

The Next Revolution: How Blockchain Technology Will Change Collections Management

In this Friday morning session, “The Next Revolution: How Blockchain Technology Will Change Collections Management,” the presenters discussed the potential of blockchain technology to expand and simplify various elements of the art market. They wanted people to grasp what blockchain could possibly do and what problems it could solve – rather than precisely how the technology works.

As someone very interested in technology used for collections management, I was eager to attend this session and see what, if anything, might be applicable to my work. The future possibilities are exciting and it was great to hear about it.

There are a couple of main points I want to make before I get into details of the session.

1. Much of what they discussed was possibilities rather than case studies of the actual use of Blockchain (with the exception of use by artists).
2. The focus was on education about those possibilities more than on specific things that could be implemented or tried.
3. There was no discussion of possibilities for collections other than artwork.
4. The greatest advantages for Blockchain seem to be for artwork in a digital format and for artists/clients.

Anne Bracegirdle (Senior Direct, PaceX) introduced the session. She noted that none of them were technology experts but had expertise in the art market. She then provided an overview and history of Blockchain. Its development was initially focused on how to trust digital documentation, a way to verify the data along the chain. While it started with currency (Bitcoin), it soon became apparent that any *digital asset* could be transferred this way. Blockchain is a digital ledger or list of time-stamped, continuous, tracked transactions or data that exists in interconnected copies. It removes the need for central data control because it updates simultaneously for anyone who has access. To tamper with this, you would have to hack every single copy in the system. Transparent chain of history is created for a painting. For example, each transfer of ownership would be one block in the chain. In simplified terms, it's kind of like a shared Google Doc.

Each presenter provided “use cases” rather than case studies, with the exception of the last presenter. The first possible use, which Anne discussed, was title registry. Blockchain could provide a place where all information related to a particular artwork was stored securely. Everyone could access cataloguing details, provenance and sales data, including prices (with the owners remaining confidential). When something was traded on the market, that transaction information would be immediately accessible. She was suggesting an industry-wide title registry, which would also have less room for human error. With blockchain, there could be an automatic and organic art collection management system that would update itself. According to Anne, “there would be no need for collection databases.”

Frank Avila-Goldman (Associate Registrar, Estate of Roy Lichtenstein) tackled intellectual property. He discussed the history of intellectual property rights and “moral rights,” which protect the integrity of the artist/author. The Visual Artists Rights Act leaves digital work in a gray area. Blockchain could be a tool to help ensure the integrity of works and help artists.

Raina Mehler (Media Arts Director, Pace Gallery), who works with time-based media talked about Blockchain enabling recording of ownership and provenance of both physical and digital artworks. For physical, Blockchain can be connected to RFID, high-resolution images, DNA tags, and real-time location systems. For example, you could be able to track the shipment, movements, temperature and vibrations of a high-value artwork. Such a system is already being used in other industries. For digital artworks, Blockchain can assign a code and create a digital identity so that the code becomes inherently inseparable from the digital object itself. It could differentiate a copy from the original, even though the naked eye cannot distinguish them (like “crypto kitties,” a Blockchain game for collectibles) It would be useful for selling copies of digital artworks as well as loaning copies of digital works for exhibition. Currently, the only protection is a legal agreement – which does not prevent the actual technical copying of the work and is not very enforceable. You won’t know if duplication is happening. Blockchain allows “Smartcontracts,” which are based on code and create a digital contract that is rigid and can’t be changed. Non-negotiable parts of contracts can be translated into code. Blockchain could greatly streamline transactions. Artists are actually using Blockchain now. There are also digital art marketplaces, like CryptoArt. Allows artists to create verifiable editions of artwork and control scarcity. This allows artists to get royalties, including secondary and auction house sales.

John Thomas Robinette III (J.T. Robinette, LLC) discussed what may be the most exciting part of the technology and provided a couple of actual cases, in which Blockchain allows fractional ownership and is changing what we collect and how we collect.

1. *Priceless* by Kevin Abosch & Ai Weiwei: a virtual work given away one quintillionth at a time.
2. *Public Key/Private Key*, by Jennifer & Kevin McCoy: 50 winners of an essay contest got a digital certificate saying that they are a donor to the Whitney Museum of American Art – this changes who a donor is -- you can pass it on, trade it, sell it, etc.
 - a. People can be part owner of a physical artwork, in the same way that you are part owner of a company if you buy stock in that company.
 - b. Two companies are actively doing this so you can “buy” art as part of your portfolio. For one of these companies, they actually store the physical work of art. But questions remain about can it be loaned or exhibited?

The presenters ended the session with “Considerations and Barriers.”

1. Learning curve hinders mass adoption
2. Knowledge gap
3. Association with cryptocurrency
4. Blockchain “air gap” (how do you attach physical piece to digital record) – companies already working on this in other industries – Microsoft doing some in fashion world
5. Expensive development process
6. Hesitation of art market and institutions
7. Industry consortium: who controls data input?
8. Regulatory infrastructure needs to be created

They did stress that they were currently in a phase of constant education. And they hoped that they had addressed some of the understandable skepticism of the audience. However, for most



of us, I think any day-to-day applicability is still far away.

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