

Eternal
Heroes

White paper

eternalheroes.com

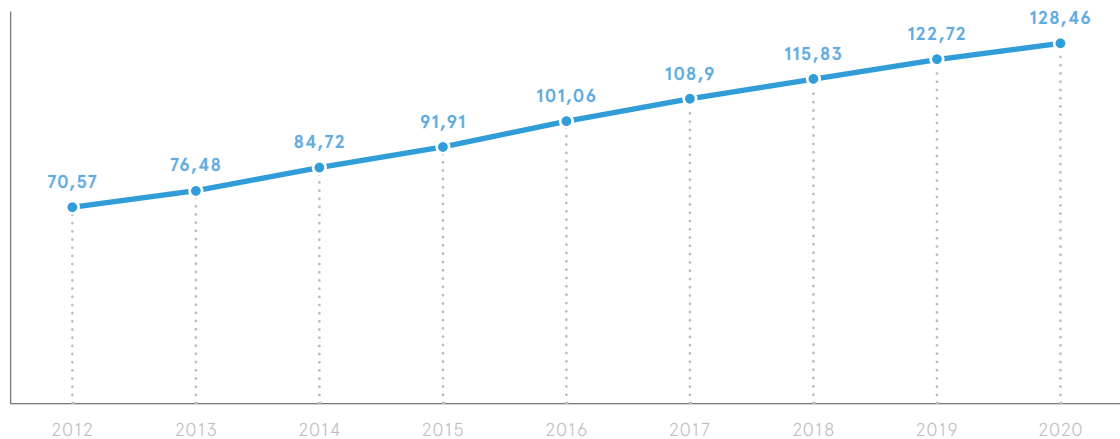


Can you make real money playing video games? Can you make money playing your favorite game using today's most reliable technology? Millions of gamers throughout the world try to make gaming their source of income and we believe they can. That's why we created Eternal Heroes – a multi-platform collectible card game that uses blockchain technology and allows players to mine cryptocurrency.

1. BLOCKCHAIN AND GAMING

Popularity of fantasy card games grew at the end of the 20th century, with the most famous game, Magic: The Gathering, released in 1993. The goal here was to either reduce your opponents' life total to zero, or make them run out of cards so they cannot draw when needed. Currently, Magic: The Gathering has over 21 million active players worldwide.

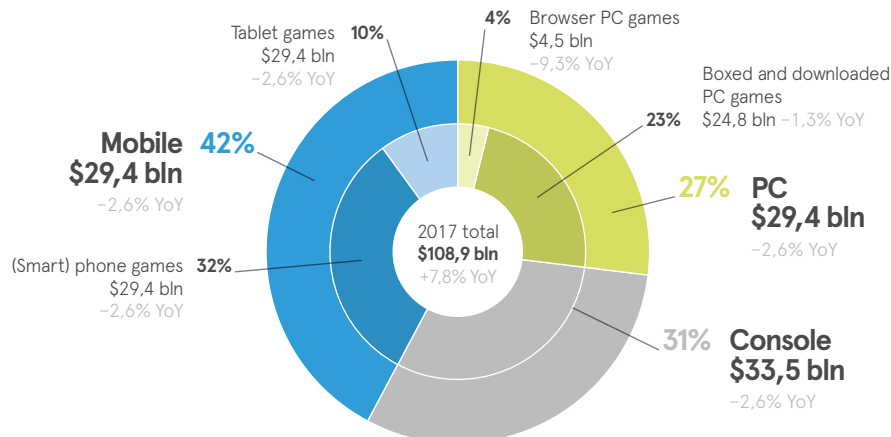
GLOBAL GAMES
MARKET REVENUE
GROWTH, \$ BLN



The genre went through a rebirth with the rise of the Internet. Today, online CCGs (Collectible Card Games) are a sub-group of the popular battler genre. According to the analytical portal Playliner (<https://playliner.com/ru/>), CCGs take up 18% of the Google Play Top Chart and 15% of Apple App Store Top Chart in the United States. In 2017, the CCG market is estimated at \$1.4 billion (analytical portal SuperData). There are over 40 million active players in the digital CCG audience.

The modern leader in CCG is Hearthstone: Heroes of Warcraft, released by Blizzard in 2014. Hearthstone has 25 million active players worldwide and reported a \$395 million profit in 2016.

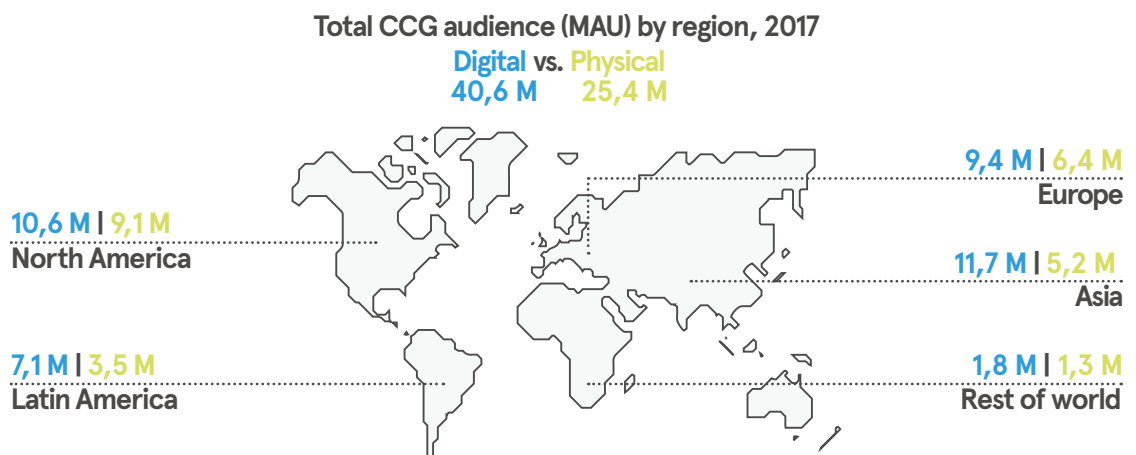
2017 GLOBAL
GAMES MARKET



Currently, the digital CCG sector is growing in parallel with blockchain technology. The word «blockchain» first appeared in the media during the 2013 Bitcoin boom. With the most transparency and ability to create your own currency without a regulator's approval, blockchain attracted digital entertainment developers right away.

In 2016, Swiss company EverdreamSoft released the card game Spells of Genesis, which used its own cryptocurrency called BitCrystals. This game differs from a classical digital CCG with its action component and focus on player vs. environment battles. The game can be downloaded from the Apple App Store and Google Play. Despite its limited popularity, it introduced players to the genre and technology. The game's tokens can be bought and sold on cryptocurrency exchanges.

2017 GLOBAL
DIGITAL CCG
MARKET



BLOCKCHAIN IN GAMING

Based on the blockchain technology, Eternal Heroes is a CCG that is set in a carefully thought-out fantasy world. Here, players will complete transactions using in-game tokens called MAGE. All in-game transactions will be recorded within the Ethereum blockchain.

Using MAGE tokens, players will be able to bet against each other in PvP battles, buy limited edition card decks, and sell cards to other players at auctions. Players will also pay to participate in online tournaments using MAGE tokens. Tokens won during these tournaments can be withdrawn and sold on cryptocurrency exchanges.

MAGE tokens' price will increase the more popular the game becomes. This means that token holders will have a chance to make a profit as the currency increases in value. Players will keep their tokens in a digital wallet with two-factor authentication and all token transactions will be recorded in the Ethereum blockchain.

As such, Eternal Heroes will become the world's first CCG where players can compete with their opponents and make real money using their gaming skills.

PROJECT CREATORS

We are Game Garden. At first, we concentrated on creating social media games (Facebook, Vkontakte, Odnoklasniki, My World, NK.pl and others), but when the mobile market exploded in 2011, Game Garden switched to developing mobile games, finding our niche in this ever-growing field. Some of our most successful projects include Fairy Farm, Farmdale, Tales of Windspell, Fairy Kingdom, and Pet Heroes: Puzzle Adventure.

There are over 45 employees in Game Garden head office in Moscow, as well as developers in Minsk, St. Petersburg, and Los Angeles. In 2015, Game Garden was named a resident of the Skolkovo Innovation Center in Moscow. Our partners include GameJam Studio (creator of Punch Club) and Disney Russia.

This year, Game Garden wants to concentrate on creating a game that will allow digital CCG fans to use all the benefits of blockchain and cryptocurrency. Eternal Heroes will give regular players a platform to mine cryptocurrency and spend it outside the game in the real world.

2. GAME DESCRIPTION

Set in a fantasy world, Eternal Heroes is a multi-platform CCG battler where players will build teams of legendary heroes and test the strategic talents of their troops against other players. For the first time in blockchain's history, participants will be able to battle against each other for a chance to win cryptocurrency prizes.

Eternal Heroes' target audience is 16- to 35-year-old males interested in the fantasy genre, collectible card games, and hardcore games. We plan to promote our product on all major social media platforms, including Facebook, Twitter, Google AdWords, Unity Ads, Vungle, Fyber, and Adcolony.

WHAT MAKES THE GAME UNIQUE

- a. use of MAGE tokens, which can be bought within the game and sold on cryptocurrency exchanges
- b. limited edition cards that can be sold for tokens at special auctions
- c. regular tournaments with token prizes

GAME PLATFORM AND IN-GAME CURRENCY

Eternal Heroes will be available on mobile devices and desktop computers. Two types of currency will be used in the game:

- o crystals
- o MAGE tokens

CRYSTALS

Players will be able to enjoy all the features of Eternal Heroes using crystals – the traditional in-game currency. Crystals can be bought through standard in-game purchases using a credit card.

Players can use crystals inside the game to purchase new card sets for their decks. There will be a 30% commission charged by the mobile store for all crystal purchases.

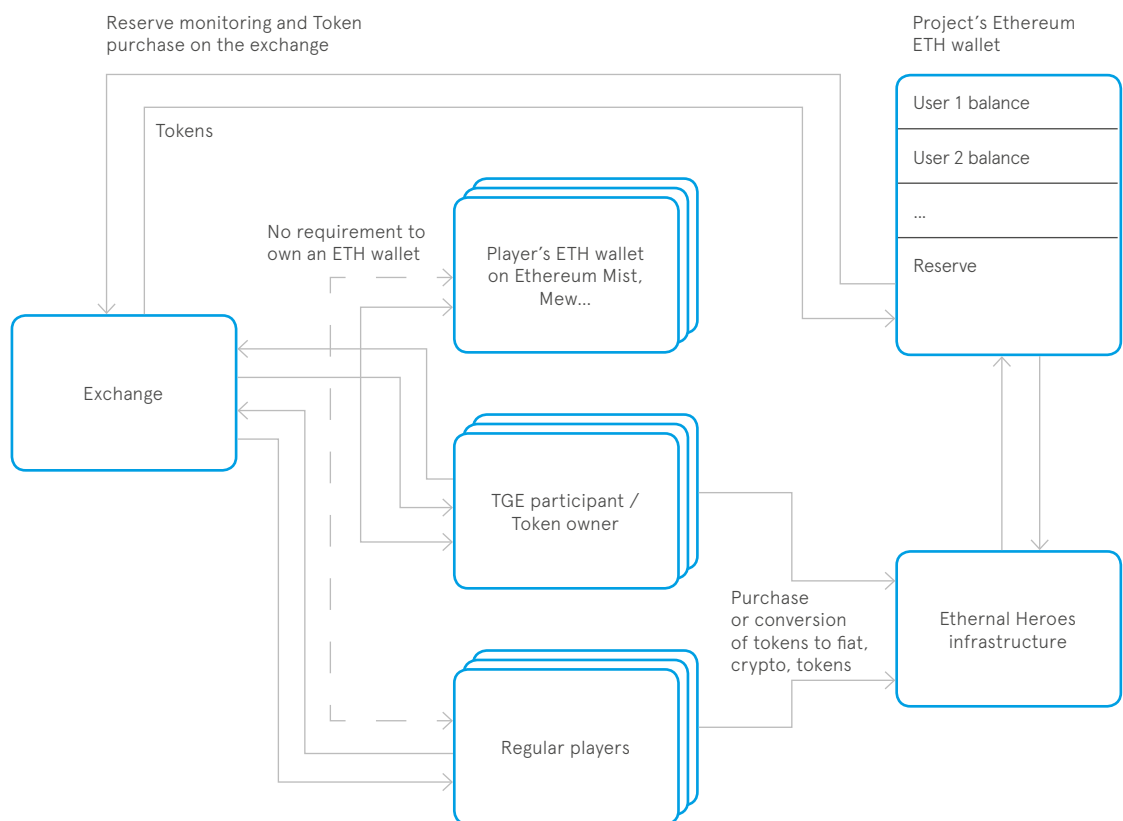
MAGE TOKENS

MAGE tokens are a digital currency used by Eternal Heroes players. MAGE is what sets Eternal Heroes apart from any competitors, because these tokens can be purchased on cryptocurrency exchanges or through a desktop application. Players can use the tokens inside the game to:

- bet on PvP battles
- pay to participate in daily and weekly tournaments
- buy unique cards at auctions

Each player who downloads the desktop version of Eternal Heroes will automatically get a digital wallet to buy and store their MAGE tokens. All wallets will use two-factor authentication to lower the risk of tokens being lost or stolen. Tokens will be deposited in the wallet after all in-game transactions. Players will be able to withdraw MAGE tokens at any time and sell them on a cryptocurrency exchange.

TOKEN ECONOMIC MODEL



MAGE tokens are ERC-20 compatible and all in-game operations will be recorded in the public Ethereum blockchain (<https://www.ethereum.org/>).

3. GAMEPLAY

THE WORLD

Eternal Heroes takes place in a fantasy world called Ethernium. For many years, Ethernium was populated by people, elves, and other creatures. The largest kingdom in the world, Medan, fell after wizards used the energy of a dark crystal to summon armies of demons into the world of people. Medan's King Baliol fought the demons and was able to stop the invasion, but he was mortally injured in battle. After his death, the kingdom found itself divided in four. The player chooses to join one of four factions: Inquisitors, Elves, Demons, or Wizards.

GAME MECHANICS

The main gameplay relies on player vs. the environment (PvE) or player vs. player (PvP) battles, in which virtual card decks are used. The player gains game experience from every battle, gradually increasing their level. At each new level, players get access to new hero cards, as well as resources that can strengthen the abilities of the cards they choose.

There are two types of cards in Eternal Heroes: battle cards and hero cards. Each card has a standard set of properties and unique abilities that make it effective in various game situations. For example, a card may have «special conditions», such as a card attack bonus for all creatures of a certain type. Hero cards can also stun the player's opponents for several moves.

COLLECTING ETHERNAL HEROES CARDS

Players get started with the core set of cards, which is a balanced beginner's deck to help the player understand the game. The starter deck remains useful as the player progresses in the game. Much like in Magic: The Gathering, players can choose cards from their deck to use before each battle. The player can purchase new cards using either the in-game currency (crystals) or MAGE tokens. Game developers will release limited edition card sets once every 3–4 months. The cards from these sets will have unique abilities and collectible value. Players can use these cards in battle against other players or sell them at auctions.

There are four tiers of card rarity in Eternal Heroes: basic, rare, ultra-rare, and legendary. Adding a legendary card to a player's deck will strengthen all of their cards and can drastically change their ability on the battlefield.

Players can get the cards by:

- purchasing them at the in-game store
- getting them as prizes for PvP battle victories
- getting them as prizes for placing at tournaments
- purchasing them at auctions from other players using MAGE tokens

BATTLES

Before a battle starts, players form a deck from all of the cards they have, picking a limited number of cards to be used during battle. Each player starts the battle with three random cards that are called the «start hand». Before each consecutive move, the player is randomly dealt one card from the deck.

The battle consists of each player taking turns to place a card from the «hand» onto the table. Players can battle to get experience (regular battle) or to obtain MAGE tokens (bet battle). Each player can have no more than five cards on the table. When the players have revealed their cards, they tap the «finish move» button.

Each of the player's cards then causes damage to their opponent's card across from it, reducing its life. When any card's life reaches zero, it is removed from the battlefield. If there is no card across from the player's card, it damages the nearest card of the opponent.

Representing the leader of the player's army, the hero card is the main card on the battlefield. The player chooses this card before each battle. The battle is lost when the hero's health has reached zero, or the player has no cards left (in the deck, in hand, or on the table).

The winner gains experience that provides access to new cards and upgrades current cards in the deck. If MAGE tokens were bet on the battle, the winnings are additional MAGE tokens that can then be exchanged for Bitcoin, Ethereum, or other popular cryptocurrencies.

TOURNAMENTS

An important feature of Eternal Heroes is its bracket tournament system. The game regularly holds player tournaments, where players of any level can participate in tournaments several times a day, if they wish. The highly developed system of leagues and divisions ensures that there will always be opponents of similar strength available for players of any level.

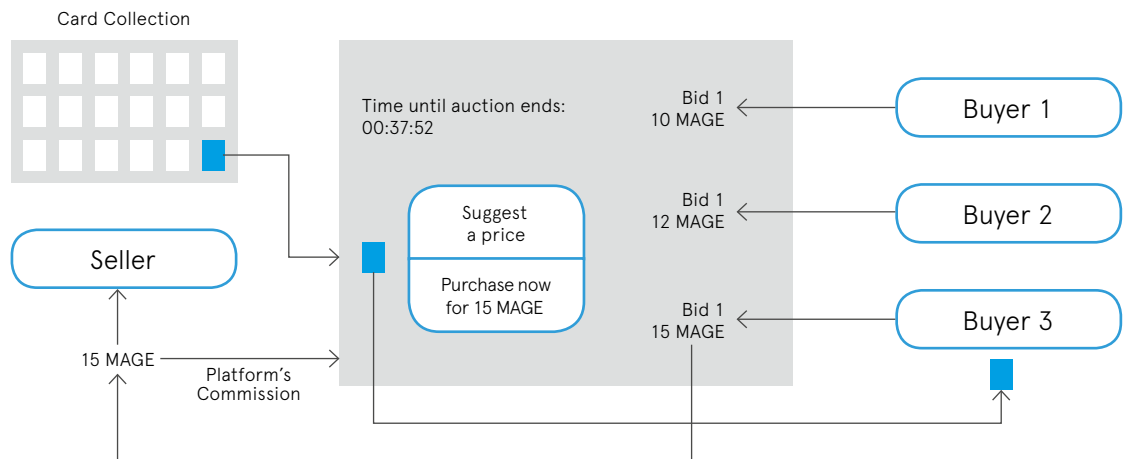
Participants of all tournaments will get access to rare cards. Most cards from additional unique card sets are given out as tournament prizes. Larger tournaments between high-level players will be held once a month. Here, players will get the chance to win unique card sets that can then be used in battle or sold at auctions.

The key mechanics of Eternal Heroes is player vs. player battles, so participating and placing in tournaments (always PvP) will give the greatest rewards. Even when players lose early in a tournament, they will still win several tokens.

AUCTION

Players can sell their cards for any price at a special auction. Players set their own prices: much like in a free-market economy, supply and demand will determine the final price of any card. Only MAGE tokens can be used to purchase cards at auctions, which makes for a separate platform where players can buy new cards or sell the ones they have.

AUCTION



Since the number of cards that can be sold is limited and cannot be changed, we predict that card prices will rise quickly and players' profits will grow as a result.

4. TECHNICAL DESCRIPTION

Eternal Heroes will be supported by most popular platforms. The full version of the game will be available on Windows and MacOS desktops. A version with limited functionality will be available on the Apple App Store, Google Play, and the Amazon Store. The limitations of the mobile versions are dictated by the rules of mobile app stores. The only difference between the mobile and the desktop version will lie in the fact that mobile users will not be able to purchase or withdraw tokens. Game play will be the same in both versions.

BLOCKCHAIN IN BATTLE

We will use blockchain technology to record tournament and battle results. All results of battles involving MAGE token bets, and the number of MAGE tokens transferred from the loser to the winner will be recorded in an Ethereum-based blockchain log.

To enter a correct record in the blockchain and save it on the server, the data from all three participants has to match. If the data received from one side is different, an error is generated and an internal investigation is launched. Players have access to the results of every battle that has ever taken place in Eternal Heroes at any time.

In the real world, transaction approval speed within any given blockchain can decrease dramatically during peak hours. In Eternal Heroes, MAGE tokens are stored and transferred between players on the server side. All of the players' MAGE tokens are located not in their personal wallets, but in the game platform itself. Each in-game account shows the current token account balance. Transactions are completed by withdrawing a sum from one token account and depositing it into another. Using this approach, we have achieved high transaction speeds during peak times.

Players can withdraw their MAGE tokens to their external wallets at any time. A similar mechanism is used on such cryptocurrency exchanges as Poloniex and Bittrex.

PURCHASING MAGE TOKENS

Players can purchase MAGE tokens in one of two ways:

- on the desktop app or the game website
- on cryptocurrency exchanges

There is a 5% commission when purchasing tokens on the game website. In the desktop version, players can purchase in-game currency using a credit card or buy MAGE tokens using any cryptocurrency.

TECHNICAL DEVELOPMENT TOOLS

Leading software and tools will be used to develop Eternal Heroes. We chose to use a Unity engine (C#) for all front-end operations because it allows us to release projects across multiple platforms (iOS, Android, etc.), fully supports complex visual effects and animation, and allows for high development and testing speeds.

The front end communicates with the server using HTTPS protocol.

Golang microservices will be used on the server side.

5. ROADMAP

JUNE 2017	project born, concept developed
JULY 2017	team formed
AUGUST 2017	game development started
OCTOBER 2017	Private Placement
NOVEMBER 2017	Token Generation Event
NOVEMBER 2018*	release of beta version
DECEMBER 2018	soft launch
MAY 2019	global launch
AUGUST 2019	token auction launch

* A closed beta version will be developed from November 2017 to November 2018. During this time, developers will publish their notes monthly on an open information site, discussing how the project is growing and uploading videos demonstrating gameplay.

6. TOKEN GENERATION

We will hold a Token Generation Event (TGE) in November of 2017. As part of the TGE, we will release 100 million MAGE tokens out of the total number of 160 million.

BONUSES FOR TGE PARTICIPANTS

TGE participants will receive bonuses in the form of additional tokens and two unique playing cards. These cards (Surami Pirate and Roderick the Paladin) will be released in very limited numbers only during the initial generation event. The cards will give their owners unique advantages in PvE and PvP tournaments. After Eternal Heroes is released, the price of these cards can rise dramatically. Participants of the initial generation event can sell the cards for cryptocurrency, which can then be exchanged for real money.

ADDITIONAL
BONUSES
FOR TGE
PARTICIPANTS



Over 4 000 MAGE purchased
RARE CARD
SURAMI PIRATE

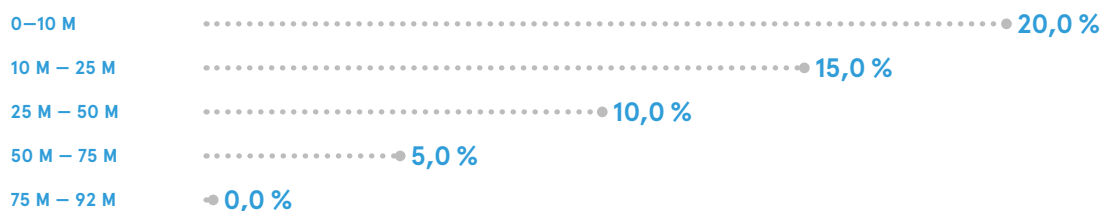


Over 12 000 MAGE purchased
LEGENDARY CARD
ST. RODERICK THE PALADIN

The token bonus size depends on the total number of tokens purchased and will decrease with time. In addition, by purchasing a certain number of MAGE tokens, TGE participants will receive bonus cards that can then be sold at auctions.



DISTRIBUTION OF BONUSES FOR EARLY TGE MEMBERS



After Eternal Heroes is released, Game Garden plans to increase the number of daily active players from 50 000 to 100 000, which will allow players to always find a well-matched opponent and increase auction activity.

TOKEN DISTRIBUTION

The first Eternal Heroes token generation event will be as follows:

ETHERNAL HEROES TOKEN DISTRIBUTION

Token allocation	Number of tokens
TOTAL NUMBER OF TOKENS	160,000,000
NUMBER OF TOKENS RELEASED FOR TGE	100,000,000
TEAM	15,000,000
CONSULTANTS	3,000,000
PRIVATE PLACEMENT	5,000,000
REFERRAL PROGRAM	2 000 000
CIRCULATING RESERVE	35,000,000

EXPENDITURES

Profits from the TGE will be used to complete Eternal Heroes development, release a beta version of the game in specific locales, and purchase the initial player traffic.

ETHERNAL HEROES FUNDS DISTRIBUTION

AMOUNT	\$1,500,000	\$2,500,000	\$3,500,000	\$5,000,000
DEVELOPMENT TIME (MONTHS)	18	24	24	24
EVENTS		1	3	5
ADDITIONAL CARD SETS	1	2	3	5
PLOT CAMPAIGN		+	+	+
ALLIANCES			+	+
DEVELOPMENT TEAM BURN RATE	60,000	70,000	85,000	100,000
FULL DEVELOPMENT CIRCLE	1,080,000	1,680,000	2,040,000	2,400,000
MARKETING	420,000	720,000	1,160,000	2,100,000
EVENTS (COST)		100000	300000	500000
MARKETING	420,000	720,000	1,160,000	2,100,000
EVENTS (COST)		100,000	300,000	500,000