



# IdeaFeX

INVESTMENT MARKETPLACE

## Token White Paper

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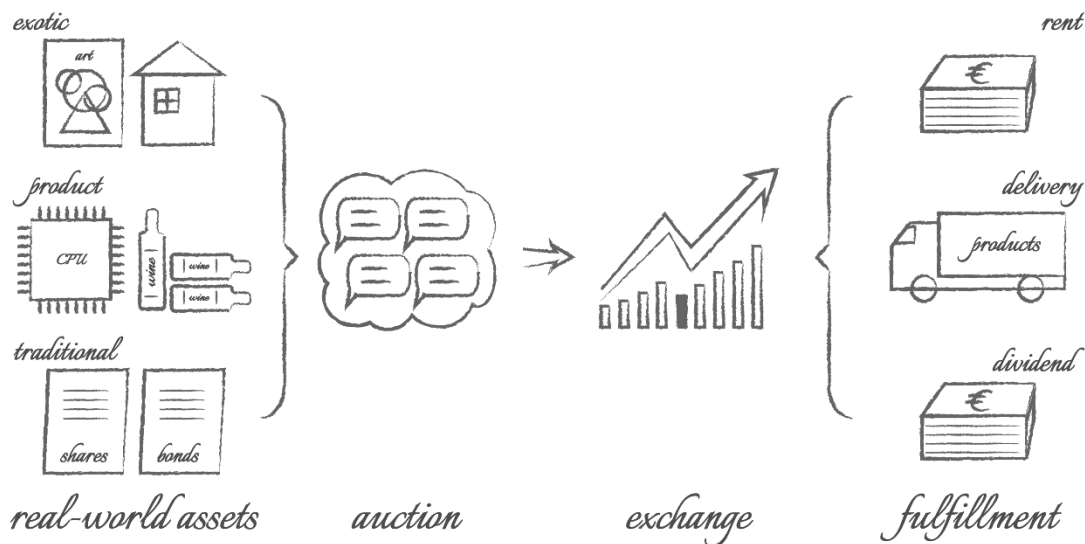
# EXECUTIVE SUMMARY

IdeaFeX unlocks potentials in information technologies and blockchain solutions for financing and investment. We present an easily-navigable marketplace that supports new classes of real-world assets, notably exotic assets and product futures, much of which have been illiquid and/or indivisible. Our unique auction method together with our innovative adoption of distributed ledger technology empowers fundraisers and investors with efficiency and robustness hitherto unseen.

Currently, inefficient processes, unnecessary restrictions, and misaligned interests plague financing and investment. Access–cost–flexibility and access–returns–stability are two notable sets of tradeoffs where existing alternatives continually disappoint fundraisers and investors. Combining marketplace format, auction method, and exchange support, IdeaFeX offers transformational combinations of high access, low cost, high flexibility, and high liquidity to new asset classes that can quickly grow into a trillion-dollar market. We identify openness, easy navigation, efficiency, and robustness as our unique selling propositions.

To build a symbiotic relationship between the IdeaFeX team and our user community, we introduce the IdeaFeX token. With such functions as Discount, Referral Award, Staking, and Fundraising Bonus and the feature of Token Burn, the IdeaFeX token delivers meaningful and tangible value to our user community, drives active use, promotes organic growth, and supports continued adoption.

In this Token White Paper, we begin by identifying the pain points that we address and present our solution. Then, we review the competitive landscape and size the total addressable market. Details of the IdeaFeX token, including its features and issuance schedule, follow. We also discuss how we will be using the proceeds from our token sale and deduce the utility value of the token. Towards the end, we delve into a couple of specific features of our business and offer three high-level examples. Our timeline concludes this paper.



# CURRENT PAIN POINTS & A BRIGHT SPOT

Three notable pain points in financing and investment lead to suboptimal resource allocation in the economy. Fundraisers and investors are not the only ones who suffer — as our economy under-creates value and unfairly distributes it, we all do. IdeaFeX is tasked to address these pain points.

To begin with, financing and investment are currently plagued with **inefficient processes**. Except for public offerings by mature companies, existing channels for financing and investment are bound to *“bilateral” deal flow*: The fundraiser connects with a number of investors, exchanges information with each, and attempts to reach a deal. While some aspects of these interactions can be reused, the whole process comprises of a series of deal attempts that involve considerable repetitions as well as inter-temporal uncertainties. Consequently, bilateral deal flow leaves optimization across deal attempts costly and ineffective — it essentially precludes optimal fundraiser–investor matching. Likewise, the *lack of a market mechanism for price discovery* has led to an abundance of over-valued and under-valued deals. Mismanaged deal optimization may result in failure to reach the financing goal or in forfeiture of gains when exiting investment positions.

Due in part to these inefficiencies in processes, financing and investment also suffer from **unnecessary restrictions**. In terms of *access*, fundraisers with a few potential investors lined-up tend to stop exploring better deals due to feasibility constraints given bilateral deal flow; the same is true with investors. Imbalances across geographies, industries, and networks exacerbate this problem as information, expertise, and trust are asymmetric. Beyond access, many valuable aspects of a firm’s operations have been absent in financing. *Flexibility* in financing and investment is regrettably low. Poor access and inflexibility only aggravate the difficulty in efficient fundraiser–investor matching.

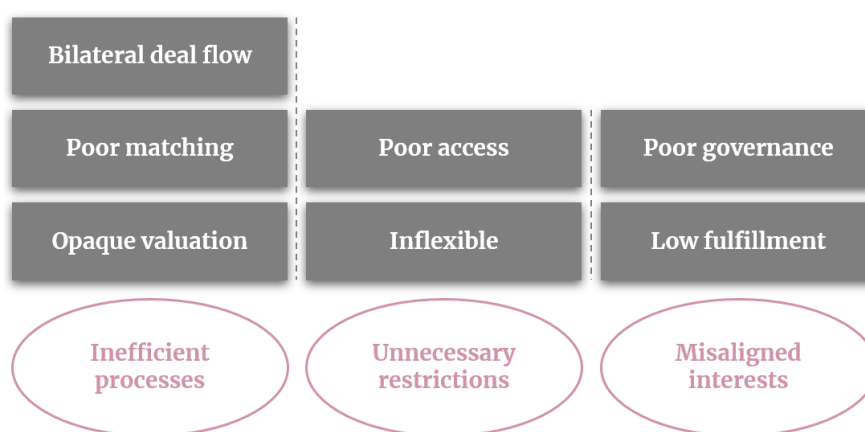


Figure 1. Pain points that IdeaFeX addresses

Even when deals are closed, **misaligned interests** are frequently an issue. Impracticality in prescribing for all contingencies, information asymmetry, disparity in experience, and mischief are all thorny realities. Well-structured, strong *governance* systems that align the interests among fundraisers and investors hardly extend beyond the stock market. Similarly, the structuring and *fulfillment* of the terms of investment are usually impromptu. There lacks a parameterized system that averts misunderstandings, mishandlings, and

misfortunes. It is therefore hardly surprising that fundraisers and investors frequently walk into deals that they do not fully understand and whose outcomes they cannot fully predict.

In recent years, **distributed ledger technology** (DLT) has promised to revolutionize financial services. Notably, immutability, distributed databases, and smart contracting have provided the tools for innovative and efficient management of asset classes that has hitherto been infeasible. They collectively enable increased transparency and parameterized governance of investment terms. While currently tokens powered by DLT have been primarily tokens with only on-chain value, tangible assets with off-chain value can also be represented by DLT tokens. Though the issuance, exchange, and fulfillment of these tokens together have the potential to transform financing and investment, a compelling solution that fully develops this potential remains absent. Notably, there is an aching need for an easily-navigable, fully-compliant convergence point for sellers and buyers.

We believe that a financing and investment solution that effectively tackles these issues will greatly contribute to value creation, and that a simple, reasonable, and robust business model can be built for it.

# THE IDEAFEX SOLUTION

IdeaFeX resolves these pain points with an easy-to-use service marked by efficiency and robustness. The three key pieces of the puzzle are (i) our marketplace interfaced with distributed ledger, (ii) our unique auction method that empowers multilateral financing deal flow, and (iii) our fully-compliant, manipulation-resistant exchange.

## Marketplace for Tokenized Assets

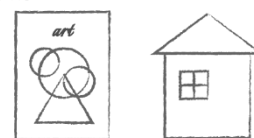
Two decades of continual innovation has online marketplaces deeply ingrained in how we shop. Consumers enjoy broad selection of merchandise well-organized in adaptive categories. AI-aided suggestions, filters, detailed descriptions, and peer reviews further empower them. Door-to-door delivery options complete the experience: one can navigate through tens of thousands of products, visit dozens of shops, choose the most appealing offer at the best available price, and have the purchase delivered before the day ends.

IdeaFeX transforms financing and investment by bringing the convenience and efficiency of marketplace to the world of DLT tokens.

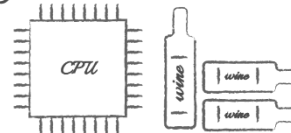
Powering **new asset classes** is the first step we take in building IdeaFeX. Here, we aim to bring attractive financing and investment opportunities to a larger audience; hence, instead of going down the rabbit hole of complex derivatives, we stick to real-world assets with off-chain value. From the perspective of investors, individuals can easily understand these assets, and corporate actors may readily integrate their investment into their supply chain and/or business model (e.g. by flexibly trading unused capacity or by sourcing through B2B presales). From the perspective of fundraisers, these asset classes reflect valuable aspects of their existing operations that have been regrettably overlooked as financing resources.

### *new asset classes*

*exotic*



*product*



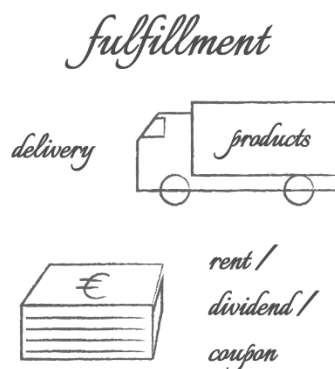
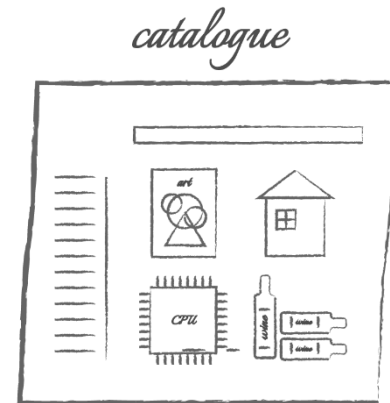
Specifically, we introduce **exotic assets** and **product futures**. While presold products are physically delivered after maturity, exotic assets are rent-generating. Some notable examples of presell-able products include fine wines, consumer electronics, and electronic components, etc. Their customers may be either the end consumer or the next link in the supply chain. Product futures share many features of commodity futures. Notably, the investor need not be the consumer — combined with the possibility to delay delivery, this dramatically broadens the investor base and increases the number of units an investor can purchase at a time.

Before IdeaFeX, exotic assets were indivisible; their ownership was highly illiquid. Collectible art, real estate, infrastructure, and production capacity are some notable examples. Traditionally, external investment in these assets only occasionally made sense, and only for a few investors. IdeaFeX makes it possible for investors

large and small to participate by enabling partial ownership governed by smart contracting. These assets can act either as a haven in periods of market instability or a source of passive income.

Beyond these new asset classes, we will also support **traditional securities** such as shares and bonds. This option is empowering for startups. The benefits in investor engagement, however, also apply for mature firms. Further, we will continually integrate new functionalities to the DLT tokens on our marketplace; hence, investors as well as fundraisers will enjoy exceedingly excellent experiences — a feature that traditional investment channels cannot match. We discuss the asset classes and their fulfillment in further detail in the *<Market Sizing>* and *<Features Deep Dive>* sections below.

With a high number of assets in a wide array of categories, navigation is key. We integrate intelligent and adaptive **search and filtering** functions found in leading e-commerce platforms such as Amazon. Investors can browse, search, filter, and compare asset listings. These functionalities greatly facilitate navigation, comparison, and decision-making; they also boost fundraiser-investor matching as more precise searches become a reality.



Last but not least, as a marketplace we also secure the **fulfillment** of the investment terms with smart contracting. Fundraisers that have presold products will deliver them physically to investors post maturity (either upon maturity or with the option to delay delivery). Those that have auctioned off exotic assets, shares, or bonds will distribute rents, dividends, or coupons respectively. While we will work with investors in the unfortunate event of a breach of the investment terms, we leverage smart contracting to optimize parameterized handling of cash flow in order to prevent this from ever happening. Moreover, we will continually integrate the latest

developments in DLT protocols so as to elevate investor engagement to a new level. These aspects all contribute to interest alignment. Please refer to the *<Features Deep Dive>* section below for further details.

## Auction & Multilateral Deal Flow

In addressing some of the current pain points in financing, we introduce a unique auction method on IdeaFeX. Upon the fundraisers' application, we conduct initial screening before allowing the fundraiser to customize the auction and to establish the terms of investment. Upon approval, the auction is announced on IdeaFeX and broadcast to subscribers interested in similar investment opportunities. After a defined delay for investors to study the opportunity, the bidding window opens. Investors can submit and update a series of competitive bids. As the bidding window closes, all winning bids will be awarded tokens at the same price determined from the competitive bidding. For more detailed description on how auction works on IdeaFeX, please refer to the *<Features Deep Dive>* section. The IdeaFeX Auction Method is instrumental to multilateral

financing deal flow.

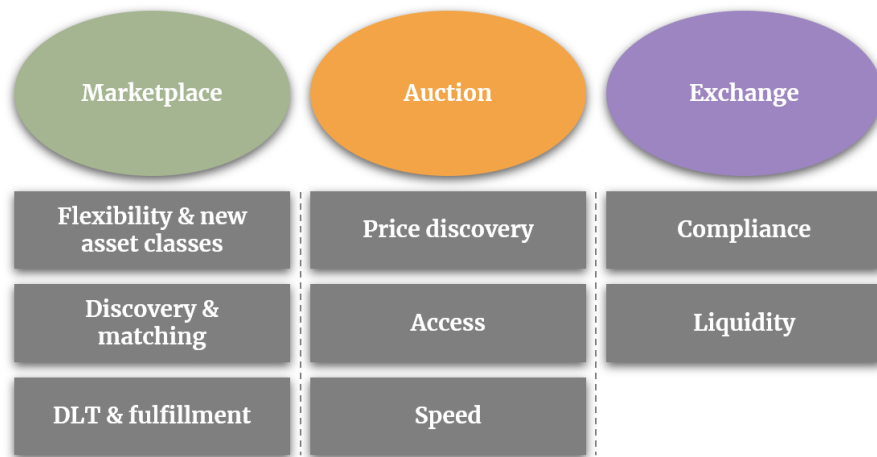


Figure 2. The three components of The IdeaFeX Solution

Fundraisers and investors alike benefit immediately from **optimal price discovery** by market mechanism. Unlike bilateral deal flow where uncertainties and poor access hinder deal optimization, in an auction inputs from all participating investors together determine the final price of the tokens. The auction mechanism is designed such that all winning bidders are willing to pay *at least* the final auction price given all public information, and that all losing bidders are prepared to pay *at most* this price (at the final auction price, the first-come-first-served principle is observed). By design, therefore, our auction method ensures correct valuation. The price discovered through this process is also the one that the secondary market is ready to support.



*broad access*

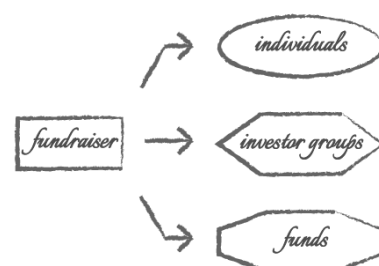


Multilateral deal flow in our marketplace setting drastically transforms **access**. For the fundraiser, the marginal cost of an additional investor is zero. For the investor, the marginal cost of exploring an additional asset is also largely eliminated: part of this reduction comes from improved navigation offered by our marketplace; part of it arises directly from the price discovery mechanism — placing bids in an auction is significantly less costly than engaging in a series of negotiations. Consequently, investors have much better odds of building a

balanced portfolio of assets that they understand and are interested in. Fundraisers, too, experience a welcoming boost in their matching with investors. Broad access together with the resulting improvement in matching further strengthens the foundation for interest alignment.

Last but not least, while yielding better outcomes, multilateral deal flow also **saves time**. Once an auction is announced and all pertinent information shared, every interested investor can find

*time-saving*

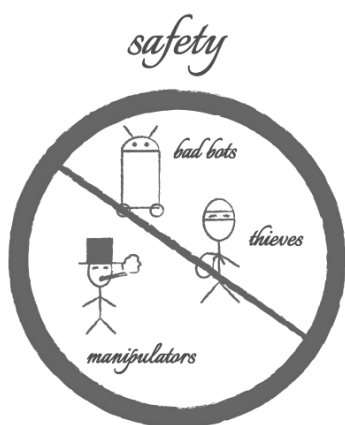
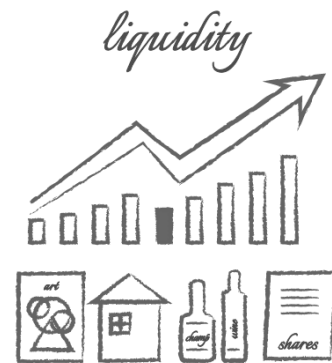




the announcement, research the asset, and decide whether and how they will bid separately. The fundraiser can engage all investors in parallel, for example by making answers to frequently asked questions public. Hence, the waiting period before one party gets an “answer” or manages to schedule the next “meeting” is effectively gone. By cutting deal time while securing better deal outcome, our multilateral deal flow minimizes the opportunity cost. The end result is more effective resource allocation and value creation.

## Manipulation-Resistant Exchange

The third piece of the puzzle is our integrated, manipulation-resistant exchange. As we introduce new asset classes, particularly ones that are formerly illiquid, a means to sustain a liquid market is instrumental for establishing these assets as viable investment options. To that end, several levers on IdeaFeX help maximize **liquidity** given the nature of the assets: (i) Our marketplace facilitates fundraiser–investor discovery and matching. Consequently, buying interest is more likely to be captured into buying actions. (ii) Fulfillment governed by DLT makes asset management more effective. Investors save considerable energy in tending to the execution of each deal. Thereby, they have more time and energy for trading. (iii) We ensure that our integrated exchange is safe and compliant so as to provide a conducive environment for investment. (iv) Last but not least, the IdeaFeX token (IFX) that we offer to our user community has Discount and Referral functions. The Discount function can reduce the opportunity cost and thereby make more trades attractive. The Referral function incentivizes our users to help us bring in new active users. Together, these functions boost liquidity further.



We believe **safety and compliance** are critical for our success as well, for reasons beyond transient liquidity. Observing the cryptocurrency market, one can note the damaging effects of legislative uncertainty to public adoption. Because IdeaFeX is a marketplace for assets that already have legislative certainty (such as physical products, physical assets, shares, and bonds, etc.), we have the relative luxury of knowing how to achieve full compliance.

Combining marketplace, auction, and exchange innovatively, IdeaFeX offers an Amazon- / eBay-like experience for investors and fundraisers alike. We believe this unique mix effectively addresses current pain points in financing and will greatly facilitate the adoption

of DLT in value creation in our economy.

## Success-Fee Business Model

As a marketplace that supports the issuing and exchange of asset-backed tokens, IdeaFeX enjoys a simple **success-fee model**. Fees collected on first issuance, executed orders, and currency exchange are the three notable branches. While they start off as highly competitive, users can further reduce these fees with the help of the IdeaFeX token (see the <The IdeaFeX Token> section).

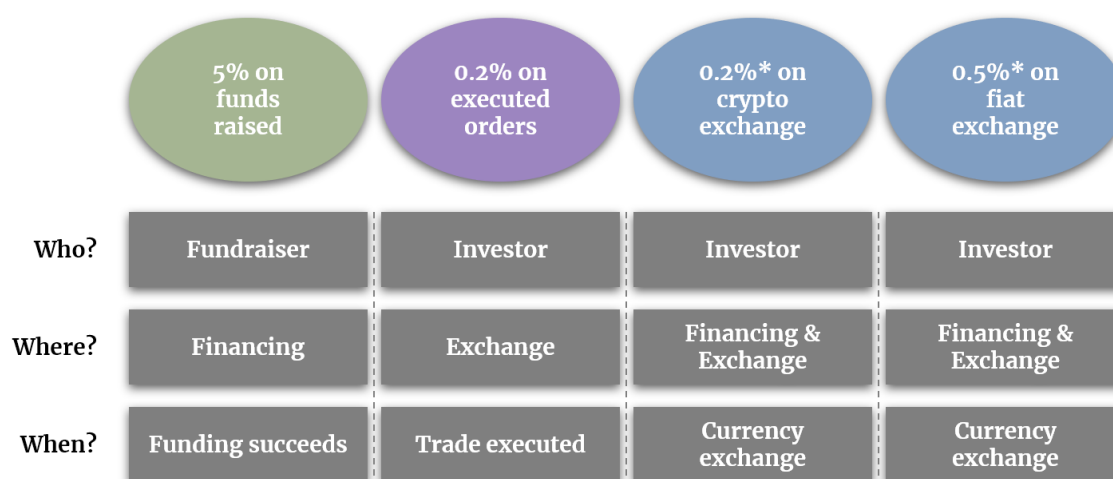


Figure 3. Overview of our success-fee business model

First, we charge the fundraiser a 5% flat fee on funds raised. For them, the absence of a listing fee is advantageous: they only pay when their funding goal is reached. Our analytics team will guide them in customizing their own auction in order to optimize their success rate.

Second, we charge 0.2% on all executed orders on our exchange (secondary market) on both buy and sell sides. For the types of new asset classes that we support, this represents a markedly lower transaction cost than existing alternatives (see the <Competitive Landscape> section). This difference will serve to boost liquidity on our marketplace and attract fundraisers from existing, high-cost alternatives. It is noteworthy that this fee also serves to maintain market stability — without it, “wash trades”, which are trades by a single trader or a single group of traders intended to manipulate the market, would be possible.

As a marketplace, we enlist not only assets initially issued on IdeaFeX. We will also support tokens issued elsewhere that nevertheless meet our high standards. At the same time, some tokens will be taken off the market once the terms of investment tied to them have been fully fulfilled. With these factors combined, the number of listings on the secondary market that each investor can find at any given time may differ significantly from the total number of assets ever issued via auction on IdeaFeX. As third parties come into this market in droves, the total number of listings will be considerably higher.

Third, we support a wide range of fiat and crypto currencies; whenever an exchange is needed (when the token is issued or traded natively in a currency different than the one preferred by the investor), we charge a one-way fee of 0.5% for fiat-to-fiat and 0.2% for fiat-to-crypto pairs. For fiat-to-fiat pairs, we can offer this advantageous rate thanks to demands from both sides of the trade.

Throughout our service, only success fees are charged. Browsing, registering, issuing, bidding, and placing

orders, etc. are all free-of-charge. In the future, we will build on our success-fee model and introduce other value-added services.

# COMPETITIVE LANDSCAPE

With IdeaFeX, we are not merely entering a market: we are creating a new one. Much like the case of cars and horse-drawn carriages or that of email and fax, however, alternatives that serve the same purpose already exist. In this section, therefore, we explore the current competitive landscape and identify how IdeaFeX will drive the paradigm shift and sustain competitive advantage for the foreseeable future.

IdeaFeX as a marketplace serves both fundraisers and investors. Unlike traditional two-sided platforms, however, our inclusion of the secondary market means investors can also be sellers. Publicly-traded securities and ICO tokens are two main existing alternatives that share this feature. Therefore, investors of tokenized assets on IdeaFeX enjoy some new dynamics that open up new investment strategies; fundraisers, in turn, also enjoy broader access and higher flexibility. In the following analysis, we take the perspectives of fundraisers and investors in succession; then, we tie them together with a holistic view of the competitive landscape before identifying our unique selling propositions.

## Fundraisers

Fundraisers' primary concern is financing; namely, what the criteria are to access financing and how costly the process is. As each fundraiser's need varies, another consideration is whether the option is suitable for the specific scenario. Therefore, we analyze the various financing alternatives along three dimensions:

**Access:** How accessible is this financing option?

**Cost:** How costly is it to raise funds with this option?

**Flexibility:** How flexible is this option?

**Auction houses** serve fundraisers with exotic assets. Access is stringent as qualified venues are few and their capacity limited. At the same time, auctions are costly, and the outcomes are at times unpredictable. Only select assets such as collectible art, fine wines, antiques, and real estate, etc. with considerable value and well-defined audience are suitable.

Small business owners frequently resort to **bank loans**. Loans are generally issued against collateral to the fundraiser and thereby exacerbate personal risk exposure. Moreover, few scenarios beyond small businesses are suitable to apply for bank loans for a multitude of reasons. The size of loans also tends to be smaller than most alternatives.

**Corporate investors** represent one of the most attractive options. The nominal cost of seeking corporate investment is low, and the process can be part of a firm's usual business development. The size of investment can vary from medium to high, depending on the specific needs. However, corporate investment is hard to come by. Each investor is likely to be interested only in a specific type of investment with a well-defined set

of qualities. Worse, corporate investors rarely communicate their preference openly. Overall access to corporate investment is therefore highly restrictive.

**Crowdfunding** is a low-cost alternative for startups to bootstrap their operations. Rather than connecting with investors, startups presell their products or services to end consumers. In general, crowdfunding has few restrictions; however, not all startups are suitable to be crowdfunded: when the development cost is high or when the products or services do not target individual consumers, crowdfunding is inappropriate.

Blockchain startups originally used **ICOs** (Initial Coin Offerings) to raise funds from the public for the development of their services. Hence, ICOs could be considered a variant of crowdfunding. Recently, non-blockchain startups have also been exploring this financing option. It is usually less restrictive than traditional crowdfunding because “buyers” (investors) of ICO tokens need not be the end consumer of the services that the startups offer, thanks to the existence of exchanges. At the same time, regulators have noted that some ICOs are indeed securities offerings. There are two compelling cases where tokens can be argued not to be securities: (a) when the token is the product, and (b) when the token can be exchanged for the product (loosely referred to as “currency”). The second case means access to ICOs is open to many firms, startups or otherwise, insofar as the firm is ready to adopt tokens as payment for part or all of its products and services. The cost for an ICO is usually lower than it is for public securities offerings, though it remains high due largely to considerable marketing costs as there is no marketplace for these tokens and each ICO needs to make its own market from scratch.

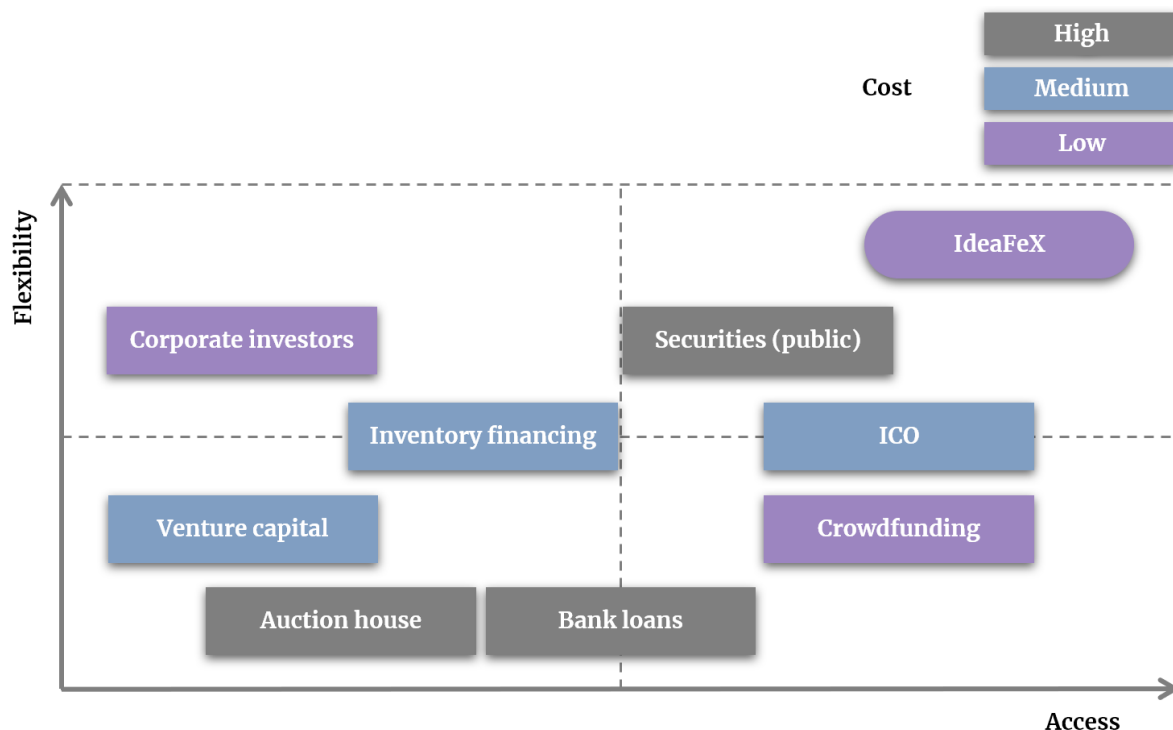


Figure 4. Access–cost–flexibility analysis for fundraisers

**Inventory financing** bears some resemblance to corporate investment: the investor usually operates within well-defined boundaries. Nevertheless, it is usually more accessible, for the length of commitment is shorter. At the same time, the costs for inventory financing are higher than corporate investment, and flexibility is

confined to that of the production of the fundraiser.

Publicly-traded **securities** cover a wide range of financial instruments. They are perhaps the most established means of financing and are highly flexible. However, issuing securities to the public is costly and generally only suitable when the amount to be raised is high. Financial institutions have also been packaging multiple assets or asset classes into synthetic securities. This, however, is not a case that we explore, for they are products of financial institutions rather than means of financing by fundraisers.

Traditionally, startups that require external funding have relied on **venture capital** investments. In recent decades, the stages at which venture capitalists enter have gradually shifted; the majority of “venture capital” firms indeed focus solely on growth capital. As a result, the already selective process has grown increasingly demanding. Further, venture capital only caters to startups and always results in significant dilution of ownership; therefore, it is unsuitable for mature firms and unappealing to firms with more attractive options.

In comparison, IdeaFeX combines some notable advantages offered by these options while avoiding their restrictions. Specifically, goods suitable for **auction houses** can also be auctioned on IdeaFeX: because we can fractionize the asset into numerous tokens and each investor need not purchase the asset in its entirety, auctioning on IdeaFeX attracts more interested buyers; the fundraiser, therefore, is likely to achieve higher raises. **Corporate investors** can also integrate IdeaFeX into their investment strategy: at the same time, fundraisers on IdeaFeX need not limit their target investors to any single corporate investor. Compared to **ICOs**, IdeaFeX offers well-defined financing options backed by goods and services in our purpose-built marketplace. The costs to raise on IdeaFeX are therefore considerably lower. Moreover, our broad support means fundraisers unsuitable for ICOs can also raise funds on IdeaFeX. In the near future, we will also provide support for securities. Thanks to DLT, securities on IdeaFeX will enjoy better transparency and governance functions. Figure 4 provides a qualitative overview of the competitive landscape from the point of view of fundraisers.

## Investors

Investors are concerned with a different set of qualities that collectively affect the success of their investments. From their point of view, we compare various investment alternatives along the following three dimensions:

**Access:** How accessible is this option?

**Returns:** What is the typical level of return on investment that an investor can expect?

**Volatility:** How volatile is this investment option? What is the level of variance among specific investments within this option?

**Commodities** usually trade in high volume. Nevertheless, their performance is closely tied to political and macroeconomic environments; in recent times, uncertainties on the global scale have kept commodity prices volatile. Further, as commodities are physically delivered upon maturity, a large portion of investors in this market are corporate investors who use it as part of their supply chain. Other major players are financial

institutions.

**Cryptocurrencies** (pure currencies such as Bitcoin as opposed to ICO tokens), in comparison, are fully open. Since their invention, investors have seen astronomical returns. At the same time, due to slow adoption cryptocurrencies remain highly volatile. There is also significant variance among specific currencies, with Bitcoin as the apparent leader. It remains to be seen whether cryptocurrencies can sustain in the coming years the levels of returns that they have so far achieved.

Closely linked to cryptocurrencies are **ICOs**. Among investors, there is confusion as to whether ICO tokens are “currencies” when their use case is the payment of goods. We draw a distinction between the two based on whether global payment is within their scope: for us, cryptocurrencies are to be used across platforms like *cash*, while ICO tokens are to be used for selected services like *coupons* (or indeed *tokens*). ICO tokens are highly volatile. Performance heterogeneity is astoundingly high, too. However, the average returns from ICOs underperform cryptocurrencies in general. Access to ICOs used to be open, though recently some jurisdictions have imposed temporary restrictions. Due to the lack of a marketplace, the processes of researching and investing in ICOs are also complex.

**M&A** at times can be considered an investment option for corporations. As few if any viable candidates exist at any given time, access to M&A is understandably restrictive. Unlike most other investment options, corporations who conduct M&A rarely profit by selling their positions. Nevertheless, returns can be assessed by comparing the performances of the firm before and after M&A. Heterogeneity is relatively high, as textbooks are full of stories of successful and failed M&As.

**Private funds** tend not to be volatile, as the fund management usually has long-term investment strategies that seek consistency. On the other hand, heterogeneity among funds is nonnegligible: a significant number of funds fail to match the performance of the market, and access to proven, high-performing funds is usually restrictive. The costs of private funds are also high for investors.

**Real estate** is a common choice for many investors. For retail investors, real estate investment provides benefits in utility and tax deductions. For corporate investors, ownership of office building or manufacturing facilities cuts down cost and may supply an additional source of income. For governments, investment in infrastructure drives social and economic development. Overall, historic returns from real estate have been reasonably high and stable. It is also reasonably accessible. However, real estate investment is highly illiquid.

Publicly-traded **securities** tend to be more volatile and more accessible than private funds. Heterogeneity in performance among securities is high, but thanks to relatively high liquidity investors can exit easily. It is feasible to outrun the market, which also tends to yield higher returns than real estate. As in the previous subsection, we are referring primarily to the stock market and exchange-traded funds rather than derivatives. From the investor’s point of view, those instruments are useful in professional trading but are rarely assets that are worth holding on their own.

In comparison, IdeaFeX offers the highest level of accessibility to investors with all types of backgrounds and interests. Our broad support for new as well as traditional asset classes makes it exceedingly easy to build a balanced portfolio. Admittedly, such breadth also means the heterogeneity in performance among assets can

be relatively high; still, our efforts in curbing asset price manipulation combined with the off-chain value of our asset listings should ensure lower price volatility than cryptocurrencies and ICO tokens.

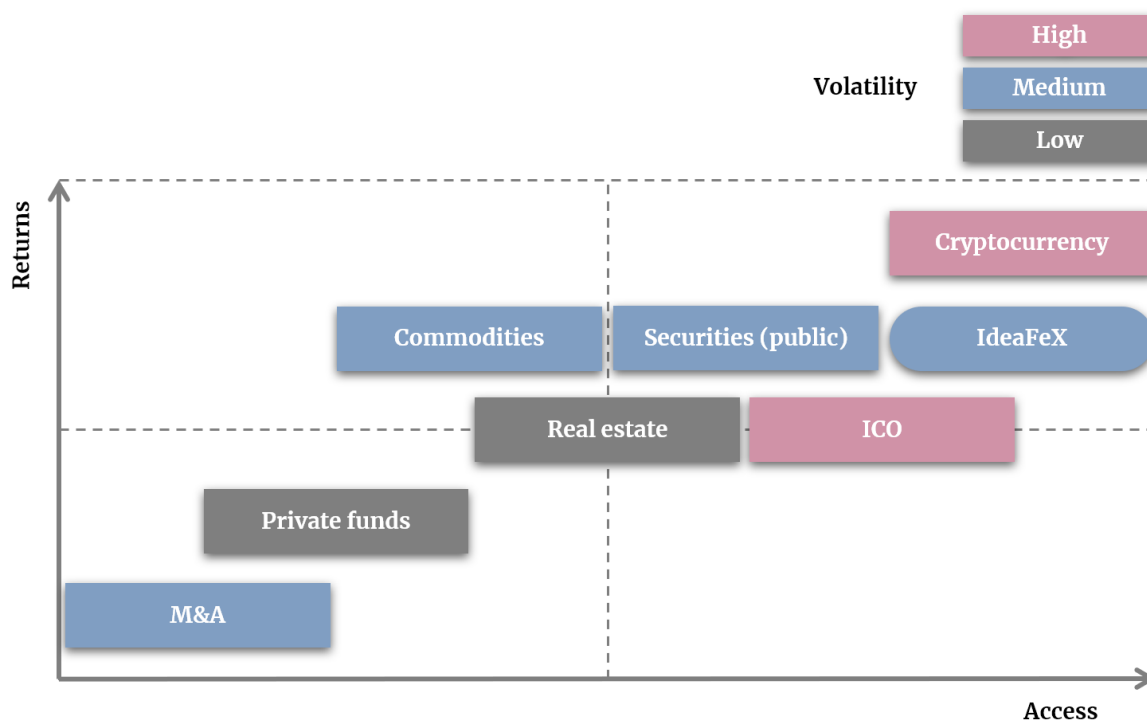


Figure 5. Access–returns–stability analysis for investors

IdeaFeX does not intend to replace commodities, securities, real estate, funds, or any other form of investment. Rather, with our open marketplace and DLT support, we introduce them to a **more efficient format**. Hence, investors on IdeaFeX can access these types of investment options more easily. For example, compared to traditional real estate investment, investors will be able to purchase the asset in part and exit their positions by selling directly on our exchange. These advantages greatly boost access and makes higher returns possible.

Last but not least, while IdeaFeX cannot substitute **M&A**, some aspects of corporate investment can be complemented by integrating product futures offered on IdeaFeX into the supply chain. As IdeaFeX is much more affordable and agile, we believe this option will greatly empower corporate investors. Figure 5 provides a qualitative overview of the competitive landscape from the point of view of investors.

## Synthesis

Financing and investment are complex activities. Many professionals dedicate their careers to a small part of a single option. Nevertheless, if we focus on the overall experience, it remains possible to form a clear understanding of the competitive landscape. Before IdeaFeX, we can generally consider access–cost–flexibility and access–returns–stability as two sets of tradeoffs. IdeaFeX transforms financing and investment by offering an alternative that largely mitigates these compromises. Table 1 provides a synthesis of the above analysis.



Table 1. The Competitive Landscape

	Fundraisers			Investors		
	Access	Cost	Flexibility	Access	Returns	Volatility
<i>Auction house</i>	Low	High	Low			
<i>Bank loan</i>	Medium	High	Low			
<i>Corporate investor</i>	Low	Low	High			
<i>Crowdfunding</i>	Medium	Low	Low			
<i>ICO</i>	High	High	Medium	High	Medium	High
<i>Inventory financing</i>	Low	Medium	Medium			
<i>Publicly-traded securities</i>	Medium	High	Medium	High	Mid-High	Medium
<i>Venture capital</i>	Low	Medium	Low			
<i>Commodities</i>				Mid-Low	Mid-High	Medium
<i>Cryptocurrency</i>				High	High	High
<i>M&amp;A</i>				Low	Low	Medium
<i>Private funds</i>				Mid-Low	Mid-Low	Low
<i>Real estate</i>				Medium	Medium	Low
<b>IdeaFeX</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>High</b>	<b>Mid-High</b>	<b>Medium</b>

## Unique Selling Propositions

Compared to existing alternatives, we offer four unique selling propositions (USPs) that are clear, understandable, and easy to communicate: open, easily-navigable, efficient, and robust.

First, **openness** is our greatest asset. As a marketplace, we welcome a broad range of assets and bring them features that used to be exclusive to publicly-traded securities: Exotic assets such as collectible art, infrastructure, and factory capacity, etc. can now be fractionized, owned, and traded by numerous investors. Product futures based on fine wine, electronic components, and inventory, etc. offer opportunities of business model innovation to fundraisers and investors alike. Soon, we will also support traditional securities. Thus, the level of *flexibility* is unprecedented.

Beyond flexibility, we make attractive financing and investment opportunities more *accessible*. Fundraisers can find on IdeaFeX financing options that readily match or eclipse most existing alternatives — now cheaper and less restrictive. Similarly, investors can find on IdeaFeX investment options that readily match or eclipse most existing alternatives — now more secure and easier to manage.

Second, an open market could be cluttered and hard to navigate. In contrast, IdeaFeX boasts an **easily-navigable marketplace format** that offers exceptional user experience. We meticulously curate an adaptable catalogue and will leverage artificial intelligence to help investors search, *discover*, and research throughout our listings. Further, we leverage smart contracting to govern the *fulfillment* of the terms of investment, thus completing the user experience from discovery to fulfillment. Currently, there is no financing or investment alternative that offers comparable experience, let alone for the new asset classes that we propose.

Third, financing and investment on IdeaFeX is exceptionally **efficient**. Our innovative auction method provides a market mechanism for *optimal price discovery* in financing. Details of this method are covered in the <Features Deep Dive> section. This easy-to-understand mechanism simultaneously benefits fundraisers and investors by cutting down financing costs and yielding fairer valuations. Auction houses are the only

alternatives that support a similar feature, though an auction for large quantities of tokens differs from an auction for a single item.

Beyond price discovery, *fundraiser–investor matching* is greatly empowered, thanks to our marketplace format as well as high degrees of accessibility and flexibility. Essentially, fundraisers and investors enjoy much better chance of interacting with the most suitable audience.

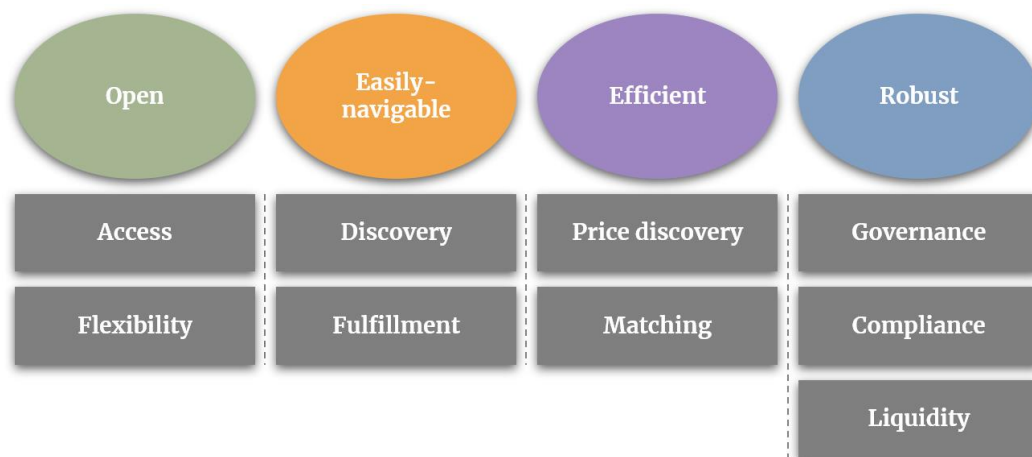


Figure 6. Our USPs

Fourth, IdeaFeX is also designed to be **robust**. In general, our asset listings enjoy superior transparency and *governance*. By moving governance and transaction on-chain while keeping private data off-chain, it is possible to achieve high levels of trust while preserving privacy: tokens not only represent the underlying asset but also provide functions that underpin governance functionalities. Further, we will ensure *full compliance* with all pertinent regulations, and the levers discussed in the <The IdeaFeX Solution> section will be able to sustain levels of *liquidity* rarely found in existing alternatives.

# MARKET SIZING

IdeaFeX addresses both financing and investment. The overall turnover on the secondary market can be considerably higher than the size of the primary market: (i) asset price can appreciate over time, (ii) some assets can remain in trading years after issuance, and (iii) we will enlist tokenized assets issued elsewhere that nonetheless meet our standards. As tokenized assets (beyond cryptocurrency) are new and the first tokens are expected in 2019, we take two steps in sizing this market: First, we estimate the annual financing market in ten years as substitutes or complements to existing alternatives. Then, we estimate what evolutions of the primary market could mean for the market capitalization in the same time frame.

In the first step, we consider the annual markets of auction house, real estate, asset financing, infrastructure, crowdfunding, ICO, supply chain, and venture capital. These will be grouped into the three main asset classes on IdeaFeX.

Current markets that constitute alternatives to **exotic assets** include collectibles auction, commercial real estate, infrastructure, and asset financing. Data published in France show that in 2012 the auctions for collectibles (art, antiques, jewelry, wines, and others) reached €1.23 billion, with arts and antiques accounting for 67% of the total<sup>1</sup>. Globally, fine art auctions have summed at around \$15 billion annually in recent years<sup>2</sup>. If we ignore antiques in the former figure and assume that the French market is representative, this will conservatively put the annual **auctions market for collectibles** at over \$22 billion. With dramatically higher access and lower cost (yielding better results for the seller while safeguarding their privacy), we expect a significant portion of this market will move over to distributed ledger technology; further, collectors who are currently not using auction houses may adopt DLT-based solutions. Contribution from this source can therefore be around \$20 billion per year globally in 2028.

In the first half of 2018, global **commercial real estate** transaction volume reached \$341 billion<sup>3</sup>. The market that we propose makes real estate investments significantly more agile and less costly. It is therefore reasonable to foresee a considerable portion of commercial real estate investment turn to DLT-based solutions. At the same time, we also must acknowledge that this is a highly conservative market, and that adoption will be gradual. If we conservatively assume that the commercial real estate market will not grow and that 1/4 of it will be on blockchain in ten years, that represents a market contribution of roughly \$170 billion per year

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<sup>1</sup> Conseil des ventes volontaires de meubles aux enchères publiques, 2012, “Public Auction Sales in France — 2012 Activity Report”, La documentation Française.

<sup>2</sup> Artprice.com, 2018, *H1 2018 Global Art Market Report*.

<sup>3</sup> Deloitte Center for Financial Services, 2018, *2019 Commercial Real Estate Outlook*.

globally.

**Asset financing** is currently used by firms to get loans against the asset that they own. In 2016, this market has passed the \$1 trillion-mark globally<sup>4</sup>. Exotic assets that we propose are not limited to loans; instead, uses of the assets can be sold and traded. We believe this can be an interesting alternative, for it solves the problem of idle capacity. On the other hand, because this is a new proposition, for the sake of prudence, we will assume that in 10 years this market will grow to 1/10 that of asset financing today, at \$100 billion per year.

Our specific marketplace format can further transform public **infrastructure** investments, now commonly funded by tax income, public private partnerships (PPPs), or governmental debt — by empowering the PPP model with lower cost, higher access, stronger governance, and superior agility. This market currently stands at \$2.6 trillion<sup>5</sup>. If we assume that in ten years 1/20 of that will be underpinned by DLT, it will be a \$130-billion-per-year market.

While for exotic assets we primarily view the market that IdeaFeX creates as *substitutes* for existing alternatives, for **product futures** we see it as a *complement* to crowdfunding, ICO, and supply chain investment.

In 2018, total crowdfunding transaction volume reached over \$9.3 billion with 45.6% year-on-year growth<sup>6</sup>. This number is expected to reach over \$25 billion by 2022. On top of traditional crowdfunding, ICOs amassed over \$20.3 billion in 2018<sup>7</sup>. Some startups, due to uncertainties in their future pricing and limited target market size, may be more suitable for crowdfunding. Other startups may choose to adopt a special “currency” for their service. Nevertheless, for most **startups**, product futures offer a superior solution: Unlike crowdfunding, investors need not be end consumers, and the secondary market supplies liquidity for flexible entry and exit. Unlike ICOs, where tokens are considered “money” and are highly volatile, with product futures tokens represent the products or services that the startup will offer. Relative certainties and prospects of growth in their value makes them a more viable investment. We believe it is reasonable to expect this source to grow in ten years to *at least* the size of current crowdfunding and ICO combined, at over \$30 billion per year.

Compared to crowdfunding and ICO, **supply chain** investments vary from sector to sector. Some specific examples of products that could benefit from the product futures model include x86 computer processors

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<sup>4</sup> White Clarke Group, 2018, *2018 Global Leasing Report*.

<sup>5</sup> Global Infrastructure Hub, 2018, *Global Infrastructure Outlook — Forecasting Infrastructure Investment Needs and Gaps*.

<sup>6</sup> Statista, 2018, *FinTech Report 2018 — Alternative Financing*.

<sup>7</sup> Coin Schedule, *Cryptocurrency ICO Stats 2018*, 4 Dec 2018.

(\$42 billion in 2017<sup>8</sup>) and NAND flash (\$52 billion in 2017<sup>9</sup>). This market has great potential. Given the superiority of our solution, we believe a considerable portion of non-commodity supply chain will move onto blockchain- (DLT-)based solutions. At the same time, it remains possible that each leading supplier would resort to their proprietary blockchain solutions. If we (or indeed one of our competitors) are successful, this market can easily surpass the \$100-billion-per-year mark within ten years.

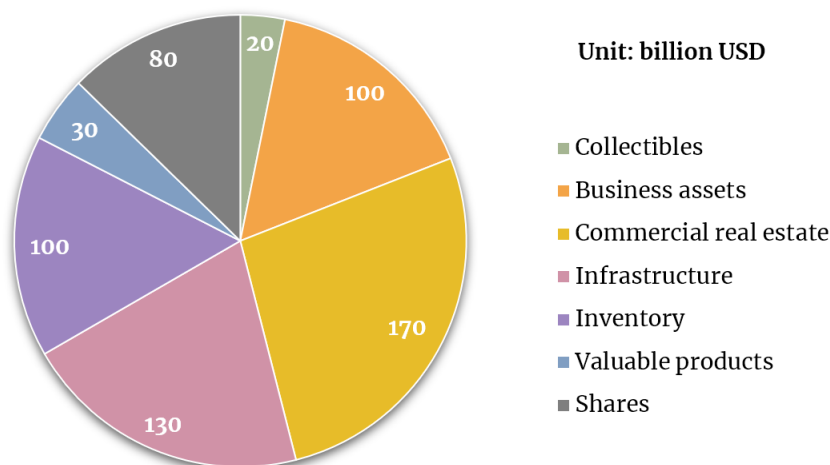


Figure 7. Breakdown of primary market in 2028

For **traditional** securities such as shares and bonds, we only focus on the space occupied by venture capital for two reasons: (a) earlier access to the public via DLT-backed shares makes future IPO redundant, and (b) our product- and business asset-backed financing options also represent attractive substitutes to debt securities.

The year 2017 saw global **venture capital** deals reach \$155 billion globally<sup>10</sup>, and this number has been surpassed already by the first three quarters of 2018<sup>11</sup>. The market we propose offers efficiency advantages to startups and investors alike. While some startups may prefer product futures, those that are still far in their development stage from delivering products or services have the choice of raising funds against their stocks. The enthusiasm of STOs (security token offerings) in the blockchain community echoes this observation. We believe this source can easily surpass 1/2 of the sum of current venture capital deals within ten years, amounting to at least \$80 billion per year globally.

The above sources together make for a primary market sized at roughly \$630 billion per year in 2028. Figure

<sup>8</sup> Statista, 2018, *Intel's Net Revenue from 2012 to 2017 by Segment*.

<sup>9</sup> Statista, 2018, *Global Flash Memory Market Revenues Worldwide from 2013 to 2021*.

<sup>10</sup> KPMG, 2018, *Venture Pulse Q4 2017*.

<sup>11</sup> KPMG, 2018, *Venture Pulse Q3 2018*.

7 offers a breakdown.

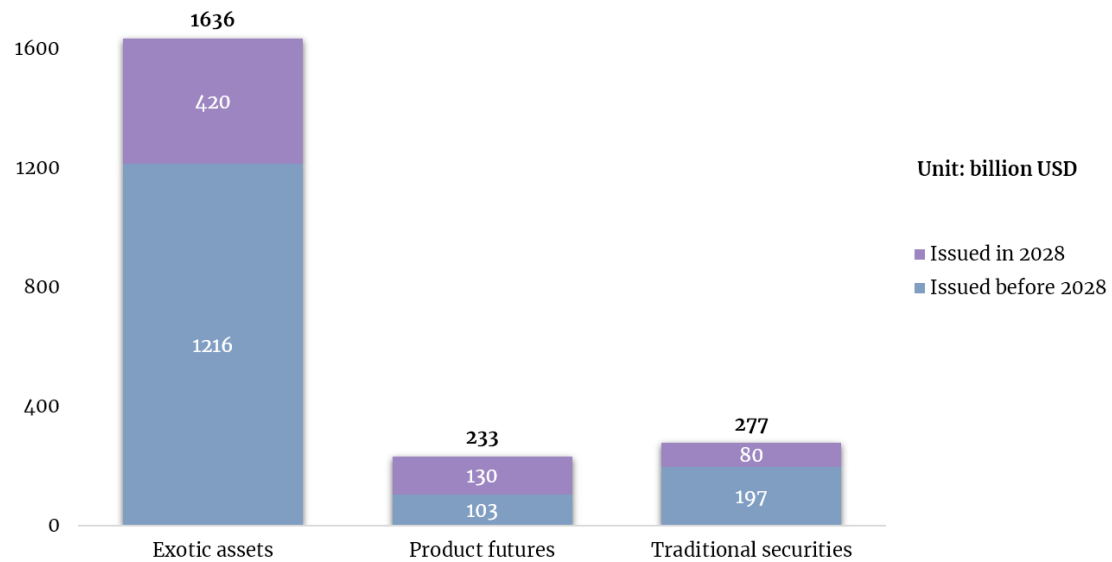


Figure 8. Market cap projections for 2028

Beyond the primary market, we need to account for market exit and growth to deduce the market capitalization. The nature of the new market means this exercise can offer at most a general idea and cannot be considered an educated estimate, for no existing data readily sheds light on (a) what the market exit rate is for each asset class, (b) what pattern of growth each asset class will experience, or (c) how the price in the secondary market will change overtime. We therefore make the following assumptions:

- A. The market exit rate for each asset category is as follows
  - a. Exotic assets: 10% per year
  - b. Product futures: 50% per year
  - c. Traditional: 15% per year
- B. The primary market will grow linearly to the 2028 estimate
- C. The prices of the assets will on average remain unchanged

Under these assumptions, we would have a 2028 total market cap of \$2.15 trillion. Figure 8 breaks down the market cap projections.

# THE IDEAFeX TOKEN

In this section, we lay out the key values that we want to deliver by introducing the IdeaFeX token, its functions and features, and the token issuance and allocation plan.

## Foundational Values of the IdeaFeX Token

To offer a marketplace that is open, easily-navigable, efficient, and robust is a significant undertaking. A vibrant, committed user community comprised of both fundraisers and investors must grow with us for IdeaFeX to succeed and for the values that we stand for to prevail. We therefore seek a solution that aligns us with a continuously-growing community. There are four foundational values that must be deeply rooted in this solution: *(i)* It must be a win-win solution that provides meaningful and tangible value to our user community. *(ii)* It must encourage our community members who have invested in it as well as those who have not to use our service and thereby stay actively engaged. *(iii)* It should also incentivize our community members to help grow our community proactively. *(iv)* Last but not least, it should not only motivate early-adoption but also help us galvanize lasting support from all our users, regardless of the timing at which they join.

First, the value this solution provides **to our user community** must be **meaningful** and **tangible**. In the blockchain community, there is currently growing interest in security tokens backed by shares in companies. Investors in these tokens are shareholders and enjoy the rights that this status confers. These tokens add investor engagement features to equity rights and represent an asset class that we offer at IdeaFeX. However, this type of security tokens serves primarily *investors* rather than *community members* who actively enjoy the service of the issuer. While this may be preferred in many cases, it would weaken the value provided to our user community. Further, investing in shares of companies before said company has achieved profitability, or at least established considerable income streams, is not always suitable for most investors: it is difficult to value the company correctly under these circumstances. Our opinion, therefore, is that security tokens backed by shares are not advisable for average investors unless the issuer has achieved profitability or established considerable income streams. Otherwise, the value of the token is usually *neither meaningful nor tangible*.

Second, this solution must help keep our community **actively engaged** through use. Whether the use case is fundraising or investing, a well-designed utility token can offer functionalities that encourage usage. Community members who hold these tokens can *directly* enjoy their functionalities. This process is conducive to a more diversified asset pool with higher liquidity. Members who do not hold these tokens, therefore, also enjoy meaningful and tangible value *indirectly*, as we will be able to offer better services at lower opportunity cost: Thanks to a *more diversified* asset pool and the *more dynamic* user base that it attracts, investors will have broader choices with which to build a balanced portfolio, and fundraisers will have an easier time matching with interested investors. Thanks to *higher liquidity* and the *more active* user base that it supports, investors can fill their orders faster with smaller spreads, and fundraisers can avoid funding failures

and flash crashes more readily.

Third, this solution must incentivize the **organic growth** of our community. Indirectly, it entails the dynamic raised in the preceding point, for a more vibrant active user community improves the value that we can provide to all users. A positive feedback loop thereby becomes viable. More directly, we should incentivize our community members to help grow our user community proactively. A *straightforward referral program* is therefore a valuable addition that can reward our community members who make the largest contribution to our growth with meaningful and tangible value.

Fourth, this solution must **encourage adoption continuously**. While early adopters should enjoy the benefits for *longer periods of time*, this solution must not be set up in a “pyramid-like” fashion such that early adopters enjoyed disproportionately more benefits at the expense of late adopters. To achieve this, we should offer higher incentive at the beginning to encourage early adoption but never distinguish among community members by their tenure.

We have designed the IdeaFeX token with these values in mind.

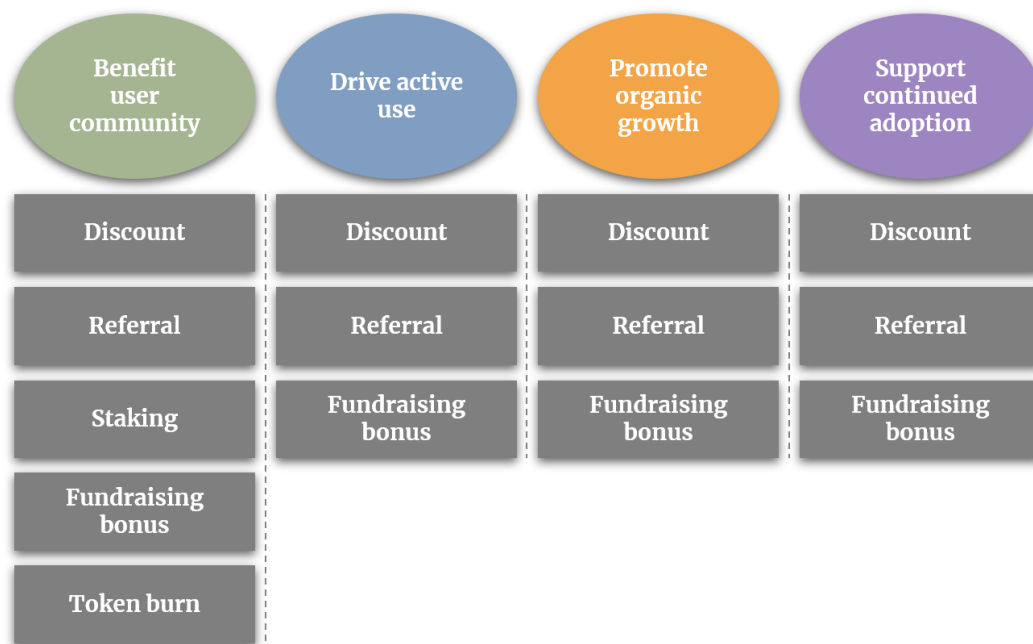


Figure 9. The foundational values of IFX and its token features

## Token Features

As a utility token, the IdeaFeX token (IFX henceforth) will have four main functions and one additional feature. Together, these features incentivize active engagement of the entire community and underpin the value of IFX through usage.



## Discount

In its first function, IFX offers users discounts on fees when it is used for these fees. Specifically, both fundraisers and investors can choose to pay their success fees in IFX and receive a discount. Provided that the user holds sufficient amount of IFX, we will deduct from their account the amount that corresponds with the fees after discount, valued at the market price denominated by the currency that denominates the trade. Otherwise, the discount only applies until the entire balance of IFX in the user's account is exhausted; the remainder of the fees will be covered in the currency that denominates the trade.



The discounts that IFX offers follow a simple schedule: Within the first year after the official launch of our marketplace (scheduled in late 2019), the discount rate is **40%**. In the second year after launch, the discount rate is reduced to **30%**. In the third year, it is further reduced to **20%**. Beyond the third year, IFX will *always* offer **10%** discount on fees.

For example, user Anna buys 100 coins of Hotel Beta at 100 EUR / coin. The total amount of the transaction is €10,000. Suppose that Anna has euro in her account and therefore does not require currency exchange. Her fees total at  $10,000 \times 0.2\% = 20$  EUR before discount. Suppose further that IFX offers a 40% discount on fees at the time of her transaction. (a) If she holds no IFX,  $10,000 + 20 = 10,020$  EUR will be deducted from her account, and she will be credited the 100 coins that she has purchased. (b) If she holds some IFX valued at above  $20 \times (1 - 40\%) = 12$  EUR, only €10,000 and IFX worth €12 at the current market price will be deducted. (c) If IFX that she holds has a total value inferior to €12, for example €8, the discount will only apply to the portion of fees that she pays with IFX. In this case, IFX covers  $8 \div (1 - 40\%) = 13.33$  EUR of the original €20 in fees; the remaining  $20 - 13.33 = 6.67$  EUR will be paid in euro. Thus, a total of €10,006.67 and all her remaining IFX (worth €8 at the market price) will be deducted. It is worth highlighting that the “current market price” of IFX that applies here is the price against euro, which is the currency that denominates the coins that Anna has purchased (Hotel Beta).

In general, let  $x$  be the undiscounted fees to be paid,  $m$  be the discount rate, and  $z$  be the value of IFX that the user holds; both  $x$  and  $z$  are denominated in the currency of the transaction.

1. If  $z = 0$ , no discount applies, and the final fees paid are  $x$ .
2. If  $0 < z < x(1 - m)$ , discount applies only to fees covered by  $z$ , and the final fees paid are  $x + zm / (1 - m)$ .
3. If  $z \geq x(1 - m)$ , discount fully applies, and the final fees paid are  $x(1 - m)$ .

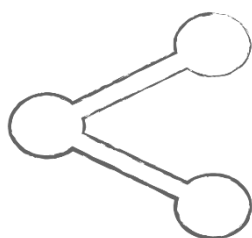
The Discount function is a key driver of the four foundational values of IFX. First, discounts are meaningful and tangible for our user community. The **value** of IFX is always **superior** to them than it is to others by at least the discount that the token offers at the current market price.

Second, Discount makes it less costly for users to raise funds and to buy and sell assets; **more fundraising and investing activities** become viable as a result. For investors, while without these discounts our fees are

highly competitive with cryptocurrency exchanges, they can be further reduced with IFX — and we offer new asset classes in an open and easily-navigable format unfound in cryptocurrency exchanges. For fundraisers, we proffer an open and easily-navigable format as well as our unique and highly efficient auction method for optimal price discovery — again unfound in cryptocurrency exchanges. We are therefore confident that this function will help drive active use and promote organic growth of our user community.

Third, the Discount function has **no expiration date**. While we offer higher discounts in the first three years to incentivize early adoption, our entire user community can continue to enjoy this benefit. The value of IFX derived from this function will therefore not suddenly vanish. All users can at any time purchase IFX and start enjoying fee discounts.

## Referral Award



In its second function, IFX offers referral awards for introducing new active investors. Specifically, users can send private invitations to others who are not yet members of our user community. After the new user registers **as an investor** with the unique link inside the invitation, each time they pay fees using the **IdeaFeX token** the referrer receives **20%** of the IFX collected. This referral award has **no expiration date**, though it works **only with direct referral**.

For example, user Charles uses the unique referral link sent by user Anna to register on IdeaFeX. Charles buys 20 coins of Firm Delta at 500 EUR / coin. The transaction totals at €10,000, and the fees incurred total at €20 before discount. Suppose Charles holds sufficient IFX, and that the discount is 40% at the time of his transaction. He pays €12 worth of IFX in fees. Anna receives a referral award of  $12 \times 20\% = 2.4$  EUR.

Months later, Charles invites his friend's company, Echo, to register on IdeaFeX in order to raise funds for an expansion project. Though the administrator of Echo uses Charles' link to register, because Echo is a fundraiser Charles will not receive a referral award when Echo successfully raises funds on IdeaFeX.

The referral award function further drives the foundational values. It is valuable primarily to our community members who **actively** help us grow. As our active user community grows, dynamics similar to that described under the Discount function come into play: our services will improve, and the opportunity costs will drop.

Further, the referral award only applies to **direct referrals** — contrary to “pyramid” referral schemes. As a result, disproportionate benefits are not given to early adopters at the expense of late adopters. Indeed, the value of the referral award relates only to investment activities of the new users and is independent of the time at which referral is made.

## Staking

The third function of IFX is staking for fundraisers in certain catalogue ranking scenarios. Specifically, in the default view of keyword searches and catalogue browsing, asset listings that have the highest numbers of IFX

staked will appear higher than otherwise. When the results of keyword searches and catalogues are sorted by other criteria, for example date of issuance or price, and when several results otherwise rank the same, asset listings that have the highest numbers of IFX staked will appear higher than otherwise.

For example, suppose Assets *X*, *Y*, and *Z* are all the infrastructure projects in Europe currently in trading. If a user searches the keyword “infrastructure” and refines the results with “Europe” as the location and “in-trading” as the status, *X*, *Y*, and *Z* are the only assets that remain in the search. Suppose *X* has 1,000 IFX staked, *Y* has 500 staked, and *Z* has none. Asset *X* will appear first, followed by *Y* and *Z*. Suppose further that *X* is priced at €10, *Y* €20, and *Z* €20. If the user further chooses to sort the search results by price in descending order, *Y* will appear first, followed by *Z* and *X*.



In general, staking IFX potentially improves the **search ranking** of the corresponding listed asset. We must emphasize that the effects are a possibility rather than an eventuality. Functionalities in navigation, for example filtering and sorting, as well as the user’s set preferences, are our priority. We will never intentionally compromise the search results. When **other criteria and preferences have been exhausted**, staking will help improve search ranking.

This function serves fundraisers. It presents a way for them to bestow more visibility to their asset listings and hence represent meaningful and tangible value. At the same time, the function is so devised that all other features and functions that we provide are fully protected. Demand for IFX from staking therefore drives up the value of the token at no cost to our user community.

## Fundraising Bonus

In its fourth function, IFX grants fundraisers who choose to raise *exclusively* in IFX an **additional discount** on fees. Specifically, if a fundraiser auctions off an asset on IdeaFeX and chooses to accept only IFX, they will receive an additional discount on top of that from the Discount function.



This additional discount follows a simple schedule: It is not activated within the first year after the official launch of our marketplace (scheduled in late 2019); hence, the discount rate is **0**. In the second year after launch, the fundraising bonus function becomes active for IFX. The initial discount rate is **12.5%**. In the third year, it is increased to **25%**. Beyond the third year, IFX will always offer **50%** discount to fundraisers who accept IFX exclusively in their funding auctions.

For example, suppose company *N* raises funds on IdeaFeX. Assume further that it is able to close a raise worth €10 million at the end of the auction. If *N* holds no IFX and has chosen to accept euro only, our success fee amounts to  $10,000,000 \times 5\% = 0.5$  million EUR. Suppose that the discount offered by IFX is 20%. If *N* holds sufficient IFX, it will only have to pay a fee in IFX worth  $0.5 \times (1 - 20\%) = 0.4$  million EUR. On the other hand, if *N* has chosen to accept IFX exclusively in its auction, an additional discount will apply. Suppose this

additional discount is 25%. In this case,  $N$  only pays a fee of  $0.4 \times (1 - 25\%) = 0.3$  million EUR. Note that when the fundraiser chooses to accept IFX exclusively in their funding the two discounts are compounded.

In general, let  $x$  be the undiscounted fees to be paid,  $m$  be the discount rate for all fees paid in IFX, and  $n$  be the additional discount rate for funding auctions that accept IFX exclusively. The final fee that the fundraiser pays is

$$x (1 - m) (1 - n)$$

This Fundraising Bonus function offers an interesting choice to fundraisers who may be sensitive to fees. At the same time, it provides another source of demand for IFX, thus further supporting its value. Investors who actively use IFX, therefore, can enjoy higher value per token from both Discount and Referral functions.

It is worth noting that we choose not to activate this function in the first year of our launch for two reasons: First, before our service becomes well-established and our community fully-fledged, we expect the market to have diverging views on the valuation of IFX. Consequently, its initial volatility may be high, and its price may be difficult to predict, despite our best efforts. We believe these may not be the most conducive conditions for successful financing and would not encourage fundraisers to accept IFX exclusively. As our service and our community become more mature, accepting IFX exclusively will grow into a viable and attractive option. Second, the Discount function is scheduled to grant lower discounts on fees; having the Fundraising Bonus function grant higher discounts allows us to maintain the value of IFX derived from the demand side.

Table 2. IdeaFeX token overview

	Users served	Condition	Rate			
			Year 1	Year 2	Year 3	Beyond
<i>Discount</i>	All	Fee paid in IdeaFeX token	40%	30%	20%	10%
<i>Referral</i>	Investors	Fee paid in IdeaFeX token			20%	
<i>Staking</i>	Fundraisers	Does not interfere with functions			n/a	
<i>Fundraising Bonus</i>	Fundraisers	Accept exclusively IdeaFeX token	0	12.5%	25%	50%
<i>Token Burn</i>	All	Acts as an appreciation mechanism			10%	

## Token Burn

The final feature of IFX is a mechanism that continually reduces the total supply. As we accept IFX as fee payments, it is necessary for us to sell them back into the market so that the circulating supply does not dry up. In order to stabilize the value of IFX in a cryptocurrency market marked by extreme volatility, we build into the design an appreciation mechanism through **systematic reduction of the total supply**. Specifically, we sell back **at most 90%** of the tokens that we accept as fee payments from our user community. This means that **at least 10%** of the tokens will be burnt after being used once.



For example, suppose in a certain month we collect 50 million IFX as fee payments. We will burn 10% of

them, i.e. 5 million IFX, at the end of the month. We can choose to sell back at most 45 million of these tokens. In this, we will take the utmost care in minimizing the impact of these transactions on the market price of IFX. Table 2 offers an overview of the features of our utility token.

## Token Supply and Issuance

We fix the total supply of the IdeaFeX token (IFX) to one billion. Of these, 70% are allocated to the community, with just over half of them (40%) to our initial token sale, 15% to community development, and 15% to talent recruitment and interest alignment. A broad basket of currencies will be accepted under a demand-adjusted token-pricing schedule. Jointly, these details help ensure that IFX will be able to deliver on its four foundational values.

### Total Supply

For the interests of transparency, we fix the total supply of IFX to 1,000,000,000 (one billion). Currently, an intricate mechanism in ICO, the continuous bonding curve, is popular. With this mechanism, the unit price of the token goes up continuously as long as the demand for new tokens sustains, and vice versa. It essentially eliminates the need for cryptocurrency exchanges, at least for the currency or asset to which the token is bonded.

However, we do not believe these qualities align with the foundational values that we have established above: Bonding to a single currency or asset makes broader exchange with other currencies and assets more cumbersome. Each such transaction will have to involve the base currency and be exposed to volatilities related to it. This reliance goes against the key principle of our marketplace, openness, and the compounded volatility runs contrary to our goal of driving active use and organic growth.

In comparison, a fixed total supply is easy to understand. Starting from a number that is also easy to remember, our user community can track our token usage and token burn more readily. Moreover, because the supply does not confound with value, as would be the case with a bonding curve, it is more feasible to value IFX correctly.

### Token Allocation

Since our primary motivation in creating IFX is to foster a win-win dynamic between the IdeaFeX team and our user community, the token allocation that we propose follows the same principle. The majority of the tokens are allocated to our user community, and the remainder of the tokens are allocated either to activities that benefits our community directly or for the IdeaFeX team to attract talents and align our interest better with that of our community.

First, **70%** of the tokens are allocated **directly to our community** and divided in two parts: Of the total supply, **40%** will be put on the initial sale (ICO), and **30%** will be locked in escrow for potential future sales. In case any token from the ICO will be left unsold, they will be put on sale on our marketplace once it

launches in late 2019.

Our reasons for locking tokens away for potential future sales are twofold: Immediately selling all the tokens would result in wasted funds and dilution of token value. On the one hand, there would be funds sitting idle that were not actively serving our community. On the other hand, the value that each token holds would be diluted, making it harder for IFX to deliver on its foundational values. Together, these dynamics would hurt the interests of our user community and indeed weaken the long-term development of IdeaFeX as a company. By locking close to half of the tokens in escrow, in comparison, we reserve the possibility of increasing the *circulating supply* of IFX as our community grows. We also **fully eliminate** the possibility of increasing the *total supply* at any future date, which serves to assure our community members who use IFX of its long-term value.

A potential drawback of this arrangement would be the negative pressure on token price if clarity would be missing from potential future sales. We negate this pressure by committing to a **strict procedure** in handling the tokens in escrow: (a) Before any future token sale could be organized, all IFX holders have the opportunity to vote on this decision. We will provide a specific token sale plan as well as an application for this vote at least one month before it is scheduled to take place. Only with the approval of a simple majority of the votes will we carry out any further steps. (b) Once the decision to conduct a future sale is approved by voting, a delay of at least one month is necessary before the sale can begin. (c) Five years after our initial token sale (ICO), we will destroy all remaining tokens in escrow, thereby capping the circulating supply definitively.

Second, **15%** of the tokens are reserved for **community development**: initiatives that directly benefit our community. Some examples include bounties, challenges, events, and partnerships, etc. For example, we will set up security-check bounties for every aspect of our software to reward community members who identify vulnerabilities in our service and help rectify these vulnerabilities. We will hold open challenges for our community to contribute ideas and solutions to improve our service. We will also partner with reputable service providers and open-source blockchain communities in order to improve our service.

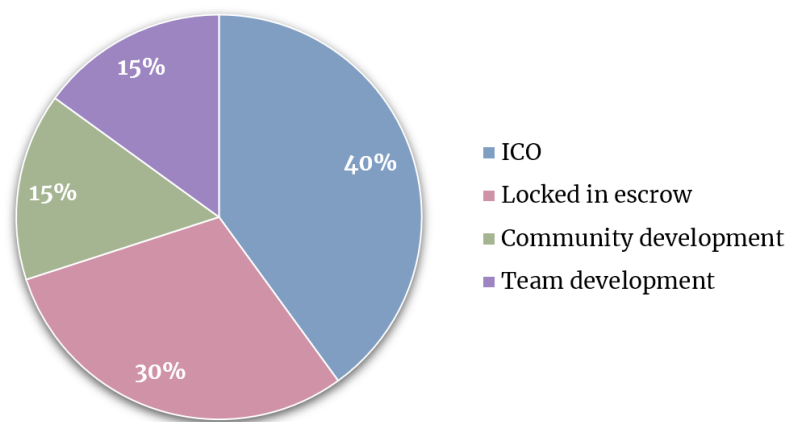


Figure 10. IFX token allocation

Third, **15%** of the total supply is reserved for the **IdeaFeX team**. We will use these tokens to attract talent and align the team's interests with those of our user community. In order to secure interest alignment further, these tokens will be earmarked and cannot be sold within the first three years after our initial token sale. This

simple mechanism allows every IdeaFeX team member who holds these tokens to share the same interest in growing our business and our community together.

We believe that this allocation plan works in concert with the token features in driving the foundational values of IFX: All key stakeholders are accounted for, and the allotment is conducive to bringing them together in growing our user community. Long-term plans for potential future sales and for reallocating tokens reserved for market making further assure our community of our awareness of contingencies in our development.

## **Token Issuance and Listing**

We will issue IFX on the Ethereum blockchain under the ERC-20 standard. In our initial token sale, we will be accepting a basket of cryptocurrencies, including but not exclusive to Bitcoin and Ethereum. These choices are made with consideration of the breadth that we should reach in building our community. Indeed, at IdeaFeX we have no ideology but openness in supporting technologies; it makes perfect sense, therefore, to acknowledge that members of our user community may be enthusiastic of other blockchain projects, too.

In order to encourage early participation, to adjust for the demand, and to facilitate correct valuation, we propose a simple schedule of staggered pricing in our initial token sale:

1. The sale starts with tokens priced at 0.1 EUR / token.
2. After each 10% of the 40% allocated for the ICO (4% of the total supply) are sold, the price increases by 0.01 EUR / token. For example, after 20% of the tokens in the ICO (8% of the total supply) have been sold, the price becomes 0.12 EUR / token.
3. After over 90% of the tokens in the ICO (36% of the total supply) have been sold, the final price of the tokens will be 0.19 EUR / token.

With this pricing schedule, token price goes up as realized demand increases. It serves as a market mechanism for valuation until all tokens will have been sold in our initial sale, at which point the mechanism confirms that the market values the IdeaFeX token to be no less than 0.19 EUR / token. In the months immediately after our initial token sale, we will accelerate our software and business development so as to support full token functions as planned. Token holders will also be able to exchange the IdeaFeX token against other assets on our marketplace. Additionally, we will apply to be listed on major cryptocurrency exchanges.

## TOKEN FUNDS UTILIZATION

In this section, we itemize the utilization of the funds raised through our token sale at a high level. We must emphasize that uncertainty is inherent to business operations: macroeconomics, regulatory changes, technological development, and shifting tastes of potential users, etc. all point to agility as a key success factor. As a result, the following itemization should be considered only as a guideline. Our priority will always be the long-term success of the symbiotic relationship between IdeaFeX and our user community.

To begin with, roughly 20% of the proceeds from the token sale must be put aside for **taxes** as well as **legal** and **accounting fees**. Because utility tokens represent services that the issuer is committed to provide, proceeds from the token sale are currently considered taxable revenues in all jurisdictions that recognize utility tokens. This item is therefore a relative constant regardless of the outcome of our token sale.

The remainder of the proceeds will be divided into three categories: research and development (R&D), operations and compliance (OPS), and marketing and business development (MBD). R&D is responsible for developing, maintaining, and *continually* improving our software as well as hardware. OPS is charged with regulatory compliance, financial analytics, and client support. MBD is responsible for developing partnerships, growing our user community, and building meaningful long-term relationships.

If we manage to close our token sale with the entire allotment sold, we will receive €58 million. There will be sufficient funds for us to **develop our software fully** and **integrate up-to-date support** of a broad selection of blockchain protocols. Beyond R&D, we will also be able to manage compliance in **more jurisdictions** and thereby **serve a broader audience**, and we will establish close relationships with industries outside the blockchain community in order to **drive mass adoption** of the DLT-based new asset classes that we propose. Roughly 20%, 35%, and 25% of the funds will go to R&D, OPS, and MBD respectively.

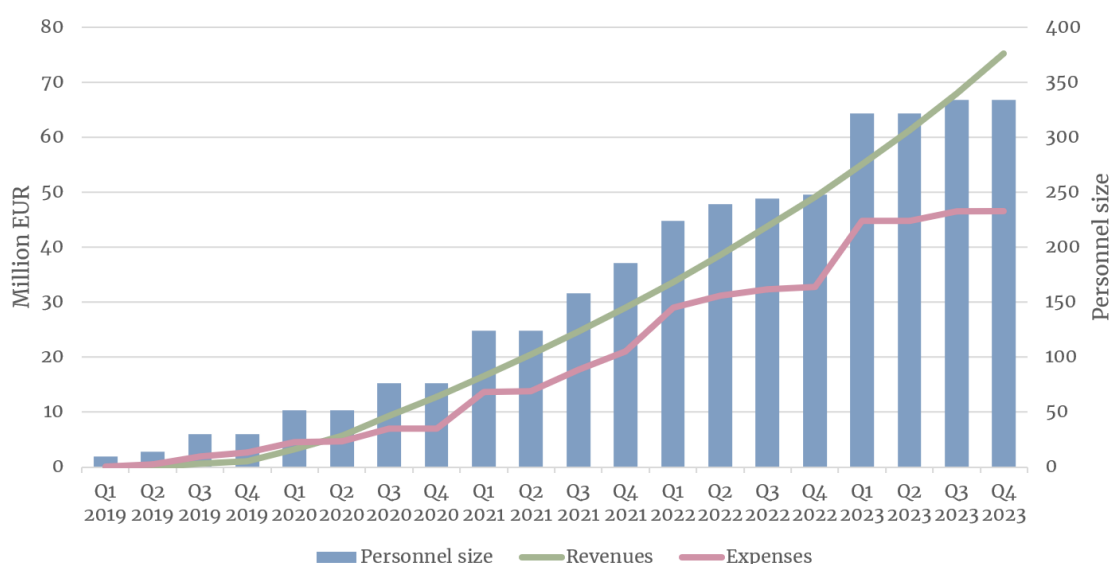


Figure 11. Projection of personnel size and income statement highlights in the best-case scenario



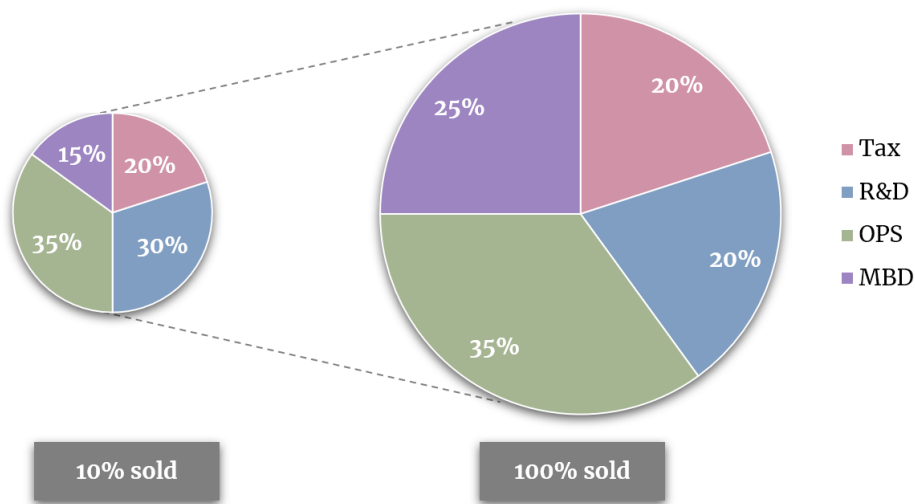


Figure 12. Comparison of funds utilization between two ICO scenarios

According to our projection of personnel size and income statement in the best-case scenario (Figure 11), a little shy of €30 million in expenses will be incurred in the first two years before IdeaFeX can be soundly profitable. This roughly corresponds with the goal of our initial token sale.

If our initial token sale is less successful, we will put less emphasis on partnerships beyond the blockchain community and take a slower pace in managing compliance in regulatory compliance outside the European market. We will prioritize R&D where necessary. For example, if we only manage to sell 10% of the allotment, the proceeds will amount to €4 million. We will allocate roughly 30%, 35%, and 15% of the funds to R&D, OPS, and MBD respectively. In this scenario, we will have to reduce our support for third-party protocols and focus on asset financing and trading. Compliance, however, is an area where no corner-cutting will ever be pondered or permitted.

# TOKEN UTILITY VALUE

Before wrapping up the discussion of the IdeaFeX token (IFX), we believe that deeper economic analysis can help our community understand it better. Please keep in mind that analyses in this section are academic and should not be taken as investment advice.

Specifically, we deduce token utility value that can be supported by different levels of market share and token utilization. We must precede it, however, by stressing that we account for *solely* the **utility value**. It may be argued that the **total value** for our utility token is higher to active users than it is to token holders who only focus on its appreciation potential. Token utility value is essentially the *additional* value to token users on top of market valuation. Because IFX is meant to create a symbiotic relationship between IdeaFeX and our user community so that we can excel together, we choose not to discuss the market valuation in this analysis.

If we temporarily omit the Staking function (due to its amorphous nature) and the deflationary pressure from Token Burn overtime, the transient utility value of IFX is the sum of the values derived from other functions

$$V = V_D + V_R + V_B \quad (1)$$

Where subscripts  $D$ ,  $R$ , and  $B$  represent the Discount, Referral, and Fundraising Bonus functions respectively.

Before going further, we give a rundown of the symbols used:

1. Subscripts:
  - a. Time:  $t$
  - b. Trade:  $T$
  - c. Fundraising:  $F$
2. Volume:  $v$
3. Fees rates:  $f$
4. Transactions:
  - a. Share of transactions where IFX is used:  $\delta$
  - b. Share of transactions by users registered through referral:  $\varepsilon$
  - c. Share of funds raised using exclusively IFX:  $\theta$
5. Function rates:
  - a. Rate of the Discount function:  $\alpha_t$
  - b. Rate of the Referral function:  $\beta$  ( $\beta$  does not vary overtime)
  - c. Rate of the Fundraising Bonus function:  $\gamma_t$

We assume that the shares  $\varepsilon$  and  $\delta$  are independently distributed.

With these, we can express the transient utility value from Discount as

$$V_{D,t} = 2v_{T,t}\delta_{T,t}f_T\alpha_t + v_{F,t}\delta_{F,t}f_F\alpha_t \quad (2)$$

which equals the total discounts that IFX can offer at the time on fees at the applicable rate for trading and fundraising combined. It is worth noting that fees apply to both makers and takers.

The transient utility value from Referral is

$$V_{R,t} = 2v_{T,t}\varepsilon_t\delta_{T,t}f_T(1 - \alpha_t)\beta \quad (3)$$

which equals the referral awards for fees collected from applicable trades after Discount is applied.

The transient utility value from Fundraising Bonus is

$$V_{B,t} = v_{F,t}\theta_t f_F(1 - \alpha_t)\gamma_t \quad (4)$$

which equals further discounts for fees collected from applicable raises after Discount is applied. It is worth noting that  $\delta = 1$  for all such raises.

By adding Equations 2, 3, and 4 together, we get

$$V_t = 2v_{T,t}\delta_{T,t}f_T(\alpha_t + \varepsilon_t(1 - \alpha_t)\beta) + v_{F,t}f_F(\delta_{F,t}\alpha_t + \theta_t(1 - \alpha_t)\gamma_t) \quad (5)$$

This is the transient utility value at time  $t$ . To get the utility value of IFX between two points in time  $a$  and  $b$ , therefore, we only need to calculate the integral of  $V_t$  in the interval  $[a, b]$ .

$$V_{ab} = \int_a^b V_t d_t \quad (6)$$

It is worth noting that  $\alpha, \beta, \gamma$ , and  $f$  are constant parameters. They follow the schedule below:

Table 3. Parameters

	Year 1	Year 2	Year 3	Beyond
$\alpha$	40%	30%	20%	10%
$\beta$			20%	
$\gamma$	0	12.5%	25%	50%
$f_T$			0.2%	
$f_F$			5%	

Plugging these parameters into Equations 5 and 6, we can calculate the total utility value in Year 1, Year 2, Year 3, and each Year  $n$  ( $n > 3$ )

$$V_1 = 0.004v_{T,1}\delta_{T,1}(0.4 + 0.12\varepsilon_1) + 0.02v_{F,1}\delta_{F,1} \quad (7.a)$$

$$V_2 = 0.004v_{T,2}\delta_{T,2}(0.3 + 0.14\varepsilon_2) + 0.05v_{F,2}(0.3\delta_{F,2} + 0.0875\theta_2) \quad (7.b)$$

$$V_3 = 0.004v_{T,3}\delta_{T,3}(0.2 + 0.16\varepsilon_3) + 0.01v_{F,3}(\delta_{F,3} + \theta_3) \quad (7.c)$$

$$V_n = 0.004v_{T,n}\delta_{T,n}(0.1 + 0.18\varepsilon_n) + 0.05v_{F,n}(0.1\delta_{F,n} + 0.45\theta_n) \quad (7.d)$$

where the subscripts denote the year and the bar on top of the variables denote the average of this variable in this year.

For example, if we assume that  $\delta_T = 0.8$ ,  $\delta_F = 1$ ,  $\varepsilon = 0.4$ , and  $\theta = 0.2$ , the total utility values of IFX would be

$$V_1 = 0.0014336v_{T,1} + 0.02v_{F,1} \quad (8.a)$$

$$V_2 = 0.0011392v_{T,2} + 0.015875v_{F,2} \quad (8.b)$$

$$V_3 = 0.0008448v_{T,3} + 0.012v_{F,3} \quad (8.c)$$

$$V_n = 0.0005504v_{T,3} + 0.0095v_{F,3} \quad (8.d)$$

With these, we can further plug in results from the *<Market Sizing>* section to understand at what levels of utility valuation are possible at which market share.

Before doing so, let us briefly examine how these numbers can add up for a cryptocurrency exchange using (8.a). Currently, the largest cryptocurrency exchange by trade volume is Binance. At the time of this analysis (January 2019), Binance has had a volume of €14.8 billion in the last 30 days. If we assume that volume remains at this level,  $v_{T,1} = 14.8 \times 12 = 177.6$  billion EUR/year. Even if we ignore  $v_{F,1}$ , this would entail a utility value of at least €254 million per year. In fact, from just trading alone, the volume from a cryptocurrency exchange ranked between 30th and 40th in overall volume would be able to provide roughly €50 million per year in utility value, if the volume is kept at the rate of January 2019.

In the *<Market Sizing>* section, we conservatively estimate that in 2028 the new asset classes that we propose will make a primary market of \$630 billion (€550 billion) per year with a market cap of \$2.15 trillion (€1.9 trillion). If we assume that the market cap is turned over 10 times per year (in comparison, currently the cryptocurrency market turns over more than 50 times per year), this makes a secondary market of roughly €19 trillion. Let  $p$  be the percentage of market share that IdeaFeX holds, we get for 2028

$$V_{2028} = 104.576p_T + 52.25p_F \text{ million EUR} \quad (9)$$

That is, if our market shares are 1% for both the primary and secondary markets (i.e. 190 billion EUR/year in trade volume and 5.5 billion EUR/year in funds raised), the value of IFX in 2028 alone will be €156.8 million. If our market shares are 10% for both, the utility value of IFX will be over €1.56 billion just in 2028.

Before concluding this section, we should reiterate that the discussion here revolves around *utility value*. This is value that only our user community can actively enjoy. We think that it could be understood as part of the *total value* of IFX. That is

$$\text{Total value for users} = \text{Market value} + \text{Utility value} \quad (10)$$

## FEATURES DEEP DIVE

In the preceding sections, we have covered the motivation, outline, and highlights of IdeaFeX; we have also detailed how the IdeaFeX token will help us build a symbiotic relationship with our user community. We encourage the reader to visualize the experience and give us feedback on our implementation — this white paper is intended to serve as a framework upon which we will tirelessly improve. Still, a couple of features, by virtue of their innovativeness, call for more thorough explication.

### Asset Classes & Fulfillment

We emphasize three main asset classes, for they vary in their implications to financing and investment. Nevertheless, the user experience pre-auction and in-auction is the same regardless of asset class. User experiences differ primarily post-auction, in fulfillment. Our innovative use of distributed ledger technology (DLT) underpins them.

**Product futures** gives the fundraiser two options in physical delivery to specify prior to financing: In the first option, products are delivered *upon* maturity. In the second, delivery after maturity is *on demand*; a lead time will sit between the point when the investor schedules a delivery and the point when the fundraiser finally fulfills the order. In order to understand why the second option may be attractive, we need to delve deeper into product futures as a financing and investment format.

Among the most attractive features of product futures *to the fundraiser* is the “**lock-in**” effect: it helps the fundraiser seize a sizable market before the product or service is available, thus gaining advantage over competitors in similar stages of development. This allows fundraisers that leverage presale better market clarity and consequently easier strategic planning.

On the other hand, the most attractive features of product futures *to investors* differ depending on whether the investor is a would-be customer. When the investor is not a customer, or when the investor is a customer but has also invested more than s/he could take delivery of, being able to exit post-maturity is valuable. Even when the investor is motivated by using presale as part of its supply chain, being able to schedule delivery reduces inventory cost and allows for just-in-time manufacturing.

In contrast, the fulfillments of exotic assets and traditional securities are similar in that gains are automatically accredited to the investor’s account; their main differences rest in **investor engagement**.

**Exotic assets** and **shares** allow investors to participate in important decisions in management of the asset or of the firm. Fundraisers of exotic assets, in particular, need to specify an initial list of management terms whose parameters the investors will be able to adjust by voting. Shares also have built-in voting systems that allow investors to exercise their shareholder rights from the comfort of their homes. At the same time, firms can leverage the collective wisdom and knowledge of their shareholders through polls. As mentioned many times

before, thanks to the ceaseless effort of the DLT community, we will continually upgrade these investor engagement functionalities — at no additional cost.

## The IdeaFeX Auction Method

Our auction leverages competitive bidding innovatively to secure optimal price discovery. To understand how this works, we need to examine some principles of auctions in general.

The simplest auctions involve one item that can only be sold to one bidder, if it ever gets sold. Usually, this entails either first- or second-price auction, and economics theory teaches us that optimal price discovery is ensured by design in both cases. As we move to multiple items, however, modifications are necessary to optimize price discovery.

Why? Because the auction then runs the risk of leaving different bidders paying different prices. The simplest way to avoid this difference is to let all winning bidders pay the minimum acceptable price — this is an auction method called **OpenIPO**. We extend this method by allowing **bid updates** as new information from the bidding process gets incorporated in the decision-making. This market mechanism, thereby, facilitates the achievement of consensus on pricing.

One may wonder, why does the fundraiser not auction off the two items separately? As it turns out, insofar as the two auctions proceed *in parallel* and are *second-price* auctions, the outcome would be exactly the same. This remains true as the number of identical items increases (and as the feasibility of multiple simultaneous listings decreases). However, while the outcome would be the same as two auctions *in parallel*, it would differ from two auctions *in series*. On the other hand, increasing the number of auctions is impractical when large quantities of tokens are involved. This is where the **starting price** comes in.

Specifically, the fundraiser sets a *starting price* ( $p_0$ ). Each bidder  $i$  commits both a *price* ( $p_i$ ) and a *quantity* ( $q_i$ ). Our system automatically ranks all valid bids in descending order by their prices. Until the sum of all quantities from all valid bids surpasses the total number of tokens to be auctioned off, the starting price remains the *current price* ( $p$ ). Once this sum becomes larger than the total number of tokens, the current price becomes the lowest price at which token(s) can still be allocated. All bidders can increase their bids (both price and quantity), but not decrease them, during the auction after the bids are initially placed. As the bidding window closes, **the last current price is the final price** ( $P$ ) in the auction. All bids higher than the final price are awarded tokens at the final price, and for all bids at the final price tokens are allocated following the first-come-first-served principle.

This auction method enjoys four qualities:

**Price uniqueness:** All winners pay the same unique winning price.

**Price consensus:** All winners would pay (and have bid) at least the unique winning price, and all losers would pay (and have bid) at most the unique winning price.

**Competitiveness adjustment:** The seller can adjust the starting price in order to gain control over the competitiveness of the auction.

**Purchase in whole:** It is possible for an investor to purchase the entirety of the tokens in the auction (with the highest bid and a volume equal to the total supply).

By allowing the seller to adjust the starting price, we can protect the fundraiser while allowing the auction of large quantities of tokens. The level of this price should ensure that the price discovery process does not disadvantage the fundraiser, and that investors will be attracted to the auction. We will continually track and study the real-world performance of this parameter and assist fundraisers in choosing it.

## Marketplace Interface

A key differentiator between IdeaFeX and other tokenization services is our easily-navigable marketplace interface. It introduces e-commerce-like experience and efficiency to investment, thereby dramatically improving discoverability and matching. Our marketplace has two key pages: the search page and the asset page.

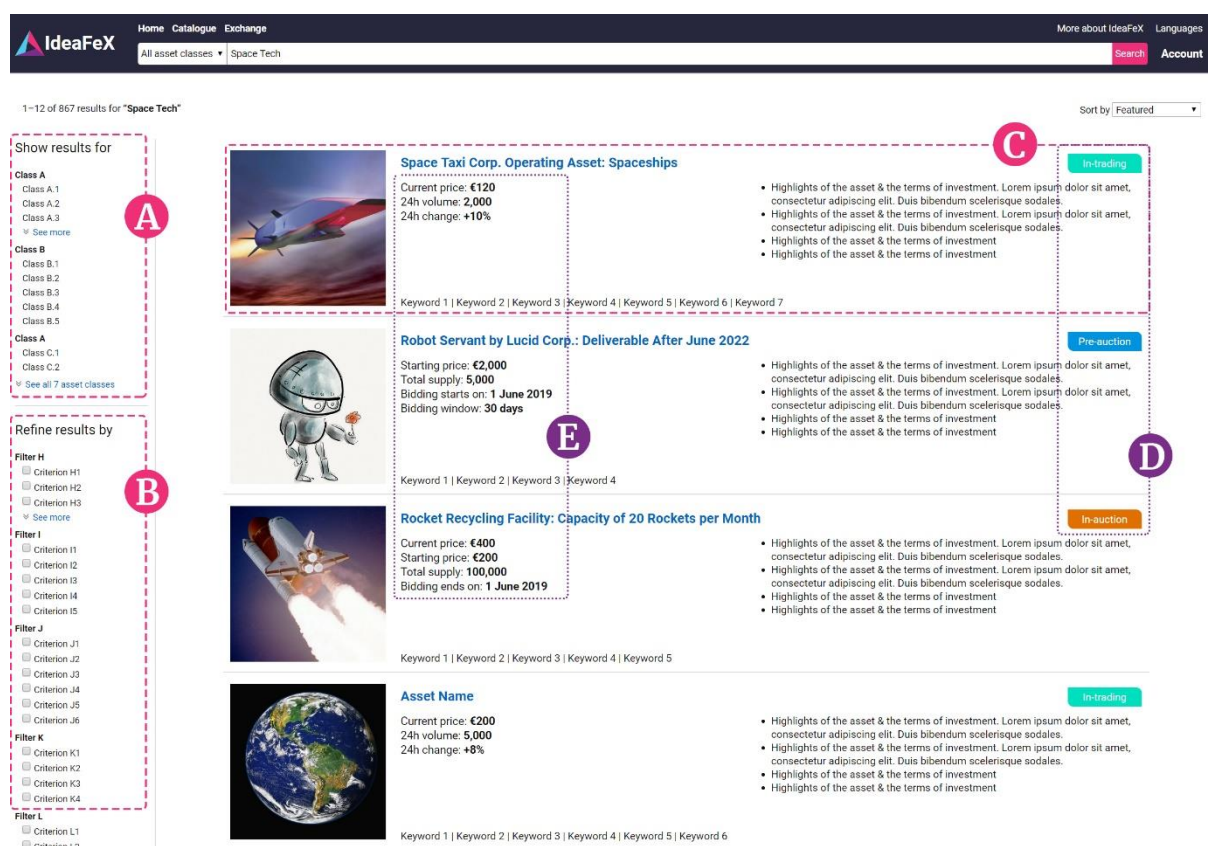


Figure 13. The search page

The search page is where a user reaches when one of four actions are taken: (a) when the user clicks on the “Catalogue” link in the header, (b) when the user clicks on any “Asset Class” link, (c) when the user clicks on

any suggested “Keyword”, or (d) when the user conducts a keyword search by using the “Search Bar” in the header. Among these, Actions *a*, *b*, and *c* are special cases. Action *a* calls out the entire asset listing; it is equivalent to conducting a keyword search without entering a keyword. Action *b* is equivalent to taking Action *a* and then restricting the search results to the specific “Asset Class”. Action *c* is equivalent to conducting a keyword search using the suggested “Keyword”. Therefore, Action *d* is the general case. Figure 13 is a screenshot of the search results with keyword “Space Tech”.

Notably, search results can be further restricted and refined. As shown in Region A of Figure 13, the user can choose which asset class s/he would like the search results to be confined to. Asset classes with more matching results are shown on top, while asset classes with few matching results are collapsed by default. Similarly, as shown in Region B of Figure 13, the user can refine the search results with a list of filters. These filters are adaptive to the search results so as to provide the most sensible and useful tool for the user to navigate the asset listings.

In the initial version of our marketplace, “List View” is the only supported viewing mode for search results. As shown in Region C of Figure 13 and as well as in Figure 14, each matching asset will be displayed as a list entry with several key pieces of information that help the user decide which assets are worth exploring further. Among these are (a) a thumbnail that helps quick visual identification, (b) the status of the asset, (c) key facts, (d) highlights of the asset and the terms of investment, and (e) suggested keywords. Among these, the status of an asset takes one of three values; as shown in Region D of Figure 13, an asset can be “In-trading”, “In-auction”, or “Pre-auction”. Correspondingly, the key facts presented adapt to the status of the asset, as shown in Region E of Figure 13.

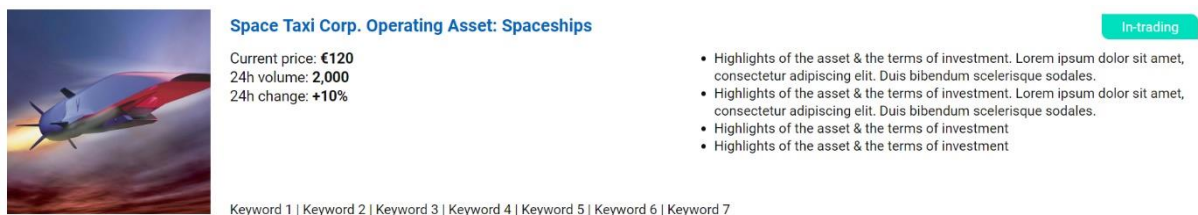
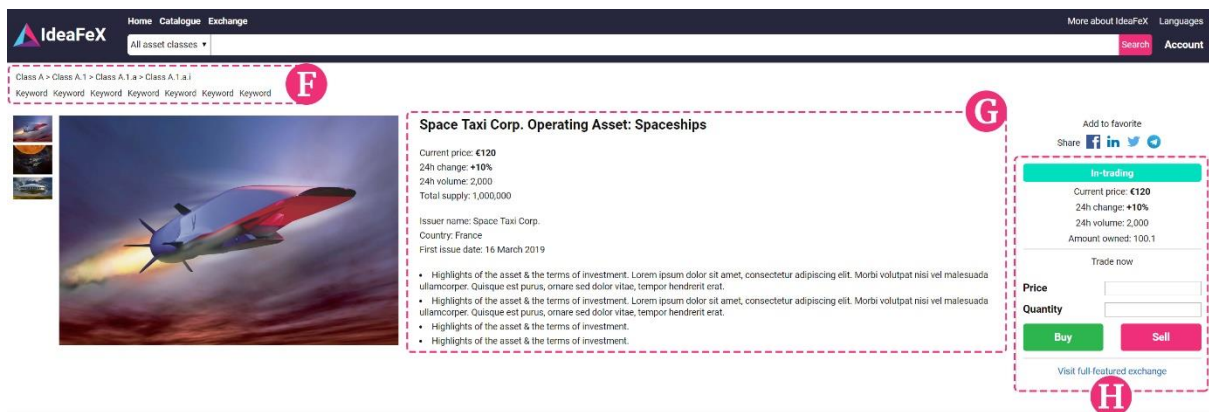


Figure 14. An asset entry among search results

Once the user clicks on a specific asset, either on the search page or elsewhere, s/he is taken to the asset page. It is where the user can view detailed information of each listed asset. Figure 15 is a screenshot of the general layout of the asset page.

On the asset page, the most critical pieces of information are presented on top, while further details can be found deeper into the page. The first group of key information includes the classification of the asset as well as suggested keywords, as showed in Region F of Figure 15. The user can browse the asset listings using these asset classes and keywords. The second group of key information includes and extends the key information in the search results, as shown in Region G of Figure 15. On the right side, as shown in Region H of Figure 15, an “Action Panel” adapts to the status of the asset; it allows the user to conduct a set of actions. Below, related assets and details of the current asset are presented.





#### You may also like



#### Details of the asset

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Figure 15. The asset page

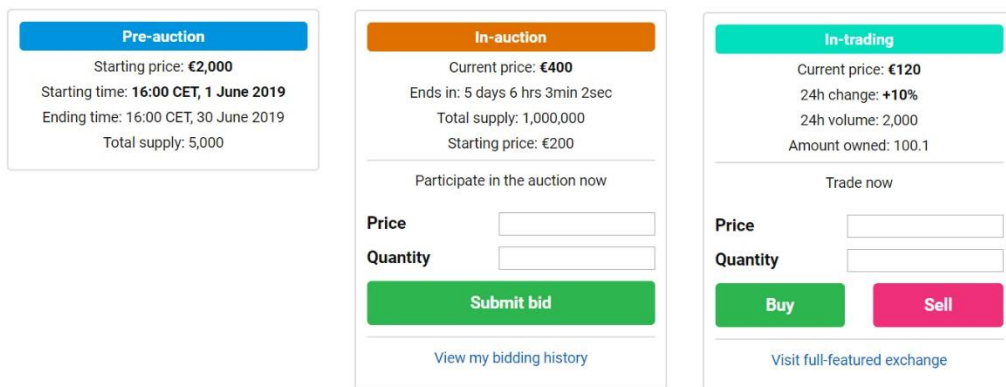


Figure 16. Action panels

Notably, the Action Panel can take one of three possible forms. As illustrated in Figure 16, they recapitulate key pieces of information and, when actions can be taken, allow the user to bid or trade on the asset directly.

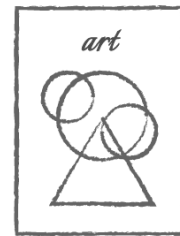
## THREE EXAMPLES TO INSPIRE

Before concluding this white paper, we present three short examples that cover the three main asset classes on IdeaFeX. While they are not meant to be exhaustive, we hope they can inspire the readers with the breadth of potentials for us to transform financing and investment. As high-level examples, we omit the discussion of fees paid and consequently the use of the IdeaFeX token. Cases of token usage are included in the *<The IdeaFeX Token>* section. All examples depict fictional events.

### Art Gallery — Exotic Asset

Lumino is a private art gallery in Northern Italy. It has a collection of contemporary paintings and sculptures from artists that are gradually gaining international recognition. Lumino's new curator has the ambition to expand its collection and to organize more high-profile temporary exhibitions. Its trustees, being investors on IdeaFeX themselves, introduce us to the management.

Having researched the various options, Lumino's management consider auctioning part of their collection as exotic assets. The trustees agree that this could be an innovative approach to building Lumino. After due process, Lumino decides to put four of their most prized paintings up for auction: Lumino will continue managing and maintaining these paintings unless all token owners unanimously decide otherwise. Proceeds from exhibitions will be awarded to token owners.

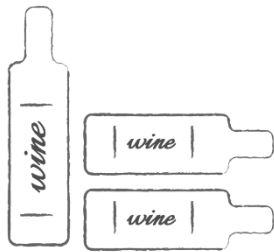


Eventually, Lumino raises €12 million. Three of the paintings are sold to multiple investors, some of which own less than 0.1%. Meanwhile, one painting garners the attention of a wealthy art collector; he manages to walk away from the auction with the painting for €5 million. Within the month, the art collector receives the painting at his home. Lumino, though losing an important piece in their collection, raises more than it would have if it had sold the painting alone. With these funds, it purchases new art works from up-and-coming artists that will likely appreciate in value. Further, the high-profile exhibitions elevate Lumino's international standing, which in turn secures its financial future.

### Fine Wine — Product Futures

Gaudon is a winery in the Burgundy region in France with over two centuries of history. Its wines are the favorites of renowned chefs and wine collectors alike around the world. Gaudon's financial health is excellent. Nevertheless, as the owners learn that a vineyard adjacent to theirs may be up for sale, whether to purchase it themselves and where to source the funds become questions on their minds.

In Burgundy, vineyards that carry the “*grand cru*” designation enjoy immense prestige. This designation is



strictly controlled and essential for Gaudon's quality and reputation. The vineyard that may be for sale carries this designation, and it has not changed ownership in over a century! Gaudon's owners really want to seize this once-in-a-lifetime opportunity.

After some research, they find the product presale option on IdeaFeX to be ideal: Currently, their supply falls well short of demand. With the possible addition of the new vineyard, they can recuperate the cost within a decade simply from the increased output. Even if for one reason or another they fail to purchase it, preselling the wines reduce their exposure to uncertainties in the coming years.

In the comfort of this knowledge, the owners of Gaudon proceed to auction off half of their productions from two to eight years into the future. Unexpectedly, some investors highly knowledgeable in wines recognize this opportunity; their involvement pushes up the price in the auction well above the current market price. This becomes a self-fulfilling prophecy, and Gaudon's market price catches up in a few months' time. Gaudon purchases the new vineyard; their owners are grateful for the innovative, highly-efficient financing opportunity.

## Agricultural Technology — Shares

Biota is an agricultural tech company founded by a group of Mexican scientists. Its main product is a non-poisonous, biodegradable soil supplement that effectively repels several types of vermin yet is not absorbed by plants, thus offering a safe alternative to insecticides.

Having enjoyed commercial success locally, Biota is looking into expanding its market internationally. An IPO in Mexico would be a conventional choice. However, Biota's founders observe that investors in the Mexican stock market are overwhelmingly local; in contrast, raising on IdeaFeX would allow them to connect and engage investors in markets that they are hoping to break into. Further, thanks to its nature of a marketplace, IdeaFeX would also allow Biota to connect with farmers in these markets, their end consumers, who browse the asset catalogues. Innovators at heart, they decide to give IdeaFeX a try.



Upon receiving their application, we determine that Biota would make a valuable addition to our market and for our investors. Still, Biota founders are cautious. They eventually settle on a raise against 15% of common stock, which translate to 150,000 tokens, with €80 / share as the reserve price. They also supply us with all materials to be made public in the auction to help investors decide on their investment, including reports from an independent accounting firm outlining the financial outlook of Biota. We go ahead and arrange the auction as usual. Thanks to the growth potential that Biota has demonstrated and the exhaustive growth plan that it has proffered, the auction ends with a share price of €112.

Using the Biota token, Biota continually organizes investor polls and communicates its financial and strategic

decisions. Investors also receive dividends monthly. Some farmers in Biota's target markets hear of this and become intrigued. An increasing number of them start following Biota on IdeaFeX, and some of them become investors. This process keeps the Biota token liquid; moreover, it helps Biota build its brand in their new markets.

# OUR ROADMAP

## **April 2018 — Corporate White Paper v1**

We finished the first draft of our Corporate White Paper. In this document, we expressed the need for asset-backed new financing and investment classes powered by distributed ledger technology.



## **September 2018 — Corporate White Paper v2**

We finished the second draft of our Corporate White Paper. In this document, we explain the values of a marketplace format empowered by our innovative auction method.



## **October 2018 — Software development commences**

Our in-house development team began developing the IdeaFeX software using the state-of-the-art technologies in the financial industry and the blockchain community.



## **November 2018 — Go-to-market strategy finalized**

We finalized our go-to-market strategy. In this strategy, we take into account developments in the blockchain community, particularly that of asset-backed token issuance protocols. We also offer a vision for the market of the new asset classes we propose in the next ten years.



## **December 2018 — Software architecture and design finalized**

We finalized the features of our software as well as specifications the underpin these features. Our development team continue to work on delivering the product.



### **January 2019 — Token White Paper**

We finalized the Token White Paper by extending our Corporate White Paper. We focus on the foundational values of the IdeaFeX token and how token features and token allocation are designed to support these values.



### **Q2 2019 — Initial token sale**

We will launch our initial token sale to our user community. More details about our token as well as the token sale are available in the *<The IdeaFeX Token>* section.



### **Q4 2019 — Initial launch**

IdeaFeX marketplace goes live. From this point on, we will continually upgrade our software and improve our UX. We will gradually roll out our supports for payments in fiat and select crypto currencies. The first category of assets that we support will be exotic assets.



### **Q2 2020 — New asset categories**

We will expand the support of other asset categories in our marketplace.



### **Q3 2020 — Full integration of 3rd-party protocols**

Since our initial launch, we continually integrate protocols developed by the open-source blockchain community. The goal is to support all asset-backed tokens issued on major protocols. Thereby, even tokens that are not initially issued via our auction system will enjoy state-of-the-art support on our marketplace.



### **Q1 2021 — Localization in Asia-Pacific**

We will open our Asia-Pacific office in order to serve local clients better.  
This office will also handle compliance works in the region.



### **Q4 2021 — Localization in the Americas**

We will open our Americas office to serve clients in the Western Hemisphere better.



### **2022 & beyond**

We will work tirelessly in making financing & investment more efficient  
& robust.

# Terms of the IdeaFeX Token

The following terms and conditions (these “Terms”) govern the rights of holders of the IdeaFeX Token, the cryptographic tokens which adhere to and support the ERC-20 standard and are deployed on the Ethereum blockchain. The parties to these Terms shall be IdeaFeX France SAS (Registration Number: 850 251 844), a company incorporated in France and having its registered office at 142 Rue de Rivoli, 75001 Paris France (“IdeaFeX”) and each such holder of the IdeaFeX Token (each a “Holder”). IdeaFeX and a Holder shall each be referred to as a “Party” and collectively be referred to as the “Parties”.

Each Party agrees as follows:

## 0. Definitions and Interpretation

### “Corporate Presentation”

means the finalized and published version of the presentation deck dated April 2019 and entitled “IdeaFeX Presentation v3.3” as accessible at [https://www.ideafeX.com/docs/IdeaFeX\\_pd\\_v3.3.pdf](https://www.ideafeX.com/docs/IdeaFeX_pd_v3.3.pdf);

### “Corporate White Paper”

means the finalized and published version of the corporate whitepaper dated January 2019 and entitled “IdeaFeX Corporate White Paper v2.1” as accessible at [https://www.ideafeX.com/docs/wp\\_v2.1/pdf](https://www.ideafeX.com/docs/wp_v2.1/pdf);

### “ERC-20 Standard”

means the set of criteria, (including criteria in relation to functions and events) developed by the Ethereum community, which has to be met in a smart contract on the Ethereum blockchain in order to enable interoperability across multiple interfaces and distributed applications, as published at <https://github.com/ethereum/EIPs/issues/20>;

### “Ethereum”

means the open-source, public, blockchain-based distributed computing platform featuring smart contract functionality, as described at <https://www.ethereum.org/>;

### “Ethereum Wallet”

means the address of a cryptocurrency wallet of any form, which

- (a) adheres to and supports the ERC-20 Standard;
- (b) enables and supports transactions executed on the Ethereum blockchain;
- (c) enables its user to:
  - a. send cryptographic tokens and/or other digital assets which adhere to and support the ERC-20 Standard (including IFX) from an address of such wallet to any other address on the Ethereum blockchain, or call any function of any smart contract on the Ethereum blockchain; and
  - b. receive and hold, at an address of such wallet, any cryptographic tokens and/or other digital assets which adhere to and support the ERC-20 Standard (including IFX)



which are transferred from any other address to such address on the Ethereum blockchain.

**“Exchange”**

means an online platform (whether centralized or decentralized) that provides services to allow users of such platform to store, send, receive, buy, sell, convert and/or trade certain virtual currencies, cryptographic tokens, and/or other digital assets into other forms of virtual currencies, cryptographic tokens, other digital or financial assets, or fiat currencies at such exchange rates as may be determined by such platform;

**“Force Majeure Event”**

means any event or circumstance the occurrence and the effect of which IdeaFeX is unable to prevent and avoid notwithstanding the exercise of reasonable foresight, diligence, and care on the part of IdeaFeX;

**“Holder”**

means a person who has access to an Ethereum Wallet holding any amount of IFX;

**“IdeaFeX Website”**

means the official website of IdeaFeX as accessible at <https://www.ideafeX.com>;

**“IFX”**

means the IdeaFeX Token, the cryptographic tokens which adhere to and support the ERC-20 standard and are deployed on the Ethereum blockchain;

**“Terms”**

means these terms and conditions governing the rights of Holders; and

**“Token White Paper”**

means the finalized and published version of the token whitepaper dated May 2019 and entitled “IdeaFeX Token White Paper v1.1.1” as accessible at [https://www.ideafeX.com/docs/IdeaFeX\\_twp\\_v1.1.1.pdf](https://www.ideafeX.com/docs/IdeaFeX_twp_v1.1.1.pdf).

**1. Rights**

1.1 Holders of the IdeaFeX Token (IFX) are entitled to:

- (a) hold IFX in any Ethereum Wallet,
- (b) carry out transactions of IFX on the Ethereum blockchain,
- (c) hold IFX in their accounts on the IdeaFeX marketplace,
- (d) spend IFX on the IdeaFeX marketplace by using the Discount function,
- (e) stake IFX on the IdeaFeX marketplace for their own asset listing(s), and
- (f) purchase tokenized assets that support it on the IdeaFeX marketplace using IFX.

1.2 Save for the rights to use IFX to the extent set out in Paragraph 1.1 above, Holders shall have no rights, express or implied, legal or equitable, in relation to the IdeaFeX company, the IdeaFeX marketplace, or any other person.

1.3 IFX is not intended to be, and shall in no case be, construed, interpreted, classified, or treated as:

- (a) any kind of currency, legal tender, money, or deposit, whether fiat or otherwise, or any kind of

- substitute for any currency, legal tender, money, or deposit;
- (b) debentures, stocks, or shares issued by the IdeaFeX company or the IdeaFeX marketplace;
- (c) rights under a contract for differences or under any other contract the purpose or pretended purpose of which is to secure a profit or avoid a loss;
- (d) units in a collective investment scheme;
- (e) units in a business trust;
- (f) derivatives of units in a business trust; or
- (g) any commodity which any person is obliged to redeem or purchase.

1.4 Each Holder also acknowledges that:

- (a) the range of service by IdeaFeX is likely to expand;
- (b) new features and functions not outlined in the Token White Paper may be introduced;
- (c) IFX are at all times subject to the inherent technological conditions and limitations by virtue of their nature of adhering to and supporting the ERC-20 standard on the Ethereum network;
- (d) there is no assurance by IdeaFeX of when the launch date of full service described in the Token White Paper will be;
- (e) it shall be his or her sole responsibility for keeping his or her own Ethereum Wallet and IdeaFeX account safe, including the credentials for accessing such Ethereum Wallet and his or her IdeaFeX account in his or her secure possession and under his or her exclusive control at all times;
- (f) he or she shall not reproduce, duplicate, copy, or reverse engineer IFX for any purpose.

## 2. **Restriction of Rights**

In the event that any provision laid out in these terms results in any direct or indirect non-compliance by IdeaFeX with any provision in any applicable law, regulation, or rule, direction, order, and requirement in any jurisdiction, each Holder acknowledges and agrees that:

- (a) such provision in these terms shall be null and void to the extent that such provision results in such non-compliance by IdeaFeX; and
- (b) IdeaFeX shall be entitled to take such action as may be required for full compliance by IdeaFeX, or omit to take such action as may result in such continued or future non-compliance by IdeaFeX, with such provision in the applicable law, regulation, or rule.

## 3. **Amendments and Modifications**

- 3.1 IdeaFeX shall have the right, in its sole and absolute discretion, to amend, modify, or vary these Terms to any extent by giving Holders notice of such amendment, modification or variation no later than ten (10) days prior to the date of entry into force of such amendment, modification or variation on the IdeaFeX Website or in any other manner deemed appropriate by IdeaFeX (which shall constitute good and sufficient notice thereof to Holders by IdeaFeX and such notice shall be deemed to have been received by each Holder on the date of publication of such notice).
- 3.2 Any Holder who continues to own or hold any IFX from the date of entry into force of such amendment or modification shall be deemed to have agreed with and accepted such amendment or modification in its entirety.

## 4. **Representations and Warranties**

4.1 By purchasing, owning, or holding IFX, each Holder represents, warrants, and undertakes to IdeaFeX as follows:

- (a) he or she has read and understood all of these terms and will review any announcements or updates in connection with these terms on the IdeaFeX Website;
- (b) he or she will use IFX only for the purposes and in the manner permitted by these terms;
- (c) he or she has no expectation of obtaining any governance rights over any part of IdeaFeX;
- (d) he or she is fully aware of, understands, and agrees to assume all the risks, direct or indirect, associated with his ownership or holding of IFX and Ethereum Wallet;
- (e) he or she is fully aware, understands, and agrees that no purchase of IFX is refundable under any circumstances whatsoever;
- (f) he or she is not a citizen or resident of any jurisdiction in which the ownership or holding of DLT tokens (commonly also referred to as cryptocurrencies) in general, and IFX (a cryptographic token existing on the Ethereum blockchain which adheres to and support the ERC-20 standard, identified with the ticker symbol "IFX") in particular, is prohibited, restricted, curtailed, hindered, impaired, or otherwise adversely affected by any applicable law, regulation, or rule to any extent;
- (g) no consent, approval, order, or authorization of, or registrations, qualifications, designations, declarations, or filings with, any regulatory authority in any jurisdiction is required on his or her part in connection with his or her holding of IFX, or where any such duties with applicable regulatory authorities are required, such consent, approval, order, authorization, registration, qualifications, designations, declarations, or filings have been obtained and remain valid and in full force and effect;
- (h) the proceeds used for his or her purchase of IFX has not been obtained through any acts in connection with money laundering, terrorism financing, or any other acts in breach or contravention of any applicable law, regulation, or rule; and
- (i) the IFX owned or held by him or her, used by him or her, or to be transferred to and received by him or her pursuant to his or her performance of any action will not be used for any purpose in connection with money laundering, terrorism financing, or any other acts in breach or contravention of any applicable law, regulation, or rule.

4.2 IdeaFeX does not make, and IdeaFeX hereby disclaims, any representation or warranty in relation to:

- (a) the Token White Paper, the Corporate White Paper, or the Company Presentation;
- (b) the IdeaFeX Website;
- (c) the IFX token sale;
- (d) the IFX tokens;
- (e) any potential of IFX to be listed by or continue to be listed by, or accepted or continued to be accepted for trading on, any Exchange or secondary market except the IdeaFeX marketplace; or
- (f) any potential of increase in traded prices or trading volume of IFX on any Exchange or secondary market, or any potential increases or favorable changes in the geographic reach of any Exchange or secondary market.

## 5. Disclaimers

5.1 To the maximum extent permitted by all applicable laws, regulations, and rules and except as otherwise provided in these terms, IdeaFeX hereby expressly disclaims its liability and shall in no case be liable to any Holder or any other person for:

- (a) the ownership or holding of IFX or use of IFX for any purpose in connection with money laundering, terrorism financing or any other acts in breach or contravention of any applicable law, regulation or rule;
- (b) failure, malfunction, or breakdown of, or disruption to, the operation of IdeaFeX or the

Ethereum blockchain on which the functioning of IFX relies on, due to occurrences of forks, hacks, mining attacks (including but not limited to double-spend attacks, majority mining power attacks, and “selfish-mining” attacks), cyber-attacks, distributed denials of service, errors, vulnerabilities, defects, flaws in programming or source code or otherwise, regardless of when such failure, malfunction, breakdown, or disruption occurs;

- (c) any virus, error, bug, flaw, defect, or otherwise adversely affecting the operation, functionality, usage, storage, transmission mechanisms, transferability or tradability of IFX on any Exchange, and other material characteristics of IFX;
- (d) any prohibition, restriction, or regulation by any government or regulatory authority in any jurisdiction of the operation, functionality, usage, storage, transmission mechanisms, transferability or tradability of IFX on any Exchange, or other material characteristics of IFX;
- (e) any delay of the launch dates after they have been posted or made public; and
- (f) any loss, theft, or inappropriate or unauthorized disclosure of and/or use of an Ethereum Wallet or the IdeaFeX account with which a Holder holds IFX and/or the credentials for accessing such holdings.

- 5.2 In the event of any loss, hack, or theft of IFX held by a Holder at any address of any Ethereum Wallet or the IdeaFeX account, each Holder acknowledges and accepts that he or she shall have no right(s), claim(s), or causes of action in any form or manner against IdeaFeX.

## **6. No Waiver**

Any failure of IdeaFeX to enforce these terms or to assert any right(s), claim(s), or causes of action under these terms shall not be construed as a waiver of the right of IdeaFeX to assert these right(s), claim(s), or causes of action.

## **7. Force Majeure**

IdeaFeX shall be liable to any Holder or be deemed to be in breach of any provision of these terms by reason of any delay in performing, or any failure to perform, any of its obligations if the delay or failure was due to any Force Majeure Event.

## **8. Taxes**

- 8.1 Each Holder shall be responsible for determining any and all taxes that are applicable to his use, receipt, ownership, and holding of IFX in any jurisdiction and declaring, withholding, collecting reporting, and remitting the correct amount of payable tax to the appropriate tax authorities. Each Holder shall be solely liable for all penalties, claims, fines, punishments, or other liabilities arising from the non-fulfillment or non-performance to any extent of any of his obligations in relation to the payable tax.

- 8.2 IdeaFeX shall not be responsible for determining any payable tax and declaring, withholding, collecting, reporting, and remitting the correct amount of payable tax to the appropriate tax authorities.

## **9. Governing Law and Jurisdiction**

These Terms shall be governed by, and construed in accordance with, the laws of the French Republic.