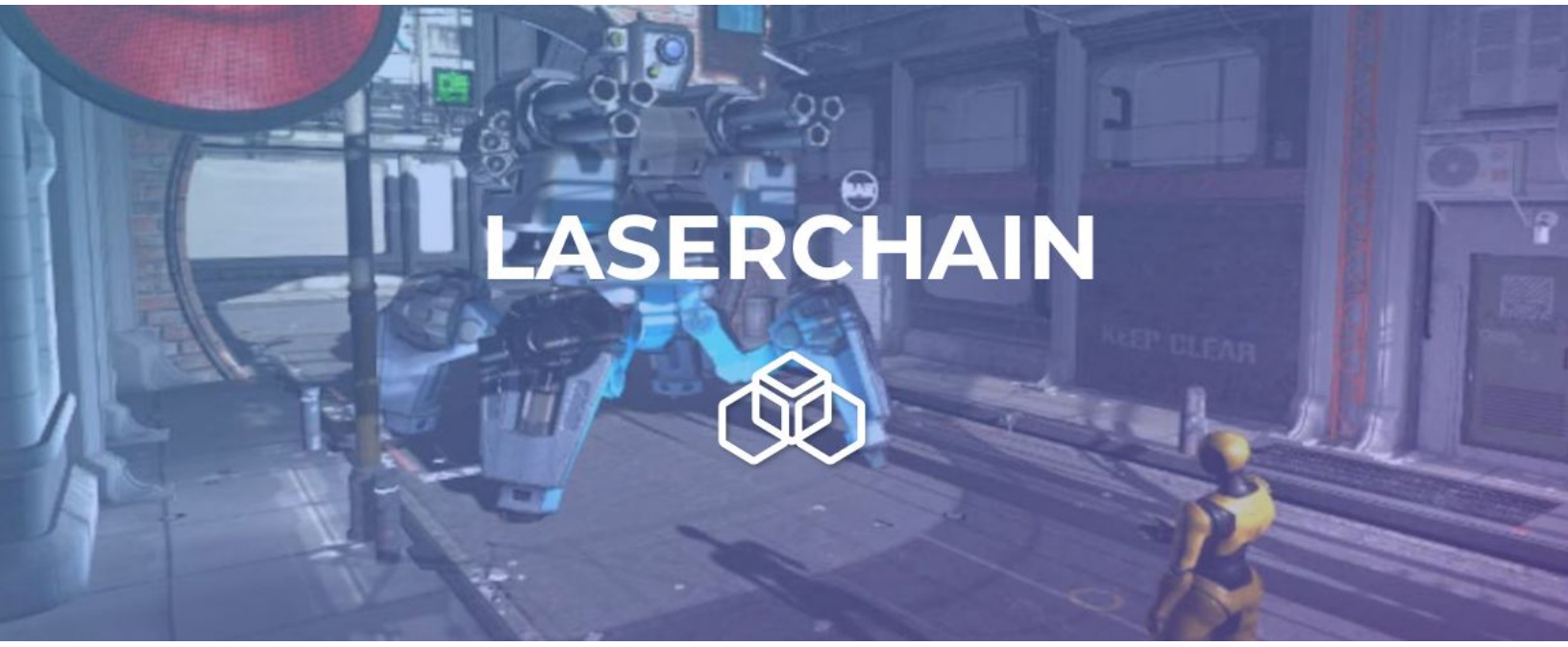



# Whitepaper

(April 10, 2018)

# Market

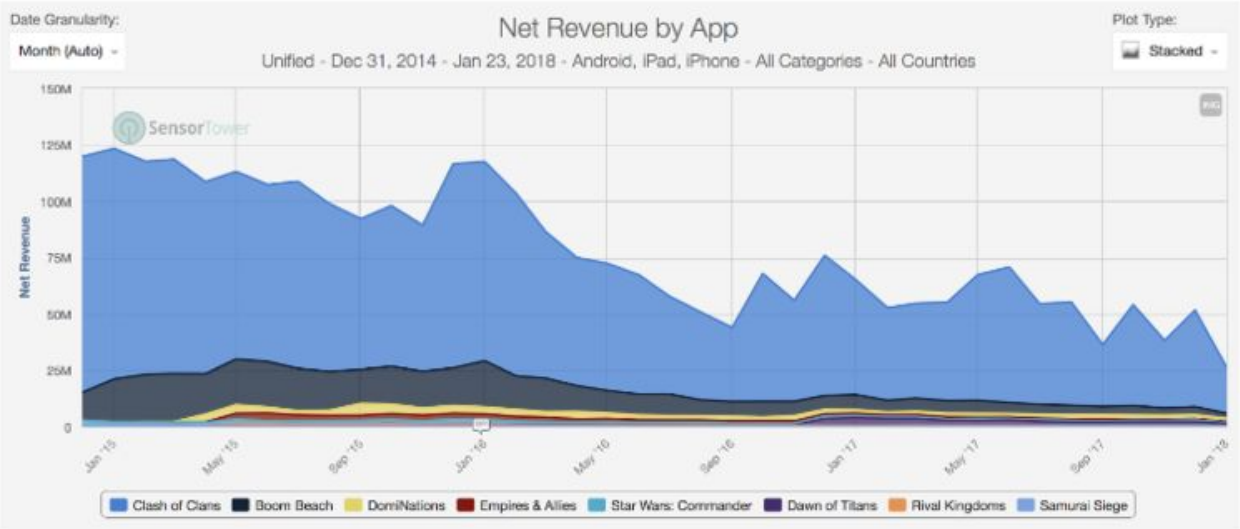
## The mobile game market is huge.  How huge is huge?

## Mobile Game Spending Hit $48.3 billion in 2017

(https://venturebeat.com/2018/01/05/sensor-tower-mobile-game-spending-hit-48-3-billion-in-2017/)

Blockchain gaming has taken the world by storm, combining a time tested tradition of entertaining ourselves with the prospect of bringing that value outside of the game.  War games bring the lion's share of the revenue by pitting players against each other for supremacy while they pay ever increasing amounts of money to gain an edge in the game. Supercell, the publisher that created **Clash Of Clans** brought in **2 billion dollars** in revenue in 2017 alone.

(https://venturebeat.com/2018/02/14/supercell-2017-results-810-million-in-profit-2-billion-in-revenue-without-a-new-game/)




This is a staggering 4% of the total and they only have a few games, all of them war games.  The competitive human spirit has proven that people like to battle each other, even if it is only in a fantasy universe.  **So what happens if we combine this heavily developed game design with the blockchain?**

# Enter LaserChain

LaserChain is a WAVES based first-ever multiplayer online cryptocurrency wargame for iOS and Android.  At the center of this game is a cryptocurrency token called LaserChain(LSC) that can be earned in game through **Proof of Play** mechanisms.  The coin can be spent in the game to enhance gameplay, obtain items, increase player power, and unlock experiences in the virtual game world.

## Coin Cap

There are 1,000,000,000 tokens in circulation, 600,000,000 of which are reserved by the game bank to be awarded to players through the **Proof of Play** mechanisms in the game.  The game will take these tokens back when they are spent on in-game purchases, creating a zero sum economy.  Coins will never be created or burned, this coin is built on the WAVES blockchain and is fixed in quantity.

It should also be noted that the currency only has 4 decimal places instead of the standard 8. These decimal places were intentionally limited to maintain divisibility but increase readability in the game.  The starting price is $0.10 per coin, but the market price will fluctuate with coin demand.

# Proof of Play And How To Get Coins

## Build

In the game, players can place a Laser Generator building on their base that will offer them a certain amount of LaserChain tokens every time they click the collect button. Players can place more than one Laser Generator and upgrade the level of each building to increase the output per hour.

This is the easiest way to obtain LaserChain from the game. The amount given will scale depending on how many players are currently playing.  The difficulty formula we use is similar to Bitcoin's algorithm that scales up the complexity of finding a block depending on the number of miners in total.

## Combat

Another way to obtain LaserChain coins in the game is to attack other players.  When you assault a players base and win the battle, you can take a percentage of the coins they currently hold in the base.  Players are incentivized to keep coins in the base, as they receive a bonus collection amount for each coin they keep in the base **similar to proof of stake.**  Players can remove coins from their base at any time and store them in their Account or an outside wallet to prevent them from being taken by another player, however these transactions take time.

As players gain tactical power in the game, their rating will go up. This measure is designed to protect weaker players. If one is being attacked by a player with considerably higher power rating, the attacker's reward will be significantly diminished.

## Quest

Players can also obtain LaserChain by completing the randomly generated daily quests that require the series of tasks to be performed to get the reward.  This design is resistant to automation and will give the players a **human based proof of work** scheme that will deliver a reward and keep the value of that reward high.

## Trade

The final way to obtain LaserChain tokens will be through outside channels.  Players can trade with one another on the public blockchain, give their friends tokens, or trade them on various exchanges. LaserChain is built on the WAVES, and thus it has access to the WAVES Decentralized Exchange (DEX).  A secondary market will exist to trade their tokens for other tokens.

**We will sell 200,000,000 tokens to fund the game and jumpstart the economy, and then we will allow the inherent supply and demand economics of the game to take over.  After the sale is over,  players will only be able to purchase coins from other players or gain them through one of the  proof of play mechanisms described above.**

## Social Hooks and Teamwork

Each new player will choose one of three factions to join. Factions are like teams, players cannot attack their own team members and are encouraged to work together with them to form alliances, and fight against the other two factions. The game will have sub alliances, a friends list, and chat to fully embrace the social entertainment of teamwork. Eventually it will extend to reinforcing other players armies, declaring wars between sub alliances, and a comprehensive system to trade items and resources with other players.

## Planets

A planet is a 3D world with regions that can be explored or controlled (mine resources, craft items, complete quests, expand the base and perform attacks). All new players are placed on a starter planet where everyone belongs to the same faction, so players can only attack the non player tiles and practice their skills. After a certain level they are given an opportunity to leave this planet and go to a Battle Planet where the rewards for LaserChain are significantly higher , but the risk is also increased as players are able attack each other.

Players are not required to leave the starter planet, but the **proof of play** mechanisms there will produce LaserChain tokens significantly slower than on the Battle Planet.

# Centurions

We are creating a system where each player can build their own robot hero, also known as a Centurion.  This unit can equip weapons and armor, receive upgrades, and learn skills that make players stronger in combat. The mining and crafting systems will further augment the power of their Centurions by giving them gear to equip and use. We plan to allow Centurions to exist on the blockchain and ultimately let players sell and trade them between one other.

## Outside Exchanges

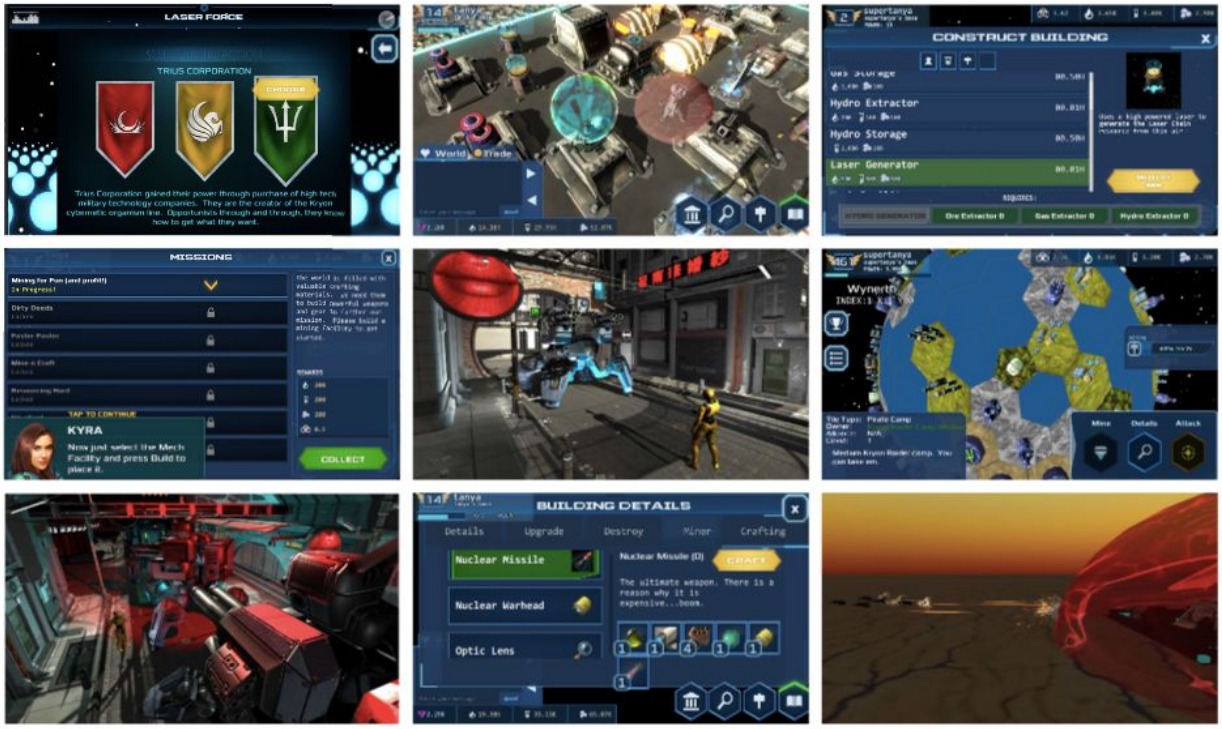
Due to unclear SEC rules on cryptocurrency tokens, we have decided to disclaim here that we are not promising any return on the future value on this token. Now that the disclaimer is out of the way, we will state that just like it happened with Bitcoin (which has no centralized company and never had any intention of being traded on an exchange) people will trade this token on outside exchanges. We are based on WAVES, so DEX will be available for trading from day 1. This is a feature of the WAVES ecosystem. Other exchanges may decide to trade it as well.

## Centralized and Decentralized Architecture

The game is built using a blend of centralized and decentralized server technologies. We acknowledge that decentralized is ideal, but at the time of this writing it is simply impossible to create a fast and free decentralized game experience. The other problem with decentralized smart contract based video games is their immutability. If the game needs to be updated, have a bug fixed, or be balanced you cannot change a smart contracts once written. It was then decided that the fastest and best experience could only be obtained with a hybrid design of both centralized and decentralized technologies.

Decentralized models also utilize transaction fees for interactions with the blockchain. This means if the game were purely decentralized players would need to pay every time they attack, collect, or upgrade a building. We operate in the same way that a centralized exchange does. The game logic and state of the game runs on extremely fast centralized servers, and we use the blockchain to hold things that can be transferred outside of the game world.

# Screenshots




[Visit https://www.laserchain.io for more]

# Team

Our team consists of War Game industry veterans,  mostly coming from Kabam. We also have team members who previously worked in Sony,  Disney,  Zynga,  Gree, and other large game studios. We have built this before, and know how to do it.  The beta is available and working right now.

- Benjamin Taller - Lead Architect and Founder

  **(Zynga, Disney, Sony Online Entertainment, Kabam, VRWorld)**

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- Jay Jodway - Lead Designer and Business Development

  **(GREE, Kabam, Arcway LLC)**

  **https://www.linkedin.com/in/jayjodway/**

- Justin Pumpr - UI/UX Designer

  **(Limbic, Kabam, Beyond Games, Monumental Games)**

  **https://www.linkedin.com/in/justin-pumpr-4b231b7/**

- Anthony Devries - QA Analyst, Game Designer

  **(Kabam, Cascadia)**

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- Aaron Bryson - Overlord of Infrastructure

  **(Cylance)**

  **https://www.linkedin.com/in/aabryson/**

- Rushil Reddy - Software Engineer

  **(UploadVR, Pixite LLC, BroomBall, LeadingOnes)**

  **https://www.linkedin.com/in/rushilreddy/**

- Matt Boh - Digital Marketing Master

  **(Visivio, Vision Magazine, MultiDimensional Interactive)**

  **https://www.linkedin.com/in/matthaydon/**

- Tanya Yakovleva - Founder and Web Designer

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