HTMLCOIN

Althash White Paper

Version 1.0

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Abstract

The concept of "cryptocurrency" being a method of exchanging wealth without the need of a 3rd party began with Bitcoin in 2008. Upon its introduction, Bitcoin was merely a white paper with a novel idea. But the idea caught on and has grown from a fledgling idea into a bonafide global phenomenon, giving rise to a financial, social and cultural revolution.

Blockchain technology is the basis behind most cryptocurrencies. A blockchain is a growing database / public ledger which uses cryptography to secure the blocks together in a growing chain of blocks where the information stored is impossible to alter or delete.

What gives blockchain technology its allure can be honed down into four main factors:

A) Transparency – The public has access to the distributed ledger with all the transactions.
B) Trustless – A trust factor is distributed among different nodes in the network via an economic game of incentives that require nodes to follow a set of protocols to authenticate new blocks of data on the blockchain.
C) Decentralised – The blockchain doesn't rely on a single point of authority but rather a network of nodes that need to reach a consensus.
D) Immutable – Once data is confirmed into the blockchain, that data has to be authenticated by multiple nodes for any future data to be confirmed.

The average person knows very little about the cryptocurrency world, having no idea that there are thousands of different alternative cryptocurrencies available, and more are being added daily. The world is at the early stages of a blockchain and crypto currency boom that has the potential to change our world drastically. Htmlcoin and Althash will play a major part in this global change. With a committed team, we plan to establish ourselves as a recognized brand in not only global cryptocurrency blockchain transactions but in utilizing the blockchain to solve real-world problems.

Introduction to Althash and Htmlcoin.

The Distinction Between Htmlcoin And Althash

Htmlcoin started out in 2014 as a clone of the Bitcoin code. While there was never an ICO or public offering for Htmlcoin, the project still attracted a significant community of crypto enthusiasts, supporters and developers with a shared vision of making blockchain technology available throughout the world for all income levels.

The name itself, "HTMLCOIN" evokes the legacy of HTML, the markup language behind most websites on the Internet and we use it as a symbol for our shared vision: an open business model accessible to all who master the "syntax" of participating in the decentralized digital economy.

However, being "just a coin" was not enough to reach our goals. We had a much bigger vision and that required not just a big change, but a revolution. Our development team looked into multiple ways to improve Htmlcoin, but the one solution which stood out for everyone was for our project to become a smart blockchain platform that allows anyone to develop and launch their own crypto projects at very low cost. We needed our platform to be secure, flexible and fast, but most importantly, low cost. We also realized that we don't need to reinvent the wheel, but rather adapt and optimize some of the great technologies that have already been developed open-source.

From several projects we found QTUM to be the blockchain that most closely matched our needs. We decided to use its open source code as the main building blocks for our own blockchain platform, on top of which we introduced alternating PoW (Proof of Work) and PoS (Proof of Stake) blocks for much improved 51% attack prevention.

We then launched the new smart blockchain platform in Q4 of 2017 followed by swapping the old HTML5 coin to the new HTML coin at a 1:1 ratio.

In 2018, the blockchain was rebranded to make the distinction between the cryptocurrency Htmlcoin and the blockchain, which with the help of our great community, we named Althash. Htmlcoin and Althash are developed, supported, and promoted by the Htmlcoin Foundation and its loyal community.

Althash Blockchain Features:

- Genesis block on September 23rd 2017 at 5 pm GMT;
- Blockchain undergoes a halvening every 14.6 years;
- Dual alternating consensus, PoW (Proof of Work) and PoS (Proof of Stake);
- 1 minute blocktime;
- Miners reward of 1,250 HTML (March 2021);
- Total supply of 81,862,913,750 HTML (March 2021);
- Runs AVMs (Althash Virtual Machines) for hosting Smart Contracts, DApps and other blockchain applications coded in Solidity.
- Extendable design – for adding AVMs (Althash Virtual Machines) to run Smart Contracts written in languages other than Solidity;
- Account Abstraction Layer which allows account-based VMs to function on a Bitcoin-based UTXO blockchain (for improved security).

The new blockchain, however, was only our first step towards reaching our goals and making our vision a reality. After having delivered on a smart blockchain that is secure, flexible, fast and low cost, we now needed to reach out to the people who would most benefit from our solution – and that meant we needed to start focusing on education.

We strategically formed an Althash Education team to start drawing out plans for an educational body and platform to provide the necessary training to all people who want to learn about blockchain, cryptocurrencies and coding on Althash.

With this in mind, in 2019 we have established Althash University as an official educational body registered in the state of Illinois. Althash University helps people not just learn the tools of many new trades but become certified professionals in the new industries that have already started to spring out from this crypto-revolution.

Vision and Goals

The pace of change in the world today is ever increasing and we have human spirit and technology to thank for that. The ways of the past are starting to change, not due to pressure from regulatory bodies but rather from lack of relevancy via the advent of new technologies and their widespread adoption.

While the Internet has made information widely available and easily accessible, blockchain technology is providing an even greater extent of availability for value exchange but with a much more secure, yet decentralized framework. Whether to mitigate fraud or eliminate unnecessary middlemen, blockchain has its place in every industry. Wherever there is an element of trust needed or data to be authenticated, blockchain provides a revolutionary solution to injustices and inefficiencies.

At the Htmlcoin Foundation we are striving to bring about the changes that we want to see in the world by providing the education and tools necessary for anyone to take part in the new world of decentralized applications and permissionless transfer of value. We have built the Althash Blockchain with a goal to constantly improve and expand its infrastructure in order to accommodate new developments prone to spring out of this blockchain revolution.

The Htmlcoin Foundation via the Althash Blockchain provides a secure, flexible, fast and low-cost smart blockchain solution. We are consistently testing and using all occasions to improve the Althash Blockchain. We promote our solutions to businesses, government entities, entrepreneurs and individuals. The Htmlcoin Foundation will always have a secondary focus on creating decentralized applications that can be used in numerous settings by both businesses and individuals.

The Htmlcoin Foundation has a threefold objective:

- Maintaining and advancing the development of Althash as a secure, flexible, fast and low-cost smart blockchain platform through a focus on maintaining the development of the foundation of the platform
- *Promoting the creation of a diverse range* of decentralized applications to solve real world problems.
- *Providing the opportunity to third party developers to create and implement their ideas, projects and businesses on the Althash Blockchain.*

Technology Application

Economically Althash strives to:

- Utilize mobile technology as a tool to facilitate payments.
- Facilitate the adoption of Htmlcoin as a store of value.
- Work to make the adoption accessible to all businesses and people.

Developmentally Althash strives to:

- Provide a strong, stable, and robust cryptocurrency.
- Build and maintain a sound support infrastructure.
- Offer an integration layer (API) for developers to build products that communicate with the Althash Blockchain.

Educationally Althash strives to:

- Educate people about blockchain technology, cryptocurrencies and.the potential therein to create a better world.
- Promote research about Blockchain technology and decentralized applications.
- Provide a platform for people to gain education and blockchain technology credentials.
- Share knowledge regarding blockchain technology with schools, universities, and training centers to help expedite the next generation's adoption and application of this technology.

Globally Althash strives to:

- Facilitate the development of the Htmlcoin community throughout the world.
- Secure and promote good relations with the financial and developer communities.
- Spread awareness about Htmlcoin to the mainstream.
- Provide an accessible, low-threshold blockchain platform that can be utilized by both small businesses and large multinationals.

Civically Althash strives to:

- Make blockchain accessible to everyone.
- Educate, support, and encourage people to utilize the blockchain to harness their digital potential.

The value of the Althash Blockchain resides in its smart contract-based projects and the services offered on its platform.

▪ Enterprises, communities, and projects can use the Althash Blockchain to collect funds and run their businesses.
▪ Users can support crowdfunded or established projects running on Althash.
▪ Users will use Htmlcoin as gas for transactions on the network.
▪ Businesses and users will use the Althash platform for communication and educational purposes.

The innovative construction of the Althash Blockchain allows for a wide variety of concepts to be realized. All types of companies, governments and communities can develop their ideas and projects on the Althash blockchain.

Smart Contracts

Smart contracts on the Althash blockchain are coded exactly like those built on the Ethereum blockchain. Htmlcoin serves as the gas for all transactions and data entries onto our Althash Blockchain. Htmlcoin is a utility coin.

The Althash Blockchain

When developing the Althash Blockchain, we recognized the importance of Bitcoin and Ethereum. We wanted to build a blockchain that utilizes aspects of both cryptocurrencies but we also wanted to build something that was easy to use and accessible to all. The result is an open source blockchain platform that brings together the best features of both Bitcoin and Ethereum, and allows the creation of decentralized applications. It utilizes the UTXO model of blockchain infrastructure but with modifications that make it unique. The Althash blockchain focuses on the practical applications of smart contracts. It also focuses on decentralized application development. Since the smart contract transaction fees, known as gas, are paid with Htmlcoin. The Althash Blockchain is powered by Htmlcoin.

The Althash Blockchain uses the UTXO model to ensure the consistency of transactions and the traceability of tokens. It allows smart contracts that were originally developed for Ethereum to also function and operate on the Althash Blockchain. With the Althash Virtual Machine (AVM) developers will be able to use the programming language of their choice to develop programs that compile to the machine language code that the blockchain reads. The UTXO model on the Althash Blockchain combines the advantages of both Bitcoin and Ethereum.
Developers can check this repository for more information about integration on Althash.

Features and Enhancements

- Real Time Checkpointing
- Broadcasts block height
- Enhanced Hash Rate Compensation
- Two PoW/PoS Difficulty Adjusts
- Hybrid Bitcoin/Ethereum
- Althash Virtual Machines (AVM)
- Smart Contracts
- Smart Contract Protocol
- Simple Payment Verification
- Decentralized Applications (Dapps)
- Account Abstraction Layer

How Althash Works

The Althash Blockchain is an open source project which we thoroughly believe is the way forward. It provides us with the opportunity to innovate with a disruptive technology that ultimately brings power and freedom back to the people. We are able to build upon the latest and greatest technologies and innovate with little restriction. We, in turn, share our innovations for others to build upon and they, in turn, will share and share alike, which encourages and promotes an endless cycle of creation. This is the world of open source.The Althash Blockchain uses Unspent Transaction Output (UTXO) – based Smart Contracts. With a UTXO-compatible blockchain, Htmlcoin allows Bitcoin developers to use a wide range of developer tools. Like Bitcoin core, Althash uses the Standard JSON-RPC-based API service, which allows DApp services developed on the platform to be accessed through a web browser.

Proof of Work (PoW) vs Proof of Stake (PoS)

To verify and validate a transaction or a block, Bitcoin, Ethereum, and many other blockchain platforms use the Proof of Work (PoW) consensus model. In a PoW consensus system, the creator of a new block is determined by certain mathematical algorithms. The biggest challenge with PoW is that it requires high computing and electrical power.

Proof of Stake (PoS) is a newer consensus model that determines the creators of new blocks based on the stake which is the amount of coins "locked" in participating wallets in order to provide security for the network. It reduces energy consumption compared to PoW and it rewards the staking wallets with minted coins in exchange for securing the network. To stay at the forefront of this innovation, Althash uses the PoS 3.0 protocol.

The Althash Virtual Machine - AVM

As an UTXO-based smart contract platform the Althash Blockchain uses the same Remote Procedure Calls (RPC) as Bitcoin. We chose this framework and further selected a PoS consensus model for its ability to facilitate a decentralized app building platform. It ensures traceability and consistency of blockchain transactions.

Ethereum, on the other hand, uses an account-based system wherein the state is defined by objects called accounts, and account balances are managed in the account system. The Ethereum blockchain uses stack-based virtual machines called EVMs. These 256-bit EVMs execute smart contracts that run on the Ethereum platform.

As the Althash Blockchain platform is based on the UTXO model an interface that translates the UTXO model to an account-based model was required. The AVM integration interface facilitates EVMs to work on the Althash Blockchain without requiring any changes to the EVMs. Using the AVM Integration Interface, developers and users can easily work with both Bitcoin and Ethereum protocols. This makes Htmlcoin a hybrid cryptocurrency that can be used in a wide range of industries across the globe.

Htmlcoin Gas Model

Htmlcoin has imported the gas model from Ethereum. In the gas concept, every transaction executed has a price. When a transaction happens, more than enough gas is spent and the remaining left over gas is refunded to the senders change address. When creating a contract, the gas limit and the price is determined in Htmlcoin. Gas refunding is done either fully or partially.

Compliance

Althash and Htmlcoin have not and will not raise funds using an Initial Coin Offering (ICO) or other source of public investment. As the body of regulatory requirements in the cryptocurrency and blockchain tech space grows, Althash and Htmlcoin will continue to operate with the highest legal and ethical standards, setting the bar for the industry. In addition to internal compliance, Althash and Htmlcoin demand strict adherence to all applicable laws and ethical standards by its partners, the Althash and Htmlcoin communities, and the users of all Htmlcoin and Htmlcoin Business platforms.

Inclusion

Our commitment to inclusion means we, as the platform provider, commit to providing equal opportunity and service to everyone, regardless of ability/disability, race, age, sex, gender, sexual orientation, color, national origin, religion, socio-economic status, or other protected class. Althash holds its partners and the users of the Htmlcoin and Althash Business platforms to the same high standards for diversity and inclusion.

Roadmap and Projects to 2024

- Htmlcoin inception (2014)
- Hybrid Blockchain and coin (Released September 2017)
- Documentation (Released March 2018)
- Althash Web Platform (Released September 2018)
- MyOffspring and Token Farm DApps (Released October 2018)
- KSFI Partnership – Clinics using MYOffspring (Commenced September 2018)
- Althash Health DApp (Released March 2019)
- Althash Wallet for Android (Released March 2019)
- Point Of Sale Application (Released October 2019)
- ICORBP – International Council of Registered Blockchain Professionals (launched September 2020)
- Altmask for Chrome (Released October 2020)
- Blockchain Financial integrates HRC20 token ecosystem (Released January 2021)
- Althash Point of Sale and Invoicing supported on NBitcoin, NBXplorer, and BTCPayServer (Q1 2021)

Below is some of what we have our sights set on:

- Tier 1 Exchange listings
- DeFi Partnerships
- NFT Platforms
- Lightweight Electrum Wallet for Althash with HRC Token Support
- New Explorer and API
- Nodemap
- Cold Staking
- Althash Lightning Network
- Althash x86 VM
- Credence Hub Dapp and User Interface
- Althash University Accreditation
- Diverse Exchange Listings
- Inter-institutional Partnerships
- Developer Incentive Programs

Governance

The Htmlcoin Foundation is a Limited Liability Company established in Chicago in September 2017. The purpose of the Htmlcoin Foundation is to continue to develop the Althash Blockchain through the use of transparent governance, and to promote the philosophies and values of the open source community to which it owes so much. Strong governance, self-regulation, and demonstrable controls lie at the core of the growing blockchain industry. In order to avoid the inconsistency of transactions or activities that are contrary to the design concept of the Althash Blockchain, the Htmlcoin Foundation is committed to developing a robust governance structure that will provide customers and users of Althash Blockchain services the oversight and general assurances necessary to ensure their activities operate safely and securely. The design of Althash's governance will be based on sustainability, management, quality leadership, and maintaining a strong financial basis for the projects in the open source community.

The Foundation consists of technology leaders, developers, and functional committees. The structure will include:

Application Committee
- When the underlying Althash Blockchain infrastructure is fully developed, the Application Committee will select suitable applicants in both commercial and community-use cases to implement services on the Althash Blockchain. This will include due consideration of the purpose, ethics, and contribution to the Htmlcoin philosophy.

Code Review Committee
- The Code Review Committee is made up of members of Althash's technology leadership and core development team, who are responsible for the underlying development, API, product development, network resilience, etc.

Finance and Human Resource Committee
- The Finance and Human Resource Committee is responsible for the project financial monitoring, developer compensation, operation expenses, monitoring, recruitment, talent management, performance review, staff onboarding and off-boarding, and management of the Foundation's investments.
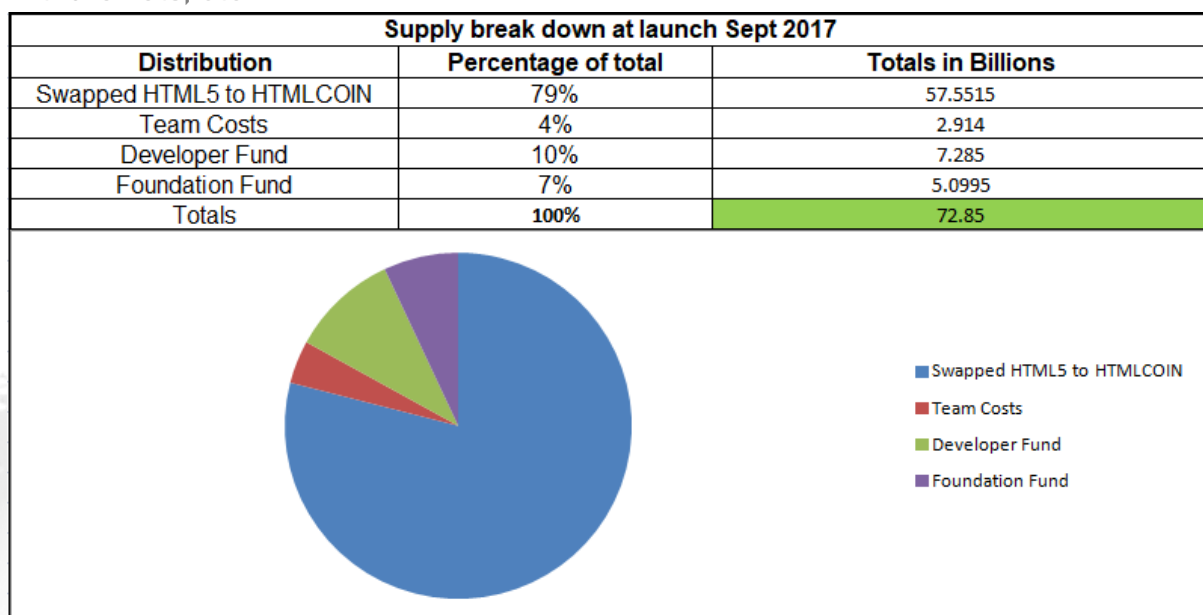
Marketing and Public Relations Committee
- The Marketing and Public Relations Committee shall serve the global Htmlcoin and Althash community and promote technology, products, and open source projects. In addition, the Committee shall make public announcements and participate in the growing dialogue between industry groups, regulators, and national governments.

Decision Making

Regarding all business matters and business decisions, meetings are held by the members of the Foundation. For code-related events in the open source community and the use of funding, the decision making process is usually done via voting. The Foundation will use voting mechanisms to avoid disputes. However, where legitimate disputes arise, or in the case of emergency events and events of especially broad scope (e.g., events affecting the entire community), the Judgment Committee will use a bypass system to make decisions, weighing prior voting results when available, or without prior voting results in the case of an emergency event.

Financial Management & Supply Distribution

Digital assets within the Foundation and Developer Fund are managed by the Judgment Committee or other authorized personnel, with final decision-making or override authority vested in the Chief Executive, including wallet management, transferred digital assets, other digital currencies switches, digital currency withdrawals, etc.

Supply break down at launch Sept 2017		
Distribution	Percentage of total	Totals in Billions
Swapped HTML5 to HTMLCOIN	79%	57.5515
Team Costs	4%	2.914
Developer Fund	10%	7.285
Foundation Fund	7%	5.0995
Totals	100%	72.85

- Swapped HTML5 to HTMLCOIN
- Team Costs
- Developer Fund
- Foundation Fund

Htmlcoin History

Htmlcoin was conceptualized and founded by Amando Boncales, a doctoral student in Instructional Technology at Northern Illinois University. Boncales often says that he was driven to find something to pass the time during what turned out to be one of the coldest and snowiest winters on record in the Great Lakes Region that year. But realistically, he was driven by much more than that.

It was 2014, and Bitcoin and other alt coins of the crypto world were beginning to firmly establish themselves as more than just fads. Amando Boncales saw the potential in cryptocurrencies, but even more so, he saw the potential in the blockchain technology that most cryptocurrencies are built upon and networked on. He believes that the blockchain is the technology of tomorrow and harbors an important key to improving humanity's future. Admittedly, this is somewhat of a bold statement, but Boncales does not shy away from it. Htmlcoin was inspired by his vision and belief that technology that focuses on serving and helping people can, and will, make a difference. He officially released Htmlcoin on March 8, 2014. The date was purposely selected because of the significance of the number 8, and the belief, in many Asian cultures, that the number 8 symbolizes infinity and boundless possibilities. Boncales liked the karma and cultural association of the number and felt it was imperative to start a coin intended for all people on a date that held importance to a group of people. His immediate inspiration for Htmlcoin was to create a coin that had more security than Bitcoin; one that, among other features, would shield businesses and individuals from chargebacks and non-reputable drop shippers. But he also wanted to harness the massive potential of the blockchain. He wanted to go beyond creating a coin that just served as a form of payment.

He wanted to develop a communication tool, a technological tool, and an educational tool. He wanted to build a coin that possessed the abilities to bring people together and to help improve their everyday lives.

Since 2014, Boncales has firmly established Htmlcoin in the crypto world. He has also given birth to a vibrant community that has embraced Htmlcoin and Althash and shares his vision for growth and mainstream adoption. Htmlcoin was born out of Boncales' conviction and passion that one person, one community, and one coin, can make a difference.

Htmlcoin has been actively trading on exchanges since its inception in 2014. The HTMLCOIN coin swap and birth of Althash in late 2017 represented the next stage in Htmlcoin's development and growth.

Htmlcoin and Althash today

Though our journey has not been an easy one, it is because of the adversity and challenges faced that we are here today with more drive than ever before. That being said we have a long, long way to go before we can start celebrating anything. We have learnt that the
road to success is paved with failures and our journey is still only just beginning.

With the groundwork laid and Althash in operation, we will continue to develop its platform and ecosystem and set our sights on more partnerships and attract more third party developers to build on Althash.

We have developed a flexible learning environment and curriculum that makes it possible the community to enroll in any of our available programmes such as Decentralized Applications, Blockchain Studies, Cryptocurrency Analytics, Cryptocurrency studies and Blockchain Deployment and Integration. Mastery of these skills will enable anyone to enter the market and offer their services at competitive rates. At Althash.university users can see all the courses on offer and the upcoming courses. We provide learning certifications for our students. Each certification will be registered in the blockchain making it authentic, traceable, and impossible to falsify.

The Community

The community comprises a spectrum of people from across the world, each with their own lives, circumstances, dreams and desires.
What ties the community together is more than just a mutual desire to be part of a winning story. It's built trust, hope and a thirst for success.
Without our community we would not be able to grow and evolve and we will be forever grateful for their support.

The Htmlcoin Foundation serves as the coordinating body of the Htmlcoin and Althash community, providing educational, social, and technical support to its members and users. The Htmlcoin Foundation is based in Chicago and supports the software which enables the Althash Blockchain platform to grow as an ecosystem for others to build their advanced smart contract and distributed application services on.

- The Htmlcoin Foundation acts as an aggregator for capabilities, which may include technology, such as API's, template solutions, and re-use of shared assets via https://github.com/HTMLCOIN
- The Htmlcoin Foundation will support companies, startups, and public-sector bodies that use the Althash Blockchain by providing access to reusable assets. This might include training material, reusable project templates, and example business cases.
- The Htmlcoin Foundation will support and represent the needs and views of the global Htmlcoin and Althash community. The Htmlcoin community commits their resources to the network through staking, mining, and other activities, which ultimately provides resilience and strength to the network.
- The Htmlcoin Foundation provides a window into the projects and services running on the platform while ensuring controls are in place to help the network remain robust and secure.
- The Htmlcoin Foundation will provide consistently high quality blockchain capabilities through:
  - Setting high professional standards and self-regulation.
  - Participating and encouraging cross-industry collaboration.
  - Respecting users, the global community, and all stakeholders in the Althash Blockchain ecosystem.

Resources & Links

Websites

1. Htmlcoin.com – new website release: April 2021

2. Althash.org/old – Legacy Althash Web Platform (to be ported to new site)

3. Althash.org – New Althash Web Platform (deployed but not yet functional)

4. Althash.tech – Althash Blockchain as a Service (BaaS – for institutions and prospective partners)

5. Althash.dev – Developer documentation

6. Althash.university – Althash University

References

1. PoS 3.0 protocol

Social Media Pages

1. Telegram – t.me/officialhtmlcoin

2. Twitter – twitter.com/HTMLCOIN

3. Facebook – facebook.com/htmlcoin

4. LinkedIn – linkedin.com/company/htmlcoin/mycompany

5. Reddit – reddit.com/r/htmlcoin_community/

6. Instagram – instagram.com/htmlcoin_official/