



# SILKS WHITEPAPER

## Introduction

Silks is the first derivative gaming platform that leverages a blockchain-enabled metaverse to parallel the real world of thoroughbred horse racing. The Silks metaverse is powered by a play-to-earn (P2E) gaming economy where anyone can experience the thrill of owning racehorses and horse farms, while reaping valuable tokens through skilled gameplay and contributions to the ecosystem. The Silks community will have the ability to acquire, collect, trade and interact with digital assets that represent actual thoroughbred racehorses in the real world. Furthermore, they'll have the ability to acquire and develop land and horse farms, as well as other interactive digital assets that are necessary to support and grow the Silks economy.

At its core, Silks is an innovative, engaging and skill-based game that promotes collaboration between racehorse owners, horse farm owners and land speculators to optimize rewards and offset risk in the high-stakes world of thoroughbred racing.

## Silks Mission

The Silks mission is to democratize thoroughbred racehorse ownership for the masses and gamify the experience utilizing a blockchain-enabled metaverse and a P2E economy. In doing so, it will introduce the excitement of thoroughbred racing to a new tech-driven and culturally distinct generation of enthusiasts.

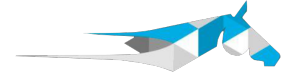
## The US Thoroughbred Horseracing Economy

### - *Annual crop of foals*

Silks gameplay is primarily derived from and tied to the real US thoroughbred horse racing economy. The economy's foundation is the approximately 20,000 foals born and registered as thoroughbred racehorses in the US each year. Many of these horses are sold between the months of August and October at yearling auctions when they turn one year old. Once acquired, they are trained and start racing as early as May of the following year. Horses can begin racing as early as two years old and their racing careers can span several years. Further, horses can live for more than 20 years and they can breed for the majority of their lives.

### - *The industry by the numbers*

The US thoroughbred racing industry is massive. Yearlings sell for an average of \$60,000 and cost their owners approximately \$40,000 annually to feed, house and train as they're prepared



for their racing career. Individuals that purchase racehorses do so with the hopes of profiting from racing prize purses and breeding fees. There are over 30,000 races a year and over 50 million people who wager in excess of \$11 billion on their outcomes. These races are sponsored by racetracks that distribute over \$1 billion in prize money to the owners of winning horses. Owners of successful racehorses can also generate significant income by retiring their horses from racing to breed. Champion stallions can breed hundreds of times a year and can receive staggering fees of \$100,000 or more per newborn sired. The present value of these future cashflows can make a horse that was sold for \$100,000 as a yearling, worth \$200 million or more in just a couple of years!

- *The importance of bloodlines*

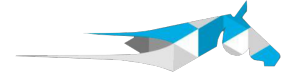
Horse buyers use their knowledge and experience to identify horses at an early age that they believe have the best prospects of winning races. This starts by studying a horse's lineage or bloodlines. Horses that come from a lineage of champions are believed to have greater prospects of becoming champions themselves. During a horse's adolescent years prior to racing, its value can fluctuate based on published training (workout) data that indicates how it's developing. Additionally, the value of an unraced horse can increase when one of its many older siblings wins an important race. *Pinhookers* are professionals who make a living by trading horses during this period and using their speculative skills to process information that helps them identify great prospects within a particular year's crop. Professional bloodstock agents can also be hired by prospective owners looking to breed a productive horse. These agents use similar historical bloodline information to identify good breeding candidates that can produce champions.

- *Horse Farms*

Individuals seeking to become racehorse owners can outsource the maintenance and training of their horses to a professional trainer and horse farm. Horse farms invest in land, infrastructure, labor and consumable resources to provide turnkey maintenance services to horse owners that prefer not to build and manage their own stables. These farms charge a fixed fee and oftentimes a percentage of winnings to train and manage the horses in their stables.

- *Risk*

While racehorse ownership is a thrilling experience, it also comes with significant risk. A horse with great prospects may never train well enough to race, may race but never win or may not win enough to become a desirable breeding prospect. Thousands of horses are purchased each year for significant sums of money only to be retired a few years later because they were unsuccessful in their short careers. In such instances, the owners of these horses can potentially lose their entire investment. It is common for horse owners to diversify or offset this risk by



purchasing multiple horses and/or syndicating the fractional ownership of their horses to investors.

### The Rise of the “Play to Earn” (P2E) Gaming Culture

While the world of gaming may have come from humble beginnings, technological and cultural advances have transformed it into a multibillion-dollar industry. Video games that were introduced in the 1970s and played on television sets have evolved into massive multiplayer games with the advent of consoles, the internet and developments in computer technology. In the last decade, enterprise gaming companies have introduced a multitude of interactive gaming products that generate billions of dollars in revenue and can be played in real-time via the internet with like-minded enthusiasts all over the world. Many of these games offer in-game assets that can be purchased by players who want to enhance the aesthetic and performance of their avatars on the platform. Gaming companies generally limit the use of these in-game assets to specific games and restrict their transferability to maximize their profits.

Enter the blockchain and metaverse technology which has spawned a movement that is redefining gaming entertainment. In its wake, a culture has formed where gamers now want to own their avatars and corresponding digital assets while having the freedom to profit from trading these assets without transferability restrictions. The legacy internet model of trading participation, engagement and privacy for entertainment no longer resonates with this gamer community and a revolutionary movement has formed to change this model forever. Today’s gamer wants to trade their contributions to a platform for a share of ownership and governance in the platform they helped create.

This cultural shift is driving the convergence of investing, gaming and gambling into a new category of gaming entertainment. Those at the forefront of this rapidly growing movement don’t just want to play games for fun anymore - they want to play with a purpose; the prospect of earning, owning and having a seat at the table. Furthermore, they want their entertainment derived from the satisfaction and excitement of being financially rewarded for their savvy and skills as part of their user experience. This type of financial incentive-driven gaming entertainment resembles the proliferation of online poker and fantasy sports. Both games paralleled elements of their real-world counterparts and both offered their players the prospect of being financially rewarded for skill-based gameplay.

Silks builds upon these models to deliver a gaming experience that today’s gamers covet – a community owned entertainment platform driven by the engagement, involvement, investment and contributions of its participants. The Silks metaverse is owned by a decentralized autonomous organization (DAO) that is powered by a real economy. This



foundation will allow for years of exciting P2E gameplay and has the potential to organically grow the Silks ecosystem in ways we can only imagine and can't predict.

### Derivative Gaming

Silks is the first true NFT “derivative gaming” project that leverages blockchain and metaverse technology to bridge the real world with the digital world. The Silks metaverse will be powered by massive, decentralized data sets representing generations of real thoroughbred bloodlines, historic and current racing results and data representing the birth and development of actual racehorses throughout their lifecycle. The digital assets native to the Silks ecosystem will be automatically created on the blockchain in real-time from public data that is published through many sources and verified by the Silks community through consensus and proof of stake. These data sets will then be ported to the Silks metaverse by thousands of contributors and used to create an economy and experience that closely corresponds to that of the real world. The result will be a game that has the potential to deliver the same excitement felt by actual owners of thoroughbred racehorses and horse farms. Although Silks horses will exist in the metaverse, their real-life counterparts will allow participants of the platform to track them as they develop, race and breed in the real world.

Welcome to the new gaming culture. Welcome to Silks!

### The Silks Ecosystem

Members of the Silks ecosystem can participate by:

- Speculating on land
- Developing land into horse farms
- Purchasing and trading horses
- Syndicating horses
- Entering horse ownership pools

Members can earn rewards in the Silks ecosystem by:

- Staking horses
- Racing horses
- Breeding horses
- Mining (verifying and publishing data to the ecosystem)
- Contributing to the Silks ecosystem in various ways

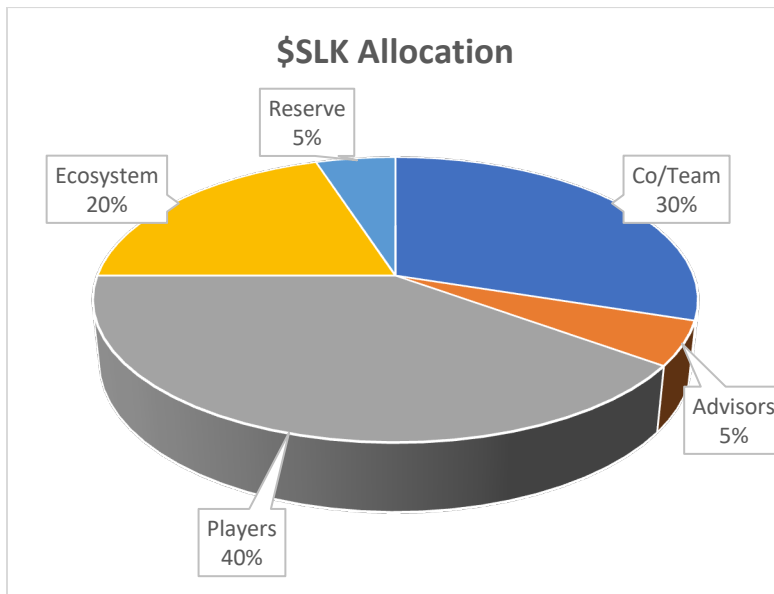


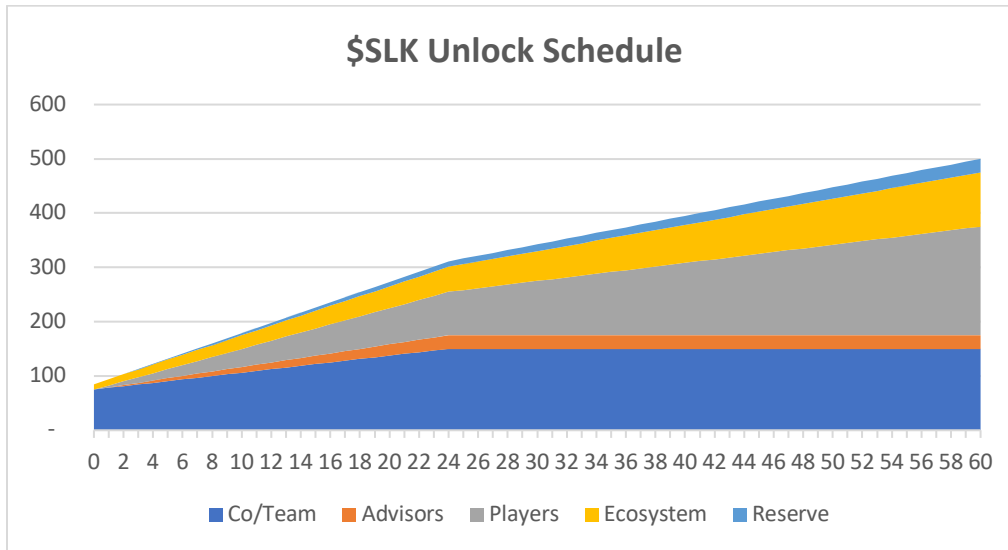
The Silks ecosystem will be comprised of multiple economic components that are represented by digital tokens. A fungible governance token will reward the Silks community for their contributions and empower members with ownership and governance rights. Additionally, a fungible transactional token will be utilized to reward community members for skilled gameplay while allowing them to transact in the Silks metaverse. The Silks metaverse will also consist of multiple non-fungible tokens that represent unique interactive virtual assets. These tokens will provide real ownership of the digital assets to individuals within the Silks community.

## Fungible Tokens

### ***﻿\$SLK - The Silks DAO Token***

The Silks metaverse is a distributed application built on the blockchain and governed by a DAO. The Silks DAO will control all governance within the Silks metaverse. Its ownership will be represented by a non-inflationary fungible token called \$SLK. The \$SLK token will be backed by a treasury wallet that holds liquid and stable digital financial instruments to secure the DAO. \$SLK can be purchased with \$STT (described below) or earned by community members who contribute to the ecosystem in different ways. A total of 500 million units of \$SLK will be allocated and unlocked over time as follows:





### ***\$STT - The Silks In-Game Transaction Token***

The Silks metaverse will operate as a virtual economy that largely parallels the real world of thoroughbred horse racing. The currency that will be used to transact in the Silks metaverse is called \$STT which is a non-inflationary token. All transactions that occur within the Silks ecosystem, including rewards for owners whose horses win races or breed will be settled using \$STT. The Silks platform will mint a maximum of five billion units of \$STT. The \$STT token is convertible into \$SLK at a variable exchange rate published by the DAO, effectively making it backed or secured by the DAO treasury wallet which will hold liquid and stable financial instruments to secure its value. Various features within the economy are expected to burn enough \$STT to support future minting requirements while not exceeding the maximum cap. In the event that there is a gap, the DAO will use a portion of the funds in the treasury to buy back any shortfall of \$STT in the open market.

### **Non-Fungible Tokens (NFTs)**

#### **Racing Silks**

Racing silks are colorful and unique uniforms that will represent the identity of every racehorse owner in the Silks metaverse. Racing silks represent a horse owner's "family crest" and are traditionally worn by jockeys as a way for the public to identify the owner of each horse in a race. In order to directly purchase a Silks horse, an individual must first acquire a racing silk which will represent their identity throughout the Silks metaverse. An individual's racing silk signifies both ownership and identity and will appear virtually on its horses, stables and other



areas within the Silks metaverse. Racing silks will be tradable like any other NFT on the Silks platform. Horse owners that don't have registered racing silks on the platform are not eligible to earn \$STTs when their horses win races.

### ***Land***

The Silks metaverse will be built on 202,500 acres of virtual land. Land will be segmented on a 450x450 acre grid and each plot will be represented by horizontal and vertical coordinates that determine the land's unique location on the grid. Each plot of land will be one acre and represented as an NFT with its unique coordinates. Land must be acquired by players to build horse farms in the Silks metaverse. Each structure will require a certain amount of contiguous land. The amount of available land will not exceed 202,500 acres without the approval of the DAO.

### ***Stables***

The Silks metaverse will introduce many types of structures to support the needs of its ecosystem. Initially, Silks will launch with a stable - the primary structure necessary to operate a horse farm. The minimum size horse farm is 10 acres and will require a player wishing to build one to assemble 10 land NFTs that are contiguous to each other. Each 10 acres of land will accommodate one stable which can house and maintain up to 10 horses. Horse farms can be as large as 100 acres. There will be a limited number of stables available equal to 10% of the number of horses living in the Silks metaverse. The Silks platform intends to introduce future functionality that will allow owners to syndicate or sell their farms.

### ***Horses***

Silks horses are central to the Silks metaverse. When a real horse is born and registered as a thoroughbred racehorse in the US, Silks will create a digital counterpart of the horse in the form of a derivative NFT. The NFT will track the lineage, physical traits, development and productivity of the horse as it exists in the real world. Once minted, these NFTs will be sold to the public with 100% of the proceeds deposited into the DAO treasury. Silks horses will be freely tradable on secondary market exchanges that support the technology. When Silks horses are traded on the secondary market, the DAO treasury will receive a percentage of each transaction.

### **The Silks Economy and Gameplay**

The Silks economy is multifaceted and allows for various forms of interaction and gameplay that is further detailed below.



## **Mining \$SLK**

The entire Silks economy will be fueled by real events that are verified by Silks miners who will earn \$SLK as an incentive to ensure accurate verification. Silks foundational data sets will initially be centrally developed but will grow organically into completely decentralized databases once new data begins to be verified by Silks miners. Silks will incentivize miners in a similar fashion to how traditional blockchains incentivize and reward their miners with native tokens for verifying transactions on a platform. This methodology will organically develop massive historical data sets over time and allow Silks to perpetually grow the bloodline and historical racing data that is verified by its community.

Mining has the potential to provide thousands of individuals with the opportunity to generate real income by contributing to the Silks community.

## **Purchasing a Horse**

The Silks metaverse will mint its first crop of horses in mid 2022. These horses will be naturally scarce as they'll represent the approximately 20,000 yearlings born in the U.S. in 2021. Each subsequent year, the Silks metaverse will mint and sell the entire crop of qualified horses born in the prior year. Individuals who own a racing silk will be limited as to the number of horses they can buy in the first drop to ensure that a diverse community of active stakeholders is fairly built. However, buyers may purchase an unlimited amount of Silks horses in the secondary market.

All Silks horses will be sold in a traditional blind NFT sale with a subsequent reveal. Therefore, all individuals who purchase a horse during the specified sale will pay the same price for their horse and will not know what they have received until it is revealed at a later date. The distribution of horses is completely random for the purposes of providing a level playing field for all Silks participants.

Once revealed, an owner's horse NFT will appear in their wallet, at which time they will be provided the metaverse coordinates of the community stable where they can visit their virtual horse.

## **Staking a Horse on a Farm**

Silks horses will cost money to feed, house and train just like their living counterparts do in the real world. Each horse in the Silks metaverse must live in a stable on a farm so that they can be sheltered, fed, trained and cared for. When an individual first receives their horse, it will be housed in one of many large community farms during which time it will be freely tradeable





unless it is staked. Owners will have the option to pay the DAO in \$STT to keep their horse on the community farm indefinitely, stake their horse on the community farm and earn \$STT for locking it up, move their horse to a private third-party farm or build their own farm to care for their horse.

The requirement of maintaining a Silks horse can be easily outsourced to a third-party horse farm willing to take one's horse in. In the Silks metaverse this is called *staking*. When a Silks horse is staked on a private third-party farm, it will be subject to a lockup period during which it cannot be sold. In exchange for a farm maintaining one's horse during that time, an individual must share a percentage of any \$STT earned by their horse with the horse farm owner. Additionally, all remaining \$STT earned during the staking period will be pooled on a pro-rata basis with the owners of all horses staked on the farm at that time.

Private farm owners will have full discretion as to whether to take in a horse and will receive a percentage of the winnings generated by all the horses on their farm while they're staked there. Horse farm owners are incentivized to take in horses that they believe have the greatest prospects of winning. Private farms will essentially serve as sub-communities that pool winnings to reduce risk. The larger the farm, the lower the risk becomes. Horse owners are incentivized to find farms that have the best horses staked there. Belonging to a horse farm will promote the development of these sub-communities and establish relationships between respective horse owners due to their shared rooting interests.

The process of staking will limit the supply of horses in the secondary market which will serve to enhance the value of all assets on the Silks platform. Staking will also allow individuals to spread their risk by sharing in the prospective profits from a portfolio of other horses. Choosing the right horse farm based on its size and the horses staked there, rewards skilled horse owners that acquire and develop knowledge of the thoroughbreds in the Silks ecosystem and corresponding real world.

### **Pinhooking – Selling an Unraced Horse**

Due to the prospect of significant volatility in the value of a horse prior to its first race, there's a robust market of traders that buy and sell horses during this period. This activity is referred to as *pinhooking*. The Silks metaverse will track all public data relating to the development and productivity of every horse within its metaverse and publish that information to the owners, farms and other interested parties. This will allow diligent community members who follow this information to become pinhookers on the Silks platform and profit from the purchase and sale of horses during this time.

### **Syndicating – Fractionalizing the Ownership of a Horse**



Owning thoroughbred racehorses involves a significant degree of risk. To offset this risk, many owners choose to syndicate or sell fractional interests in their horses. In the Silks metaverse, an individual will have the ability to easily share in the ownership of their horse with up to 9 other individuals. Each horse will come with a governance token and nine additional tokens representing fractional interests in the horse. The governance token will control the decisions pertaining to a horse including which farm it resides in. By owning a fractional token, individuals will have a right to participate on a pro-rata basis in any rewards earned by the associated horse when it wins races and breeds. Sharing horse ownership with friends will serve to elevate the social experience of playing the Silks game. Unless a horse is staked, individuals will also have the ability to sell their fractional tokens on the open market at any time.

### **Speculating and Developing Land**

The Silks metaverse will be situated on a 450x450 grid of 202,500 one acre lots. These lots can be acquired with \$STT. Ten contiguous lots will be required to build a farm and house a stable which can also be purchased with \$STT. Each stable can house ten horses. The maximum size of a horse farm can be 100 acres with ten stables and 100 horses.

Land speculators may purchase and hold land anticipating that the value will increase with both the growth of the economy and new land uses that may be introduced in the future. Land speculators may also buy and hold land in the hope that an expanding farm will want to acquire their adjacent land at a premium.

Horse farm developers will be incentivized to acquire land and develop farms so that they can share in the winnings of horses staked in their farm. A ten acre farm will earn a minimum of 10% of all racing purses won from each staked horse. As farms increase in size, they will have the ability to earn a higher percentage of winnings.

Silks intends to allow individuals to buy and sell horse farms within the Silks metaverse in the future.

### **Earning Rewards**

#### *- Racing*

The horses in the Silks metaverse are derivatives of actual horses in the real world. When the real-world version of a Silks horse is scheduled to race, the blockchain will notify their owner so that they can watch it race. When a horse wins a race, the owner will receive a distribution of \$STT as a reward. The amount of the reward will be derived from an algorithm that considers many factors including the actual prize purse in the real world. If a horse is staked at the time of the race and/or syndicated, the reward will be distributed to respective stakeholders including



the horse farm owner, the other owners of horses staked on the farm and each token holder within a syndication group.

#### - *Breeding*

If a horse is successful at racing, it may be retired at some point in the real world to become a broodmare or stallion. Mares are capable of birthing a foal once a year, whereas stallions can sire hundreds of foals each year. When a horse produces registered offspring, the blockchain will recognize the owners of the mare and stallion and reward them with a distribution of \$STT equal to a percentage of the sale price of the foal when it is purchased as a yearling. This will represent the breeding fee traditionally paid to the owner of the stallion, as well as payment for the foal to the owner of the mare. Owners of mares will receive a larger distribution from a sale than stallion owners.

### **Retiring Horses**

If a horse becomes inactive and is no longer racing, Silks will deem the horse retired. Silks intends to create other ways for owners to enjoy their retired horses including simulated races against other retired horses for rewards using algorithms based on bloodlines and historical productivity to determine the winners.

### **Other revenue streams**

Over time, the Silks platform plans to develop additional revenue streams as it introduces deeper functionality into its metaverse.

### **Game of Silks, Inc.**

Game of Silks, Inc. (GoS) is the company that is creating the Silks metaverse. The intention is for Silks to be completely decentralized over a period of time. Until that point, the Silks DAO will hire GoS to support the platform.

### **Long Term Sustainability of the Silks Economy**

The Silks metaverse is a living and breathing ecosystem that will develop over time and eventually take on a life of its own. Silks intends to focus on optimizing its user experience along the way by developing new ways for users to engage with the platform, including introducing new structures, new businesses, new roles and new sub-economies. Silks also intends on continuing to push the limits of decentralization. Silks token holders will collectively



own its DAO and have governance rights that will grow over time as more tokens reach the hands of more people in the community.

The Silks economy will have the potential to sustain indefinitely as it is organically grown by the continual addition of newborn horses in the real world. The Silks community size is necessarily limited by the number of horses in the real world and can only grow, along with the economy, with each newborn horse.

The Silks economy provides the ability for each member of its community to adjust their risk tolerance by staking their horses on private farms. Staking a horse involves housing one's horse on a private farm, having a lockup period in which their horse cannot be sold and splitting pooled winnings. Lowering personal risk also lowers collective risk by strengthening the economy through the reduction in the supply of horses available for sale. This will provide immense flexibility for people with changing risk tolerance levels to stay part of the Silks community.

### **Initial Projected Roadmap**

- Q1 2022 - Presale of Silks avatar and mint pass
- Q2 2022
  - Public sale of Silks avatar
  - Presale of Silks 2022 Yearling Crop to mint pass Holders
  - Public Sale of 2022 Yearling Crop
- Q3 2022 - Public Sale of Land and Stables
- Q4 2022
  - Metaverse registration and onramp
  - Staking, Syndication, Mining
  - Racing and Breeding
- Q1 2023 - Metaverse

### **Team**

GoS is being built and operated by a team of highly experienced technology entrepreneurs that are passionate about the blockchain, NFTs and the P2E gaming culture.