

**ArtCommodities.com**  
By Paolo Cirio. 2014.

**Premise - Abstract**

With the conceptual artwork *ArtCommodities.com*, Paolo Cirio introduced the ideas of collectible digital art within a critique of the contemporary art market. The artwork is presented with diagrams and texts that subtly use financial and business language to persuade for changes in the art markets. It proposes alternatives of trading and collecting artworks for establishing democratic aesthetic values through a protocol called the *Smart Art Market* enabled by a large series of unique artworks sold for very low prices. This economic model is created through selling *Smart Digital Art Objects*, which is a format invented by the artist to authenticate digital art via cryptography.

In spring 2014, Paolo Cirio defined the general trade of art through cryptography for the first time, anticipating the rise of platforms such as Ascribe and Monegraph for trading and authenticating digital art on Blockchain. Beyond the technology, he focused on the socio-economic consequences of trading digital art commodities. He analyzed how to design and apply alternative instruments and models for addressing the present manipulations of the art market, which ultimately affect socio-cultural values.

The text offers a critical reflection of the financialization of the contemporary art world, and with irony and provocations it suggests investments and markets for art with social values. The proposals drafted are solutions for a sustainable trade of artworks and taste formation among artists, critics, collectors, and dealers for the advantage of society at large. The research integrated the proposition for an alternative notion of private property for art, and it examined the symbolic systems of values for economically sustaining the art world within an ethical framework.

The artwork considered how distribution systems, such as the art world, the economy, and technology, are mutually influenced by the flows of information they channel, such as art, its language, and social meaning. Ultimately, *ArtCommodities.com* explored how art can be the conceptualization of the circulation of itself.

**ArtCommodities.com**

**Smart Art Investment Advisory**

*ArtCommodities.com* embraces the notion of art as an asset class. It advises for optimal investments in art and for avoiding financial losses, inefficient business, and trade. Art is a good hedge against inflation, stock, bond, and currency market fluctuations: buying art allows investors to diversify their portfolios while pursuing financial gains. Works of art can be bundled with numerous investment funds or they can also be used as collateral in order to secure loans, for capital shields through tax-deductions and insurance value, or to disguise the transfer of assets.

*ArtCommodities.com* proposes a new formula for advanced art investments for reorganizing the economic and symbolic value of contemporary art while maintaining and assuring social, cultural, and financial capital returns.

**Why Value Investors Should Buy Critical Art**

*ArtCommodities.com* aims to build an art investment market whose social impact increases its potential for economic returns. As the social relevance and impact of a work increases, so does its market value.

Today's primary art market logic is highly dysfunctional and poor-performing over the long term. Art collectors are endangered by incentives on short-run profits and the selling of quick, aimless, and trivial art, instead of being encouraged by an independent oeuvre of lasting quality and thought-provoking art. This false paradigm of low-intellectual and cultural value as tied to high-financial value negatively affects the infrastructures and formations that sustain the cultural industry complex. Overvaluation and mispricing of easily digestible and entertaining art is becoming more and more prevalent, a situation that misguides the investors and harms the whole art world, which is the real source of value. The present conservative model is often unsustainable, leading to collapse, and creating losses for its investors.

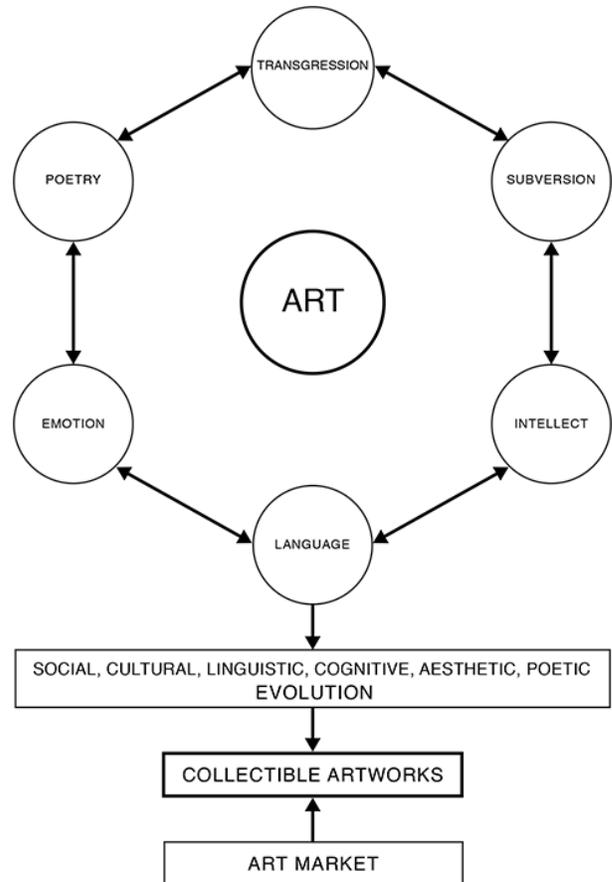
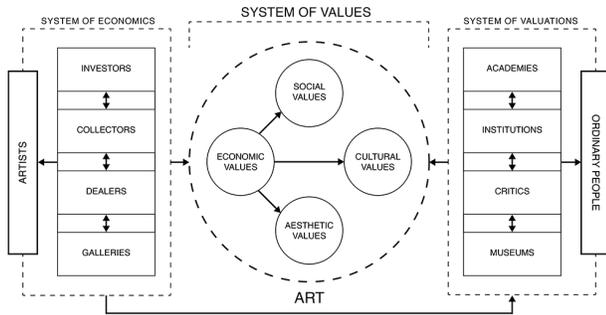


Diagram about creation of art values for the market



The traditional inefficient investment model

### A simple economic analysis on the production of values of artworks

Symbolic value can be exchanged for high economic value, however commercial value is often exchanged for the symbolic, making the market unreliable. Misleading dominant economic forces have influenced popular taste and the artistic canon, which ultimately determines a false system of values.

*ArtCommodities.com* is committed to building symbolic and intellectual capital for creating a new market value of art, and promoting the equation between social value, artistic significance and economic development. Art is a concept of value constantly requiring its own reevaluation. However, the factors influencing the valuation and validation of contemporary art, artistic reputation, and credibility are too often determined by the economic conditions and status of its producers, dealers, and buyers.

*ArtCommodities.com* wants to invert this paradigm, and assert a new scenario where the social validation of art influences its economic value, which is then redistributed to the social bodies that fuel and create the art economy itself. Economic evaluation should be democratic, hence conditioned by discernible quality and accessible artworks. *ArtCommodities.com* promotes a new age of critique, awarding prestige and cultural capital to critical art, and encouraging its appreciation by popular audiences. Many have questioned the authority of cultural experts and how they could legitimate their own valuations to generate estimations for inflating the value of artworks. Today, within the sphere of the contemporary visual arts, the agents whose interests determine the dominant values of art are mainly large institutional investors. Through their acquisitions these agents shape artistic reputations and taste, and establish the art market's elitist character. The role of the public expert has been gradually replaced by financial ventures in the art market, which has shifted both intellectual and monetary values to bend to these power dynamics. Experts themselves have lamented this questionable inflation of superficial values in the art market, a scheme that ultimately harms both collectors and artists.

### Some common art market deceptions

1) Insider trading via privileged access to information is common practice. Dealers often offer art to auctions to drive prices up by bidding on their own sales, or they simulate sales by lending artworks to institutional investors for inflating their relevance. The lack of independent information on this trade endangers everyone in the art market.

2) Dominant art funds have higher acquisition budgets than public museums, and are able to manipulate the art market and extend their influence on the art world through tax-deductible donations to museums, sponsorships, and several types of advertorials in art publications.

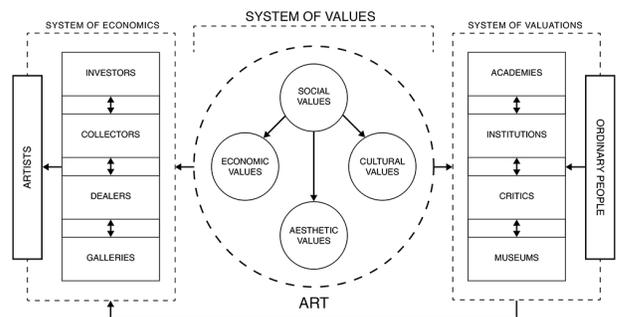
3) Some collectors and art investors may only support artists who are subject to a celebrity or fashion logic, rather than artists who represent the real spirit of the time and medium of the contemporary.

### Goals for high performance investments and acquiring social reputation and prestige as art collector

1) Establishing transparency in the market about prices and ownership by utilizing reliable sources of information.

2) Creating a market to maintain independent and autonomous production with democratic valuation of art that guarantees economic stability.

3) Supporting art that represents meaningful social and historical process, or art with socially transformative purposes.



The proposed efficient investment model

### Smart Art Economic Model

The economic model for a *Smart Art Market* presents a new logic of trade and valuation, ensuring fair access, distribution, and acquisition for every type of art collector. It proposes a business model for contemporary art sales based on abundance and not on scarcity, driven by transparency and reliant on a mass of collectors, rather than a select few. Investing in abundant collectable artworks can be seen as owning blocks of shares of a financial commodity. Collectors from the *Smart Art Market* can invest in this type of art commodity and they are supported by a discerned and accessible valuation system.

### Business goals of ArtCommodities.com

1) Providing the collectors an alternative art financial investment portfolio with cost-effective solutions.

2) Reestablishing the real economic and social values of art, which are the foundations of a healthy market.

3) Competing against an unregulated, opaque, and volatile market which is producing financial losses and mistrust.

## A mediation system for innovating systems of value

The *Smart Art Market* proposes an economy similar to those of other cultural industries, in which profit is driven by appreciation by a large audience. This model circumvents traditional intermediaries or middlemen within the market, allowing for direct exchange between producers and consumers of cultural products, and new patterns of taste formation within the art industry. Shifting the sale of contemporary art to a model more similar to those proposed within music and cinema enables mass collectors to express their opinions visibly and widely, challenging the separate status of the professional critic, and inaccessibility in the art market. Such collaborative filtering would enable a new process for the creation and assignment of cultural value.

## Leverage technology opportunities

The *Smart Art Market* leverages digital and network technologies to advance today's art trade. Internet networks facilitate, accelerate, and expand the distribution of art commodities, which increases potential access to investment by any demographic capable of market exchange. Easy reproduction of digital artifacts is another benefit that increases the access and share of copies of art commodities for viral-marketing. Yet, the uniqueness of the individual artworks is assured by crypto-algorithms that sign and verify the authenticity of the artworks. This means of ensuring the authenticity of digital artworks is a new opportunity for the art market. The mathematical impossibility of art forgery of *Digital Art Commodities* ensures the investment of the art collectors against fraudulent activity that frequently occurs in the traditional art market.

## Costs of production

The artworks that are traded within this model are by nature cost-effective, due to the low material resources required for their production. As such, the prices of art commodities are independent of these concerns. This inherently low cost of management and fabrication is a characteristic that is specific to the model and technology of the *Smart Art Market*. This particular model supplements the opportunity for higher financial returns for both artist and collector, while refining the intrinsic value of the artwork. Instead, the traditional art market often needs a substantial cash flow or liquidity to cover production, transport, marketing, and transaction costs, which limits the creation of artworks to high-earning artists or galleries and excludes critical and socially valuable art from the market. Furthermore, this model would eliminate many traditional upfront and additional costs of the art market including insurance, handling, storage, shipping, preservation, and ownership costs, which are negative cash flow assets. Low-maintenance circulation and easily-transferred art commodities would also potentially lower carbon footprints.

## Protocol for the Smart Art Market for Critical Art

- The market must be an open system of valuation, distribution, and trade.
- It promotes collecting with the aim of creating economic value for art with a critical edge and function.
- It is not a donation or crowding-source model, nor a form of patronage. Instead, it embraces personal expressive needs for possessing art that matters.
- It ensures access to the ownership of critical artworks enabled by affordable prices and simple digital platforms.

- Abundance and accessibility are favored over a model of scarcity, while social value is democratically established and preserved within a sustainable economy.

- Artworks sold through *ArtCommodities.com* are characterized as large series of unique pieces without multiples. Every art piece has unique characteristics, while the series of the same artwork can be composed of hundreds of thousands of pieces.

- The economic value of the individual art piece is intrinsic to its social, historical, and aesthetic value, which is determined by a wide audience that judges the social, emotional, and visual qualities that the piece offers to them.

- The authenticity and certification of the original and unique artwork is guaranteed by crypto-technology within digital signatures on a unique certificate of authenticity, the contract of ownership, and fingerprints for the individual art piece.

- Physical and digital copies of the artworks may be produced by collectors, furthering the premise that the value of a work increases as it is shared. Removing any restrictions against the reproduction of high resolution or printed copies of the artworks allows for them to multiply in infinite copies and modifications.

- The artwork can take any form and medium, including digital files, as long as the production and management costs for the series are incidental to the final sale price.

- The sale and resale of the artwork can take place with or without an intermediary, such as an art dealer, based on the contract's terms set between the artist and collector.

## Access to the market

The model proposed has the ambition to bring quality art to the masses at affordable prices, enabled by its low transaction costs and little to no reliance on material resources. Today only a few can access and make use of the art market, which consequently radically affects the very meaning of art and its social role. Democratizing the art market through lower priced collectibles and digital distribution changes how art is consumed and experienced, thereby raising returns for both collectors and artists. Furthermore, better access to the market transcends the simple idea of making the market more democratic through lower prices, as today contemporary art suffers from a narrow audience and reach. This new model would generate wider interest in critical artworks, elevating both their social and economic significance.

## Smart Digital Art Objects

*Smart Digital Art Objects* are digital artworks in form of digital files that are certified by the artists.

A Digital Object is usually considered a digital file with any type of format and information, like a picture as a jpeg, a song as a mp3, or video files and even texts. Usually digital objects are infinitely duplicable. However it's possible to authenticate and certify the uniqueness of a digital object by attaching to it digital signatures, fingerprints, and contracts through cryptography's digital algorithms.

The potential of cryptographical certification also enables these digital art objects to be exchanged as property - like any other type of art object - which can be claimed through possessing the cryptographic keys for the object.

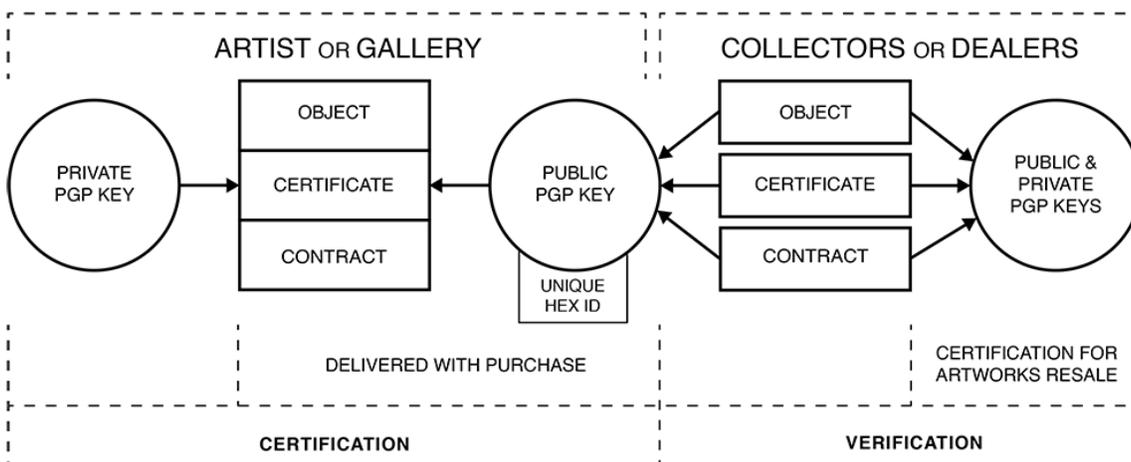
This type of property is different than the others we used to know. The object is still infinitely duplicable, easy transferable and it can be used and accessed by anyone, yet it has a defined owner.

This evolved and hybrid notion of private property is liberating the potential of properties to be enjoyed by anyone, while allowing private ownership. Copies of the property can be shared by everyone to prosper from the distribution of benefits generated from the actual goods, while the owner of the property is still able to care for it and claim ownership over the property.

Specifically, digital objects can be exchanged between peers, and yet can only have a single owner. They can be protected against theft and forgery through the use of cryptography, which assure their ownership.

The *Smart Digital Art Objects* look like regular files. When they are bought and owned by a collector they come with documents as such as Certificates of Authenticity validating the authorship, a contract attesting and defining the trade and ownership's terms, and records to prove the uniqueness and the origin of the artwork.

As in the traditional model, the ownership is certified and verified by documents that are signed by the parties involved in the transaction and the records that indicate the details of the property. With cryptography, the signatures, contracts, and records have refined security protocols fully embedded in property certification and verification systems. Although the cryptography is complex, owners of digital art objects don't need to know anything about it, because of the universality of the verification systems.



### Implementation of the Certification and Verification Protocol of Smart Digital Art Objects

The implementation of the certification and the verification is managed through a self contained system of certificates that are pgp-signed with relevant details. The artist digitally signs the artwork with his private key, producing a unique hash-key that includes the documents that define the property exchange and authenticity.

The documents that certify the Smart Digital Art Objects:

- Certificate of Authenticity with details of the artwork sold.
- Contract between the artist and the buyer.
- Records of the artwork with pictures and Hash-ID of it.
- Public signature of the artist (PGP Public key and its ID hex)

Straightforward implementation of certification and authentication of the artwork:

- The artist signs the certificate of authenticity and the contract with his private PGP Key.
- The artist creates a Hash-ID of the artwork within the signed certificate and the contract, and releases it with the Digital Art Object.
- The artist delivers the artworks to the collectors with the Hash-ID and the other documents digitally signed.

Straightforward implementation of verification of the authenticity and ownership of the artwork:

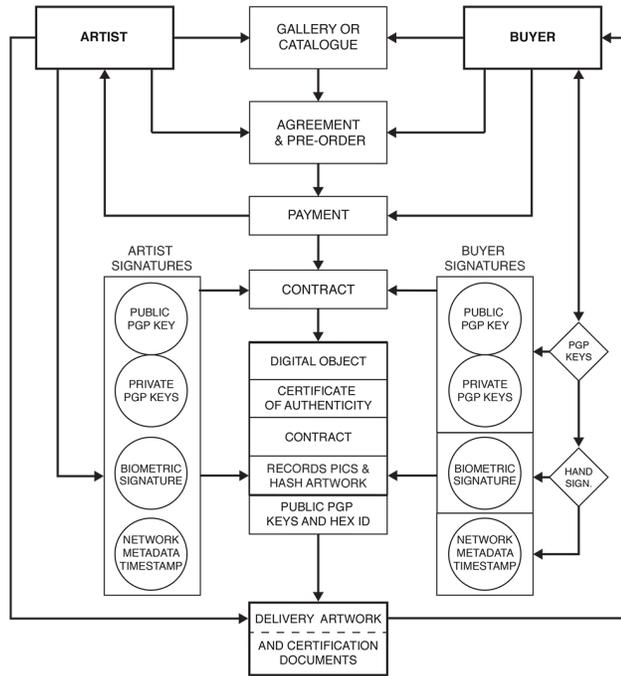
- Evidence with the names and signatures on the contract and certificate regarding the artwork.
- Evidence with the Hash-ID of the artwork within the documents and signature.
- Evidence with the PGP Public Key on public keychain servers or printed documents

## Smart Art Trade

The *Smart Digital Art Object* as defined by *ArtCommodities.com* is meant to strike a balance between the logic of an art market that thrives on privileging the unique object, and a contemporary visual culture that demands and is improved by increased public accessibility.

As such, each buyer receives both a public and privately encrypted version of the digital file. These dual iterations of each digital work allow for individual ownership, while at the same time enabling the public sharing of the work.

In a symbiotic relationship of financial and social value, the public dissemination and accessibility of these digital artworks will result in their increased social impact, which will in turn increase the monetary value of their private ownership.



### General description of the Terms of Sale and Exchange

The Artist agrees to provide the following to the Buyer:

- The *Digital Art Object* (the “artwork”)
- A copy of the Contract signed by both the Artist and Buyer
- A Certificate of Authenticity
- Hash of artwork image
- Public encryption keys

These items must accompany the digital art object with any subsequent transfer or sale of the work and are required for proving the authenticity of the artwork.

The artwork may be reproduced under the terms of Creative Commons licensing for non-commercial use. The artwork may be exhibited in art and other public contexts.

The Buyer agrees to provide payment in full at the time of sale. Payments will be made directly to the artist, and not an intermediary such as an art dealer, unless where exceptions are noted.

The Buyer agrees to use the artwork at their own risk, and will not hold the artist liable for any damages due to the infringement of copyright, or other infractions within the artwork.

The Buyer agrees to fulfill the terms as explained in this Contract.

### General description of the Exchange Protocol

- Agreement Pre-order: Prior to payment, buyers are required to agree that they will purchase the work. This stage is akin to a system of invoicing, where the expectation of a transaction is settled before money and goods are exchanged.

- Payment: Buyers will be directed through a payment system.

- Contract: As the sale of a work is confirmed, the buyer must agree to the terms of use and sale as described in an accompanying contract. This contract will address issues such as copyright control, reproduction rights, and the requirements for future transfer of the work.

### Transfer of Work – Necessary Elements

- Digital Object: The actual digital file or physical render of it.

- Certificate of Authenticity: Each Digital Art Object is accompanied by a Certificate of Authenticity. This Certificate must accompany the work at all times, and contains all information required for transferring the work.

- Contract: This Contract must also accompany the Certificate of Authenticity at all times, and must be consulted regarding any future transfer, sale, and reproduction of the work.

- Hash of Artwork Image: This code comprises the digital artwork.

- Public Keys PGP and ID-HEX: These encryption keys are necessary for certifying the digital work. Both artist and buyer private keys or “signatures” must be combined in order to prove ownership of the work. The buyer can use a biometric signature or network metadata in alternative to the PGP signature.

- Artist Signatures: The authenticity of a work is ensured by the inclusion of an artist’s “signature,” which here takes the form of a unique encryption key. Each work will be given a public key and a private key. The artist can sell the encrypted digital art file, which makes the artwork accessible only with the collector’s PGP key.

- Buyer Signatures: In order to verify the unique digital art object, this key must be combined with the artist’s private key, thereby ensuring the buyer’s exclusive ownership. However, the buyer also has access to a public key, which may be used for sharing public versions of the work while maintaining the integrity of the unique digital art object.

- Delivery of Artwork & Certification Documents: The artwork will be delivered as bundled digital files or in another manner as appropriate.

**Text and concept by Paolo Cirio.**

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Research from November 2013.

**Notes & Bibliography:**

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"On (Surplus) Value in Art" by Dietrich Dietrichson

"The Auction is the Action" by Barbara Rose

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"A Certain Lack of Coherence" by Jimmie Durham.

"What is Critique?" by Michel Foucault

"The Accident of Art" by Paul Virilio

"The Conspiracy of Art" by Jean Baudrillard

"Against Art and Artists" by Jean Gimpel

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"The Great Contemporary Art Bubble" film by Ben Lewis

"A Crime Against Art" film by Hila Peleg

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"Politics of Art: Contemporary Art and the Transition to Post-Democracy" by Hito Steyerl

"9.5 Theses on Art and Class" by Ben Davis

"L'1% C'est Moi" by Andrea Fraser

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"Discorso sull'orrore dell'arte" by Baj Enrico

"Il trucco dell'avanguardia" by Flaminio Gualdoni

"L'arte e la sua ombra" by Mario Perniola

"Arte e Consumo" by Fabrizio Sebastian Caleffi

**Smart property was first proposed by Nick Szabo in 1994**

Smart Contracts: Building Blocks for Digital Markets

<http://szabo.best.vwh.net/smart.contracts.html>

[http://szabo.best.vwh.net/smart\\_contracts\\_2.html](http://szabo.best.vwh.net/smart_contracts_2.html)

<http://szabo.best.vwh.net/idea.html>

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Transferable virtual property:

[https://en.bitcoin.it/wiki/Transferable\\_virtual\\_property](https://en.bitcoin.it/wiki/Transferable_virtual_property)