



The Analysis of Blockchain Technology's Application in the Art Market

Qin Zhang

New York University, New York, USA.

How to cite this paper: Qin Zhang. (2024) The Analysis of Blockchain Technology's Application in the Art Market. *Journal of Humanities, Arts and Social Science*, 8(3), 556-559.
DOI: 10.26855/jhass.2024.03.001

Received: February 22, 2024
Accepted: March 18, 2024
Published: April 15, 2024

***Corresponding author:** Qin Zhang, New York University, New York, USA.

Abstract

The paper addresses the potential of blockchain technology to create a positive change in the art world by improving the sustainability of the art market. It provides an overview of blockchain technology and addresses existing problems in the art market. The blockchain technology is evolving rapidly and spreading its influence widely. It provides a highly transparent yet secure environment and offers a new tool for information distribution. In today's knowledge-based economy era, with the development of social culture, art has permeated all aspects of life. The protection of intellectual property rights in art has become a serious problem. Blockchain technology has the potential to bring about positive changes in the art market, enhancing acceptance and visibility in both online and traditional art markets. The paper concludes that blockchain technology offers new possibilities and approaches for collecting and selling art. What we need is a more regulated art market with increased transparency, diversity, and efficiency. The paper argues that blockchain technology can eventually enhance the commercial value of art by offering emerging artists and amateur collectors a more accessible and secure entry into the art market.

Keywords

Blockchain Technology, Art Market, Digital Art

1. Overview of Blockchain Technology

In 1990, Drs. Haber and Stornetta were working at Bellcore, a research center descended from the legendary Bell Labs. The pair set out to build a cryptographically secure archive, which is now the oldest blockchain in the world. However, blockchain database technology didn't come to light until 2009 introduced by Satoshi Nakamoto as part of Bitcoin, an open-source online payment system. Nakamoto stated that "the design [of Bitcoin] supports a tremendous variety of possible transaction types... Escrow transactions, bonded contracts, third-party arbitration, multi-party signature, etc." (Amy Whitaker, 2018). The blockchain provides a transparent and decentralized way of verifying and validating transactions without the need for any central authority. It minimizes the need to trust centralized institutions by enforcing agreements through cryptography. At the same time, the network of "miners" generates new "coins" and guarantees the system's security. The word "blockchain" has become the hottest buzzword and creates enormous value. Not only because it was the first decentralized cryptocurrency, but also because it brought to the mainstream concepts like smart contracts and proof of works. Blockchain provides the answer to digital trust because it records all the important information introduced in the blockchain network and doesn't allow anyone to remove it. It is transparent, time-stamped, and decentralized (Bernard Marr, 2018). At the same time, it creates a database that is replicated and shared among the network participants, and all members have access to the information. It provides a highly transparent but secure environment, and contributes a new tool for information distribution.

2. The Application of Blockchain Technology in the Art World

In addition to the financial industry, the art world is one of the main application areas of blockchain technology. The recent advent of blockchain technology has rapidly expanded its influence on the art world. The music and art industries are often monopolized by large companies, and it is difficult for emerging artists to get the rewards they deserve through their work. The blockchain technology decentralized the market. The characteristics enable artists to connect directly with consumers, eliminate middlemen, and give them better control over the ownership of the work. It provides new possibilities for approaches to art collecting and selling, and has the potential to change the way artists define, control, and license their work.

Although blockchain doesn't have the function of value generation, it still provides a transparent and decentralized way of recording, verifying, and validating transactions. The use of blockchain in property rights registration is a stimulation for the digital art market. It has already solved some of the problems that exist in the digital area. It provides emerging digital artists with a traceable record of their work and also lets them have control of reproducibility. It encourages the collection of digital artwork because it potentially eliminates the title risk which used to be one of the biggest problems in digital art collecting. Blockchain changes the market of digital art using decentralization techniques and distributed database protocols. It is "distributed" because the transaction record is held by each of the users of the network, and each user's copy is updated with new information simultaneously (Allens, 2019). It can enforce trust on the collectors' side as well and provide them with a new way of collecting. It eliminates some of the potential risks of art collecting.

3. Existing problems in the art market

"The art market is a bit of an enigma, you don't really get a chance to know the ins and outs of what happening as an artist, you don't really know what the gallery is doing in terms of authenticating the work, it's more taking someone at their word," said Graham Goddard, CEO of AllPublicArt (APA), a P2P art community designed to address these very issues (Andrew Rossow, 2018). The art market only had a yearly transaction of \$63.7 billion in 2018. The market has been established for thousands of years, yet it still has a lot of problems that need to be solved. The contemporary art market will be used as a case study to explore some of the major issues here.

Digital artwork is incredibly valuable to our networked society. Paddy Johnson argues that "What is happening online is the closest thing we have to a major art movement today, and that's something to celebrate and showcase" (Paddy Johnson, 2014). The art world is evolving with the changing times and trends. Digital art is now present in every gallery and on every social media platform. However, considering that the first digital works of art showed up in galleries and museums in the 1970s, the art market was a little slow to catch on. The current commercial practices for selling digital art are very limited. Perhaps, the reason for this was the issue of mass production or the hassle of acquiring proper equipment. It impacts digital art's market value and critical value. Nonetheless, we overcame that initial hesitation eventually and today, almost 10% of the total art collectors globally are solely digital art collectors. Richard and Pamela Kramlich, one of the first few digital art collectors, who started collecting art in the 1980s and now have a collection of over 60 video installations, believe that video art is the art of our time. "It's become a second language to an entire new generation of artists," said Pamela in an interview with Artnet (Kipton Cronkite, 2007). In today's knowledge-based economy era, with the development of social culture, art has penetrated into all aspects of life. The protection of intellectual property rights of art has become a serious problem. While the artworks create great commercial value, the incidents of artists being infringed at various levels such as exhibition, publishing, collection, circulation, and use cannot be solved in time, which hinders the benign development of the cultural industry to a certain extent.

The major issue I would like to talk about here is the market of digital art. Easy to copy and pirate has been the fact of the bane of digital art. In 2008, selling a video prompted perhaps the most complex questions from a collector the average contemporary art dealer had ever had to answer about terms, conditions, and technology. Much of that complexity revolved around how the technology or platform in which an artist had created their work would invariably become obsolete, or how the means to copy and redistribute or present artwork in ways that may have violated the artist's copyrights or been counter to their intentions were being used by collectors who simply were unaware of the issue involved (Edward Winkleman, 2015). These lead to collectors having little interest in digital art. It's almost impossible to prove the ownership or the authorship of the digital artwork due to its nature. The low guarantee of uniqueness makes the investment value of digital art very low.

The Philips Paddles On! auction in the fall of 2013 was the first and the only major commercial sale of digital and digital-related art (Dale Eisinger, 2015). In addition to immaterial digital artworks, Paddles ON!'s curator, Lindsay Howard, selected works "inspired by the inner workings of computers or the Internet, as well as those who use the Web as a distribution platform" (Jennifer Maloney, 2013). When media artist Rafael Rozendaal sold the Internet-based artwork ifnoyes.com at the auction, the transaction highlighted issues of asserting authorship and ownership claims of digital artworks. The top price record in that auction was \$16,000 achieved by Addie Wagenknecht's Asymmetric Love Number 2, a chandelier made out of CCTV cameras (Paddy Johnson & Whitney Kimball, 2014). By comparison, Christie's Post War & Contemporary auction, which was held on the same day, raised \$691.6 million. Compared to other forms of art, digital art is highly undervalued mainly because of the idea of ownership and the difficulty of pinning a commercial value on dematerialized artworks. Rozendaal's work raises questions that are highly relevant to the discussion of digital art more generally: Can artworks that only exist publicly (such as websites) be subject to private property claims, and if so, what do such claims mean and how can they be enforced? What are the contours of a digital work whose underlying source code can be easily copied and changed, and what implications might modification source code have for the work's authenticity and value? How does the concept of ownership function in relation to intangible artifacts such as digital artworks, and how can the commercial value of such works be fixed? Capability of intellectual property assets has been described as an existential problem for artists for decades. It was a lose-lose situation for digital artists before. They need to put their works online in order to get people to know their art, but then it becomes so easy for people to "steal" or copy their artwork from the internet. Collectors do not have many incentives to collect digital art in the era of free downloads and omnipresent internet and computer access. Most people do not even take digital art as serious art because the ownership of digital art seems very vague. It's relatively easy to make copies of digital artwork that are indistinguishable from the original.

According to the Hiscox report (2018), new media art, such as video or digital art is gaining popularity among online art buyers, with 17% now buying this medium. The digital art market remains relatively small.

4. Conclusion

Affordable price points, open access to both emerging artists and established artists, and ownership of artworks that can be re-sold without the same logistical overheads of physical artworks, are some of the motives that, as discussed, drive collectors to the online digital art market. Yet, if sold via a blockchain ledger, digital art will also be able to offer accessibility, security, and traceability, as well as an explicit claim to ownership that is not mediated by third parties; and in turn, a standard for ethical practice that is starting to be applied the whole of the art industry.

It has been shown in this thesis that there are many problems in the current art market that need to be solved. The blockchain technology is evolving quickly and widely spreading its influence. It has the potential to create positive change in the art market for enhanced acceptance and prominence in both the online and traditional art market. The blockchain provides a transparent and decentralized way of verifying and validating transactions without the need for any central authority which can solve some of the major problems in today's art market. Its characteristics enable artists to connect directly with consumers, eliminate middlemen, and give them better control over the ownership of the work. It provides new possibilities for approaches to art collecting and selling.

Nevertheless, there is still a long way to go for the adaptation of blockchain technology in the art field. This is partly due to the relatively small size of the online art market and what a report from UBS and Art Basel calls "the asymmetrical structure of the art market, with the majority of value and most of the highest value transactions conducted via a small number of companies and virtually all offline" (Cassie Zheng, 2018). By bringing digital art into the commercial sphere, greater publicity will be generated around the art form. With the increased popularity of the medium, museums may increasingly feature and promote digitally orientated-work. This in turn would educate the public about digital art and imprint its importance into the public's consciousness. And, going full circle, would bring the public back to the online, where they may collect and engage with the digital art in its native environment, and hopefully help in building stronger online art communities that would continue to accrue art market relevance.

Just as Mr. Li said, the revolution here is not about technology, it is about understanding and acceptance. It requires time, and marketing for its use and expansion across the art industry. As Vershooren writes, "To create a bridge between the Internet art world and the art world at large, creating the possibility for inclusion of the good Internet art creators into the broader category of artists" (Karen Vershooren, 2007).

There was a show by Digital artist Simon Denny called "The Founder's Paradox". As Denny mentioned, "I hope one of the things that comes through in this show, is some of the problematic underpinnings of how digital capitalism

is expanding in a kind of neocolonial way” (Tim Schneider, 2018). This is not what we want to see. What we need is a more regulated art market with more transparency, diversity, and efficiency. The application of new technology shouldn’t mean that fewer people dominate the market. It should provide new artists and collectors with a more accessible and secure entrance into the art market.

References

- Allens, Blockchain Reaction. (2019). Understanding the Opportunities and Navigating the Legal Frameworks of Distributed Ledger Technology and Blockchain, p. 4.
- Amy Whitaker. (2018). The Eureka Moment That Made Bitcoin Possible, *The Wall Street Journal*, May 25.
- Andrew Rossow. (2018). Why Does the Art Community Need Blockchain on Its Palette? *Forbes*, April 7, <https://www.forbes.com/sites/andrewrossow/2018/04/07/why-does-the-art-community-need-blockchain-on-its-palette/#38c1c3ce4044>.
- Bernard Marr. (2018). A Very Brief History of Blockchain Technology Everyone Should Read, *Forbes*, Feb 16, <https://www.forbes.com/sites/bernardmarr/2018/02/16/a-very-brief-history-of-blockchain-technology-everyone-should-read/>.
- Cassie Zheng. (2018). Can Blockchain Impact the Future of Art Collecting? *Culture Track*, July 11, <https://culturetrack.com/ideas/can-blockchain-impact-the-future-of-art-collection/>.
- Dale Eisinger. (2015). Your Laptop Is Also a Masterpiece: Digital Art’s Big Money Moment, *The Daily Beast*, Feb 11, <https://www.thedailybeast.com/your-laptop-is-also-a-masterpiece-digital-arts-big-money-moment>.
- Edward Winkleman. (2015). *Selling Contemporary Art*, p. 279.
- Jennifer Maloney. (2013). Auction House Enters the Digital Age, *The Wall Street Journal* September 23, <http://online.wsj.com/news/articles/SB10001424052702304713704579091192929676208>.
- Karen Vershooren. (2007). *Art: Situating Internet Art in the Traditional Institution for Contemporary Art.*, MS diss., MIT, p.116.
- Kipton Cronkite. (2007). Collecting Video Art, *ArtNet*, <http://www.artnet.com/magazineus/features/cronkite/cronkite3-15-07.asp>.
- Paddy Johnson and Whitney Kimball. (2014). Interest on the Rise for Paddle ON! Digital Auction, *Artcity*, June 26, <http://artcity.com/2014/26/interest-on-the-rise-for-paddles-on-digital-auction/>.
- Paddy Johnson. (2014). Why Is Our Era’s Greatest Art Movement Missing from the Whitney Biennial? *ArtNet News*, March 27, <http://news.artnet.com/art-world/why-is-our-ears-greatest-art-movement-missing-from-the-whitney-biennial-7543>.
- Tim Schneider. (2018). How Artist Simon Denny Is Turning Board Games into Hilarious Critiques of Digital Capitalism, *ArtNet News*, March 1, <https://news.artnet.com/art-world/simon-denny-board-games-1233644>.