Malyi

Blockchain-based Aircraft Leasing

Whitepaper v. 1.0

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Why Malyi?

The aviation industry is experiencing phenomenal growth. The International Air Transport Association (IATA) forecasts that passenger numbers are on track to reach 7.2 billion per year by 2035, nearly doubling the 3.8 billion air travellers in 2016. As a result, the number of aircrafts will double with demand for a new, younger, more fuel-efficient and environmentally-friendly fleet accelerating. With over 1,000 aircraft currently traded each year, and this number set to grow further, now is a good time for innovation in the aviation leasing space.

Malyi will transform the aircraft leasing and financing sectors. Aircraft leasing and financing is a cumbersome process full of manual, time-intensive tasks with data siloed across ecosystem participants such as aircraft operators, lessors, and financiers. This can lead to inconsistencies in information, resulting in costly delays when a leased aircraft changes hands. By integrating blockchain technology and our own native token (SWAN), we will digitally enable the entire leasing and financing process. Thus reducing transaction processing times, simplifying risk management, and increasing transparency across the ecosystem.

Malyi' Mission

We are proposing "The safest and best way to get started in aircraft leasing".

To make this a reality, Malyi is creating an ecosystem leveraging blockchain technology and the BEP 20 standard to streamline aircraft lease management, aircraft maintenance and records. A protocol for staking provides instant liquidity and distributes a portion of transactions fees in return to all users. We plan on expanding Malyi's services with other value-adding components to support collaterized loans and yield-generating protocols at a later date. Smart contracts for aircraft Maintenance management and aircraft utilization details

& payments will complete the ecosystem of products and infrastructure necessary to accelerate blockchain adoption with a higher degree of security, sophistication, and accessibility.

Capturing the Market

The world's commercial passenger and freight aircraft fleet stands at $1 trillion. The norm in the industry is for aircraft operators to lease their fleets. Currently, aircraft lessors and financiers own approximately 46% ($460 billion) of commercially-operated aircrafts. This percentage is expected to increase n the coming years. As operators seek to optimize their capital spending in the wake of industry challenges and the COVID-19 pandemic, aircraft lessors have yet to fully take advantage of blockchain technology. Many core business processes continue to be reliant on manual labour and there is no visibility into the operation of owned aircraft, creating the need for a trusted transaction system of record with business partners doesn't exist.

Aircraft leasing companies allow investors to benefit from the growth of global aviation while taking on less risk than purchasing airline stocks.

For aircraft companies leasing makes a lot of sense. They can use their money to focus on what they see as their core business: carrying passengers or cargo while retaining a degree of flexibility they otherwise would not have if they own the planes.

But does buying aircraft and leasing it out via an aircraft leasing fund make sense as an investment? And is it a smart move in the modern world?

Inherent problems and risks

Compared to real estate and infrastructure, aircraft leasing investments are a rather new and unknown asset class.

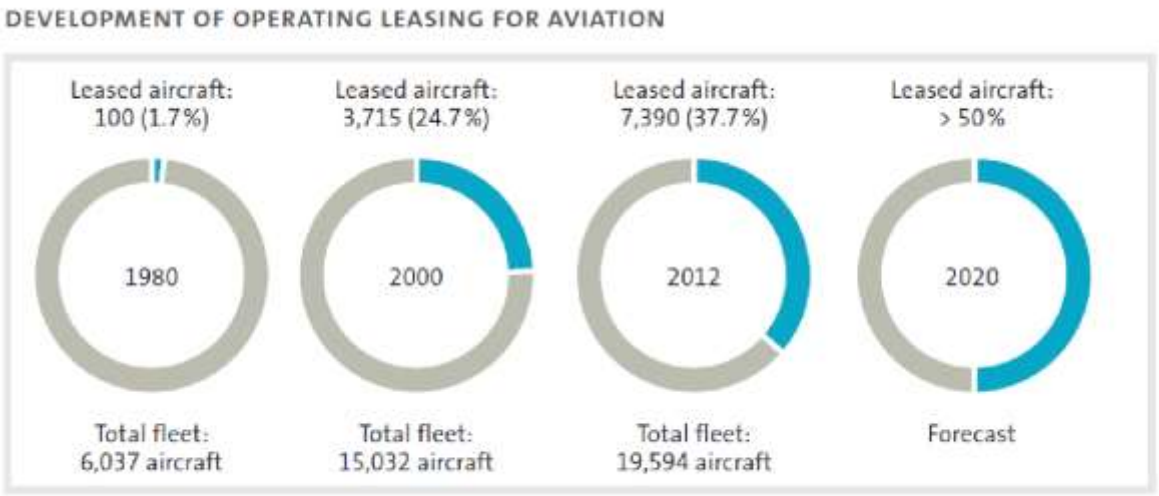
This can be attributed to the sector's fragmented nature, its inherent lack of transparency and the sparse performance data which makes it difficult to fully understand the asset class. In addition, given that aircraft are expensive assets and minimum diversification requires a substantial commitment of at least a couple of aircrafts, the minimum investment requirement is usually pretty high.

The Inefficient billing process

The current billing process for aircraft operators is manually intensive. This results in delays as well as a higher chance for errors that need to be resolved. As there is no system of record of transactions between all parties involved, any aircraft operator or lessor changes take longer to update. Delays in the due diligence process during the sale of an aircraft to a new lessor can even result in hundreds of thousands of dollars of additional, non-recoupable costs to lessors. And exposing the same information in multiple systems presents data security challenges.

Prospective opportunities

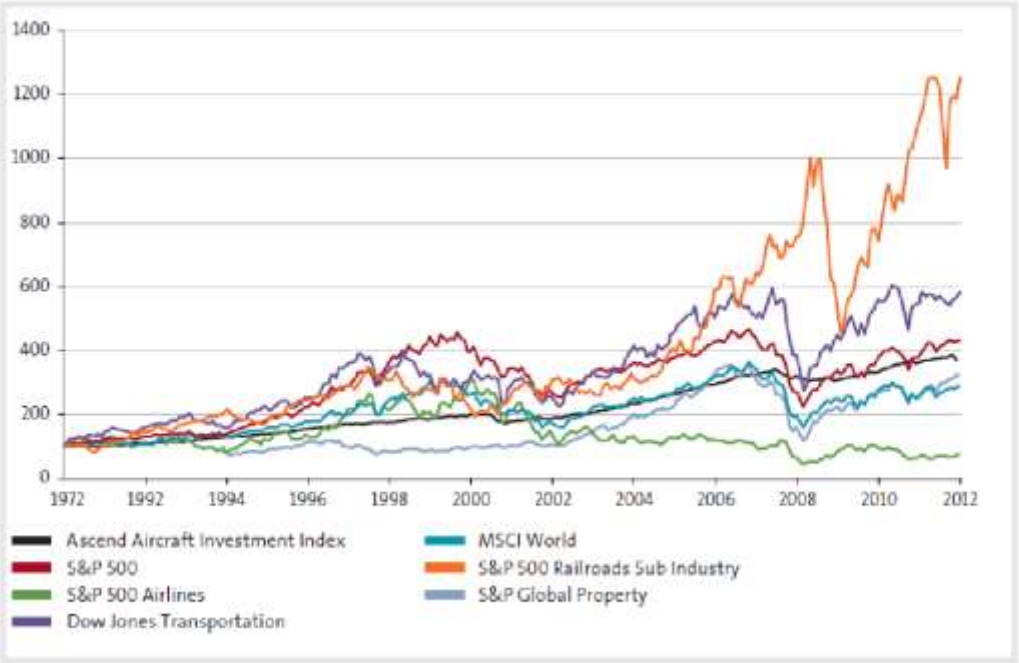
The barriers of entry can be lowered considerably, however, by investing via a fund format (minimum tickets are far lower) and with the help of an asset manager specializing in the aircraft leasing sector.



Source: Boeing Capital Corporation

Moreover, as the demand for aircraft leases is rapidly growing (see the graph above) funding capacity is still lagging behind. –Depending on asset type, credit risk and maturity- an aviation lease fund can guarantee high and stable return opportunities –based on debt leverage we can estimate between 7%-15% in a low interest rate environment with low correlation to other asset classes. This return is typically higher than investing in the debt of the carriers; yet this investment is fully asset-backed.

THE ASCEND AIRCRAFT INVESTMENT INDEX COMPARED TO OTHER INDICES



Source: Ascend Advisory

The airline industry has undergone a big revival in the last few years, delivering huge gains for investors. Even conservative players can profit from the airlines' resurgence.

Ascend, a globally recognised valuation expert and consultant in the aviation sector, created the Ascend Aircraft Investment Index (AAII), which calculates the returns of a passive portfolio strategy when buying aircrafts lease them out and sell them after 25 years. In direct comparison with other asset classes, the progress of the AAII shows a consistent progression with stable performance (including during crises periods) and low volatility. The rate of return of the portfolio over the entire period (1991-2012) is 6.2 % without leverage. Aircraft leasing further shows a comparatively low correlation with other global economic indicators and factors, which reinforces the suitability of the asset class as a diversification instrument.

How it works: the basics

In essence, an aircraft leasing fund seeks to do three things:

Purchase an aircraft at a cheaper price

Lease out the aircraft – preferably to commercial airlines

Sell the aircraft for a good price at the end of the lease

An aircraft leasing fund typically sources aircraft through three broad channels: Purchase and leaseback from airlines, purchase from other lessors and direct orders placed with the manufacturer. Typically, about 75% of the aircraft value is financed through debt.

The length of an aircraft lease typically ranges between 5 and15 years. Logically, a /newer aircraft tends to have longer lease terms than an older one. Principal factors influencing the lease rate include type of lease, interest rates, tax considerations, specific terms of the lease, starting value of the aircraft, assumption of residual value of aircraft and credit quality of the airline lessee.

Aircraft leasing firms are seeing a strong interest in joint venture arrangements as an increasing number of investors are looking to purchase airplanes to lease, creating a new, low-risk revenue stream.

As an aircraft has 25 years and beyond of life – in most cases, this is beyond the investment horizon of the aircraft leasing fund- as the fund manager needs to eventually sell the aircraft (or in rare occasions, "recycle" it into parts).

How Malyi Solves The Problem

Creating a network that compounds elements from several Defi platforms and the traditional aircraft leasing market will result in accessibility and benefit of locked collateral and profit generation. Malyi will enable anyone to utilize a high-speed, low cost and secure lease-related transactions for multiple combinations of operators and lessors, Malyi chose to build its POC using Binance Smart Chain. We have chosen BSC for the fine-grained access control it offers over who can read and write what information. This guarantees that operators and lessors only see information related to lease contracts where they are an authorized party. Such a level of control minimizes potential exposure of sensitive information in a cost-effective way. This kind of access control is one of the main pillars in Malyi's value proposition.

- Malyi's POC all happens directly on the blockchain and can be accessed using a GUI. This way, the protocol unlocks billions of dollars in value that are currently on-chains that As a professional and experienced fund manager, Malyi can add considerable value through the appropriate use of the following sources:

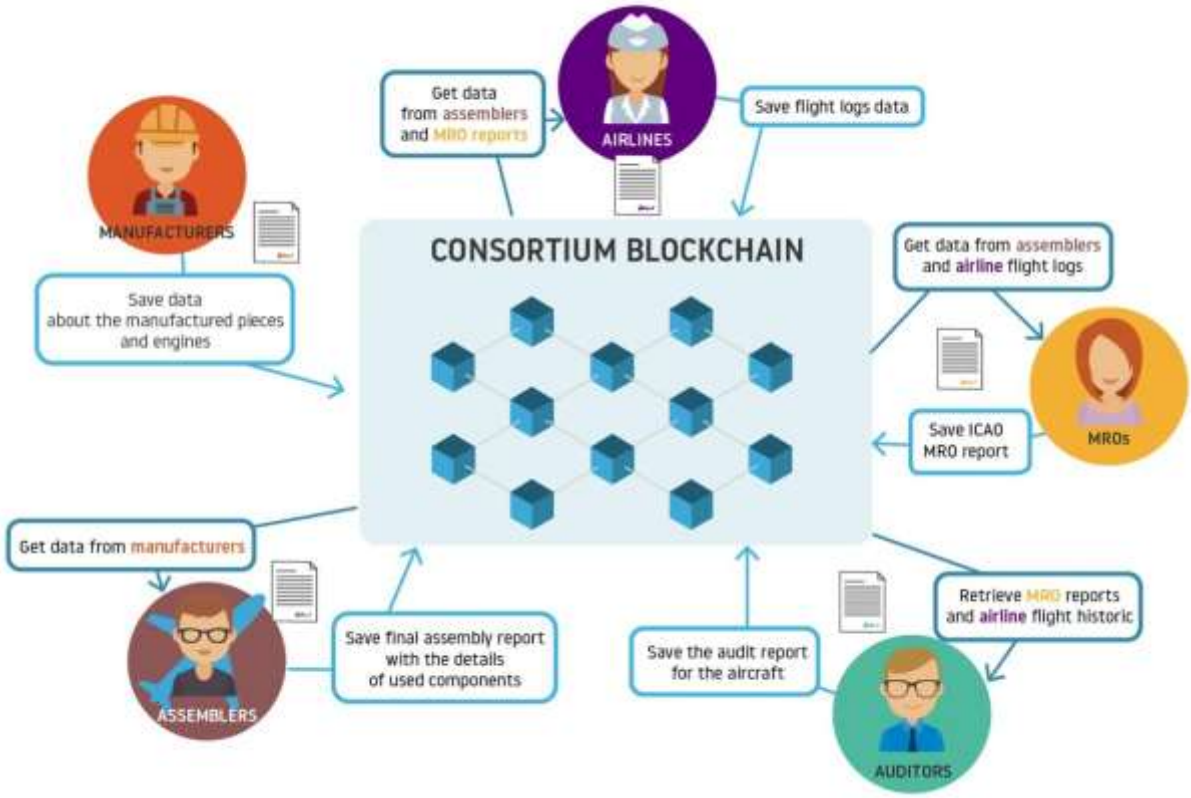
- Timely acquisition and disposal of aircraft: The purchase price of the aircraft is generally one of the key determinants of the overall return. The fund manager can add value by using his leverage by purchasing assets in bulk directly from a manufacturer or identifying and acquiring a fleet of aircrafts from a distressed seller.

- Asset selection and portfolio fleet management: The age and type of planes acquired (dimensions, capacity, etc.) and their performance metrics and market-related characteristics to potential investors can markedly impact the overall return.

- Strong credit analysis: A rigorous approach to credit risk management will also help protect the asset and income stream associated with the investment, by providing ongoing oversight of the aircraft operator and early warning of issues with business performance that might suggest a possible default.

- Asset management: Aircraft are complex physical assets with strict operator regulation. Hence, asset management is extremely important from a technical and risk perspective.

- Prudent capital and fund structure: The fund manager should ensure an appropriate capital structure for the type of assets acquired while maintaining a low financing cost and managing potential refinancing risks. The fund structure itself needs to be adapted to the type of investor and the (regulatory and tax) framework he is subject to.
- Transparent records: Recording billing and other lease-related transactions on a blockchain shared by operators and lessors makes historical information required at the time of due diligence events easily accessible to all parties. It also eliminates the need to spend time reconciling differences between each party's system of record, thus improving cost-efficiency. For an already exiting lessor or operator on the Malyi platform, this translates to greater control over how they administer their new aircraft as they are given access to existing immutable historical records, for which they are now an authorized party. We view this network effect as an accelerator to the adoption of the Malyi platform.



Smart contract use cases in the Malyi ecosystem

The Malyi blockchain has two important features that can be critical in implementing elements of the Malyi platform. The first is the SWAN token, which is a tradable instrument based on the BEP 20 standard. Transactions among aircraft operators, service providers, regulators, and others can use the SWAN as an accounting unit.

SWANs are the unique digital asset that is the building block of the entire Malyi platform. Powered by user-generated and user-controlled data, Malyi will allow the exchange of value through the introduction of SWAN tokens. The goal is to fairly, transparently and securely reward users for better motivation and engagement for tracking and monitoring records of aircraft and its components on the ledger to be accessible by maintenance providers.

Second, the value of the token is greatly enhanced by the fact that the Ethereum and BSC blockchains support fully programmable contracts, or object-oriented software components, that execute when the token is exchanged between parties. The token's "smart" behaviour can be leveraged in many ways, including the use cases below:

SWAN smart contracts

Smart Contracts are a crucial part of the system to make it robust. The smart contract stores the parameters of the function that is to be executed. The smart contract will execute in the following manner:

Smart contracts are another core element of blockchain, and are used to automate the billing process. When an operator (airline) reports their monthly utilization, smart contracts can automatically apply the relevant billing rates and generate the billing invoice. They can also be used to update the stages of the billing process for a given plane, providing transparency to all parties involved.

The Smart contract will also be responsible for granting and recording access and updated to user data between, say, corporations, aircraft operators, regulatory bodies, NGOs, etc. Upon completion of present events, the smart contract will then trigger distribution of SWANs where necessary.

In the Malyi system, smart contracts are categorized into two types:

Individual contracts will keep a record of the steps data provided by the users, while the parent contract will get the record from individual smart contracts and perform calculations for SWAN reward distribution.

The user will also have the ability to transfer SWANs from Address A to B in a matter of seconds, also ensuring the fact that everything is recorded and is accounted for within the Blockchain.

SWAN would use our user wallet or any compatible wallet, ie. metamask wallet to store their SWAN tokens.

SWAN Mechanism

SWAN is both the main currency of the Malyi Platform and the basic unit of measurement for loyalty points obtained from this platform.

SWAN is a fee settlement token for the Malyi platform. The token facilitates additional functions as both deterrent to bad actors (via its staking function) and as a payment option. List of token functions:

Fees for access to data

Staking upon registration

Purchase of goods and services via SWAN

Fee burning

Incentives for data providers (e.g. end-users) in the form of SWANs.

Governance

The Malyi team has years of combined experience in aircraft financing, technology consulting, and development of innovative business solutions.

worldwide. Our management team comprises industry veterans with over three decades of commercial aircraft financing experience.

The SWAN token will be the digital cryptocurrency powering a new type of aircraft leasing and maintenance applications. It will become the catalyst to drive major change in the way operators lease aircrafts and handle aircraft maintenance. Malyi's expertise in aviation finance, management consulting, and private equity investment transactions in the aviation, leasing sector allows us to focus on transforming the aerospace and aviation financing sectors by harnessing the power of blockchain and predictive analytics.

Ecosystem and Features

At the core of the Malyi network is smart contract functionality for enabling instant transactions across a network of participants on the blockchain. Build-in billing and other lease-related transactions are recorded on a blockchain that is shared by operators and lessors. Therefore, making historical information required at the time of due diligence events easily accessible and fully transparent. There is no need to spend time reconciling differences between each party's system of record, improving lessors' bottom lines. When a new lessor or operator joins the Malyi platform, their ability to administer their aircraft becomes a relatively straightforward matter. They receive access to existing immutable historical records for which they are now an authorized party. We view this network effect will be an accelerator to the adoption of the Malyi platform.

Malyi's business model can be explained in just a few steps. There is the act of acquiring SWANs, staking it and then receiving dividends based on how a user chose to stake or loaning it to other users in a P2P environment and collecting interest.

As the network grows, we will add more capabilities to Malyi until we reach a full range of features and decentralized financial services that are fully compliant, safe and easy to use. These include a Stake, a Loan and a Swap functionality.

Staking within the Malyi ecosystem is different from other definitions of staking within a blockchain-based ecosystem. Traditionally, staking refers to the consensus algorithm that supports a blockchain network with regards to operability and security- referred to as Proof of Stake (PoS). Malyi's network will be secured by the underlying blockchain, which at the moment is BSC - the most utilized blockchain in decentralized finance.

Stake

Upon staking SWANs, users will start generating passive rewards. The protocol provides predictability in price, sustainability in rewards, and a guaranteed return to our providers. As a portion of the token supply will go back into the wallets of Liquidity providers, SWAN investors benefit from sustainable and long-term investment returns.

There will be a number of different farms for users; all non SWAN farms will incur a 5% fee upon withdrawal of Malyi rewards, which are sent to the burn address.

Malyi is designed to enable a complete algorithmic money market protocol on Binance Smart Chain. This makes SWAN a stable store of value that is unaffected by the volatility that plagues other cryptocurrencies.

Loan

Malyi enables users to Lend and earn interest by extending loans using either SWAN or other supported assets as collateral.* Users can implement lease contracts on a block chain accessible by both the lessors and lessees. Users or operators who want to borrow any of the supported cryptocurrencies, stablecoins, or digital assets via Malyi must pledge collateral that will be locked on the protocol. These assets must be over collateralized and will allow for up to 100% of that collateral value to be borrowed at 0% interest. These

collateral ratios will be determined by the protocol and will be controlled through the Governance process.

SWAN users may supply various supported cryptocurrencies or digital assets onto the platform. These assets can servce as collateral for loans, supply liquidity and earn an APY. Supplying assets such as cryptocurrencies or digital assets to Malyi gives the users the ability to participate as a lender while maintaining the security of collateral in the protocol. Users will earn a variable-based interest rate depending on the yield curve utilization of that specific market.

Token Technology

Total Max Supply:

Whitelisted Presale Round:

Public Sale:

Team Tokens:.

Marketing Tokens:

Staking Rewards:

Community Reward Pool:

Development Roadmap

Disclaimer

This whitepaper (document), or the content and/or materials thereof are not intended to be financial advice or a solicitation to purchase any digital asset, token, or financial instrument, nor is it any recommendation to purchase the SWAN token. This document is for informational purposes only. Before deciding to invest in the SWAN token, ensure that you understand that this document is subject to change. A "best practice" may suggest that you are educated and informed by an advisor before deciding to invest in the SWAN token, or any other tokens or cryptocurrencies. There are risks involved investing in cryptocurrencies - investments in digital assets such as token(s) are inherently speculative. Valuations of the SWAN token can or may fluctuate due to market volatility. All of the assumptions, ecosystem simulations, opinions, and statements in this document are idiosyncratic of the Malyi Network, and therefore are subject to change.