

New Trends and Industry Impacts of Digital Art Creation Driven by AIGC

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Abstract: In recent years, AIGC technology has made a major breakthrough, deeply integrated into digital art creation and changing the development pattern of the industry. It gives rise to two main trends, the transformation of creative tools towards intelligence and cooperation, making the process simple and stimulating creativity with functions such as natural language interaction; the creative subject is transformed from elite to popular, with more than 70% of creators are non-professionals, promoting the popularization of art. At the industry level, AIGC reconfigures the creative model and the division of labor. A human-machine team has a shorter cycle, a higher degree of creativity. At the same time, it promotes the transformation of talent demand. compound talents are becoming scarce resources.

Keywords: AIGC, digital art creation, intelligent creative tools, multidisciplinary talent

1. Introduction

In recent years, the artificial intelligence technology has entered an explosive development period. As one of the core application branches of AIGC, it has made a major leap from technological research to industrial application and has generated a considerable technological empowerment effect in the field of digital art creation[1]. From the early rule-based simple picture generation to the current architecture-based creation of complex narrative artworks, AIGC technology has continuously reshaped the creation model of digital art through algorithm iterations and data accumulation[2]. In the background of digital transformation all over the world, digital art creation with media integration and the advantage of convenient dissemination has become an important part of the contemporary art environment. AIGC technology deeply integrated with digital art creation has not only produced innovative methods for creation, but also caused changes in the structure of the industry's development. To make a study on these new trends and the new industry that will arise from them both practically and theoretically is important.

2. New Trends in digital art creation driven by AIGC

2.1 Intelligent creation tools

The development of AIGC technology is promoting the development of digital art creation tools towards intelligence and collaboration. In the traditional way of creating digital art, it requires designers to go through linear procedures such as planning of compositions and details. Creating cycle is long, need very skilled profession. The latest generation of AIGC creation tools use natural language and generation algorithms to complete creation, which is completely different from the past, all that is needed is to provide structured instructions such as theme positioning, style parameters, and visual elements, and it can automatically generate multiple initial drafts of the creation[3]. The just released AIGC campus scene creation system, by means of image semantic segmentation and style transformation algorithm, it turns users' real photos into artistic pieces featuring the appearance of campus landmarks, reaching both lightweight and fun in the creation process. This smart tool improves the efficiency of creative work, and also enhances the scope of thinking of the creator with the recommendation function and creative stimulation function of algorithms, changing the center of creativity from the operation of technical tools to the conception of concepts and artistic expression.

2.2 Diversification of creative subjects

Inclusive feature of AIGC technology has broken through the professional barrier of traditional digital art creation and promoted the change of the creative subject from elite to mass. Before the empowerment of technology, digital art creation required that the creator mastered some technical knowledge, including the operation of professional design software, the principle of visual composition, thus making the creative group concentrated in the professional artistic group and designer group. With the development of AIGC technology, generative tools have distributed the right to create, reducing the threshold for creating - ordinary people can easily create with simple ways such as describing something using natural

language or transferring an image's style. According to the relevant platform data, it is expected that in 2024, the number of non-professional creators using AI painting tools around the world will account for 72.3% of the total number of users of such tools, and the average annual growth rate of their works on social media is 158%. This kind of diverse creative subject not only provides an enormous amount of native creativity for the digital art field, but also constructs a collaborative system of professional creation and public participation. The participation of non-professional creators has taken digital art out of the palace and into daily life, forming a more inclusive art expression system and promoting the socialization and cultural infiltration of digital art.

3. The industry impact of digital Art Creation driven by AIGC

3.1 Transformation of the industry model for Digital Art Creation

The AIGC technology deeply affects the industry pattern of digital art creation, reconstructs the current creative process and the existing professional division of labor system. Take the creation of aAIGC micro-short drama for instance. The traditional production mode is that a micro-short film generally needs to involve many professional positions, including screenwriters, directors, and art designers, etc., from writing scripts, setting characters to constructing scenes, which takes several weeks or even months. With the power of AIGC technology, creators only need to provide basic story ideas, character traits, and other key information, and the AI system will automatically generate a full script, create familiar character images, and create detailed scenes. It condenses the creative timeframe into a few days instead, improving efficiency a whole lot. In this process, a new kind of collaboration model has been created between human creators and artificial intelligence. Human creators with special thinking for creation, ability of artistic conception, leading to establish the main theme of their own work, express emotions and style positioning. AI system utilizes its powerful data processing and pattern recognition abilities to undertake tasks such as content creation and technical execution, such as automatically creating multimedia items like images, videos and audios according to the creator's instructions. This kind of human-machine cooperation model can combine the human's own creativity and the efficiency of the machine, it not only improves the efficiency of the creativity but also ensures the quality of artistic creation, which provides a new practical way for the future development of digital art creation.

3.2 The transformation of talent demand in the Digital Art Industry

AIGC technology development has caused great change in the talent demand for the digital art industry. In the AIGC era, compound talents who can create art and also understand artificial intelligence technology are now a kind of scarce resources in the industry. They can fully play the paradigmatic innovation potential of AIGC technology in the creation of digital art, through organic integration with the creativity of artistic creation and intelligent algorithms. Take the creation process of AIGC micro-short dramas for instance. Aside from the basic traditional art creation skills such as story composition and character shaping, it is also necessary for creators to have human-machine collaborative thinking, be able to apply AI tools systematically, and collaboratively optimize creation efficiency and artistic expression through the construction of efficient prompt word engineering and parameter adjustment mechanisms. To tackle the transformation demands of such a capacity structure, the industries and educational sector have started an organized response mechanism. Enterprise level, creating internal technology empowerment centers and improving talent acquisition standards to form a combination of art and technology team. Educational institutions are pushing hard to reconstruct their own curriculum system, and integrating the most advanced modules like the fundamentals of AI, the principles of GANs, and computational creativity into the old digital art curriculum matrix[4]. Some higher education institutions have taken the lead in establishing interdisciplinary fields such as "Intelligent Media Art", and through the construction of an interdisciplinary project-based training model, they systematically cultivate students' compound innovation capabilities in areas such as neural style transfer and generative art, providing important talent support for industrial transformation.

4. Conclusion

AIGC tech has brought about a ground-breaking advancement that has turned digital art creation on its head. This technology has emerged as the core engine that's driving the industry to evolve. Creative tools smartly transform workflows and broaden creative horizons, creators democratize to break professional constraints, artistic expression becomes more inclusive. Together, they create a new ecosystem for making digital art. On an industry level, AIGC has changed the structure of creative models and division of labor, greatly improving the efficiency of cooperation between people and machines. This shift also drives up the demand for talents that are interdisciplinary between artistic skills and technical skills. is very much on the active participation by the industrial and educational sectors in the ongoing sector-building endeavor.

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Author Bio

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