



THE IMPACT OF ARTIFICIAL INTELLIGENCE TECHNOLOGY ON
TRADITIONAL ARTISTIC PRACTICES

By

BASSEY, Cletus Linus, Ph.D.
Faculty of Environmental Studies
University of Uyo

ABSTRACT

Technology has revolutionized the art world by providing new prospects for artists to create and distribute their works through digital art, virtual reality and online platform. Artists now have access to new medium and global audiences but it raises concerns about the devaluation impact on traditional art forms and its intellectual property rights. Technology has changed the narrative on how artists think and create, with the rise of digital art, virtual reality and online market places, artists now have more mediums and techniques to explore. They can easily share their work with global audiences through social media like Facebook, Instagram and Twitter to enable them showcase their works, build their brand and attract more fans and collectors. Therefore, the study discusses some aspects of Artificial Intelligence (AI), Virtual reality and other related digital arts which make the viewers to immerse themselves in a digital art installation. However, the data for this study will be gathered from books, journal articles and online sources analyzed qualitatively, using descriptive art historian methods. The article is concluded by highlighting both the positive and negative impacts of technology on arts production and consumption as findings. It recommended that integrating new technologies like artificial intelligence and virtual reality can provide innovative ways to engage customers and meet their evolving expectation, thereby fostering loyalty and long-term satisfaction.

KEYWORDS: Technology, digital art, artificial intelligence and virtual reality

INTRODUCTION

The artworks of some professional artists have directly made use of technological tools and products for the creation of enduring art forms. Emerging technologies in graphic design provide artists with a massive potential for designing their objects. For instance, artificial intelligence (AI) technology offers better ways to accomplish tasks and exchange ideas. It revolutionizes businesses' workflow and ensures brand compliance. In 2015, only 10% of companies used AI in their daily operations; by 2019, the number skyrocketed to 37%, showing how quickly businesses are embracing the technology. It is noted that technology and all its attributes are an imperative factor for the growth of visual arts in Nigeria. Technology has transformed contemporary art by allowing artists to explore new avenues of creative expression through digital arts. These include utilizing technology to create works that were previously impossible with traditional methods and experimenting with different techniques and styles. (Paul, 2019)



3D printing has provided artists with the ability to produce intricate and complex works that were once attainable through traditional means. This technology has been employed in creating sculptures, installations, furniture, and other forms of art (Balletti, Ballerin & Guerra 2017). Technology has increased accessibility for artists through online platforms like Etsy and Redbubble, enabling them to easily showcase and sell their works to a global audience. Virtual reality technology has transformed art consumption by allowing viewers to immerse themselves in artworks, creating a more engaging experience. Despite the positive impact of technology on art, there are concerns regarding the devaluation of traditional art forms and the authenticity of digital art. It is important to find the balance between integrating technology and preserving traditional art forms to maintain the value of the arts. The influence of technology on contemporary art production and consumption is undeniable. The emergence of digital arts, advancements in 3D printing, increased accessibility for artists, virtual reality technology, and online art marketplaces are examples of how technology has shaped the art industry. The continuous evolution of technology will continue to redefine the art world, presenting new opportunities and challenges for artists, collectors, art historians, and other art enthusiasts alike.

Research Methodology:

The study utilized a review research method with a secondary data collection approach to analyze the impact of technology on art production. The data was analyzed descriptively, focusing on technology's influence on the creation and consumption of contemporary art. Existing literature related to the study topic was chosen based on originality and relevance; various types of technology in contemporary art were explored, highlighting both positive and negative impact.

The Impact of Artificial Intelligence and Cognition on Art

Artificial Intelligence (AI) refers to computer programs capable of doing things that require intelligence when done by people (Best, 1992). AI provides a way to prod the mind on how to comprehend language, make decisions, and solve problems. And as a research tool in computer simulation and expert systems, it acts as a "laboratory" for testing models of cognition. Artificial intelligence has impacted the visual arts in various ways. It assists in the authentication of artworks by analyzing stylistic elements, pigment types, and brush strokes. Artificial intelligence has become ingrained within the business of art as a useful research tool to allow art experts to interpret market developments. Artificial intelligence has the ability to help art collectors and investors to access the value of different artworks more accurately. Artificial intelligence (AI) has revolutionized how businesses streamline workflow and ensure brand compliance. The technology has significantly transformed art production, leading to the emergence of new art forms and a shift in traditional art practices. It has greatly enhanced the visibility of art and artists, allowing them to reach a vast global audience through social platforms. Artists can now share their works with millions of people worldwide, receive instant feedback, and build a community of followers who appreciate their art. (Kang & Chen, 2019). Technology has



made the art world more competitive for emerging the importance of navigating the challenges and maintaining a balance between exposure and artistic authenticity. Artificial intelligence (AI) has had a significant impact on the art industry, such as in collaboration, efficiency, accessibility, new creative possibilities, and ethical considerations and limitations (Forbes, 2024), as follows:

Collaboration: AI has introduced new windows for collaboration between artists and machines. Artists can use AI to create works that combine human creativity and machine.

Efficiency: AI can also help artists to produce works more quickly and efficiently, allowing them to focus on creativity and innovation.

Accessibility: AI can help to liberalize access to art by digitizing cultural heritage sites and artifacts creating virtual experiences, and providing personalized recommendations.

New creative possibilities: AI can provide new art forms/new perspectives, and create ground breaking performances and interactive installations. It can also give out new creative perspectives that may not have been otherwise possible.

Ethical considerations: There are ethical considerations around AI in arts, such as ownership, copyright, transparency and accountability. Of course, there is also a debate about whether AI is doing more harm than good to students with varying artistic abilities.

Limitation: AI cannot replace the depth, creativity, and unique perspective that human artists offer. It is a superb mimic and quick learner, but it might lack true insight and experience. Samdanis (2016) also noted that another limitation of increased visibility through social media is the potential for artists to become focused on the metrics of social media, but this also comes with some challenges, one of which is that there are so many artists showing their art online that it can become hard for individual artists to stand out and get noticed. Another issue is that artists might start focusing too much attention on getting pleasantries, like comments, and followers on social media, rather than focusing on making high-quality art. This can lead to artists prioritizing quantity over quality, hence losing sight of their artistic vision. Therefore, overall social media can be both good and bad for artists. It can help them reach a larger audience and connect with people who appreciate their works, but it can also create new obstacles and distractions. As social media continues to change and progress, artists will need to find ways to overcome these challenges and create a more fair and sustainable environment for themselves and their art.

Virtual Reality Technology and its Effects on Arts

Virtual Reality (VR) is the use of computer modeling and simulation to enable a person to interact with an artificial three-dimensional visual, or other sensory environment. Its applications immerse the user in a computer-generated environment that stimulates reality through the use of interactive devices, which send and receive information. Artists are using VR to create immersive installations, which is being utilized to enhance traditional artworks with interactive elements (Richardson 2017). This



technology has revolutionized the art experience in the world. It offers new ways to engage with art because of its feedback devices that provide the sensation of touch; the user can even pick up the changing viewpoints and perspectives convincingly and manipulate the objects that he sees in the virtual environment. Kale (2013) says virtual reality technology has a rich history, and as a concept, it has been around for much longer (Colson, 2007). Virtual reality (VR) is a sophisticated technology that uses advanced technologies and algorithms, such as computer stimulation, multimedia, and network technology, to create a three-dimensional visual space where users can interact in a digital environment (Qian 2020). Achieving a fully immersive virtual reality experience requires not only VR equipment and hardware with high graphics computing power but also image processing capability (Richardson 2017).

According to Burdea (2017), Virtual Reality (VR) is a new medium that utilizes various technologies such as computer processing, interactive devices, digital imaging, and audio technology to create an immersive experience for users by connecting sight, hearing, and touch with a digital environment. VR technology has been widely adopted in industries like entertainment, art, business, aerospace, architecture, and education, where it has shown significant progress, especially in enhancing students' learning interests, perception, presence, and creative thinking (Pallavicini, F., Pepe, A., Minissi, M.E., 2019). Virtual reality (VR) technology is changing the way people enjoy art. Instead of going to a gallery or museum, you can use special virtual reality gadgets to see art in a whole new way. This technology makes you feel like you're actually inside art, exploring different worlds and time periods. Artists are now able to create interactive art installations that let you interact with their works in cool new ways. For instance, you can use VR headsets to play with virtual sculptures or explore amazing environments. While VR technology has lots of benefits, like making art more engaging and interactive, there are also some downsides. One big challenge is that it can make art feel less physical and real. Some people might not have access to VR technology, which could create new obstacles for them to enjoy art. Despite these shortcomings, VR technology is changing the art world and giving artists new ways to share their works with a wider audience (Samdanis 2016). It is observed that the impact of technology on contemporary art has raised concerns about the role of galleries and museums in the art world. Technology is also changing how people buy and collect art; online marketplaces like Artsy and Saatchi Art make it easy for anyone to buy art without having to visit galleries or auctions in person. These platforms have opened up the art world to people all over the globe, making it easier for art collectors to find new artists and artworks. The technology has also made it simpler for collectors to research and learn about art history without leaving their homes. However, with the rise of online art sales, there is a risk of fraud and counterfeit artwork. It can be hard to tell the quality of a piece when you can't see it in person before buying. Despite these challenges, technology has made art more accessible to everyone, changing how we experience and collect art in the modern world.



Digital Media's Impact on Traditional Art

The advent of digital media platforms like Instagram, YouTube, and various online galleries has ushered in a transformative era for traditional artists. These platforms have become instrumental in reshaping the way artists share their works with the world. Artists use software for design, animation, and 3D modeling. These tools enable the creation of intricate and innovative works that were previously unimaginable. This technological shift is broadening the scope of traditional art (Handke & Dalla, 2022). Social media platforms have become crucial for Nigerian artists. They use these platforms to showcase their works and connect with a global audience. Facebook, Instagram, and Twitter are popular choices. Artists can now reach potential buyers and collaborators worldwide. This connectivity fosters collaboration and inspiration across borders (Wanger, 2020). Blockchain technology is making waves in the Nigerian art market scene. It offers a secure way to authenticate and sell digital art; non-fungible tokens (NFTs) are gaining popularity. This innovation is ensuring the integrity and provenance of digital art. These digital spaces are fostering a new appreciation for contemporary Nigerian art. The use of technology in art production, particularly 3D printing, has increased efficiency and lowered the cost of creating three-dimensional artworks. Advancements in 3D printing technology have made sculpting and creating three-dimensional artworks more accessible to a wider audience (Olenina, Protsenko, & Pichuhino, 2020). Digital art facilitated by software programs and digital tools has enabled collaboration among artists worldwide and the creation of new forms of collaborative art. However, despite its advantages, the technology in art production presents changes such as issues of ownership and authenticity. The rise of digital art raises questions about the originality and value of digital works as well as the potential devaluation of traditional artistic tools and software programs. The technology enhanced accessibility of the art world by providing artists platforms on social media to showcase their works to a global audience using digital tools such as Photoshop and Illustrator to create and share their art more efficiently, regardless of their access to traditional art supplies. It opened up new opportunities to the users in the art industry.

CONCLUSION

Technology has significantly impacted contemporary art by introducing advancements like artificial intelligence, 3D printing, virtual reality, and digital art, enabling artists to experiment and reach a broader audience. The democratization of the art world through online platforms and social media has increased visibility for artists and accessibility for collectors and enthusiasts to enjoy art more. The impact of technology on traditional artistic practices, as the technology progresses, will continue to transform the art world in both positive and negative ways. Artists, collectors, and enthusiasts would need to adapt to these changes and find a balance between traditional and digital art forms. There is hope for future possibilities and responsibilities that the evolution of technology in art will offer exciting opportunities for the future. Therefore,



it is crucial to anticipate the potential consequences and strive for a responsible and sustainable integration of art and technology.

RECOMMENDATIONS

1. Government should assist to lower the cost of technological gadgets and equipment making them affordable to even the less privileged.
2. Artists should make frantic efforts to develop themselves in technology use, be abreasted and updated in the emerging technologies in their various disciplines.
3. They should provide comprehensive training for facilitators and technical staff on proper handling, usage and basic maintenance of technological equipment.



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