

Platform for digital fine art investments and donations



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1. Executive summary

1.1 Orion Vault

Platform for digital fine art art investments and donations. Creating fully digital, unique masterpieces, with ownership coded on blockchain. Providing a marketplace to trade this new digital asset class faster, more secure and cheaper than current solutions. Social business model allowing art institutions, galleries and artists to create new revenues. Based on technology that is scalable to other digital IP markets like movies, music or gaming.

1.2 Problem

- Ownership it is virtually impossible to prove originality, ownership and provenance of digital fine art pieces (e.g. digital photography, video, performance, animation, or other digital goods). They are not tangible enough and as a result digital art is not being treated as an investment or store of value.
- **Opaque** art in general is traded via opaque personal relationships, leaving it open to multiple layers of fees (often 20%-50% even on the secondary market) and high incidences of fraud (15%-40%).
- Manual lack of technology in the current art market to register, track, purchase, trade, insure and transport art is making all art related processes time consuming, manual and prone to errors. Art market is one of the most prospective markets for tech disruption and blockchain based solutions.

1.3 Solution

- **Digital Masterpieces** the future of art is digital. Digital fine art is created and originally stored in the digital space, such as digital photography, animation, performance, video. etc. Currently there is no standardized solution to collect and trade digital art. Orion Vault connects storage of original art files in the cloud with blockchain certified ownership creating digital, signed and unique masterpieces.
- Blockchain enabled marketplace using blockchain technology, Digital Masterpieces
 will be securely traded at a fraction of current trading costs. Orion Vault's front-end
 product will enable easy discovery, collecting, and trading of Digital Masterpieces,
 creating a peer to peer marketplace. This new way of experiencing and investing in art
 will attract new clients and open the art market to new audiences.
- Unique business model blockchain enabled business model that profits all parties involved. For artists and galleries - carry commission for life, allowing them to participate in appreciation of value of their art on the secondary market. For investors - profit share from patronage, creating additional incentives to support up and coming artists and diversify investments. For everyone - lower fees, increased security and speed of transactions.



1.4 Value Proposition

- Orion Vault is for **younger**, **affluent and tech savvy art investors and collectors**. They might be already collecting and investing in art, or are just starting this journey. They look for new assets, new ways of investing and tech led approach to customer service.
- Those collectors and investors are **dissatisfied with the current solutions** on the art market. Most importantly **opacity, fraud, high fees and manual processes**. They view entering the current art market as a difficult, time and money consuming endeavor.
- Orion Vault is a new type of art-tech company, creating a platform for digital fine art. Our platform combines the latest technology solutions like encrypted storage in the cloud and automated ownership tracking in blockchain to allow collectors and investors to trade (digital) art, in a faster, more secure and more profitable way.
- Unlike traditional art companies who make money on physical art and derive a majority of the profits from opaque, and complex manual processes, to extract high fees from collectors and investors.

1.5 Market

\$50bn art market currently with growth potential to \$100bn+ in the next few years. Currently, fees just on the secondary market are in range of \$13bn. OV could lower fees by \$10bn if all trades were done on the platform. Our **technology allows expansion to other digital IP markets** like music, movies, and gaming with the potential to quadruple the addressable market.

1.6 Business model

5% fee on all trades made on the platform and 1% fee on donations. Current models are 5x-10x more expensive. Carry commission of 5%, for lifetime for artists, galleries and museums. Additional business models in the future could include subscriptions for using our infrastructure/blockchain as a service in management of other digital goods and properties.

1.7 Team

Majority working together for years at **Google**, on avg 10+ years of experience across US, Europe, Asia. Full stack team of blockchain developers, back/front end, UX, finance, business development and art.

1.8 Usage

Orion Vault uses **Ethereum** blockchain (with ability to migrate to other blockchain solutions in the future). Users are only required to have ETH wallet and register on our platform to use it. Currently all payments will be done in ETH,] and in the future, other crypto and fiat will be accepted. Owner of digital art has personal usage rights (cannot use art for commercial purposes like creating editions and selling them).



2. Introduction

2.1 Motivation

Art has always been at the heart of human communities and civilisations. It has been with us before we knew how to write or talk, and long before we invented money. From the Paleolithic cave paintings to the Da Vinci inspired art on the Pioneer spacecraft traversing the universe, art has always accompanied us as a species. However, the current art market is stagnated with the majority clinging to business models that have not evolved much in the last 500 years. Far from embracing new transparent opportunities, the art market is probably more closed and opaque than ever. We are changing this.

Imagine a world where all art is preserved and secured for future generations. A world that embraces and enables new expressions of human emotions and creativity. A world where artists can find patrons and collectors easily, and receive profits from their works even after the initial sale, for a lifetime. Imagine you can collect ephemeral art like animation, performance or digital painting. A world where you can always be sure that the art you are buying is original and comes from an artists. A world where you are paying one tenth of the fees and commissions you are paying now. This is the world we are building.

2.2 Company, Team and Principles

Orion Vault AG is a Swiss company founded in Zug, Switzerland, known also as "Crypto Valley" due to favorable regulations towards blockchain companies and a thriving startup ecosystem. At the root we are a family company, joined by friends with whom we worked over the years on a number of successful projects, mostly at Google. We are joined by reputable advisors with over a century of combined experience in founding, building, selling and investing in successful companies. We are technologists by skill, and we have many artists in our families - painters, dancers, photographers, etc. We witnessed first hand joys and difficulties of artists lives and we share the passion to make a difference in that world. Lastly, we are a diverse team, born, educated and with professional experience across three continents - US, Europe and Asia.

We based Orion Vault on three principles:

• **Digitization** - we believe that the future will be digital. This will be driven by two factors. The first is technological, it is simply more convenient, transparent and valuable to manage digital entities rather than physical ones. A good example is money, which first moved from seashells to gold, then to banknotes, then digital cards, and now to cryptocurrencies. The second factor is value attribution, as societies become more developed the more value they attribute to non-tangible goods. Already in many areas value is derived not from physical substance but from non-tangible attributes they represent for example luxury brands, art, or experiences. Both trends will continue, more



and more things will be digitized, and more and more value will be attributed to them, in the end majority of value will exist only in the digital space.

- **Financial Sustainability** we believe that any lasting business and social change needs to generate and distribute value. It needs to be self-sustaining. A good example of that is the reward system for miners in bitcoin, or casper protocol on ETH.
- Social-Business Model Finally, we believe that whatever we do, we should aim for more than just economic success, we should have a positive impact on the society and civilisation as a whole.



3. Problem

3.1 Ownership

Ownership and its history and provenance are at the centerpiece of the art market. Art that has been admired and bought for millions, yet loses almost all value when proven to be a forgery, no matter how good. Authenticity of art and the ability to prove it constitutes majority of the price. This is why it is so important to prove the history of ownership. Authenticity connects to the scarcity of art, ensuring that collector owns the one and only unique art piece. There has been numerous scandals in the art world, with loses adding up to billions of dollars¹. It touches galleries, collectors but also museums² (in one case it was discovered that half of the museum's collection was fake). This is why some experts estimate that even 40%³ to 50%⁴ of art can be fake. In another case, an art dealer spent 3 years in prison on a charge of selling fake art, just to be released and cleaned of the charges⁵. Such situations make people hesitant to invest in art and investors trade less than they could. We see how difficult it is to prove ownership in the physical space, but it is even trickier in digital.

It is virtually impossible to prove originality, ownership and provenance of digital fine art pieces (e.g. digital photography, video, performance, animation, digital goods). They are not tangible enough and too easily copied. This is one of the main reasons why digital art has not been popular across investors and is not treated as an investment or store of value. There were few attempts to make new media and digital art ownable, however none has proven to offer a successful solution. How do you make a unique, ownable, original version of a new media art piece? We believe that finding a solution to this problem will mark the future of art, as most art in the coming years will be created using new media.

3.2 Opaque

Another big problem in the art space is lack of transparency. Art in general is traded via opaque personal relationships. At its root this could be positive, especially in the context of establishing trust required for ensuring provenance and anonymity. However, relying just on personal trust often leads to many scams, where even the biggest collectors and galleries are fooled by forged art. Moreover, it drives fees up and reduces profits as investors need to rely on numerous middlemen to reassure them about the provenance of any art piece. There are numerous intermediaries and middlemen in the art market, both on the sale and buy side. Especially on secondary market profits are limited by high fees and additional costs like sellers fees buyer premiums, insurance, storage, transportation, authentication or consulting advice, all easily totaling to 40%-50% of the total price⁶: "With

https://www.thequardian.com/news/2018/jun/15/how-to-spot-a-perfect-fake-the-worlds-top-art-forgery-detective

https://www.nytimes.com/2018/04/30/arts/design/french-museum-fakes.html

https://www.pbs.org/newshour/arts/economic-inequality-and-fakery-in-art https://news.artnet.com/market/over-50-percent-of-art-is-fake-130821

https://www.telegraph.co.uk/news/2018/03/16/art-dealer-freed-three-years-3bn-collection-fakes-ruled-genuine/

https://www.artsy.net/article/artsy-editorial-costs-mega-art-collector



the buyer premiums at 20 and 25 percent and heading upwards I am quite sure that needs to be carefully factored into any auction purchase," said veteran advisor Todd Levin. "If you buy something from auction, by the time you factor in the premium and New York state sales tax at 8.875%, you're adding a full 30 to 40% on top of the hammer price." Further he noted that by working with an advisor—as many serious collectors often do—who charges an industry standard rate of 10%, the total cost of an artwork bought at auction can be between 40% and 50% on top of the hammer price. That means a \$500,000 painting might actually run you closer to \$750,000."

High fees are eating up profit margins, stalling trading and making art an even more illiquid asset. Prices are often kept secret and even when publicized, they are rarely accurate. There are multiple cases when hidden fees are even higher than the "official" 40%-50% and can reach millions in undisclosed arrangements⁷. It is not a surprise that nearly 90% of new buyers are citing lack of transparency as the main challenge and barrier ⁸. This state of the art market is different to almost all other widely traded investments markets, where one can easily track prices such as bonds, stocks, commodities or real estate. Now with the technological development there should be something better, a solution that can both ensure privacy, while providing price transparency and improving trust. This solution is key to the growth of not only art market but also all other IP markets.

3.3 Manual

Art market is "old fashioned" and manual, not only in comparison to all other intellectual property markets, like books, movies, music or gaming, but also investment markets like stocks, bonds or real estate. Lack of technology in the current art market to register, track, purchase, trade, insure and transport art is making all art related processes time consuming, manual and prone to errors. Art market is one of the most prospective markets for tech disruption and blockchain based solutions. As Harvard Business Review puts it: "Blockchain technology provides a new platform for creators of intellectual property to get the value they create. Consider the digital registry of artwork, including the certificates of authenticity, condition, and ownership (...) The technology solves the intellectual property world's equivalent of the double-spend problem better than existing digital rights management systems; and artists could decide whether, when, and where they wanted to deploy it."9.

Currently owning and managing physical art is a chore. It often takes months to put the artwork for sale and finalize it. Finding buyers, preparing auctions, dealing with transportation and insurance, all takes time and money. Owning the art is equally costly and time consuming, often in hundreds of thousand of dollars for bigger collections¹⁰. Most wealthy collectors do not even enjoy the art they buy, either because it is in one of their houses when they are constantly on the move, or even more likely because it is either

⁷ https://www.artsy.net/article/artsy-editorial-five-legal-cases-changing-the-art-market-as-we-know-it

https://www.hiscox.co.uk/sites/uk/files/documents/2018-04/Hiscox-online-art-trade-report-2018.pdf

https://hbr.org/2016/05/the-impact-of-the-blockchain-goes-beyond-financial-services



stored in special vaults or stays in museums. It is estimated that Freeport in Geneva is home to around 100 billion dollar of art that is securely stored there. Even after spending millions of dollars on artworks, collectors have little joy from it. You could think that it should be different for digital art, at least this one is mobile, you can present it on any screen, in a few locations even. There is also no risk of destroying digital art, so no need for expensive storage or insurance. However, the current market for digital art is also manual. When you buy a digital photography from the gallery you only get one physical print out from the source file, you still need to transport it, it still can be damaged and you won't get more despite it being digital. It is even stranger with animation or video, where a collector will get a file on a pendrive or hard drive (often in a nice box) together with a paper certificate to "authenticate" the originality and rarity of the art file. What if a collector resells the piece of digital art? The new buyer should take the digital file on pendrive and certificate and check with gallery or artists directly whether they are actually authentic and original. All of this is very last century. A manual process. It does not have to be like that, it should not be like that, especially for digital art.



4. Solution

4.1 Digital Masterpieces

The future of art is digital. Digital Fine Art is created and originally stored in the digital space. For example, digital photography, animation, performance, video etc. The challenge so far has been how to make art unique and ownable in the digital world. Currently there is no standardized solution to collect and trade digital art. Orion Vault connects storage of original art files in the cloud with blockchain certified ownership creating digital, signed and unique masterpieces. We call them Digital Masterpieces.

Digital Masterpieces use blockchain technology to make digital art unique and ownable. It's clear who is the owner of the unique and only certified version. The owner may decide to be anonymous and nevertheless it's still transparent that there is only one, unique, blockchain certified art file belonging to a specific blockchain address. This original file comes directly from the artists. It is a source file that the artist has created. Think about an original painting - there can be many printouts of The Starry Night by Van Gogh, many images of it on coffee mugs and t-shirts, but there is only one source piece, this source is the original painting in the MOMA. Similar with Digital Masterpieces, they constitute the original, unique source file coming directly from the artists and store encrypted in the cloud, accessible only to the blockchain certified owner. Digital Masterpieces unlock collectible and investment value for new media and digital art, and because most of the art in a few years will be in the digital space, DMs open a new future for the whole art market. The same technology used for digital art can be applied to other intellectual property markets like music, video, gaming etc. offering even more scalability.

4.2 Blockchain enabled marketplace

Orion Vault platform enables easy discovery, collecting, and trading of Digital Masterpieces, creating a peer to peer marketplace. Users are able to see who owns the rights to a specific art piece. The ownership can be anonymous or public (if the owner chooses so). Tracking of ownership on the blockchain creates a history of when and at what price deals were made in a fully transparent way. As the ownership is tracked on blockchain, there is no need for multiple intermediaries to connect investors and verify ownership. Investors are able to deal directly between themselves, speeding up the whole process and retaining more profit. This new way of experiencing and investing in art will attract new clients and open art market to new audiences.

In all cases, trust is based on transparent data existing on the blockchain, not on multiple intermediaries. Implementation of blockchain ownership and provenance is seamless with no extra steps for investors. All transactions on our platform use blockchain provenance automatically. This makes Orion Vault the most trusted and transparent provenance



tracking platform in art history. Thanks to blockchain ownership tracking, there is no need for third party verification. Elimination of intermediaries in the secondary market increases the value for investors on both sides of the deal. Sellers are able to keep more money from the sale, while buyers pay lower fees. The whole transaction process is faster and smoother as fewer people need to be involved and most touchpoints are automated. Consequently, Orion Vault is able to operate on up to 10x lower margins than current solutions. All fees are coded in smart contracts, making them fully transparent. Investors can be confident that they are getting the best deal and that they are treated fairly.

4.3 Unique business model

Blockchain offers opportunity to implement new business models that are more profitable for all parties involved. Firstly, everyone can enjoy lower fees because a majority of the process is automated. Secondly, for artists and galleries we introduce a carry commission for life. Allowing them to participate in appreciation of value of their art on the secondary market. This works like automated royalties, paid out to original creators who first introduced works to Orion Vault Platform. All transactions go through blockchain, the smart contract enables taking part of each trade and paying it out automatically to the artists (and galleries). This is transparent as code is public on blockchain and automatic, hence artists and galleries can be certain of the payouts without any need to manual checks. In the future this technology could be implemented in other IP markets like music, video or gaming to improve transactions and royalty payments management. Such model creates a fair environment for artists and galleries who so far had no practical means to participate from the appreciation of value on the secondary market. At the same time it is acceptable for investors and collectors because the overall fees on Orion Vault platform are much lower in comparison to the existing solutions.

Additionally, blockchain allows for new kinds of patronage models that can be beneficial for both investors and artists. Investors or patrons can choose to donate a certain amount to artists to support them on the on-going (monthly) basis or as one offs for specific projects. In return they can participate in the future revenues from the sales generated, all govern by automatic smart contracts. Patrons can find new ways of supporting artists and investors can use this option to diversify their portfolio or invest in art at lower entry points.

Finally, in the long perspective we strive to make all art and culture digital, and accessible to society. So far many museums have been digitizing their collections and allowing public access to those archives for free. However, there was no business model attached to that, meaning those projects became only a cost center for the art institutions. Such projects are not sustainable in the long run and only the biggest institutions can afford them. Orion Vault allows owners to display their works for free to public.



5. Value Proposition and Benefits

5.1 Value Proposition

- Orion Vault is for **younger**, **affluent and tech savvy art investors and collectors**. They might be already collecting and investing in art, or are just starting this journey. They look for new assets, new ways of investing and tech led approach to customer service.
- Those collectors and investors are **dissatisfied with the current solutions** on the art market. Most importantly **opacity, fraud, high fees and manual processes**. They view entering the current art market as difficult, time and money consuming endeavor.
- Orion Vault is a new type of art-tech company, creating a platform for digital fine art.
 Our platform combines latest technology solutions like encrypted storage in cloud and automated ownership tracking in blockchain, to allow collectors and investors to trade (digital) art, in a faster, more secure and more profitable way.
- Unlike traditional art companies who make money on physical art and derive majority of the profits from opaque, and complex manual processes, to extract high fees from collectors and investors.

5.2 Benefits

For Investors and Collectors

- Lower Fees due to automation of the process and because blockchain is certifying ownership, users can enjoy much lower fees in comparison to typical art platforms.
- New Investment Opportunities digital art certified on blockchain offers new investment opportunities. It can unlock billions of dollars worth of art. Moreover, lower fees and faster trade allows for new approach to art investment, in traditional art investment strategies investors usually wait for more than 10 years before they realize profits, they also have lower liquidity.
- New Store of Value this is especially important for crypto and blockchain enthusiasts. Currently, if they want to use digital stores of value they can try different cryptocurrencies, with the biggest being bitcoin (often treated as digital gold). However, all those cryptocurrencies are closely correlated to each other, meaning they usually lose on value together. Stable coins were one idea how to allow for better diversification and protection of value in the digital space, but have not proven yet to be successful. Digital Art on the Orion Vault Platform offers similar benefits to digital store of value like bitcoin. It is accessible from anywhere, its value is purely digital and it can be easily transferred. It also has an advantage over bitcoin; the value of digital art is backed by the art itself. Art has a long history of being a store of value and has its part in diversification of portfolios. Digital art builds on that history. Hence, digital art should offer a better store of value than current digital solutions.



For Artists and Galleries

- New Clients artists and galleries can attract new younger and more tech savvy audiences. The art market struggles to attract new and millennial clients due to its opacity and manual processes. Orion Vault and digital art can not only offer a new revenue stream for artists and galleries but also bring people to the market who would not join it otherwise.
- Profits from the secondary market carry commission is a game changer for artists and galleries. Carry commission allows artists and galleries to participate in the future appreciation of value of their works and be a part of the secondary market. This creates new revenue streams for artists and galleries. Right now artists and galleries prefer that collectors never sell the works they bought from them. Millennials are 2x more likely to sell art pieces (and treat them as investment) vs older generations¹¹. In the traditional art market this causes a lot of tension between galleries and collectors, but with carry commission in place galleries and artists might view the trades on secondary market more favorably.

For Society

• Preservation of the world's art and culture - Orion Vault makes it possible to preserve art in a much better way than any physical storage can. In the near future with decentralised storage solutions like IPSF¹² options for encrypted and secure storage will expand even more. Orion Vault attaches business models to preserve art, hence creating a sustainable way to digitize and preserve more art than any single museum or group of museums could do. Many big museums have been digitizing their collections and making them available to the public, however because they have no business model connected to it, this is just a cost center for them. This is not a sustainable way to digitize and preserve art. On the contrary, the Orion Vault solution offers not only a free but profitable way for artists to store and preserve their collections.

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https://www.artsy.net/article/artsy-editorial-rapid-rise-millenial-collectors-will-change-art-bought-sold

https://ipfs.io/

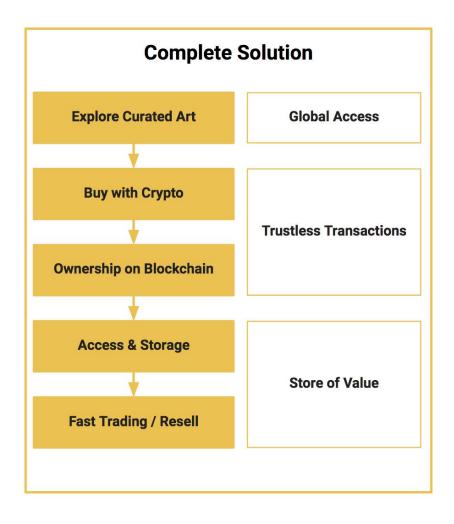


6. Orion Vault Platform

Orion Vault Platform combines all solutions described in the paragraphs above to create a unified product that delivers exponential value to users. Each solution on its own could be a strong feature, however when combined together their useability and value increases. The main objective of the Orion Vault Platform is to create a smooth and scalable experience for all users (artists, galleries, investors, collectors and the public) by bridging the physical, digital and blockchain worlds. We designed the Orion Vault Platform around key three areas:

- Global Access Orion Vault Platform is open to everyone, anyone can explore the platform and view artworks, prices, trends, artists profiles, etc. Owners of Digital Masterpieces may choose to allow other Orion Vault (OV) users to view the artworks for educational purposes in the OV virtual gallery this is similar to how art collectors choose to lend/feature their art collections in the physical museums and galleries. Owners can choose to stay anonymous or have their name displayed on Digital Masterpieces which they own. This is great way for investors and collectors to share their collections with the world, and preserve and promote culture.
- Trustless transactions Orion Vault Platform allows investors to trade artworks in a fraud-free and transparent way on blockchain. Only Orion Vault users (i.e. verified users) can exercise trade activities and all artworks have a clear chain of ownership so investors can track who introduced the artwork to the platform in the first place (only artists and/or galleries). All activities exercised in regards to ownership happen on blockchain (OV users can choose to remain anonymous to the public or disclose their name). All fees are transparent and visible on blockchain.
- Easy to use store of value Orion Vault strives to create an easy and enjoyable experience for its users. We have refined UX, not only to be better than most blockchain solutions but also better than other, more traditional web 2.0 solutions in the art space. We are currently building on the Ethereum blockchain, which is tested and has a sizeable user base. You only need an ETH address/wallet and need to register on our site to buy art through the Orion Vault Platform. In future we will have an option to migrate to other blockchains, as well as allow for payments not only in ETH but also other crypto and fiat currencies. We want to make digital art an alternative investment, a more convenient store of value that can compete on one end with physical art and on the other with digital investments like cryptocurrencies.





6.1 User Experience

The user experience should be easy and convenient. Many of the current web 3.0 and dApps are hard to use and bring a lot of friction to the user experience. Our goal is to make the web 3.0 experience better than current regular web 2.0 sites and use this as our competitive advantage in driving usage of Orion Vault Platform. We can see that there is a huge demand to buy art online (online art market is growing at 12%-15% year over year much faster than any other art segment¹³), including the most expensive, multi million dollar art. Instagram is becoming a medium for discovering and buying art, especially on the high end¹⁴. This shows that the current solutions for buying art online are only forming and are not established, hence platforms like Instagram, which are neither designed nor convenient to buy art, are used during the process. With the right strategy and execution, there is a unique opportunity to leverage user experience in capturing the online art market sales.

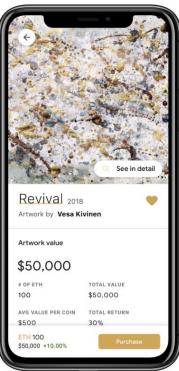
Below are screens from our prototype. Experience is optimized for mobile. Users can browse art pieces, find and follow their favorite artists, learn more about artworks and pieces as well as see chain of ownership on blockchain and trades.

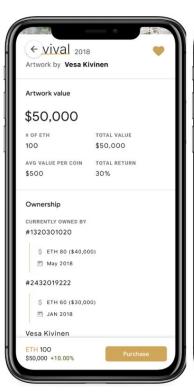
https://www.artbasel.com/about/initiatives/the-art-market and https://www.hiscox.co.uk/sites/uk/files/documents/2018-04/Hiscox-online-art-trade-report-2018.pdf

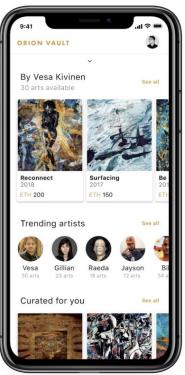
⁴ https://www.independent.co.uk/life-style/instagram-art-market-selling-paintings-worth-20-millions-online-social-media-a7501921.htm











6.2 Use Cases

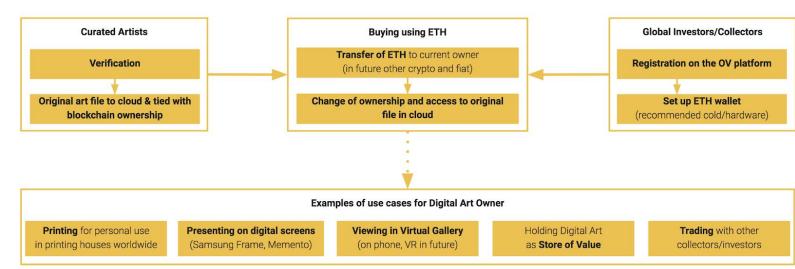
Orion Vault wants to create as easy and convenient experience as possible for all our users. On the artists and galleries side, we work directly with them to ensure authenticity and verification of content that is added to our platform. We work with the selected number of artists and galleries to ensure the right curation and quality for Orion Vault users. After verification, our team works directly with artists, or galleries on their behalf, to add the original, unique, source art file to the cloud. This file is stored securely and encrypted in the cloud, accessible only to the blockchain certified owner. On the platform itself we show a lower resolution picture, videos and animations, but the original, unique file stays locked away and is only available to the owner.

On the collectors and investors side, the process is equally easy. Users register on our platform, which takes take 2-3 minutes. They are only required to have their own ethereum address and wallet. They will use this address to make trades and to this address there will be attached blockchain ownership of the art pieces. In case for bigger transactions we require a KYC. This process should be familiar to anyone opening a bank or crypto exchange account. The Orion Vault Platform runs on ethereum blockchain and accepts payments in ETH (no need for any other custom tokens). In the future there will be an option to transfer to another blockchain, given this will benefit our users. We also plan to open the platform for payments in other crypto and fiat currencies as we scale.

Once users have their account set up, they can browse and explore different art pieces and artists. When they find something they like they click buy button and we let them know



the details of the transactions. Users transfer ETH and after the transaction is verified, the blockchain ownership gets updated. Then they become the owner of the art piece and they get access to the encrypted, original source art file from the artists, in the cloud.



Digital Art offers multiple advantages in comparison with the physical art, as well as with other digital means of storing value, like cryptocurrencies. Below are few typical use cases with benefits they offer.

- Printing Orion Vault Platform allows owners to use services of our partner printing houses worldwide to print out in gallery level quality digital photos, paintings and drawings. Owner can use those printouts for personal use only (it is not allowed to create editions for commercial purposes like selling). As long as the collector remains the legal owner of the art piece (original source file in cloud connected with blockchain ownership), that's how long she/he can keep rights to those physical printouts. Being able to print out a digital photography that was bought for often tens of thousands of dollars should be a standard, but so far it is not. We give that option so that collector doesn't need to worry about transportation, insurance or damaging of the art piece. She/he can buy the digital art file from artists in New York, while being on vacation in New Zealand and when she/he comes back home to Hong Kong, can get the art printed in a nearby printing house. Moreover, collectors can have two or three copies for each of their houses. This allows for a much more enjoyable experience of art.
- Presentation of digital screens Owner of the digital art piece can also decide to present the art on their digital screens, such as Samsung Frame¹⁵, Memento¹⁶ or the upcoming new generation e-ink displays¹⁷. This allows the collector to take the art with them wherever they go. It also allows to display large collections of art without cluttering the house or office. This enables for more innovative and broader experience of art, especially in the performance, animation or video space.
- Viewing in Virtual Gallery Art can be also viewed and displayed on the phones. We take them everywhere with us so let's make them more inspiring. If artistic phone wallpaper

https://www.samsung.com/us/explore/the-frame/highlights/

https://mementosmartframe.com/

https://www.androidauthority.com/e-ink-display-future-display-week-2018-868794/



is not your thing or you are tired of people asking you about it, there will also be an option in the future to use phones and VR headsets to visit your private virtual gallery. Collectors will be able to view their artworks, arrange them and invite other to view their gallery, allowing for new and immersive art experience.

- Store of Value Collectors and investors may simply decide to keep the digital art for an investment purposes as a store of value. Art is used like that for hundreds of years. Freeport in Geneva is said to host around \$100B worth of art¹⁸. Digital art could be used as a store of value not only as an alternative to typical physical art, but also as an alternative or diversification to other digital/blockchain assets (for example bitcoin being treated as digital gold¹⁹).
- **Trading** Collectors and investors can also use digital art on the Orion Vault Platform to trade with each other, building up collections, making investments and capitalizing on them. Lower fees, increased speed and security opens new opportunities and market behaviors for trading art.

6.3 What it means to hold digital art

Holding digital art is similar to holding a physical one. Owner can view it, trade/sell it, showcase it at home or the office, lease it, make a photo or scan of it. In most cases the owner can do what she/he pleases with the art, considering it is done for personal use. Same as with any other art - physical or digital - even after the collector bought it, it is still copyrighted and protects the artists. The buyer cannot make prints or sell copies of the art unless artist has given explicit permission. This holds no matter if art is digital or physical.

Collector of digital file owns the rights to the source file encrypted in the cloud and connected with certificate of ownership on the blockchain. As mentioned in the previous paragraph, the collector can make a printout in approved partner printing houses, can stream the art to digital screen, can view it in virtual galleries and, of course, can trade it, meaning transfer the ownership to another person. Again, all similar to owning a physical piece, but with more options and convenience. When a collector sells the artwork and transfers ownership to a new person, she/he loses access to the original source file stored in the cloud. Moreover, if she/he made any copies of the file either as printouts, image scans, or in any other way, trying to capture and store the art file, those become illegal and should be deleted anddestroyed.



https://www.forbes.com/sites/rachelwolfson/2018/02/13/digital-gold-vs-real-gold-time-to-use-bitcoin-to-buy-gold/#20521413eefe

 $[\]frac{^{18}}{^{10}} \underline{\text{https://www.bbc.com/news/entertainment-arts-38167501}} \text{ and } \underline{\text{http://www.campdenfb.com/article/hidden-treasure-look-world-freeports}}$



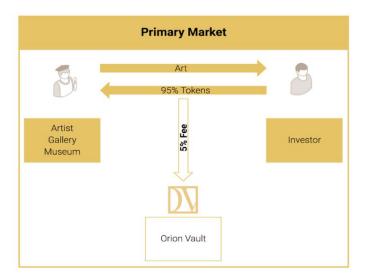
7. Business Model

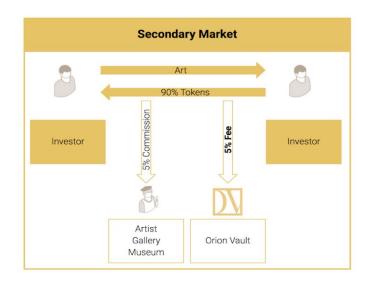
The main objective of Orion Vault is to build a healthy and growing digital platform. Our goal is to limit the fees, offer unique functionalities and open the art market to a new digital era, where everyone can participate and benefit. Business model is based on a transaction fee collected by Orion Vault on all trades done on the platform, both on primary market (artist/gallery to collector) and secondary market (collector to collector).

7.1 Trading fees

Primary market. Orion Vault will charge 5% from all trade on the platform, which is four to ten times lower that the currently available solutions. In the case of the primary market, 95% of sales value will go to the artists, gallery or art Institution who listed the artwork. We will only work with the primary owners/creators of art to ensure full authenticity of the artwork. If an artist is represented by gallery there can be further split of proceeds of sale between them. This will be a custom setting allowing for tailor made arrangements.

Secondary Market. Orion Vault charges 5% fee on trade plus there is 5% Carry Commission for artists, galleries, museums. For the first time, the original creators, backers and curators of art will be able to participate in the secondary market at scale. This will allow artists to participate in appreciation of value of their art and create a constant, for lifetime, stream of revenue for them.





Initially transactions will be done and settled in ETH, since we operate on Ethereum blockchain. In the future we plan to expand to other crypto and fiat currencies. We will also allow for a new patronage model where patrons can donate funds to artists or participate in investment plans where they sponsor an artist or a project (or commission one) and participate in the future profits from it. In those cases, sale or trades would be



treated the same as in examples above and charged with 5% trading fee. While any donations would be charged with minimal 1% to sustain infrastructure.

There are other business models and revenue streams we can implement in the future. For example, subscription models for galleries and collectors. Printing house and partner referral fees, providing our infrastructure as a service for art funds, art archive systems in museums, or even other IP markets all together to manage digital rights and royalties in music, movie or gaming industries.

7.2 Market size and business growth

The current estimated size of the art market is between \$40B - \$60B (artnet²⁰, TEFAF²¹, Art Basel²²). Within that, the **online art market grew by 12%** in 2017 to \$4.22B from \$3.75B in 2016²³. Estimates for 2018 for online art market are in the range of \$5B.

The art market has strong growth projections, as the number of wealthy people in the next five years will increase by 43% (from 2.5M to 3.6M people²⁴), this will have a positive impact on luxury and art markets. We believe there is huge potential to not only capture the market share, but more importantly, bring new people and investors into it. Improvements in transparency and trust should help to generate incremental sales and create new investment opportunities. Our goal is to start with capturing the digital and new media art market. We plan to move quickly as there is no solution like Orion Vault on the market.

Any projections at an early stage like the one we are in right now are purely ambitious, as much still needs to be tested and proven. Nevertheless, to layout the ambition and how that would position us in a market, let's look at few assumptions. Assuming we would reach our ambition and in five years by getting to a billion dollars in sales, it would make us the number one online platform and one of the top players in the entire art market. At that level, we would have approximately 65% of the digital art market, 15% of online sales and 1.5% of overall art market. The advantage of the art market is that it is relatively fragmented, with no player holding more than 20% of the overall market. On the downside is that it is a closed and relationship based market where newcomers might have a hard time getting through. Market seems to be ready for consolidation, with more galleries closing than opening²⁵ and bigger players getting bigger (although slowly). Technology could be a catalyst for both reinvigorating the market, which would bring more younger clients to it, as well as driving a consolidation among the market participants.

https://news.artnet.com/market/after-18-years-tefaf-scraps-art-market-report-1202942

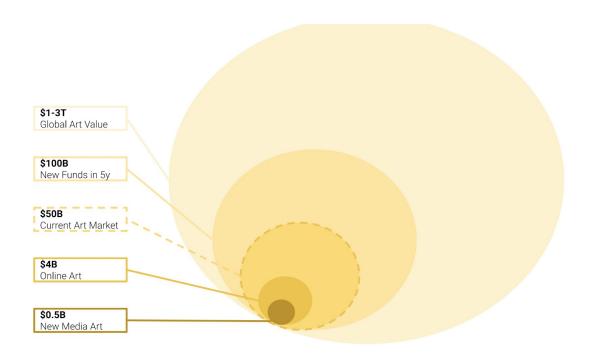
http://luyxqn3lzdsa2ytyzj1asxmmmpt.wpenqine.netdna-cdn.com/wp-content/uploads/2017/03/TEFAF-Art-Market-Report-20173.pdf

https://d33ipftjgrd91.cloudfront.net/asset/cms/Art_Basel_and_UBS_The_Art_Market_2017.pdf

https://www.hiscox.co.uk/sites/uk/files/documents/2018-04/Hiscox-online-art-trade-report-2018.pdf

http://www.knightfrank.com/resources/wealthreport2018/the-wealth-report-2018.pdf https://www.artsy.net/article/artsy-editorial-art-market-hit-637-billion-2017-key-takeaways-art-basel-report







8. Competition and Competitive Advantage

The current positioning of Orion Vault in the competitive landscape is beneficial. There are three groups of companies. Firstly, there are traditional art companies like Christie's and Sotheby's with hundreds of years of history and established position (Christie's revenue for 2017 was \$6.6B²⁶). Those companies were traditionally offline, however they moved recently into online auctions with success²⁷. The second group are established online marketplaces for physical art, like Artsy or 1stdibs. They have been around for nearly a decade and are being well funded (e.g. Artsy secured \$50M in fourth round last year at \$275M valuation²⁸). The third group represents blockchain based companies that are just entering this space like Maecenas, Codex Protocol or Verisart. In most cases they are 12 to 24 months "old" and are taking its first steps in this space.

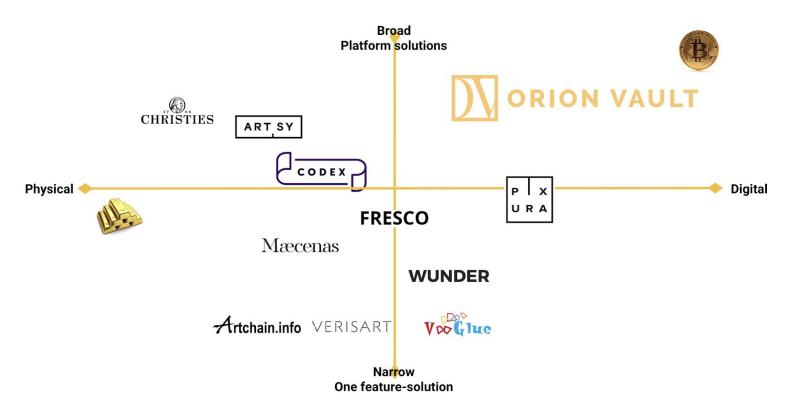
We can further segment the competitive landscape by how much those companies focus on physical vs digital space and if they offer a full platform based solution, or rather are focusing on one, specific feature. It is not a surprise that traditional companies like Christie's focus mostly on physical space, not only because they sell almost exclusively physical art but also they do it mostly offline in live auctions. Those traditional companies also offer the most complete suite of solutions making them a one stop shop. Companies from the second group (that sell physical pieces but only through online platforms) venture more into digital space, having often sophisticated online marketplaces, databases and apps to sell physical pieces, or in most cases to connect clients with galleries (as big part of sales still happens outside of the platform). Their business model is based on taking commission from a sale or subscription fees from galleries. They also often offer additional services like editorials, or shows and exhibition trackers. Finally, there are new, blockchain-based companies. Most of them focus on physical art and looks for blockchain applicability to traditional sales models of physical art. They focus more on providing functionality, in most cases tracking, on blockchain, ownership of physical art pieces, rather than being complete platform that could fully service users and capture more value. The challenge with that approach is that it is harder to have a sustainable business model when a company provides mostly one-feature solutions to another third party (since in that arrangement the third party captures more value from clients than "the feature provider"). The few companies that focus on digital art mostly offer digital collectibles (similar to CryptoKitties) with low price, low value and limited usability (the main use case is keeping those collectibles or reselling them to another user). The below list shows the mapping on those two dimensions, it is not exhaustive and is only used as an example.

https://www.statista.com/statistics/273256/revenue-of-christies-international/

²⁷ https://www.ft.com/content/782c820c-80e5-11e7-a4ce-15b2513cb3ff

https://techcrunch.com/2017/07/18/online-art-marketplace-artsy-raises-50m-plans-to-double-down-on-auctions





In this competitive landscape Orion Vault is well positioned. Firstly, we focus on a small and empty niche of digital fine art. Yes, the market is small (our rough estimations put it at half a billion dollars or 1% of the overall art market), however there is little to no competition in it. Moreover it is well poised for growth, considering the technology development, the solutions Orion Vault offers and market trends. Secondly, we are one of only a few blockchain startups that want to create a platform, that offers a full solution to clients, plans longer term and aims to capture more value from the market participants. Benefit of providing full solution in the digital fine art market niche is that we have space and time to grow and expand. Moreover it lets us partner with already established art companies since we are operating in a different market segment. When compared to both traditional and emerging art companies, Orion Vault Platform offers competitive advantages that are beneficial to all users, from investors and collectors to artists and galleries.





9. Roadmap

Q1 2018	Concept formation. Research. Team building. Seed funding.	
Q2 2018	White Paper. Legal setup. User interviews. First prototype for physical art transactions in crypto: bit-gallery.	
Q3 2018	Beta version development (launch end Sept 2018). Content partnerships. Series-A to refine and scale product.	
Q4 2018	Feedback from beta users. Beta version testing and refinement. Legal.	
Q1 2019	Scaling of beta version to more users. Video and animation functionalities Secondary market functionalities. Partnerships with art community (selected schools and art institutions to further test product).	
Q2 2019	Increased automation functionalities like self adding content. Content streaming functionalities. Partnerships with printing houses and digital frame companies.	
Q3 2019	Launch of the next product version. Selected marketing to grow user based and content. Scaling partnerships with art community. Payments in multiple currencies.	
Q4 2019	Patronage functionalities (donations, participation in future sales and commissioning art projects). Social and community functionalities, allowing for more interactions between users.	
Q1 2020	VR and AR functionalities (e.g. virtual gallery)	
Q2 2020	Archive system functionalities (that can be applied also to physical art). Partnership with traditional art companies.	
Q3 2020	Series-B funding.	
Q4 2020	Further scaling.	



10. Company Information

Name and registered office:

Orion Vault AG, Switzerland, 6300 Zug, Baarerstrasse 125.

Incorporation:

The Company was incorporated on 18th July 2018. The Company is a stock corporation setup in line with the laws of Switzerland.

Registration:

The Company is registered in the Swiss Register of Commerce: CHE-425.970.968.

The Company Board:

Joanna Pawluk, president of the board of directors.

Krzysztof Pawluk, member of the board of directors.

Capital Structure of the Company:

The share capital of the Company in the amount of CHF 100 000.00 is divided into 10 000 000 registered shares at 0.01 CHF each. There have been no changes in the share capital of the Company since its incorporation.

There are no dividend certificates, participation certificates or preferred shares. There are no preferential rights for individual share categories. No dividends have been paid yet

The Company does not have any outstanding conversion and option rights and bonds. The Company at the date of the issuance of this White Paper does not meet the requirements for an ordinary audit according to Art. 727 CO. The Company fulfils the requirements for a dispense of a limited audit. With declaration of 19 June 2018, it declared not to have such limited audit performed.

Others:

The Company is, at the date of the issuance of this White Paper, not involved in any court, arbitral and administrative proceedings.

Since the Company was incorporated in July 2018 no annual financial statements can be provided yet.

The Company is the legal setup in which the Orion Vault Platform project is embedded. No other projects are conducted within the Company and the Orion Vault Platform is the only revenue stream for the Company.



11. Funding

11.1 Introduction

Currently the company is self funded, mostly by savings of co-founders, family and friends. This has been enough to finance research, travel, user interviews, meetings, legal setup and both prototype and beta versions of development. We are now at the stage where refinement of beta product and its initial scaling requires additional funding.

In September 2018 we will start to raise additional funding for Orion Vault. We focus on two ways of funding. The first one is a typical Venture Capital funding, where we offer equity in Orion Vault AG in exchange for funds. The second is Token Offering.

Being a blockchain based company we recognize new ways of raising funds for the company development. ICOs or Initial Coin Offerings became the new way of raising money for blockchain startups. Founders benefited from higher "valuations" and raised more money while still keeping full control of their companies, while investors could benefit from much greater liquidity of their investment (in typical VC investment, even minority of companies that succeed, still take 5-10 years to return profits to original investors). The principles and intentions of this model were good, but reality proved to be harsh, with most tokens losing a majority of their value. One can argue that this is mostly due to a difficult environment and bearish market for all crypto in 2018. Nevertheless, it does not change the fact that typical ICOs offered little accountability for founders and did not tie interest of the company with the interest of their investors. Moreover, it proliferated market for utility and payment tokens, often when such tokens where not needed, or even made for worse product experience (causing more friction for users).

Being blockchain enthusiasts ourselves, we still wanted to offer the ability to invest in cryptocurrencies and use efficient blockchain solutions for raising funds. At the same time we wanted to make the model of investing in the tokens closer to typical VC investing, protecting our investors in a better way and connecting interests of Orion Vault team with those of investors. Therefore, we decided to offer a **profit sharing token that is exchangeable for Orion Vault AG equity**. We believe that this can combine the best of two worlds, typical VC funding and blockchain based investments.



11.2 Funding Details

Targeted Minimal Funding ("Soft Cap")	\$5 000 000
Targeted Maximum Funding ("Hard Cap")	\$18 000 000
Timing	Sept to Nov 2018
Venture Capital investment	Exchange for equity
Token Offering investment	Exchange for ERC20 "Profit Sharing Token"
Accepted Payments	USD, EUR, CHF, BTC, ETH
кус	Yes
Legal Status of OV Token	Uncertificated securities
Token Benefits/Rights	Participation in Dividends and Profits from sale of the Company ("exit")
Voting for Token Holders	Yes - bi-yearly
Token Exchangeable for Equity	Yes, from 1% of the Company / 100 000 OV Tokens
How many Tokens created	4 500 000 (corresponding to 45% of Orion Vault equity)
How many Tokens for Investors	3 000 000 (corresponding to 30% of Orion Vault equity)
How many Tokens for Team	1 500 000 (corresponding to 15% of Orion Vault equity)
Team Tokens Lockup/Vesting	Yes - 1 year lock up + 2 years of bi-yearly vesting
Price of Token	1 Token = 6 USD / 6 CHF / 0.02 ETH / 0.001 BTC = 1 Company Share
Minimum Investment	10 000 Tokens = \$60k USD / 200 ETH / 10 BTC



11.2.1 Amount

Targeted funding round between \$5 000 000 and \$18 000 000 of total funding (both Venture Capital and Token Offering). In the next paragraph is a detailed table with budget scenarios. There are additional fees, taxes and exchange costs that will be deduced from the raised amount before the company can use it. It is especially valid for Token Offerings as they have higher costs of raising and managing than typical Venture Capital or Private Equity rounds.

The minimum amount targeted is \$5 000 000 ("Soft Cap"). The Soft Cap is defined as the sum of the amounts raised during the Token Offering. In this case the Soft Cap will not be reached, the Company reserves the right to add additional funding (e.g. venture capital and private equity via share or token issuance) to successfully complete the Token Offering ("Filling Up"). If this Filling Up is not successful, all raised funds during the Token Offering will be paid back to the investors after coverage of accrued costs of the Company.

The maximum amount to be raised in the Token Offering is \$18 000 000 ("Hard Cap"). After reaching the Hard Cap, the Token Offering will be closed immediately. In case there is an oversubscription (because the Token Offering could not be closed immediately), the oversubscribed amount is returned to the investors within 90 days after the closing of the Token Offering. If the investor fails to cooperate in the return of the oversubscribed funds, the Company reserves the right to donate the assets to the a charitable organization of its choosing.

11.2.2 Timing

Raising money between **Sept and Nov 2018**, with finalization of transfers in Dec 2018. To invest in Orion Vault Tokens (or directly in Orion Vault AG equity) register on Orion Vault website (orionvault.com) and/or contact Orion Vault team directly (contact@orionvault.com).

11.2.3 Purchase

The investor can pay the purchase price in Ether (ETH), Bitcoin (BTC), U.S. dollar (USD), euro (EUR), or Swiss franc (CHF) onto accounts owned and assigned by the Issuer.

Orion Vault Tokens will be issued only if the required identification information has been submitted to the Issuer (for example first name and surname or business name, address as well as a passport copy or extract from the commercial register or current certified extract from a foreign commercial register or an equivalent document). The Issuer shall have full discretion to accept or not to accept any subscription submitted to it. In case the Issuer does not accept a subscription the Issuer shall not be obliged to provide any reason for not accepting the subscription.



11.2.4 Token:

The Orion Vault Token Holders will have the right to participate in the **dividends**, **profits** from selling the Company ("exit") and will be voting on bi-yearly basis on release of Orion Vault Tokens to the Orion Vault team, based on business performance. Token holders will also be able to exchange Orion Vault tokens for equity stake for shares in Orion Vault AG. Exchange will happen on quarterly basis, and requestor will need to have at least 100 000 of Orion Vault Tokens (which corresponds with 1% of the company), any legal and administrative costs of such conversion are to be covered by the requestor. In that instance the corresponding Orion Vault Tokens will be burned.

Rights of the Token Holders: Investors that have acquired Orion Vault Tokens ("Token Holders") will have limited voting and profit rights embedded in the legal structure of the Company. The general assembly/meeting as well as the board of directors of the Company has certain immutable powers. These are listed in Art. 698 para 2, Art. 716a, and Art. 706b CO and cannot be transferred to the Token Holders.

The annual general meeting of the Company decides upon the disposable profit and the dividends for the benefit of the shareholders after having complied with required laws and the articles of association (Art. 698 para 2 section 4, Art. 674 para 1, and Art. 671 ff. CO). Moreover, the general meeting may resolve on the formation of additional reserves (Art. 674 para 2 CO) and the board of directors is entitled to build up hidden reserves (Art. 716a para 1 section 3, Art. 960a para 4, and Art. 960e para 3-4 CO).

By determining the **dividends** for the shareholders the general meeting can also define a certain amount of the disposable profit to be distributed to the Token Holders ("Profit Right"). The minimum dividends to be assigned to Token Holders corresponds with the amount of Orion Vault AG shares that those Tokens represent. For example, if during Token Offering 3 000 000 Tokens have been sold to investors, those investors will be able to participate in 30% of dividends approved by the general meeting. Similar if the **company will be fully sold, "exit"**, (for example to another company or fund), then the percentage of profits generated by the sale will be distributed to Token Holders. Like in the case of dividends the amount distributed to token holders will correspond with the amount of Orion Vault AG shares that those Tokens represent.

Voting Rights. Token Holders (excluding tokens held by team) will vote bi-yearly on releasing the tokens to the Orion Vault team. This is aimed to tie interest of Orion Vault team and investors, increasing accountability, effectiveness of implementing the roadmap and increasing business performance. 1 500 000 Tokens will be held in reserve and will be awarded to Orion Vault team, after the initial 1 year of lock up, before those tokens will be released to the team. On a bi-yearly basis, Token Holders will vote on whether to grant those tokens to the team. For voting to be valid there needs to be votes casted by at least 51% of Token Holders. The default vote is yes. Moreover, in the future the board of directors can announce voting rights on certain matters with a consultative character.



For Token Holders to participate in both dividend payouts and voting, they will need to hold Orion Vault Tokens in their private addresses/wallets, that is any Tokens kept on the exchanges wallets, during the announced dividend and voting periods will not count/participate in neither dividends, profit sharing, nor voting. Orion Vault team will announce dividend and voting periods at its website at least two week prior to such events. If Orion Vault Tokens are being transferred during the ongoing dividend or voting periods the Voting Rights of the recipient account remain zero and all Voting Rights remain with the sender account despite having less or not having any Orion Vault Tokens at the time of voting. Within 90 business days of the general meeting that approved the dividend payouts and the dividend period the Company will make available the respective payment amount (after accounting for withholding tax if applicable) to each Token Holder onto his/her public key, subject to the condition that they provide all the information required for identification purposes (for example passport copy). Token Holders shall receive these payments in ETH at the exchange rate specified by the Company.

It is planned that the Orion Vault Tokens will being traded on several trading platforms. This, however, cannot be guaranteed. Further, the Issuer cannot ensure an active and liquid secondary market. Exchanges in different jurisdictions may be subject to different regulation and less, more or none supervision than it would be the case for Switzerland. This may also affect the qualification of the Orion Vault Tokens.

11.2.5 Orion Vault Token Technical Information:

The Orion Vault Tokens are cryptographic tokens implemented in a smart contract existing on the Ethereum blockchain. The smart contract code is based on the **ERC20** standard. The Tokens must be accessed and used with an Ethereum-compliant wallet and a unique pair of cryptographic keys. It is the responsibility of each investor not to lose the Tokens by losing access to the keys that allow access to the wallet and/or allowing malicious third parties to access the keys and/or the wallet.

Orion Vault Tokens qualify as uncertificated securities according to Art. 973c CO. Details of the number and denomination of Orion Vault Tokens will be recorded on the Ethereum blockchain and Orion Vault Tokens represent rights with the same function as negotiable securities. The Tokens are created on entry in the blockchain and continue to exist only in accordance with such entry (Art. 973c para 3 CO).

11.3 Budget Allocation

Depending on the final amount raised we foresee three different budget scenarios. The amounts shown in the table below are the net amounts that the company will allocate to Orion Vault Platform development. Those net amounts represents funds receives after all taxes, fees, exchange rates and other transfer costs. In case of the funding coming from Venture Capital the fees are minimal, however Token Offerings have higher costs of



running due to additional legal, banking and brokerage fees. Moreover since the Company is accepting fundraising also in cryptocurrencies, the volatility of ETH and BTC price should also be taken into account. Furthermore, in case of Token Offerings additional taxes may apply.

The first scenario assumes the Company raises \$5 000 000 of net capital. Majority of the costs will go to employ a small and specialized product team. The additional costs will cover infrastructure, legal, operational and partnership expenses. This level of funding would give us approximately 12 month runway before we would need to raise capital again. This scenario focuses on refining the beta version of the Orion Vault Platform. The downside of this solution is the short runway where not all functionalities can be developed before the next round of funding. Moreover, short runway and need to raise additional money in few months could be a distraction for the team.

The second scenario assumes the Company raises \$8 000 000 of net capital. The cost structure for this scenario is same as in the first one. The main change is the longer time frame, 24 months in this case. The longer runway allows to develop more features, test, refine and prove them on the market. Moreover the 24 months time frame allows to build stronger partnerships. This can result not only in better product but also in better position in raising further rounds of capital.

The third scenario assumes the Company raises \$13 000 000 of net capital. This is close to our "hard cap" assuming mix funding from both VC and Token Offering, as well as assuming approximately 25% "margin" for all taxes, fees and exchange volatility. This scenario allows for expansion of Orion Vault team, both in terms of developers as well as partnership and community efforts. In this scenario we could bring more functionalities faster to the market and build wider network of partnerships. This scenario could result in more favorable further rounds of funding, as well as potentially reaching a break even scenario.



Net amount raised (all values in '000 USD)	5 000	8 000	13 000
Runway	~12 months	~24 months	~24 months
Team	13 FTEs	13 FTEs	20 FTEs
Yearly run rate	2 800	2 800	4 300
Production Infrastructure	Storage online and offline, security, software and licenses		
Yearly run rate	300	300	500
Partnership, Marketing and Business Development	Marketing and PR communication, organization/participation in events, partnerships with art institutions, community development and management		
Yearly run rate	350	350	600
Legal and administrative	Audit, Legal advice and optimization, accounting, HR		
Yearly run rate	350	350	450
Operations	Office space, travel and expenses, equipment		
Yearly run rate	300	300	450
Total Yearly run rate	4 100	4 100	6 300

12. Team



Joanna Pawluk, Co-Founder and CEO

Entrepreneur, bringing business from ground zero through early stage funding to global operations, blockchain and cryptocurrencies expertise, building partnerships across the globe.



Kris Pawluk, Co-Founder and Chief Product Officer

Over decade of experience working for several global organizations, most recently Google, as product manager and strategy leader, for cross-country, interdisciplinary and complex projects.



Georg Bak, Digital Art Curator

15 years experience in senior positions at Hauser & Wirth, LGT Fine Art Services Scheublein + Bak gallery.



Dawid Wroblewski, Head of Technology

Blockchain developer, product technology manager with 5+ years of experience working at Google.



Myn Kang, Head of Creative Strategy

UX lead with experience working for Google, Facebook, Wieden and Kennedy, startup co-founder, and creative thinker.



Eric Pomeranz, Art Digitization

Leading R&D for new ways to capture and store art. Previously Robot Design engineer at Google.



Joonseo Bae, Product Design

Interaction designer, implemented multiple product and platform design at Google, graduated from School of Visual Art in New York and Rhode Island School of Design.



Piotr Delkowski, Development Tech Lead

Over decade of coding experience, full stack developer, team leader, startup co-founder.



Advisors



Marc P. Bernegger

Entrepreneur, founder and investor. Sold two startups. Recognized by the World Economic Forum as 'Global Technology Pioneer'. Board member Falcon Private Bank and Crypto Finance Group.



Karen Robinovitz

Brooklyn Museum Board Member, Curator, Top 10 Global Art influencer.



Alex Kampa

Experienced blockchain developer, Senior technical expert of Blockchain Competence Centre at the European Commission's directorate general for informatics (DIGIT).



Abhishekharee Parthasarathy

Finance expert and innovator at X - Google's "Moonshot Factory" a semi-secret research and development facility.



Seth Cochran

Founder, CEO and social entrepreneur, has 18 years of experience ranging from banking, consulting, through academia to non-profits.



Lax Poojary

Startup founder under Alphabet/Google umbrella. Experienced product manager, engineer and leader.



13. Disclaimer

Risk Factors

Acquisition of OV Tokens involves a high degree of risk. You should consider carefully the risks described below, together with all of the other information contained in this white paper (White Paper) before making a decision to acquire OV Tokens. The following risks entail circumstances under which, our business, financial condition, results of operations and prospects could suffer.

This White Paper is no prospectus in the sense of art. 1156 and 652a Swiss Code of Obligations or any other applicable regulations.

This White Paper is not a prospectus as set forth and regulated in Art. 1156 and 652a Swiss Code of Obligations, under the European Prospectus Regulation, or under any other applicable law and regulation. This White Paper is just a draft and investors should reassess the final White Paper at the time of issuance of the OV Token based on the final version. This White Paper has not been reviewed by any regulator. No regulatory authority has examined or approved any of the information set out in this White Paper. No such action has been or will be taken under the laws, regulatory requirements or rules of any jurisdiction. The publication, distribution or dissemination of this White Paper does not imply that the applicable laws, regulatory requirements or rules have been complied with.

Cautionary note on Forward Looking Statements.

This White Paper may contain certain forward-looking statements including, but not limited to, statements as to future operating results and plans that involve risks and uncertainties. We use words such as "expects", "anticipates", "believes", "estimates", the negative of these terms and similar expressions to identify forward looking statements. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the OV Token and/or the OV Platform to differ materially from any future results, performance or achievements expressed or implied by those projected in the forward-looking statements for any reason.

Exclusion of liability.

To the maximum extent permitted by the applicable laws, regulations and rules, Orion Vault shall not be liable for any indirect, special, incidental, consequential or other losses of any kind, in tort, contract or otherwise (including but not limited to loss of revenue, income or profits, and loss of use or data), arising out of or in connection with any acceptance of or reliance on this White Paper or any part thereof by you.

No legal, regulatory, tax advice.

No information in this White Paper should be considered to be business, legal, financial or tax advice regarding the OV Token, the OV Platform, and the sale of OV Tokens. You



should consult your own legal, financial, tax or other professional adviser regarding the OV Platform and their respective businesses and operations, the OV Tokens, and the sale of the OV Token. You should be aware that you may be required to bear the financial risk of any purchase of OV Tokens for an indefinite period of time.

The tax characterization of the OV Tokens is uncertain, and each investor must seek its own tax advice in connection with the acquisition of the OV Tokens. The acquisition of OV Tokens pursuant to the sale of OV Tokens may result in adverse tax consequences to investors, including withholding taxes, income taxes and tax reporting requirements. Each person acquiring OV Tokens should consult with and must rely upon the advice of its own professional tax advisors with respect to the tax treatment of an acquisition of the OV Tokens. You should consult with your own advisor regarding your legal, regulator, and tax position.

Prohibition of distribution and dissemination in restricted jurisdictions.

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Risks associated with the acquisition of OV Tokens Orion Vault may not successfully develop, market and launch the OV Platform.

Orion Vault has not yet been fully developed and additional capital funding, as well as developer and management expertise, time and effort will be necessary in order to fully develop and successfully launch Orion Vault in which various types of activities as described in this White Paper can be conducted. Orion Vault may have to make changes to the specifications of the protocol of the OV Platform or OV Tokens for any number of legitimate reasons or it may be unable to develop Orion Vault or the OV Platform in a way that realizes those specifications or any form of a functioning protocol. It is possible that there may never be operational OV Tokens or Orion Vault / OV Platform. The protocol of Orion Vault or the OV Tokens, if successfully developed and maintained, may not meet expectations of holders of OV Tokens at the time of use. Furthermore, despite good faith efforts to develop and launch Orion Vault and subsequently to develop and maintain Orion Vault and the OV Platform, it is still possible that the OV Platform will experience malfunctions or otherwise fail to be adequately developed or maintained, which may negatively impact Orion Vault and the OV Tokens.

Orion Vault will use the proceeds of the pre-sale to make significant investments to develop an operational version of the OV Platform and will subsequently continue to



enhance Orion Vault's and the OV Platform's utility and value. However, Orion Vault may not have or may not be able to obtain the technical skills and expertise needed to successfully complete the development of the OV Platform and Orion Vault and progress it to a successful launch of Orion Vault. While Orion Vault has sought to retain and continue to competitively recruit experts, there may be a shortage of management, technical, scientific, research and marketing personnel with appropriate training to develop and maintain the protocol for Orion Vault. If Orion Vault is not successful in its efforts to demonstrate to users the utility and value of Orion Vault, Orion Vault may not be able to proceed with the on time launch of the OV Platform.

The acquisition of OV Token may involve a high degree of risk.

Financial and operating risks confronting startups are significant. The startup market in which Orion Vault competes is highly competitive and the percentage of companies that survive and prosper is small. Startups often experience unexpected problems in the areas of product development, marketing, financing, and general management, among others, which frequently cannot be solved. In addition, startups may require substantial amounts of financing, which may not be available through private placements, public markets or otherwise.

Orion Vault may be forced to cease operations or take actions that result in a Dissolution Event.

It is possible that, due to any number of reasons, including, but not limited to, an unfavorable fluctuation in the value of cryptographic and at currencies, the inability by Orion Vault to establish the OV Tokens' utility, complete development of Orion Vault and proceed with Orion Vault, the failure of commercial relationships, or intellectual property ownership challenges, Orion Vault may no longer be viable to operate and Orion Vault may dissolve or take actions that result in a dissolution event.

Risks associated with the OV Tokens and Orion Vault Orion Vault may not be widely adopted and may have limited users.

It is possible that Orion Vault will not be used by a large number of individuals, companies and other entities or that there will be limited public interest in the creation and development of distributed ecosystems (such as Orion Vault) more generally or distributed applications to be used on Orion Vault. Such a lack of use or interest could negatively impact OV Orion Vault CODE and the utility of the OV Tokens.

Orion Vault may be the target of malicious cyber attacks or may contain exploitable flaws in its underlying code, which may result in security breaches and the loss or theft of OV Tokens. If Orion Vault's security is compromised or if Orion Vault is subjected to attacks that frustrate or thwart our users' ability to access Orion Vault, their OV Tokens or any of Orion Vault's services, users may cut back on or stop using Orion Vault altogether, which could seriously curtail the utilization of the OV Tokens.

Orion Vault's structural foundation, the software application and other interfaces or applications built upon Orion Vault and its services are still in an early development stage



and are unproven, and there can be no assurances that Orion Vault and the creating, transfer or storage of the OV Tokens will be uninterrupted or fully secure, which may result in a complete loss of users' OV Tokens or an unwillingness of users to access, adopt, utilize and build upon Orion Vault, or its protocol respectively. Further, Orion Vault may also be the target of malicious attacks seeking to identify and exploit weaknesses in the software or Orion Vault, which may result in the loss or theft of OV Tokens. For example, if Orion Vault is subject to unknown and known security attacks (such as double-spend attacks, 51% attacks, or other malicious attacks), this may materially and adversely affect Orion Vault. In any such event, if the launching of Orion Vault will be interrupted or if Orion Vault is not widely adopted, the OV Tokens would have no utility.

There may be occasions when certain individuals involved in the development and launch of Orion Vault may encounter potential conflicts of interest in connection with the launch of Orion Vault, such that said party may avoid a loss, or even realize a gain, when other holders of OV Tokens are suffering losses.

There may be occasions when certain individuals involved in the development and launch of Orion Vault or OV Tokens may encounter potential conflicts of interest in connection with the sale of the OV Token and Orion Vault, such that said party may avoid a loss, or even realize a gain, when other holders of the OV Tokens are suffering losses. Holders of OV Tokens may also have conflicting tax, and other interests with respect to OV Tokens, which may arise from the terms of the OV Tokens, Orion Vault, the timing of the launch of Orion Vault or other OV Token offerings, or other factors. Decisions made by the key employees of Orion Vault on such matters may be more beneficial for some holders of OV Tokens than for others.

Holders of OV Tokens may lack information for monitoring their holdings.

A holder of OV Tokens may not be able to obtain all information it would want regarding Orion Vault or OV Tokens on a timely basis or at all. It is possible that a holder of OV Tokens may not be aware on a timely basis of material adverse changes that have occurred with respect to Orion Vault. While Orion Vault has made efforts to use open-source development for the OV Tokens, this information may be highly technical by nature. As a result of these difficulties, as well as other uncertainties, a holder of OV Tokens may not have accurate or accessible information about Orion Vault.

OV Tokens have no history.

The OV Token will be a newly formed token and have no history. Each OV Token should be evaluated on the basis that Orion Vault or any third party's assessment of the prospects of the protocol of Orion Vault may not prove accurate, and that Orion Vault will not achieve its business objective.

If Orion Vault is unable to satisfy data protection, security, privacy, and other government-and industry-specific requirements, its growth could be harmed.

There are a number of data protection, security, privacy and other government- and industry-specific requirements, including those that require companies to notify individuals of data security incidents involving certain types of personal data. Security



compromises could harm Orion Vault's reputation, erode user confidence in the effectiveness of its security measures negatively impact its ability to attract new users, or cause existing users to stop using Orion Vault.

The further development and acceptance of blockchain networks, including Orion Vault, which are part of a new and rapidly changing industry, are subject to a variety of factors that are difficult to evaluate. The slowing or stopping of the development or acceptance of blockchain networks and blockchain assets would have a material adverse effect on the successful development and adoption of Orion Vault and the OV Tokens.

The growth of the blockchain industry in general, as well as the blockchain networks with which Orion Vault will rely and interact, is subject to a high degree of uncertainty. The factors affecting the further development of the cryptocurrency industry, as well as blockchain networks, include, without limitation:

- Worldwide growth in the adoption and use of ETH, and other blockchain technologies;
- Government and quasi-government regulation of ETH, and other blockchain assets and their use, or restrictions on or regulation of access to and operation of blockchain networks or similar systems;
- The maintenance and development of the open-source software protocol of the ETH networks;
- Changes in consumer demographics and public tastes and preferences;
- The availability and popularity of other forms or methods of buying and selling goods and services, or trading assets including new means of using fiat currencies or existing networks; or
- General economic conditions and the regulatory environment relating to cryptocurrencies.

A decline in the popularity or acceptance of ETH or other blockchain-based tokens would adversely affect our results of operations.

The slowing or stopping of the development, general acceptance and adoption and usage of blockchain networks and blockchain assets may deter or delay the acceptance and adoption of Orion Vault and the OV Tokens.

The prices of blockchain assets are extremely volatile. Fluctuations in the price of digital assets could materially and adversely affect our business.

The prices of blockchain assets such as ETH have historically been subject to dramatic fluctuations and are highly volatile. Several factors may influence the utility of the OV Tokens, including, but not limited to:

- Global blockchain asset supply;
- Global blockchain asset demand, which can be influenced by the growth of retail
 merchants' and commercial businesses' acceptance of blockchain assets like
 cryptocurrencies as payment for goods and services, the security of online
 blockchain asset exchanges and digital wallets that hold blockchain assets, the
 perception that the use and holding of blockchain assets is safe and secure, and
 the regulatory restrictions on their use;



- Holders' expectations with respect to the rate of inflation;
- Changes in the software, software requirements or hardware requirements underlying the protocol of Orion Vault;
- Changes in the rights, obligations, incentives, or rewards for the various participants in the protocol of Orion Vault;
- Interest rates;
- Currency exchange rates, including the rates at which digital assets may be exchanged for fiat currencies;
- Monetary policies of governments, trade restrictions, currency devaluations and revaluations;
- Regulatory measures, if any, that affect the use of blockchain assets such as the OV Tokens;
- The maintenance and development of the open-source software protocol of Orion Vault; or global or regional political, economic or financial events and situations.

A decrease in the price of a single blockchain assets may cause volatility in the entire blockchain asset industry and may affect other blockchain assets including the OV Tokens. For example, a security breach that affects OV Token holder or user confidence in ETH may affect the industry as a whole and may also cause the utility of the OV Tokens and other blockchain assets to be uncertain.

Loss of private key and risks associated with the wallet.

OV Tokens can only be accessed by using an Ethereum wallet with a combination of the member's account information and private key or password. The OV Token can be stolen if the private key or password gets lost or stolen. Orion Vault and any of its employees, bodies, or contractors are not responsible for the wallet to which OV Tokens are transferred to and they are not responsible for the access and security of a wallet, for any security breach, any loss resulting from a service wallet provider, including any termination of service by the wallet provider and/or bankruptcy of the wallet provider. Anyone investing in OV Tokens confirms that they understand the working of a wallet and the related risks.

Lack of consensus of miners and risks related to forking.

The network of miners are ultimately in control of Orion Vault and that there is no warranty or assurance that the network of miners will allocate the OV Token to the investor as proposed by any terms. The network of miners could agree at any time to make changes to the OV Token and to run a new version of the smart contract. A group of people may take the software and modify it to accept a different set of tokens, or no tokens, which might devalue the OV Token.

Risks related to blockchain technologies and digital assets

The regulatory regime governing the blockchain technologies, cryptocurrencies, tokens and token offerings such as Orion Vault and the OV Tokens is uncertain, and new



regulations or policies may materially adversely affect the development of Orion Vault and the utility of the OV Tokens.

Regulation of tokens (including the OV Tokens) and token offerings such as this, cryptocurrencies, blockchain technologies, and cryptocurrency exchanges currently is undeveloped and likely to rapidly evolve, varies significantly among international, federal, state and local jurisdictions and is subject to significant uncertainty. Various legislative and executive bodies in the United States and in other countries may in the future, adopt laws, regulations, guidance, or other actions, which may severely impact the development and growth of Orion Vault and the adoption and utility of the OV Tokens. Failure by Orion Vault or certain users of Orion Vault to comply with any laws, rules and regulations, some of which may not exist yet or are subject to interpretation and may be subject to change, could result in a variety of adverse consequences, including civil penalties and fines.

Blockchain networks also face an uncertain regulatory landscape in many non-U.S. jurisdictions such as the European Union, China and Russia. Various non-U.S. jurisdictions may, in the near future, adopt laws, regulations or directives that affect Orion Vault. Such laws, regulations or directives may conflict with those of the U.S. or may directly and negatively impact our business. The effect of any future regulatory change is impossible to predict, but such change could be substantial and materially adverse to the development and growth of Orion Vault and the adoption and utility of the OV Tokens.

New or changing laws and regulations or interpretations of existing laws and regulations, in the U.S. and other jurisdictions, may materially and adversely impact the value of the ETH virtual currency used to acquire OV Tokens and otherwise materially and adversely affect the structure or OV Tokens and the rights of the holders of OV Tokens.

Issuance of OV Tokens May Constitute the Issuance of a "Security" Under U.S. Federal Securities Laws

The OV Token is a utility token that has a specific consumptive use – i.e., it allows participants in OV to receive and pay value for OV services, such as verification. Due to the nature of the OV Tokens and the manner in which they are being offered, we do not think they should be considered "securities", as that term is defined in the Securities Act of 1933, as amended (the "Securities Act"). OV Tokens might only be distributed to "accredited investors" as defined in US securities laws and to not more than 150 non-qualified investors under the EU Prospectus Regulation.