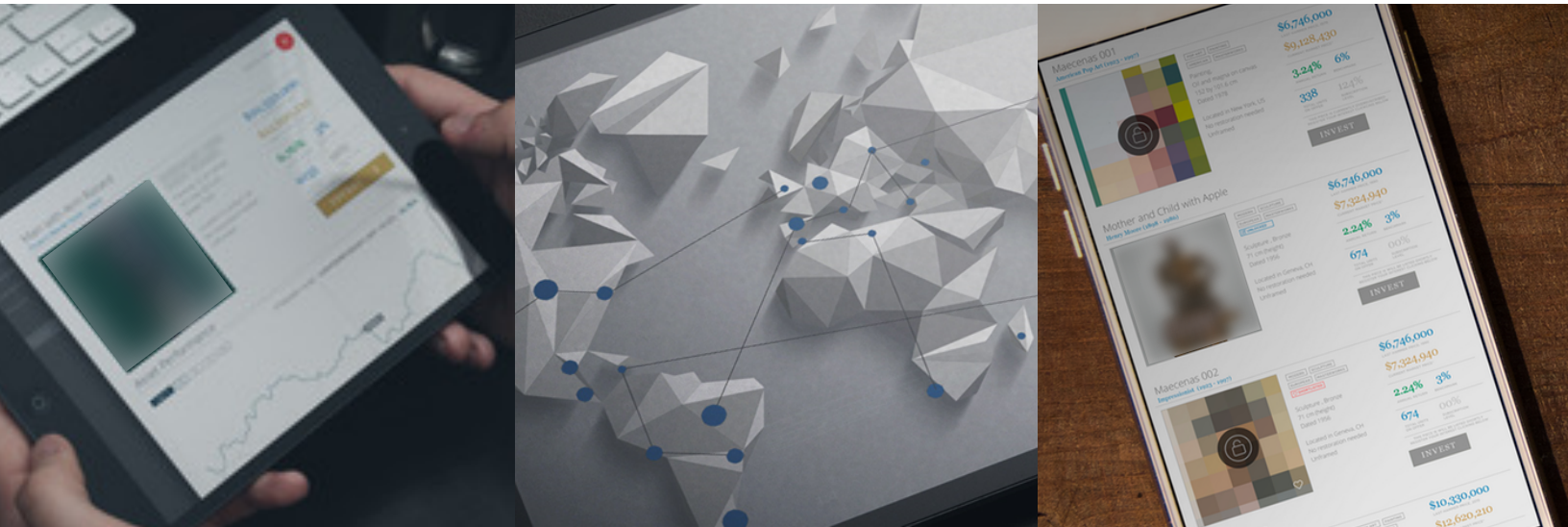


# Mæcenās

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# Mæcenas



**“A new online marketplace promises to give art lovers the chance to buy shares in famous paintings.”**

- The Telegraph

## VISION

Investing in a Monet has always been beyond the reach of most people; purchasing a Rembrandt the privilege of only a few... until now. The opaque world of auction houses and banks, which allows them to charge exorbitant fees, has cut off fine art investment from efficient modern markets.

But it does not have to be that way.

With help from visionaries like you, we can democratise access to fine art by creating a truly open platform where investors can own a piece of a Picasso. We are building a global art blockchain market where assets are traded quickly and fairly on a liquid exchange. Creating portfolios and

trading certificates representing a part of a masterpiece will be available to everyone that is part of the Maecenas community. We will convert million-dollar artworks into smaller digitised financial units that can be bought and sold easily — literally at a fraction of the cost.

For the first time, technology will allow investors, collectors and owners to exchange shares in paintings and sculptures instantly, akin to the way stocks of a company are traded today. Plus, top emerging artists will have a showcase for their work, free from the interference of middlemen.

For years, we have been building a secure and robust technology

foundation for Maecenas, the world's first blockchain-based fine art marketplace. This has been possible because we have assembled an exceptional team of experts and have built crucial relationships with galleries, collectors and authenticators. Now, with your support, we will be able to launch the platform, nurture this new investment network and turn a centuries-old industry mainstream.

Thanks to its resilience in downturns and to its capital appreciation, fine art has long been an attractive multi-billion asset class.

Now it will be open to all.

## THE ART MARKET OPPORTUNITY

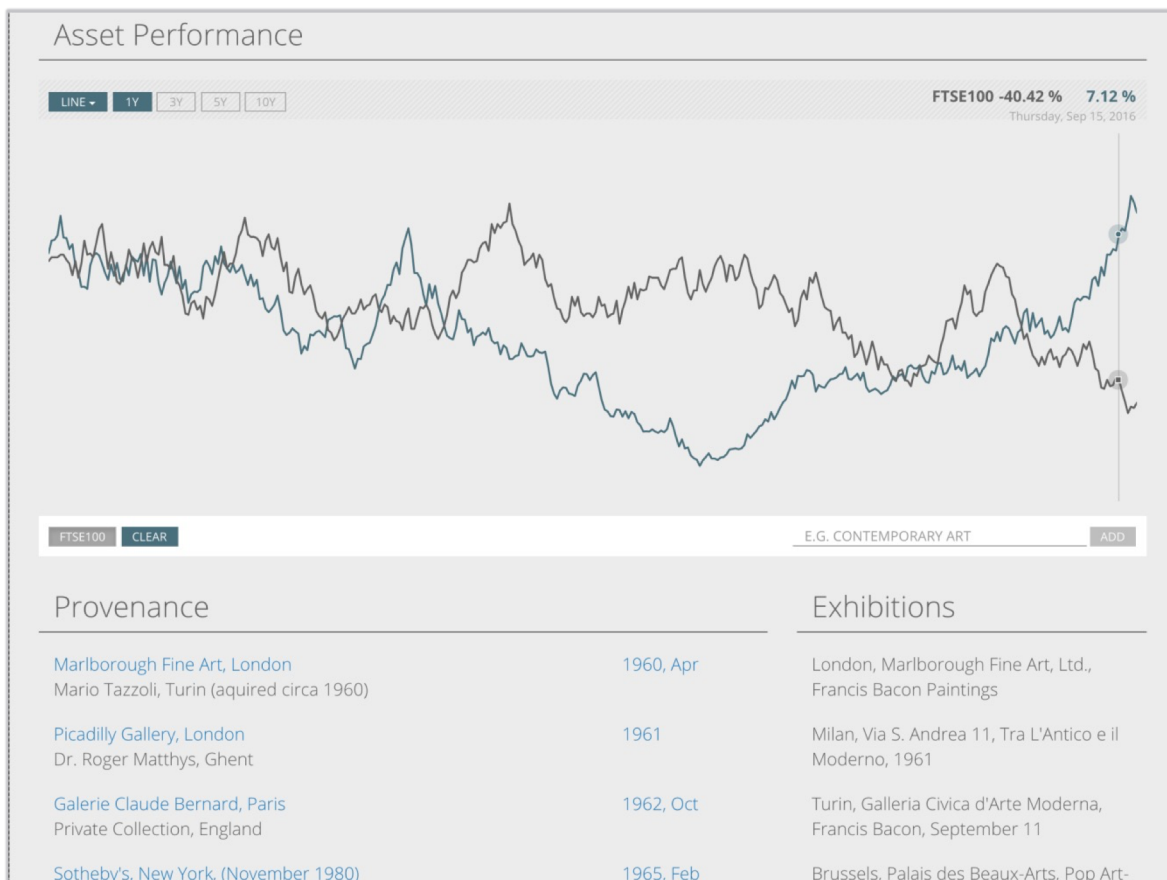
There is an estimated \$3 trillion worth of fine art in safe storage, of which circa \$65 billion are traded annually through auction houses and art dealers.<sup>1</sup>

Fine art is considered a reliable and safe store of value. Wealthy families have kept art in their portfolios for centuries, and trading volumes have continued to grow steadily over the last few decades. Interest in fine art among investors and wealth managers is on the rise, and younger generations of buyers are eager to embrace art-tech.

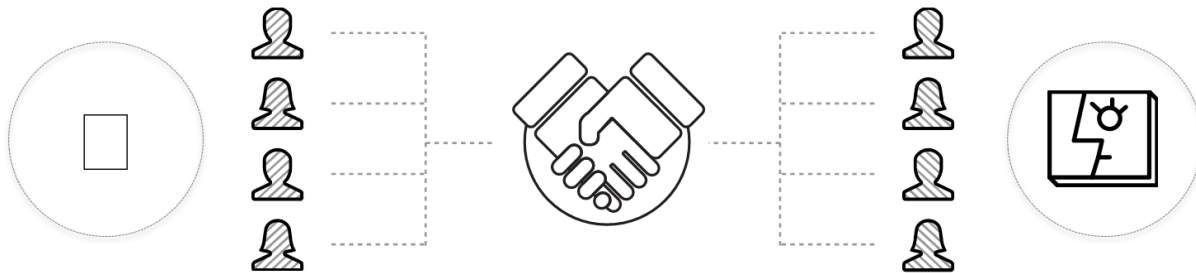
But the \$65 billion annual fine art industry is in desperate need of open and fair marketplaces that create transparency and liquidity. The antiquated industry is struggling to see trading volumes reach their real potential. The problem is that access to information is patchy, and art pieces are traded at outdated venues. Sales are processed manually and settlement can take weeks. This opaque and inefficient process discourages many potential investors, which means art trades are infrequent and art as an asset is illiquid. In

addition, many investors favour using financial vehicles over direct ownerships because they want exposure to art but don't want the responsibility of having to care for the physical art piece.

Fine art remains one of the rare few markets that have remained virtually unchanged for the last three centuries. It has been impervious to the technology advances that have been adopted by the majority of capital markets like company stocks, bonds, commodities and even real estate.



## REMOVING INTERMEDIARIES



But now blockchain can provide the foundation for a secure and efficient market that enables buyers and sellers to transact directly without intermediaries. An open, agile platform can energise art markets and bring millions of investors off the side-lines.

We are named after — and inspired by — an early patron of the arts. *Gaius Maecenas* helped democratise art in Ancient Rome by financing poor poets. We want to be the modern version of Maecenas (pronounced “My-seen-us”) ensuring that fine art is available to everyone and not just the ultra-wealthy.

The lack of innovation within art finance stems from the dominance of old auction houses. The largest — Sotheby’s and Christie’s — monopolise 80% of the secondary market volume. They present an identical fee structure, which can see art buyers paying up to 25 percent commission — and sellers are charged even more.<sup>ii</sup>

Auction houses also control access to information as there is no single art

marketplace that provides a proper price discovery mechanism. In other words, it’s nearly impossible to know the fair price of an artwork because there are no reliable means for investors to assess market sentiment. In other asset classes, like public company stocks or even cryptocurrencies, any investor can tap into historical and real-time exchange price feeds to build pricing models.

The fine art industry doesn’t have any of that. There are no order books or exchanges, and historical information is both scarce and sparse since art pieces are traded so infrequently.

Masterpieces will be traded briskly through an open exchange, giving frequent updates of what the artworks are really worth. Portfolio managers will be able to price their positions more accurately and diversify their risk by investing in a range of different art assets. They will no longer need to have their funds concentrated in a handful of hard-to-sell pieces.

Fine art should become a first-class citizen in capital markets and have rich market data feeds, order books, indices and even derivatives.

The reason auction houses have dominated and controlled the fine art market for so long can be explained in a single word: *TRUST*.

Lack of information and reliable ways of assessing the authenticity of art pieces means that investors deal mostly only with centuries-old institutions that are perceived as trustworthy. These institutions act as intermediaries in almost every art transaction and therefore control the market.

*Blockchains replace traditional intermediaries with decentralised networks of trust.*

By connecting artists, collectors and investors directly via an open blockchain platform with smart contracts, we eliminate the need for brokers and art dealers to facilitate a transaction. We replace the need for trust based on reputation with trust in the decentralised blockchain.

## THE EMERGENCE OF ART-TECH



*"Technology-driven businesses have a clear potential to support the emergence of Art & Finance, through increased liquidity, lower transaction costs and more transparency"*

- Deloitte Art & Finance Report 2016

In recent years, technology innovation has started to permeate into the traditional fine art industry. According to the Deloitte Art Finance Report 2016, "increasing investment in art market start-ups demonstrates continued confidence in the growth of the online art and technology industry". In addition, "the level of investment in art industry start-ups increased from an estimated US\$125

million in 2013 to an estimated US\$505 million in 2015 based on 23 art market start-ups."

Other findings by the Deloitte Art Finance Report 2016 show that the art market is increasingly more receptive to the usage of technology and it anticipates it playing an important role in the next two to three years. It also cites blockchain technologies as an example of an innovation that could contribute significantly to the development of the art and finance industry.

*"73 percent of art professionals (up from 53 percent) and 69 percent of collectors believe that online art*

*businesses will play an important role in the art market in the next two to three years, which signals that art stakeholders are increasingly waking up to the potential of technology and the online art market. New innovations, such as the use of blockchain technologies mentioned above, are an example of how technology and innovation could contribute significantly to the development of the art and finance industry."*

- Deloitte Art & Finance Report 2016

## COMPETITION

Art investors have limited options when it comes to investing in fine art in a secure and trusted way.

Auction houses are perceived as being the safest channel, and that is reflected in the high fees which range between 12 percent and 25 percent. These auctions are mostly conducted in the traditional way, and little has changed besides the usage of TV monitors to track bids in addition to calling the bids out loud.

Art galleries and other art dealers charge lower fees to buyers, in the range of 6 percent to 10 percent. However, these are perceived as less trustworthy, and their art selection is quite limited. In addition, galleries dictate prices instead of market participants.

Besides the lack of liquidity, lack of transparency and the high fees, both of these approaches also require having to physically acquire the

artwork, store it, manage it and look after it. This is something that most investors are uncomfortable with because they are not qualified art experts. An estimated 90% of buyers see art as an investment, and nearly half of them would prefer to have exposure to fine art through a financial vehicle instead of a physical purchase. So the traditional approaches offered by galleries and auction houses leave a huge part of the market under-served.

One alternative to these two traditional approaches is to participate in an art fund. The way this works is that a qualified art expert acts as the art fund manager. They identify a collection of art pieces that are of good value and have potential to appreciate. Investment from investors is solicited, with a minimum of \$500,000 typically being required, and larger ticket sizes being the norm. The art expert then uses the funds to

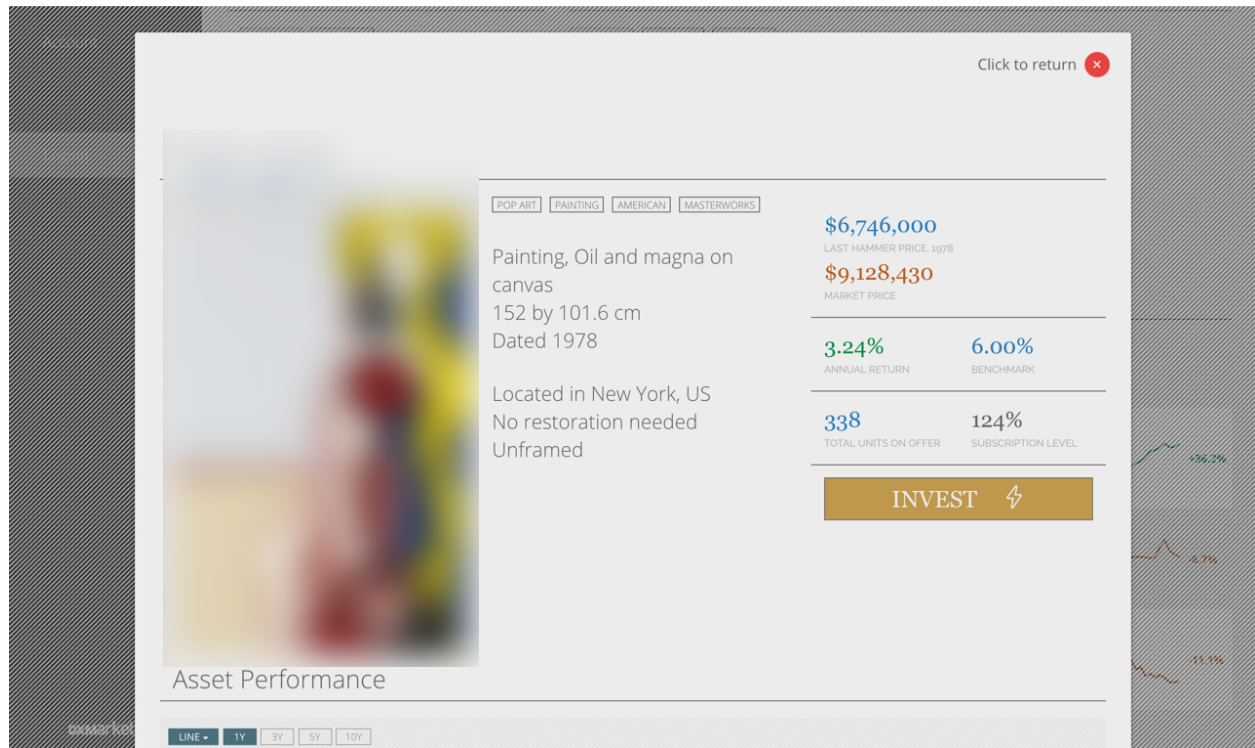
buy the collection, and sits on it for between 5 and 10 years until they can find suitable buyers willing to pay a premium for the pieces. After the last art piece is sold, the fund is dissolved and investors finally get their money back, plus any returns. The art fund manager typically charges investors 2% per annum of any cash invested plus 20% of any profits made. This means that on a ten-year horizon, investors will lose out on about a fifth of their investment in commissions, and on top of that lose another fifth of any profits made. In other words, there is no guarantee of making money even if the art appreciates, and it's not uncommon to make a loss if the fund fails to perform as expected.

The high fees combined with the large minimum investment and the lack of liquidity (minimum lock-in period of 5 years) makes these art funds unsuitable for most investors.

	Sotheby's Christie's	Borro Fine Art Finance	Art Galleries	Fine Art Investment Funds	Mæcenas
FEES CHARGED	12 – 30 %	13 – 40 %	6 – 10 %	2 + 20 %	2 – 6 %
FINE ART SYNDICATION	×	×	×	✓	✓
COLLATERALIZED ART LENDING	×	✓	×	×	✓
PORTFOLIO GENERATION	×	×	×	✓	✓
SPECULATIVE INVESTING	×	×	×	×	✓
DEALING	✓	×	✓	×	×



## ART AND THE BLOCKCHAIN



There are non-financial blockchain initiatives in the fine art space which don't have an investment focus. Instead, they attempt to solve issues around provenance of traditional art pieces and protection of digital artworks. A prominent example is *Verisart* which provides permanent digital art provenance for actual artworks that would typically be stored in galleries. Another start-up is *Ascribe*, which focuses on providing a secure way to trace digital artworks and control how they're shared.

But fintech start-ups are beginning to emerge with innovative alternatives to invest in art. *Arthena*, based in the US, is one such example, which uses a typical crowd-funding approach to create art funds. This new model is proving to be popular with investors as it reduces the ticket size to \$10,000 and waives the 2% management fee (although it still charges the 20% performance price). Although this is definitely an improvement over traditional art funds, this approach still fails to address the fundamental issues of art investment, namely the lack of transparency, lack of liquidity,

and most importantly the fact that trust is centralised.

*Mæcenas*, on the other hand, aims at leveraging blockchain technology to fully democratise access to fine art investment. By tokenising art, the platform converts million-dollar artworks into smaller financial units that can be bought and sold easily globally through a transparent marketplace. This provides investors with liquidity and a much-needed market-driven price discovery mechanism.

# Maecenas



## OUR PLATFORM

Maecenas uses blockchain technology to create tamper-proof digital certificates linked to pieces of art. These certificates are highly secure thanks to the cryptographic properties of blockchains. A single artwork is broken down into thousands of certificates, similar to how a public company issues shares. Investors can then purchase these certificates to own a percentage of a given artwork, and they can sell them back to other investors at any time via the Maecenas marketplace.

When Maecenas platform is fully operative, new artworks will be continuously listed on the platform after passing a strict due diligence process. This involves verifying the art provenance, insurance policy, safe storage, independent valuation, artwork condition and verification on the registry of loss and stolen art. Only high-quality artworks with a pristine track record will be listed.

Once listed on the platform, artworks go through a bidding process following a [Dutch auction](#) process whereby investors submit private bids stating how many certificates representing a fraction of the artwork they want to purchase and at what price. This is essentially a confidential and cryptographically secure book-building exercise. This process not only gives investors bargaining power but it also provides them with a much fairer and transparent pricing mechanism. In addition, it is harder to manipulate compared to traditional auctions or fixed-price listings.

The auction process does not happen instantly but rather it takes place over a number of days or weeks to allow all members of the Maecenas' community to participate. When Maecenas platform is fully operative artworks will be listed in any fiat currency (e.g. USD, EUR) or cryptocurrency (e.g. BTC, ETH). Conversely, investors may also prefer to invest in either fiat currencies or in cryptocurrencies, effectively creating

a multi-currency conversion scenario. Utilising a native currency-independent token as proxy for all currency conversion allows us to eliminate currency conversion risks.

This token will be called **ART**.

## OUR TECHNOLOGY

The platform's design provides fault tolerance and simple recovery mechanisms. The system is also highly scalable, resilient and easy to upgrade. It has a high degree of reusability and allows us to be agile in our development.

For instance, when we need to integrate Maecenas with an external service (e.g. a payment processor) we just create a new micro-service to handle that and link it to the rest of the services via message queues. This has the benefit of letting our developers simultaneously work on different tasks and makes integration and testing relatively simple.



# Mæcenas

## THE ART TOKEN

*ART – The currency of the Maecenas economy.*

When Maecenas platform is fully operative, the ART will be the digital token that is required by all Maecenas functions that are exposed on the blockchain via smart contracts.

We believe that the art market is in desperate need of transparency and fairness. Therefore, we've decided that all sensitive business logic dealing with money or assets will be run on a public and decentralised blockchain. This ensures that our processes can be publicly audited and known upfront.

The main and most significant function of our platform is the Dutch auction. This is the process that receives bids from investors and issues digital shares of paintings. Running such a critical part of our system on an open and transparent platform like Ethereum allows the entire community to scrutinise our operations. It also protects Maecenas

itself from any potential internal manipulation or insider trading.

These smart contracts that we're creating, including the Dutch auction contract, will require ART to operate. ART is like the fuel of the decentralised Maecenas machine. Any fiat or crypto amounts being invested through smart contracts will be first given a value in ART first. Having our own token allows us to collect income from these smart contract activities. The utility of these tokens is that ART can perform different platform functions.

In the case of our Dutch auction, ART acts as a clearing and settlement mechanism that Maecenas uses to issue digital shares of paintings. The more paintings are auctioned the higher the demand for ART will be.

ART has a fixed supply, so we anticipate that the increasing economic activity of Maecenas will play a strong role in the market dynamics of ART in crypto exchanges. The rationale here is that as the Maecenas economy grows, the market cap of ART - the Maecenas

currency - should also grow with it. That is our reasoning. Of course, nobody can know or guarantee if the value will or won't go up.

Still, the economy of Maecenas is not limited to just running auctions. For example, artworks in our platform can be leased to museums for exhibitions. The income generated by this activity is then distributed proportionally to holders of fractions of paintings or sculptures. This leasing and income collection function is also performed by smart contracts and therefore requires ART tokens to work.

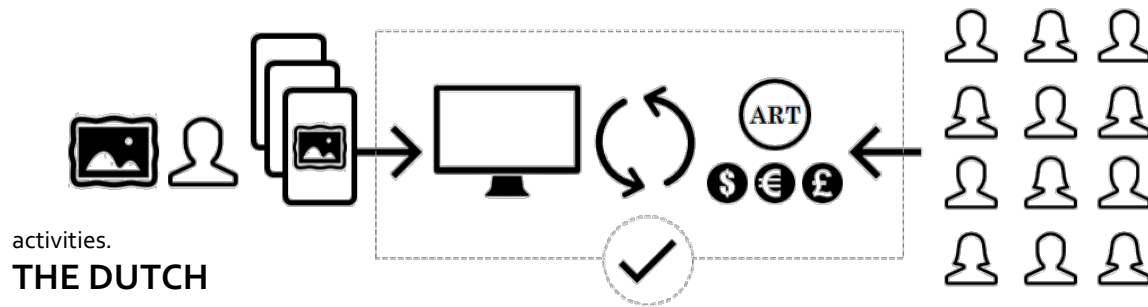
Besides, as the Maecenas ecosystem grows, we anticipate creating additional income-generating processes. Many of these will require smart contracts to operate (for the reasons stated above), therefore further increasing the demand for ART.

ART plays a crucial role within Maecenas. It enables our platform to operate transparently and openly in a decentralised space while at the same



# Mæcenas

time deriving revenue from those



1. An art owner decides to sell an artwork on the Mæcenas platform, and chooses in which currency to receive the proceeds. This could be ART tokens, cryptocurrencies or fiat currencies.
2. Investors participate in the auction by submitting ART tokens to the auction smart contract. For those investors wanting to participate with fiat currencies or other cryptocurrencies, deposits are kept in a per-investor fully-segregated virtual bank account..
3. The Mæcenas platform, upon reception of monies, allocates an equivalent amount of ART tokens to the investor and pledges the tokens on the smart contract on behalf of the investor. Mæcenas uses its ART reserve funds to guarantee liquidity, and converts the submitted funds into ART seamlessly to ensure a good user experience.
4. When the [Dutch auction](#) process finishes, the smart contract proceeds to analyse all bids to determine the final share price and the amount of shares each successful investor ends up purchasing.
5. The smart contract settles the transaction by issuing artwork crypto-certificated to investors. The artwork seller receives either the ART tokens or the equivalent amount in currency depending on what they chose before the auction started.

## AUCTION PROCESS

# Mæcenas

## WORLD-CLASS FINE ART

We have worked very hard to build a strong shortlist of flagship artworks that qualify to be listed on our platform. We now have access to a diverse pipeline of art pieces by blue-chip artists that collectively is worth in excess of one-hundred million dollars. This initial lot is an excellent starting point that will allow us to have good volume and traction when we launch.

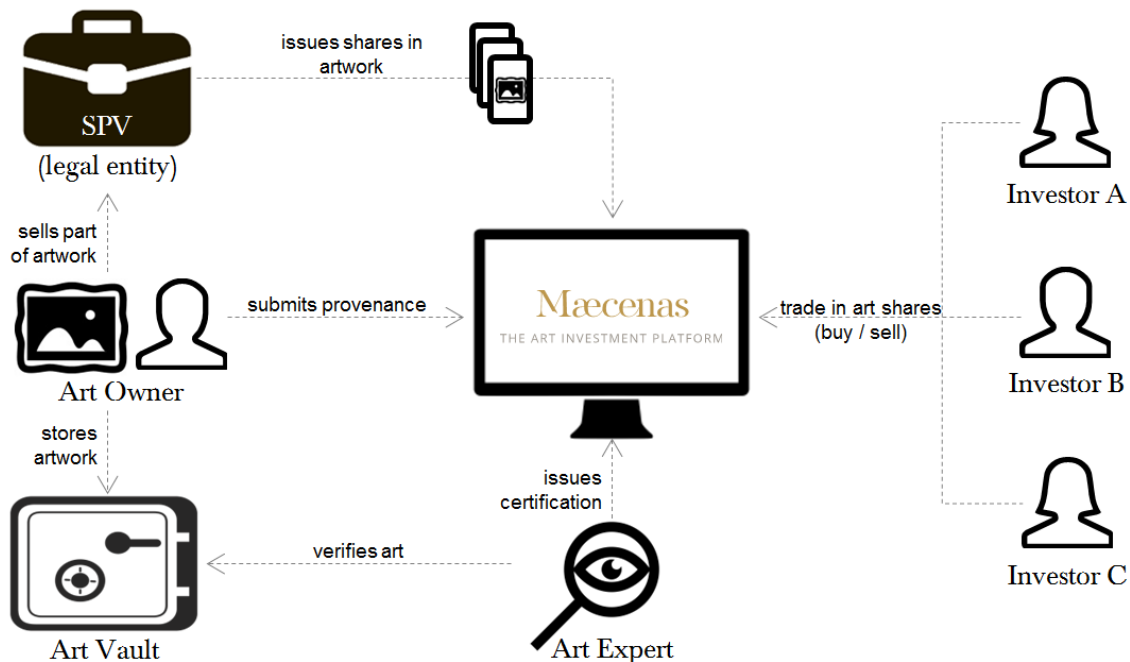
These are some of the names that could make it into the initial collection.

- Impressionist and Modern: Picasso, Monet, Braque, Pissarro, Giacometti, Brancusi, Modigliani, Renoir, Chagall, Munch, Sisley.
- Post-War and Classical Contemporary: Warhol, Basquiat, Lichtenstein, Soulages, Beuys, Duchamp, Bacon, Sam Francis, Dubuffet, Bourgeois.

## LEGAL & COMPLIANCE

One of the challenges that we face when we started defining the business model of Mæcenas was to figure out how to structure the art investments in a way that would not infringe financial regulations, while at the same time provide security and protection for investors.

For that purpose, we are engaging with numerous art finance experts, law firms and investment professionals worldwide to seek advice and to determine the best legal and financial structure to enable secure co-investment in fine art,



underpinned by blockchain technology.

# Mæcenas

Since this has never been done before, the process required extensive research and validation carried out over a period of nearly a year. We've covered all top financial jurisdictions and explored a number of different financial structures, weighing all pros and cons for each approach.

The result of this effort is a very comprehensive global view of how our blockchain-based art shares would fit on each of the top financial jurisdictions worldwide, which has allowed us to strike the right balance between flexibility and simplicity.

The diagram below shows a high-level structure for the adopted model of ownership.

## KEEPING ART SAFE BUT NOT HIDDEN

Every artwork listed on the platform will be kept in purpose-built safe art storage facilities.

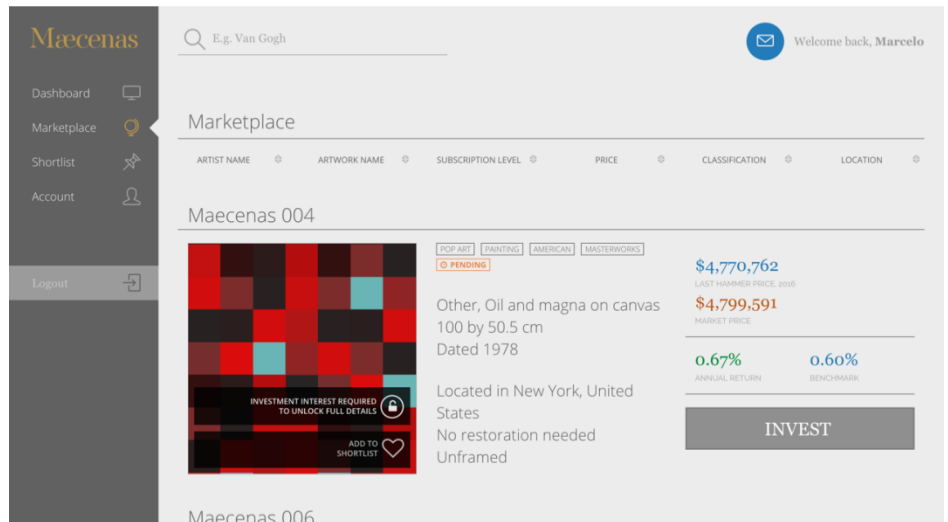
These high-security vaults actually also operate as galleries whereby dedicated rooms are allocated for viewing purposes. Mæcenas, in its effort to democratise access to fine art, will allow investors and their nominated guests to arrange visits to appreciate the artworks.

These art storage facilities typically sit within international designated areas next to airports so that the valuables kept in storage do not attract local tax when they're transacted, making it attractive for investors.

Known as freeports, these facilities are available in most tier-1 art trading hubs and we have already established relationships with many of them. One such facility is Le Freeport in Singapore where Christie's operates their Fine Art Storage Services (CFASS).

Equivalent facilities exist worldwide, namely:

- Geneva  
<http://geneva-freeports.ch/en>
- Luxembourg  
<http://www.lefreeport.lu>
- Singapore  
<http://www.singaporefreeport.com>
- Shanghai  
Le Freeport West Bund (scheduled to open late 2017)
- New York  
<http://www.arcisartstorage.com>



## TARGET SEGMENTS AND TRENDS

Maecenas' target market is sizeable in its own right. In addition, we capitalise on a number of recent investment trends which are set to continue:

### **The Shared Economy:**

Maecenas allows investors to syndicate and jointly own a piece of art. This model has been validated at large by the continual increase in popularity of the many property and equity crowdfunding platforms available.

### **Cryptocurrencies:**

Investment in cryptocurrencies and crypto-assets has grown exponentially over the last few years. The value of many of these digital assets has increased 50x in less than a year. Trading volumes at crypto-exchanges are at all-time highs and show no sign of slowing down.

The value proposition of cryptographic tokens is simple: democratise access to wealth. Blockchains allow investors to be in full control of their digital assets without having to rely on intermediaries or be exposed to central counterparties.

Maecenas capitalises on this trend by opening up trillions of dollars' worth of fine art to the crypto investor community.

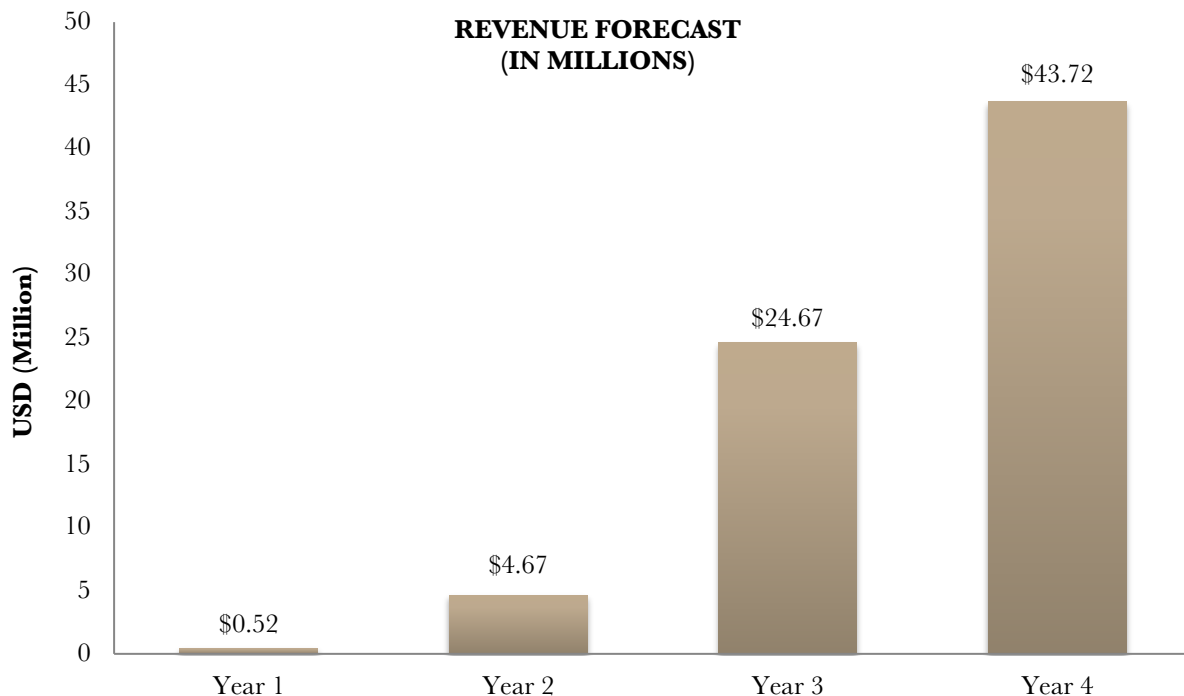
### **Investment in Art Finance Innovation:**

The investment in art-related start-ups quadrupled in the last two years reaching over \$500m a year.

### **Art as Collateral:**

Art finance is expected to grow significantly. The US art-secured lending market has grown an estimated 15 to 20 percent annually for the last five years.

### **Self-Investment:**





# Maecenas

Over the coming years, more and more money will be handed to younger generations, who are actively looking to participate in the decision making of their investments. The behaviour of this digitally native generation favours digital-first platforms and the ability to self-invest. Millennials are going to be the largest adult segment by 2020.

## **Alternative Investments:**

The younger generation of investors favour tangible assets over traditional capital market products, such as government bonds and stocks. These products are currently offering negative or very low interest rates, making alternative assets even more attractive.

## **BUSINESS MODEL**

Our business model is based primarily on two revenue streams: issuance and secondary market.

- Issuance: Artworks listed on Maecenas attract a one-time issuance fee of 6% which is charged to asset owners. Investors participating in auctions pay a 2% one-off fee. These fees are charged on settled transactions only.
- Fine Art Marketplace: Shares or certificates representing rights on artworks will be available on Maecenas Fine Art Exchange. It will always be free to sell your auction-acquired shares or certificated, while buyers will pay a commission.

# Mæcenas

## OUR TEAM



[Marcelo García Casil](#)  
Co-Founder & CEO  
Singapore

Financial technology expert who has wide-ranging experience in designing and building large-scale enterprise-grade applications with a focus on investment banking and financial systems.



[Miguel Neumann](#)  
Founding Partner  
London

Business manager with over 15 years of experience managing teams, involved in digital projects including large-scale transactional platforms for first-class investment banks.



[Jérôme Croisier](#)  
Chief Arts Officer  
Geneva

An independent Art Advisor and Art Historian, based in Switzerland. He has 20 years' art market experience and his art history research has been published in a variety of books and publications.



[Federico Cardoso](#)  
Co-Founder & CTO



[Javier Tamashiro](#)  
Compliance



[Federico Videla](#)  
Information Security



[Saul Hudson](#)  
Communications  
& PR



[Marc Garriga](#)  
Marketing

# Mæcenas

## ADVISORS



[Gimena Rabinad](#)  
Legal Counsel



[Guillaume Dubray](#)  
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Polytech Ventures



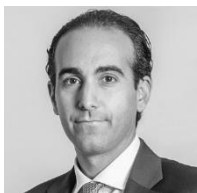
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[Scott Huan](#)  
Partner,  
Aumakua Venture  
Fund



[Fouad Bajjali](#)  
CEO of Global  
Financial Company



[Daniel Liebau](#)  
Partner,  
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[Luis Pastor](#)  
Partner,  
Grant Thornton



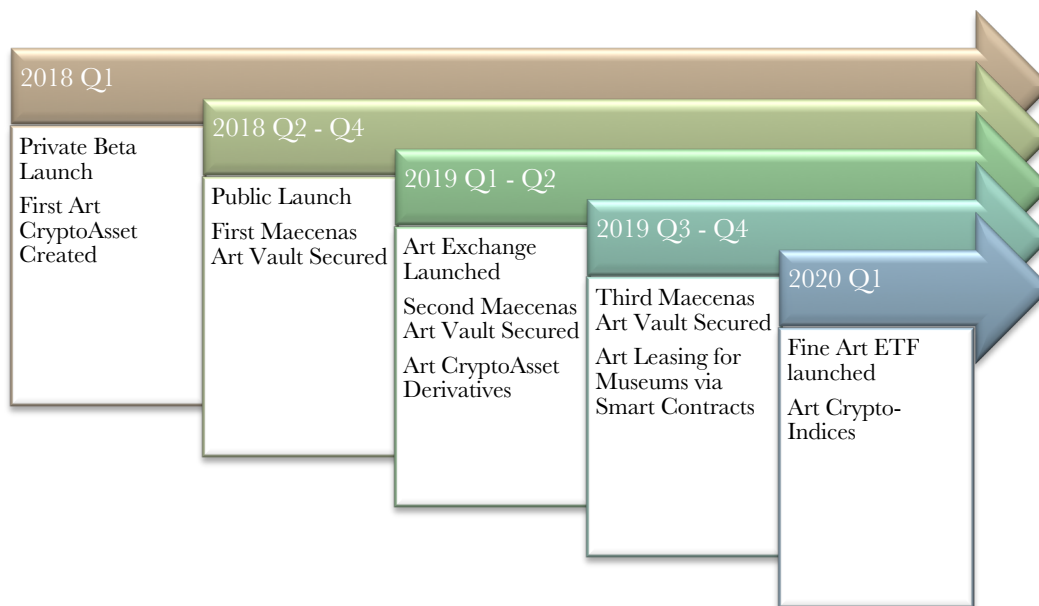
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Partner,  
Wilbe Ventures



[Philippe Beckers](#)  
Founder,  
Finarchitects

# Mæcenas

## ROADMAP



## REFERENCES

<sup>i</sup> <https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/financial-services/artandfinance/lu-art-asset-class-122012.pdf>

<sup>ii</sup> <http://www.christies.com/features/guides/buying-guide/related-information/buyers-premium>

<http://www.sothebys.com/en/news-video/blogs/all-blogs/sotheby-s-at-large/2016/10/important-update-regarding-sothebys-buyers-premium.html>

## DOCUMENT HISTORY

- Version 1.0 – 10<sup>th</sup> August 2017
- Version 1.1 – 14<sup>th</sup> August 2017
- Version 1.2 – 21<sup>th</sup> August 2017
- Version 2 – 21 March 2018