# WHITE PAPER



# MRLET

THE PURE BLOCKCHAIN GAMING PLATEFORM

# CONTENTS

<b>♦</b> Contents	2
<b>♦</b> Overview	3
€ Target Market	4
◆ Global Online Gaming Market	4
Time for a Blockchain Based Platform	6
	8
<b>♦</b> Introduction	8
◆ Mallet Game Player Architecture	11
♦ Initial Gaming Models	13
◆ Platform Economy	14
Developer Workbench	17
Developer Community	19
◆ Token Details and Revenue Allocation	20
◆ Allocation of ICO Tokens	20
◆ Allocation of ICO Proceeds	
◆ Allocation of Platform Revenue	21
◆ Roadmap	
<b>♦</b> Team	23
◆ Appendix	25



## **OVERVIEW**

The goal of this White Paper is to present a vision and realization plan for the Mallet Gaming Platform. The core premise of the Mallet platform is to leverage the substantial accomplishments that have been made in the blockchain technology arena, combined with the best lessons learned from existing Gaming Platforms, and new models for player and developer engagement, to create a truly revolutionary blockchain based Gaming Platform in the global marketplace.



In the late 1990s, it became clear that the Internet was poised to dramatically change the world's approach towards communications, commerce, messaging, and business operations. With the benefit of hindsight, we now have the ability to look back upon many of those changes, such as online retailing, social media, content streaming, and online gaming, as having been inevitable. Emergence of the new technical capabilities that we now passively associate with "The Internet" made all of those innovations possible. We're fortunate to be able to look back upon an Internet Revolution that was both impactful, & recent. It was recent enough to allow us to predict similar impacts as an outcome of the new Blockchain Technology Revolution.



Key innovations enabled by the introduction of blockchain technology will address many shortcomings of today's Global Gaming Marketplace. Among these are true ownership of assets, resilience of service, and trust related to rules that cannot be broken or manipulated. The following sections will detail how Mallet capitalizes on these innovations, and posits a realization plan for development, financing, & monetization.



## **Global Online Gaming Market**

The video gaming market is commonly accepted to be one of the most profitable segments of the global economy.

In 2017 the global online gaming market took in over \$100 billion in revenue, with continued projected increases in the years to come.

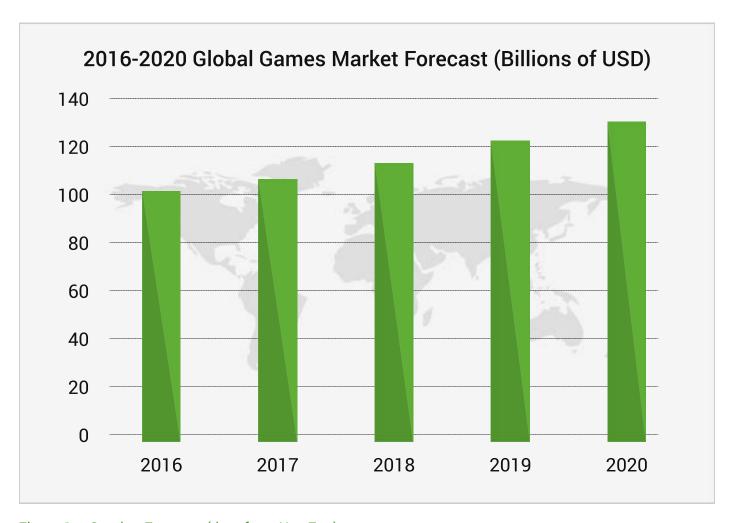


Figure 1 – Gaming Forecast (data from NewZoo)

With the explosive growth of blockchain technology there are opportunities for new approaches to gaming which take advantage of the benefits of blockchains.

Currently, the major sections of the gaming market are mobile, console & PC based.

The mobile market in particular has seen explosive growth over the last several years, and forecasts show the market continuing to grow.

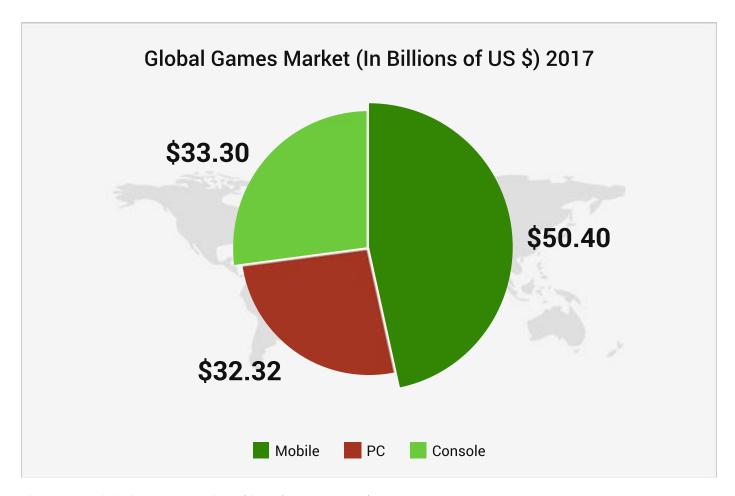


Figure 2 – Global Games Market (data from NewZoo)

We believe that blockchain-based gaming can leverage strengths of both the PC and mobile gaming sectors, supporting both smaller scale games which don't require a user to be tied to a particular device and may be free to play, and larger, more elaborate games with an upfront cost.

Digital distribution has become the norm for video games. Developers need a place where their games can be hosted and find an audience. Self-hosting of games on the web adds additional overhead, especially among developers just starting whose website will not have enough of a presence to draw in potential players. A gaming platform provides a built-in audience, as well as support for monetization.



Players have become accustomed to using a platform to get at their games, whether it be through the App Store on their phone, or a program running on their computer like Steam. Many also feature social elements, which help to retain users and boost the overall growth of the platform. The success of services like Steam shows that players are clearly comfortable with the paradigm.

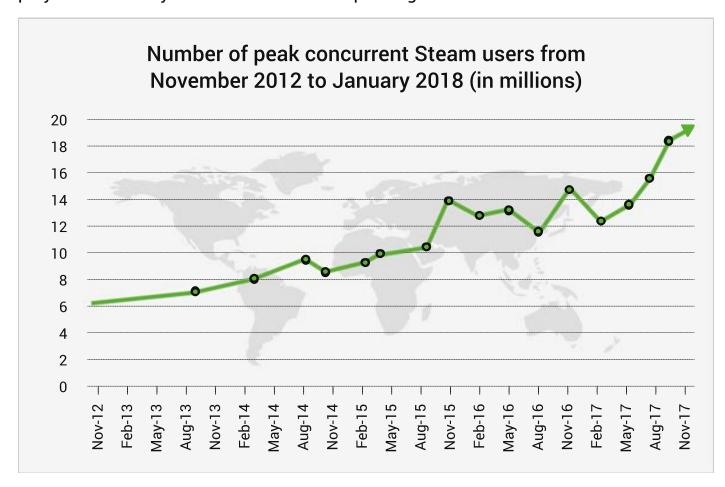


Figure 3 – Concurrent Steam Utilization over Time (data from Statista)

### **Time for a Blockchain Based Platform**

While Gaming Platforms have become very much an industry norm, the blockchain video gaming space is currently wide open, with room for many new games and platforms. As game players come to understand and appreciate the virtues of blockchain gaming (See "What virtues of blockchain technology does Mallet exercise?"), Video Gaming on the blockchain will expand to represent one of the first truly profitable segments of the blockchain industry.



Since blockchain busines models themselves are very new, models of gaming success and profitability are difficult to predict. Although blockchain technology is a rapidly evolving feature set, with new capabilities being heralded with each news cycle, early adopters such as "Cryptokitties" were simplistic in nature. For Cryptokitties, the market results were nonetheless revolutionary. In the case of Cryptokitties however, the result was nonetheless revolutionary. The early days of game operation saw individual collectibles selling for over \$US100k. While the bubble and burst pattern of early gaming launch, player experimentation, and loss of novelty is inevitable, so is the realization of blockchain gaming platforms as true institutions within the blockchain landscape. The next section will illustrate precisely why the Mallet Platform is poised to become a successful pioneer in this evolving market.



#### Time for a Blockchain Based Platform

Mallet is a revolutionary distributed gaming content and creation platform. Its goal is to leverage the best "Lessons Learned" from conventional online gaming platforms, while employing every virtue of blockchain technology, producing a gaming environment that is resilient, trustworthy, and player monetization focused.

## ■ What have we learned from other platforms?

Platforms like Steam earn Billions USD per year. They accomplish this by having a wide variety of games, contributed by a thriving community of developers, operating within a "low barrier to entry" model. Mallet has an integrated game development toolset, and will both encourage and provide early financial incentives to its developer community. Similar to other platforms, Mallet will also emphasize socialization within the player community, and record player performance, assets, and accolades. Unlike other platforms, Mallet's recording of player accomplishments will have true permanence, due to the nature of blockchain technology.

One weakness of platforms like Steam and Roblox is the proliferation of objectionable & lower quality games. Mallet will avoid this by entrusting game approval oversight to a democratically elected council of Mallet Token holders. Eligibility for voting and council membership will be limited to those who have bought and held their Tokens for a sufficient length of time. Elected Council members will be granted additional incentives in exchange for their contribution to the care of the ecosystem. The Council model will be similar to that of the City of Zion (CoZ).

## ■ What virtues of blockchain technology does Mallet exercise?

One is Resiliency. There are two dimensions of Blockchain Resiliency in the Mallet platform. Since the platform is globally distributed among a multitude of blockchain and IPFS servers, its Operations are resilient, as they do not rely on the proprietary server farm of a particular vendor. Similarly, Player Identity and Assets are also resilient, in that they exist in a permanent and unalterable form on the blockchain, as opposed to residing on a vendor owned server farm.

Another virtue is **Trust**. Perhaps Vitalek Buterin, creator of the Ethereum Platform put it best:

"Blockchain solves the problem of manipulation. When I speak about it in the West, people say they trust Google, Facebook, or their banks. But the rest of the world doesn't trust organizations and corporations that much ..."



Today's online video games are undeniably fun, but up to this point, have not been provably fair. As with any vendor proprietary service, the actual code running on various servers is not meant to be transparent, and as such, can be subject to unfairness and manipulation. Examples of the twin evils of unfairness and manipulation are illustrated below

#### Player based cheating



Players are in the business of winning, and many consider any form of cleverness, including cheating, to be a competitive advantage. Some games leave holes for players to manipulate or forge their "moves" and other activities, rendering truly competitive gameplay questionable, especially where a monetary reward may be possible. This is seen in many browser-based games, which rely on Javascript engines. Since Javascript may be intercepted and modified at the client-side, any teenager with sufficient time and motivation can easily affect a Javascript game's outcome. Similarly, games that rely on poorly architected and secured web-service interfaces are subject to forged requests from players. Common "hacks" for games relying upon more robust engines, such as the Unity platform, are also well known.

### Vendor or Institutional Manipulation: the case of Eddie Tipton



In an ideal world, all video game vendors, their principals, and associates, could be trusted implicitly. In practicality, this is not possible, due to several factors. Although Mallet will not engage in the online Gambling arena, some key parallels may be seen in an analysis of Institutional Gambling manipulation.

Eddie Tipton was found guilty of Lottery Manipulation, and sentenced to serve 20 years for the violation. Evidence in his prosecution showed that he had conspired to manipulate random number generators as far back as 2005, leading to a major incidence of fraud related to a 2010 Hot Lotto drawing. His final conviction came in 2017, some 12 years following the start of fraudulent activity. What makes his case so significant is that he was the Information Security Director of the Multi-State Lottery Association. Since due diligence of government agencies can be inadequate, grave concerns must also exist for the Video Gaming industry.



Mallet introduces gaming models that are fair and winnable, in an environment that can be audited and completely trusted. This is made possible by the blockchain innovation known as Smart Contracts. Mallet Smart Game Contracts have programmatic rules, and records of gameplay that are completely beyond manipulation (even by the platform itself), transparent, and subject to independent audit. In Mallet's case, there will be an early focus on games that can treat moves with the same diligence as financial transactions. Subsequent sections will address another Mallet innovation called the Mallet Rules Engine, which will acts as a conduit for all turn based actions, validating the applicability of moves made, within the perspective of a game state, player state, and opponent state.



## **Mallet Game Player Architecture**

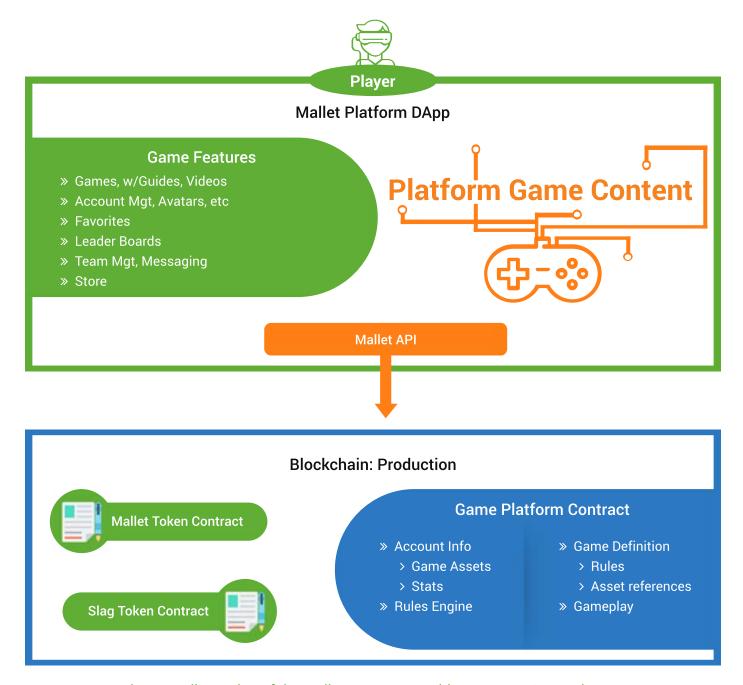


Figure 4 - Illustration of the Mallet Ecosystem, with respect to Game Players.

#### **■** The Mallet Platform DApp

Will be a common entry point for all Mallet GamePlay. Encapsulated within it are various Gaming Features, and an assortment of games from both the Mallet Platform itself, and 3rd Party Developers. Key Features:

- → Various Games, along with accompanying guides, and videos that market the game's features
- → Player Account Management
- → Player Favorites
- → Game specific Leader Boards
- → Team setup/management
- → Store, featuring virtual game items, crypto-based assets, and physical merchandise
- All operations within the Mallet DApp access the Mallet Smart Contracts via the Mallet API

#### ■ Mallet Smart Contracts include

- → The Mallet Token Contract, which will be the subject of the ICO. This is a Utility Token which is used as Mallet Platform currency. It also gives holders the opportunity to participate in Mallet Governing Council activities.
- → The Slag Token Contract, which will be used for promotional purposes.
  - See the "Platform Economy" section for more details relating to Token Utility.
- → The Game Platform Contract is the entry point for Mallet's Smart Contract Logic. It contains all logic related to Account Management, as well as game operations. Game Operations themselves are governed by the Mallet Rules Engine.

## **Initial Gaming Models**

Mallet's RoadMap for gaming models is broad, with plans to encompass every Video Gaming model, such as MMO, RTS, FPS, etc. The platform's initial goal is to launch with gaming models that strike an appropriate balance between time to market, player adoption, developer adoption, and profitability.

The following game models are considered "out of the box", and will be available to early adopters of the Mallet Workbench:

#### ■ Single Player, with In-App Purchases

- → Example games of this genre: Fate Grand Order, Candy Crush, Plants vs. Zombies, Homescapes
- → Monetization: Purchase of items from in-game store. Assets stored in Player's Mallet Account

#### ■ Turn Based Strategy, with Battle Tournament Capability

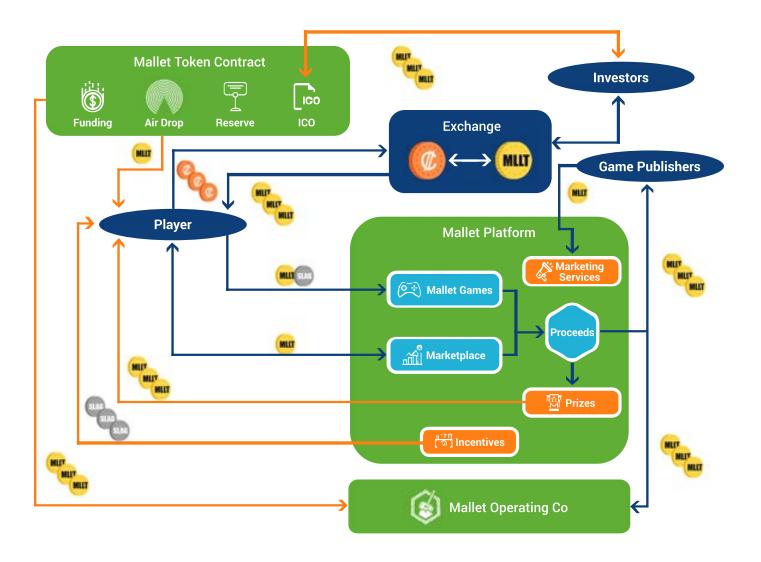
- → Example games of this genre: Pokemon, D&D, Hearthstone
- → Monetization: Charge for entry fee, with cash prize incentives

## **□** Collectible, with Battle Tournament Capability

- → Example games of this genre: CryptoKitties, Etherbots
- → Monetization: Purchase of base Collectible. Service fee on resale of collectibles. Features for "inter-breeding" to create newer, more evolved collectibles.



## **Platform Economy**



The Mallet Platform Economy has numerous entities and key interactions. These include:

## **□** The Mallet Token Contract – Origination point of Mallet Tokens.

- → Utilizes proceeds of ICO to provide funding to the Mallet Operating Company, which produces and supports the Mallet Platform.
- → Maintains a reserve of Mallet for future platform economic consideration



- Investors Purchase Mallet Tokens
- Exchange(s) The Mallet Token will be listed on one or more exchanges following ICO.
  - Players Spend and receive both Mallet and Slag Tokens, and interact with Exchanges and the Mallet Platform in a number of ways:
  - → Receipt of Tokens
    - Players will receive free Slag Tokens from the platform for several reasons:
      - As a reward for providing referral of new players who have spent more than a certain amount of Mallet on the platform
      - Via Air Drop as a general promotion from the platform, based on certain marketing initiatives to stimulate use of the platform
      - Other reasons, as determined by the Mallet Council
    - All Players can purchase Mallet from Exchanges
    - Players may receive Mallet from the platform Marketplace, following sale of their platform assets to other players.
    - Players can receive Mallet as a reward for high performance within platform Game Tournaments.
  - → Spending of Tokens
    - Players interacting with the platform will spend Mallet or Slag in exchange for gameplay, platform merchandise, platform assets, and services.



#### ■ The Mallet Plattform – The main technical platform for all Mallet services.

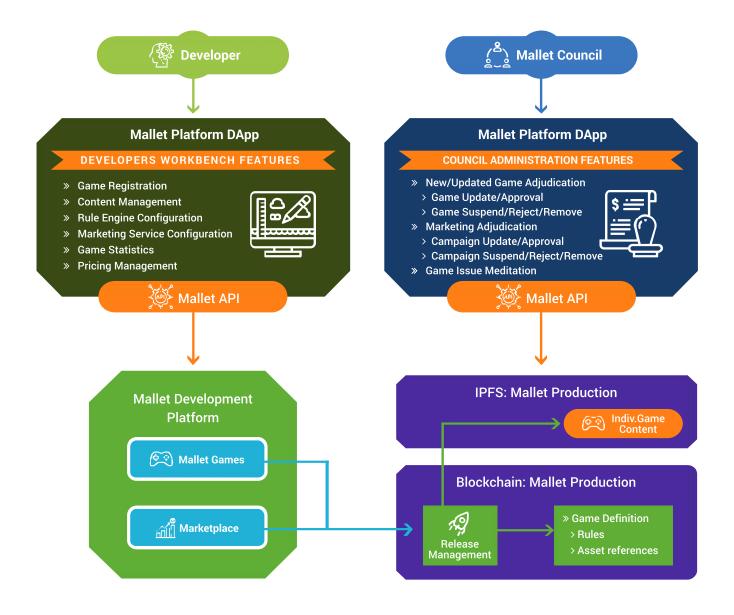
- → Exchanges Mallet and Slag tokens with Players
- → Distributes game proceeds to Game Publishers, and the Mallet Operating Company
- → Collects Mallet payment from Game Publishers, in exchange for optional Marketing Services.
- **The Mallet Operating Company** produces and maintains the Mallet Platform

#### ■ Game Publishers – producers of all game content

- → Earn Mallet from Game platform, based on player activity
- → Spend Mallet in Game platform, in exchange for Marketing Services



## **Developer Workbench**



The Developer Workbench is a critical component of the Mallet Platform. It enables Game Publishers to create, monitor, maintain, and control their published games.



#### ■ The Mallet Platform DApp

From the Developer Workbench perspective, allows Developers & the Mallet Council to manage the process of game creation, promotion and management:

- → Developer features: Acts as a control point during the game creation/publishing phase.
  - Game Registration

- Content Management
- Rule Engine Configuration
- Game Statistics
- Marketing Service Configuration
- Pricing Management
- → Mallet Council features: allows control and adjudication of game releases, marketing campaigns, and Game Issue Remediation
  - New/Updated Game Adjudication

    - Game Update/Approval Game Suspend/Reject/Remove
- Mallet Development Platform platform for development, configuration, and testing of all games
- IPFS: Mallet Production distribution point for all client side game content.
  - Blockchain:Mallet Production provides all platform logic, game logic, & release management services
  - → Release Management
  - → Game Definition
    - Rules
    - Asset references

# TOKEN DETAILS & REVENUE ALLOCATION

## **Allocation of ICO Tokens**

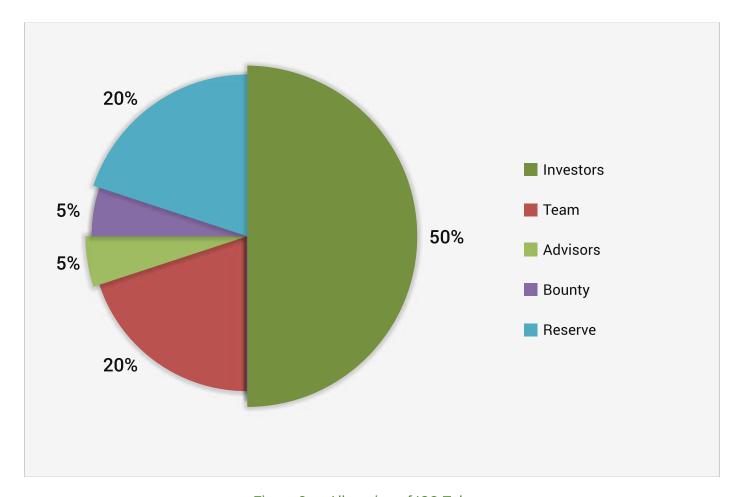


Figure 8a - Allocation of ICO Tokens

□ Investors (50%) □ Advisors (5%) □ Reserve (20%)

**□** Team (20%) **□** Bounty (5%)

# TOKEN DETAILS & REVENUE ALLOCATION

#### **Allocation of ICO Proceeds**

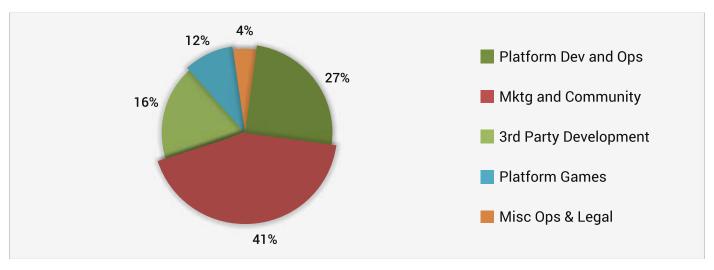


Figure 8b -Allocation of ICO Proceeds

#### ■ Platform Dev and Ops (27%)

→ Development and Operation of the Platform. This includes team staffing, creation and launch of the Platform, and related IT expenses.

## ■ Mktg and Community (41%)

→ Expenses related to Sales and Marketing of the Platform, and management of the Developer/Player community.

## ■ 3rd Party Development (16%)

→ Various incentives and discounts to accelerate Major 3rd Party Game Publisher/Developer on boarding and early adoption.

## ■ Platform Games (12%)

→ Expenses related to creation of the Platform's own games.

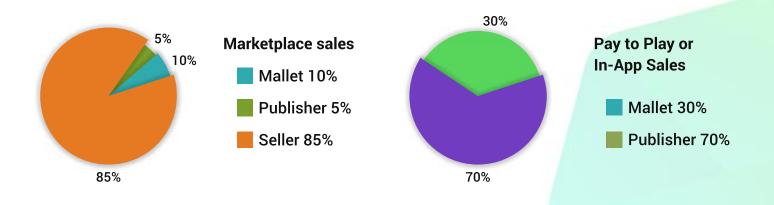
## ■ Misc Ops & Legal (4%)

→ Operation of miscellaneous and associated Legal expenses.



# TOKEN DETAILS & REVENUE ALLOCATION

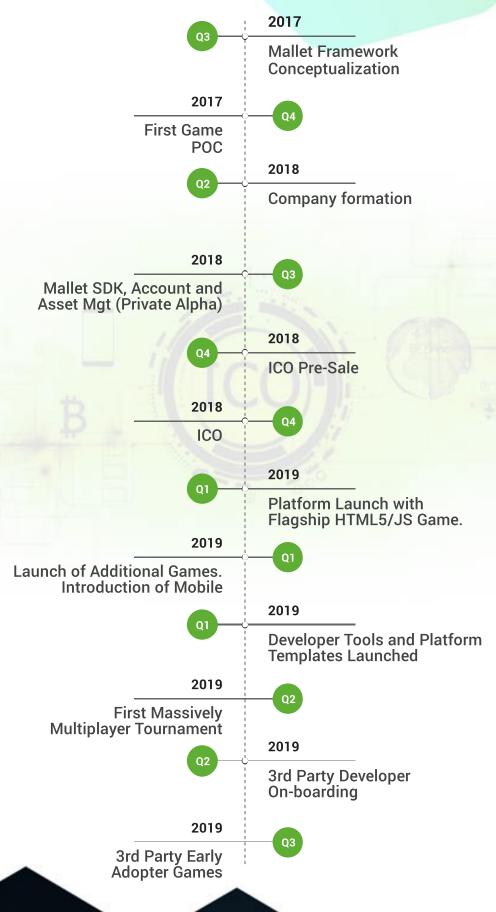
## **Allocation of Platform Revenue**





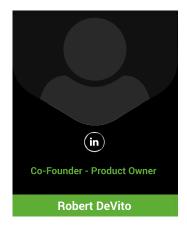
NOTE: Mallet Proceeds will allocate a certain amount of proceeds to the Mallet Council. Amount to be determined.

# ROADMAP

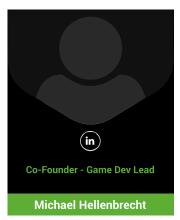




## Officers











## **Advisors**

