

BITCOIN EMPIRE *To The Moon*

Bitcoin Empire: Collectible Trading Cards Facilitated by Nextgen Blockchain Technology

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Abstract

Blockchain technology is disrupting the world in profound ways that we are only just starting to comprehend. However, most people don't understand the power of this technology, why it's so important, or how they might become a part of it.

Bitcoin Empire will develop an open trading card web platform for users at all levels of technical expertise, which will make blockchain technology accessible to everyone, breaking down the barriers to entry while providing a fun and engaging game. This web platform will use the brand new non-fungible token system introduced by Dieter Shirley in late 2017 and will run a revenue-based trading system rather than a bitcoin-like cryptocurrency.

Beyond the collectible trading card platform; Bitcoin Empire will grow into a multifaceted gaming company with key decisions regarding future growth driven by the community.

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Disclaimer

Please be aware that this whitepaper is provided for informational purposes only and does not and will not create any legally binding obligation on the authors or on any third party. This document will set out the current and future developments of Bitcoin Empire tokens (BEM) and Bitcoin Empire, the company. This paper is for information purposes only and is not a statement of future intent. Bitcoin Empire tokens (BEM) are not available to citizens of The United Kingdom of Great Britain and Northern Ireland, The United States of America, The People's Republic of China, The Republic of Singapore or Australia.

Market Analysis

Trading Card Games (TCGs)

Trading Card Games (TCGs) has been a mainstream form of entertainment ever since Pokémon emerged from the obscure hobby market. In North America alone, TCG sales were estimated to be \$800 million for 2008 leading to numerous animated television shows based on TCG brands.

Outside of traditional media, massively multiplayer games have gained popularity as interest has increased in TCG. World of Warcraft by Blizzard/Activision had 11 million subscribers worldwide at one point and has experience substantial success with it's TCG spin-off. Many other global gaming companies like Disney, Nexon and Sony have created TCG to complement their virtual worlds.

TCGs are sold via two different channels: mass market retailers and hobby game stores. Games sold at mass market retailers (i.e., Walmart, Target, etc.) tend to target a younger demographic (children ages 6-14), which include Pokémon, Bakugan, and Yu-Gi-Oh! Alternatively, games sold at hobby game stores tend to target an older demographic (ages 16 and up), which include Magic: The Gathering and World of Warcraft.

TCG Secondary Market

Due to the collectible nature of trading card games, there is a robust and active secondary market. A substantial part of the trading card game genres success originates in the search for and trade of rare cards. If we look at the total number of cards on offer for each title, and multiply it by the average asking price, we see that the total eBay secondary market on a specific day can amount to just south of one million dollars.

TCG Secondary Market, Dollar Sales by Title

Title	Units	Avg. Price for a rare card	Appr. Value (incl. common cards)	Market Share in Dollar Value
Magic The Gathering	345,986	\$4.32	\$438,979.20	46.8%
Yu-Gi-Oh!	79,682	\$7.51	\$221,170.34	23.6%
Pokémon	34,474	\$7.56	\$92,103.60	9.8%
World of Warcraft	17,467	\$9.38	\$47,551.20	5.1%

Source: eBay Stores, SuperData Research (2010)

The volume of available cards for Magic: The Gathering overwhelms that of other titles. Yet the total value gives it only 46.8% of the total market, compared to the 57.2% it holds when measured by volume. In dollars, the second-runners up gain in market share: Yu-Gi-Oh! claims 23.6% (13.2%), Pokémon 9.8% (5.7%) and World of Warcraft 5.1% (2.9%).

Digital Collectible Card Games (CCGs)

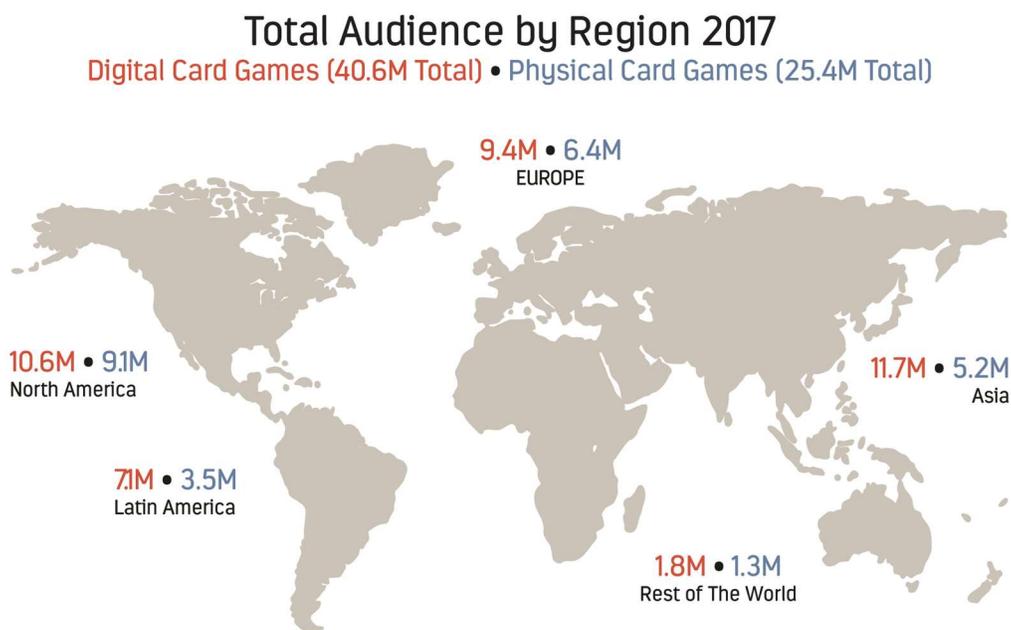
The Digital Collectible Card Games (CCGs) market emerged with the adoption of smartphones and tablet devices and now they are here to stay. The blue-chip generated \$5.73 billion in 2017 across digital and physical. While physical still dominates the market, digital CCGs have been bolstered by major new entrants, including Blizzard's titan, Hearthstone: Heroes of WarCraft. As this market continues to grow and mature, making the best use of a slower-growth audience becomes imperative. Strategies must change from acquisition of this loyal fanbase to increase conversion and spending, and retention will be key.

Hearthstone: Heroes of Warcraft earned roughly four times as much as its closest competitor in 2016 and is forcing the digital Collectible Card Game (CCG) market to transform. Before Hearthstone exploded onto the scene, the digital CCG landscape was largely divided between simple CCGs on smartphones and complex PC/Mac titles that closely resembled tabletop games. Hearthstone changed player expectations. Users now expect deep gameplay in mobile titles and want to play on the same account across multiple devices.

Shadowverse is 2016's standout digital CCG, earning \$100.1M despite launching halfway through the year. The game is part of a new wave of CCGs and has deeper gameplay than its predecessor, Rage of Bahamut.

Modern Card Gaming Audience

Today, digital card games have a much larger audience than physical card games. This is especially true in Asia due to the recent popularity of Hearthstone: Heroes of Warcraft.



Unlike physical card gamers; digital card gamers are investing a huge amount of time and money into developing their online accounts. Trusting gaming companies to save and secure their progress on their servers. With no guarantee that the gaming company won't

discontinue support, delete their game data, fall victim to hackers or lose their data through any number of future business decisions.

Industry Overview

Background

People of all ages have been enjoying trading cards for more 100 years. It's a concept that people understand and one with which many people feel comfortable. Today, the development of the internet has given rise to various communities through which members trade collectables.

Key Problems with the Industry

Physical collectibles are subject to numerous encumbrances: they can be forged, lost, stolen, damaged and they must be shipped or transported between owners.

Although digital trading card platforms currently exist, they are run by centralized authorities that have the power to control who owns what and the ultimate power to shut down the servers. This can be extremely frustrating for people that have invested a lot of time and money into a game, only to have the game creator decide to end the service.

Solutions

Since the invention of bitcoin, blockchain technology has solved all of the physical world problems listed above. Collectable items (cash and trading cards being the two most obvious examples) can now be created, traded and destroyed in a completely transparent, trustworthy way. Collectable items on the blockchain can never be stolen and the service can never be shut down as it is completely decentralized and powered by miners all over the world.

The Bitcoin Empire trading card platform is the perfect way to introduce novices to non-fungible tokens on the blockchain and also provides a unique and fun experience for those more familiar with cryptocurrency and the blockchain.

Introduction to Bitcoin Empire

Background

After watching the 2014 documentary “The Rise and Rise of Bitcoin”, David Thomas became interested in bitcoin—the story of crypto-currency fascinated him. He thought that this would be a fun subject to parody. A fan of card and board games such as Glory to Rome, The Resistance, and Dragon’s Hoard, David pondered the idea of a card game where each player becomes a famous bitcoin personality, and bitcoins are represented by face down cards. He started drawing on decks of poker cards with a permanent marker and created a collection game that was no fun at all...until he realized the missing piece: the game needed to reward players for developing their character and punish players for ignoring skills and greedily collecting bitcoins. When the three attack cards, Lawsuit, Smear Campaign, and Hack were added, Bitcoin Empire was created.

The first edition of Bitcoin Empire was funded on Kickstarter in November 2016 and was later taken to retail. The second edition titled “*To The Moon*” was funded in February 2018.

The Blockchain

In December 2017, we witnessed the first mainstream use case for the non-fungible token standard through CryptoKitties on the Ethereum blockchain. With this technology established, Bitcoin Empire will now make the exciting transition from a real world, tabletop card game to the blockchain.

Product

Brand & Press Coverage

Conceived in 2016, the Bitcoin Empire brand is well established and trusted. The Bitcoin Empire tabletop card game was crowdfunded on Kickstarter and is currently retailing at crypto-themed online stores.

Regarding press, Bitcoin Empire has been recognized in multiple online publications. These include bitcoin.com, Digital Money Times, Coin Report, Wall-Street.com, The Street

Insider, Bitcoin Uncensored, Bitcoinist.net, BitScan, BitcoinEZ, Cryptoveristy, Board Game Brawl, The Unfiltered Gamer and many others.

Card Game Product

Bitcoin Empire, a tabletop card game for 2 to 4 players, is designed to help you understand the crypto market. The fledgling blockchain industry can be cutthroat and brutal, but this economic simulation game is much deeper than your average 'Take That!' game. It's packed with subtle references to real life news stories, so it's a great way to introduce your friends to cryptocurrency in a light-heated and educational way.

In the game, each player grows an empire collecting bitcoins (represented by facedown cards). As a player, you build exchanges to increase wealth, but face challenges from other players who will attack you with lawsuits, smear campaigns, and hacks if you don't develop the skills to defend yourself. At the end of the game, the player with the most bitcoins wins the game.

For a complete description of how to play, rules, and bonus rules, find more information here: <http://bitcoin-empire.info/how-to-play/>

Web Platform Product

Bitcoin Empire will build on the already well established tabletop card to create an online web platform for trading digital, collectable cards built on the Ethereum blockchain. Using Bitcoin Empire tokens (BEM), the cards can be not only bought and sold, but can also be printed and used to play the Bitcoin Empire tabletop card game.

When the Ethereum smart contract is created for the web platform, 10,000 trading cards will be generated and rewarded to users holding BEM tokens at that point in time. They will be showcased on the web platform and available for people to buy with Bitcoin Empire tokens.

Like the tabletop game, each card will have different statistics in law, coding, marketing and a storage capacity. Additionally, each will have associated attributes, some of which may be common and others may be very rare making some cards more valuable than others. All of these statistics will be deterministically derived from a random 256 bit number generated by the smart contract and distributed in the blockchain. This number will be referred to as the card's DNA.



Card name: Moon Bear
Trading Card: #491781
Generated: January 31, 2018 at 7:30 PM UTC
Generation: 8

Owner: 0xb8Ee8B4f54Dcbd8fBbA37BA575F215aef019368e
Block number: 0x4c67ea

Block hash:
 0xcec9dae9d44e714a5f8bea7e7c41551a572be46a5a6147d5465023a79a3f2c2c
Attributes: 0xb1ba66ca42752eee327048849155d65ec81fbef6

DNA: 99ad 7768 f2aa 9a19 64d6 812k e55m 1gkr 2d7o 6719 d96n e2gg

In addition to buying and selling existing trading cards, people will have the ability to generate new random cards for a small fee. Anticipating the statistics of the new card is exciting and the number of possible combinations are endless. There is no limit to the number of new cards that can be generated. Some newly generated cards may contain rare or valuable statistics that have a high market value so there is an incentive for users to create new cards to sell.

All interactions on the web platform will incur a fee of 4% paid to Bitcoin Empire. This is very similar to the 3.75% commission collected by the CryptoKitties platform.

Web Platform Functionality Facilitated by the Ethereum Blockchain

User Action	User Payment (BEM)	Gas Price (ETH)	Web Platform Commission
Buy a trading card	Set by seller	Set by MetaMask	4%
Sell a trading card	0	Set by MetaMask	0
Gift a trading card	0	Set by MetaMask	0
Generate a trading card	5	Set by MetaMask	4%

Trading Cards as an Educational Tool

The game mechanics behind the new Bitcoin Empire web platform are connected to actions on the associated crypto wallet. By introducing a new audience to previously abstract concepts related to cryptocurrency, users are empowered with a basic fluency in the technology.

At launch, users will be required to download and install the MetaMask browser plugin. However, we are open minded to alternatives to MetaMask as a login solution as the crypto industry evolves. For launch, we will set up straightforward guides to make the process as easy as possible.

Further Development of the Web Platform

The web platform will continue to evolve once it has been released to the community. We plan to develop various voting systems in which users can vote for which trading cards they like, or which future developments they would like to see on the platform. Ideas include lotteries, reward systems, giveaways and special cards that relate to Bitcoin news stories. These exciting applications will utilize BEM tokens.

Online Gaming and Gambling Platforms

Once we grow the company, we plan to develop an online gaming platform. This gaming platform will run in the browser and simulate the Bitcoin Empire tabletop game. Allowing owners of digital trading cards on the web platform to play games against others using their cards. For security, this gaming platform will be centralized and there will be no financial reward for climbing the leaderboard.

We also plan to develop a system in which users enter their trading cards or BEM tokens into a simple game of chance. Similar to a coin toss or dice roll simulation. The loser would then gift their trading cards or BEM tokens to the winner. This system could be handled by the Ethereum smart contract for complete transparency.

Future Game Branding

Although all of these games and platforms will belong to the Bitcoin Empire company; the branding of future games and services will be kept confidential until they officially launch to the public. This is to protect the brand, business name and ensure that rival businesses do not steal the name before launch.

Technology

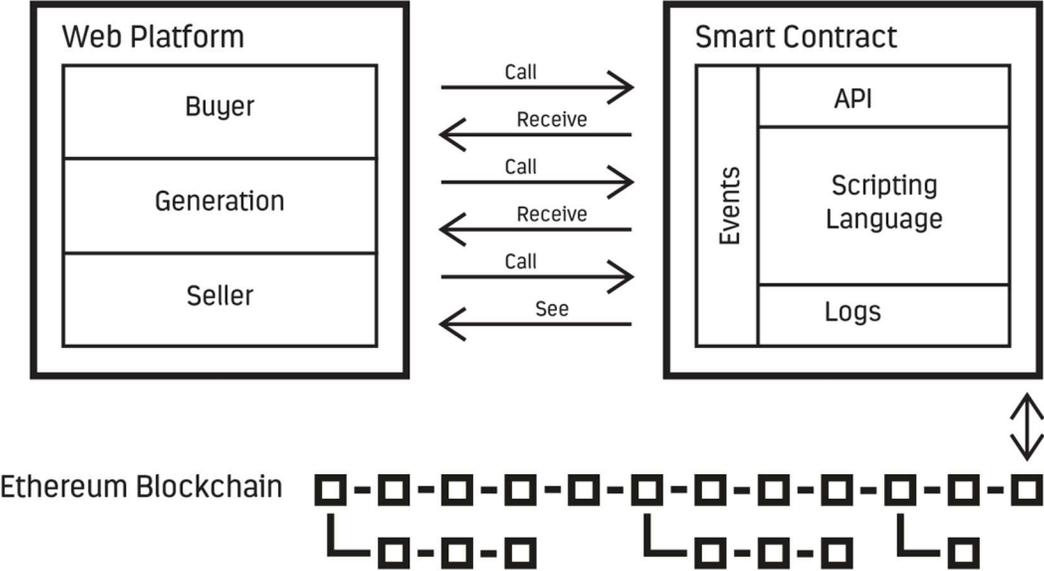
Bitcoin Empire will develop two Ethereum smart contracts.

1. The first contract will use the ERC20 token standard interface to create a cryptocurrency. This currency can be held as a speculative asset, but it also has the utility of being used to buy and sell trading card collectables through the second Ethereum smart contract. Bitcoin Empire will use the cryptocurrency to crowd fund development of the web platform and the second Ethereum smart contract.
2. The second Ethereum smart contract will use the new ERC721 non-fungible token standard. This contract will underpin the open web platform developed to tokenize the trading cards.

This is a concise declaration of an example ERC721 contract.

```
contract ERC721 {
    // ERC20 compatible functions
    function name() constant returns (string name);
    function symbol() constant returns (string symbol);
    function totalSupply() constant returns (uint256 totalSupply);
    function balanceOf(address _owner) constant returns (uint balance);
    // Functions that define ownership
    function ownerOf(uint256 _tokenId) constant returns (address owner);
    function approve(address _to, uint256 _tokenId);
    function takeOwnership(uint256 _tokenId);
    function transfer(address _to, uint256 _tokenId);
    function tokenOfOwnerByIndex(address _owner, uint256 _index) constant returns (uint
tokenId);
    // Token metadata
    function tokenMetadata(uint256 _tokenId) constant returns (string infoUrl);
    // Events
    event Transfer(address indexed _from, address indexed _to, uint256 _tokenId);
    event Approval(address indexed _owner, address indexed _approved, uint256
_tokenId);
}
```

The web platform (facilitated by MetaMask) will communicate with the Ethereum smart contract via call, receive and see requests. Each interaction with the contract will be recorded on the Ethereum blockchain which acts like a public ledger.



At the time of creation, users holding crypto-currency in the first contract will be rewarded with free tokens in the second contract.



Bitcoin Empire Tokens (BEM)

The cryptocurrency used to trade cards on the web platform is BEM tokens. Prior to this utility, these tokens will be sold to fund the development of the web platform. Users holding BEM tokens at the time that the trading card smart contract is instantiated on the Ethereum blockchain will be rewarded with some of the first 10,000 trading cards (1 free trading card for every 2,000 BEM held).

20 million BEM tokens will be created in an open source Ethereum smart contract. Each BEM token will be broken down into 18 decimal places. 20 million BEM tokens is the finite supply and will not be increased.

The tokens will be distributed as follows.

BEM ICO	50%	10,000,000
Company Reserve	25%	5,000,000
Developers	10%	2,000,000
Future Reserve	15%	3,000,000
Total	100%	20,000,000

Exchanged currencies will be used as follows.

Project Development	65%
Platform Marketing	20%
PR & Marketing for the ICO	5%
Legal Counsel	3%
Regulatory Compliance	3%
Management Dividend	2%
Developers Bonus	2%

Bitcoin Empire reserves the right to use all tokens in its form or exchanged to other currencies for the development of the blockchain technology, growth of the platform and global market development to increase the number of blockchain users of the platform.

BEM TOKEN ALLOCATION & ICO BREAKDOWN

20% PRE-SALE

Buyers will be rewarded with 20% free of charge.
Dates to be announced early 2018.

50% PLATFORM DEVELOPMENT

Distributed between company reserve,
developers and future reserve.



25% PUBLIC SALE

Distributed for ETH through the
Ethereum smart contract.
Dates to be announced early 2018.

5% PRIVATE SALE

Buyers will be rewarded with
40% free of charge.
Dates to be announced early 2018.

5% will be sold in a private sale with 40% rewarded for free. 20% will be sold in the pre-sale with 20% rewarded for free. 25% will be sold to the general public via the Ethereum smart contract.

Team



CEO - David Thomas

David Thomas, software engineer, graphic designer and web developer, created the game. He is an early cryptocurrency investor who traded his life working at some of the biggest digital agencies in Europe to follow his passions of board games and bitcoin, the currency of the future.

David has a diverse skill set. Having contracted at over 15 companies around the world in roles ranging from music website editor to database developer, he has the skills necessary to make Bitcoin Empire a huge success.



CTO - Chris Kuznetsov

Chris has 13 years of experience in software development and systems engineering. He has deep technical competence in design, implementation, rollout and support of enterprise-level, distributed systems.



CMO - Mia Liu

Mia has over 10 years marketing experience in fashion, arts and entertainment. She has strong communication skills and the ability to communicate effectively with technical and non-technical audiences. She is the CEO and founder of Mia-Mia talent agency and an advisor for CoraSwim and Mint Model Agency. She is also a crypto investor.



COO - Chris Lenaghan

Chris is an experienced project manager and team leader with a background in both creative and technical fields. He's worked in web and print based design, computer games, video production, marketing and usability research as well as technical and training roles at Microsoft for their cloud based platform.



Consultant - Maximilian Mai

Max is the co-founder and COO of Blockwise, an ICO consulting company offering tailored solutions to blockchain start-ups reaching from seed fundraising over marketing and community building to crowdsale conduction and eventual exchange listing. Fluent in mandarin Chinese and having lived in China for several years, Max has strong intercultural skills and a network of business contacts and partners. Max has been investing in cryptocurrencies since 2016 and has since participated in numerous ICOs as an investor and adviser.



Adviser - Louise Elizabeth

Louise is an experienced investor in property and cryptocurrency. Her Youtube channel Crypto Lou has acquired nearly half a million views in less than six months. With a mission to help and educate others about cryptocurrency, Louise has a lot of knowledge since she first invested in Bitcoin back in 2013.

Roadmap

2016

Bitcoin Empire tabletop card game developed, prototyped and play tested
Bitcoin Empire (First Edition) card game crowdfunded on Kickstarter

2017

Design work and space themed concept artwork developed for new edition
Bitcoin Empire: To The Moon card game crowdfunded on Kickstarter

2018

Creation of the first contract - ERC20 on the Ethereum blockchain
Private sale of BEM tokens
Pre-sale of BEM tokens
Public sale of BEM tokens
Development of the second smart contract and web platform on the test networks
Alpha version of the web platform released for user testing

2019

Beta version of the web platform released for user testing
Creation of the second contract - ERC721 on the Ethereum blockchain
10,000 trading cards created and distributed to holders of BEM tokens

2020

Capital generated by commission of users trading and generating cards on the web platform
Further development of the web platform. Voting system and regular rewards and updates
New edition of the physical card game

2021

Future development of the web platform and physical card games driven by the community
Online gaming platform development

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