becomes, people will always be unable to

ignore the creativity, originality, and cultural essence of art. Instead of eclipsing human creativity and aesthetic sense, intelligent technology should grow into a potent tool to support artistic innovation and cultural development. In order to deal with the arrival of the intelligent era, long-term sufficient attention, prior judgment, and good planning are required.

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