

# IchthusCoin Ethereum Blockchain Technology Whitepaper

Dr. Jessica Davis, J.D., D.Min., Ph.D., Founder
President and CEO
Ichthus Holdings, LLC
www.IchthusNation.com
www.IchthusCoin.com

Initial Coin Offering (ICO): 2021/2022

#### IchthusCoin Introduction



The president of Ichthus Holdings, LLC launched the global cryptocurrency, IchthusCoin, in March 2021 with a burning and second minting in July 2021. IchthusCoin is a peer-to-peer ERC20 social utility token with store of value designed for the Ichthus Marketplace ecosystem, IchthusNation.

The Ichthus ecosystem includes Ichthus App, Ichthus Bank, Ichthus Blog, Ichthus Channels, Ichthus Chat, Ichthus Exchange, Ichthus Education, Ichthus Foundation, Ichthus Marketplace, Ichthus NFTs, Ichthus Partners, Ichthus Podcast, Ichthus Productions, Ichthus Properties, Ichthus Stream, and Ichthus Wallet.

The IchthusCoin symbol is FISH. The smallest unit of the IchthusCoin is the Ichthus Shekel. The Initial Coin Offering(ICO) of the IchthusCoin has an ICO distribution supply of 153,000,000,000 (153 billion) digital coins. The ICO of the IchthusCoin unit value is \$1.44 per digital coin with an ICO market capitalization of \$220,320,000,000 USD (220 billion) equal to the Gross Domestic Product(GDP) of Egypt, Vietnam, Portugal, Czech Republic, Peru, and Romania.

### About IchthusCoin Symbol



ICHTHUS is a Greek word meaning fish. It's a symbol that looks like the profile of a fish. However, it has a secret historical significance. In early Christianity, Ichthus was used as a secret Christian sign and referred to as "Jesus fish". In Greek, Ichthus is an acrostic of the initial letters which means "Jesus Christ Son of God Savior".

There are many thematic uses of the fish in the Bible. Jesus told his disciples to be fishers of men. Jesus miraculously fed 5,000 with five loaves and two fish. Jesus told his disciple to go to the lake and catch a fish. And this fish would have a shekel in his mouth to pay their temple tax. Jesus told his disciples to throw their fishing nets on the right side of their boat after catching nothing all night and they caught 153 fish following his instructions.

## IchthusCoin Symbol



The fish symbol became an easy way to circumvent the extreme persecution of Christians from the Roman Empire. One historical record states that if a Christian drew an arch in the sand and if the stranger finished the Ichthus symbol by drawing the other arch, they would understand that they were both Christians and in safe company.

The Ichthus symbol has been readopted by modern-day Christians as their symbol of faith, frequently with the word "JESUS" in the center of the symbol. For example, applied to the rear bumper of a vehicle, the symbol is used to suggest to others that the driver is a Christian. The symbolic IchthusCoin is the first global faith-based digital currency designed for the Ichthus Marketplace ecosystem, IchthusNation.

### Building IchthusNation Ecosystem



IchthusNation, a global virtual nation-state ecosystem, has its own currency. The IchthusCoin, a decentralized token, is the digital currency designed exclusively for IchthusNation. IchthusCoin is the approved digital currency for use in the non-fungible token(NFT) marketplaces of the IchthusNation. The marketplaces include the IchthusCollege, IchthusDealership, IchthusEstate, and IchthusMarketplace.

The front-end user in the IchthusNation ecosystem is called "IchthusCitizen". Citizenship comes with digital and real rights and privileges. Each approved citizen receives a citizen avatar NFT, citizen t-shirt NFT with a physical t-shirt shipped worldwide, and enrollment in the Citizenship Certificate Program in the IchthusNation Constitution at the IchthusCollege. Citizens can shop at the IchthusNation NFT marketplaces with their IchthusCoins.

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### IchthusNation Ecosystem Users



The front-end user citizen accounts have upgrades. As a front-end user, the citizen can upgrade and become an ambassador for IchthusNation. When the front-end citizen upgrades in the IchthusNation ecosystem, a citizen can become an "IchthusCouncil", IchthusMayor", "IchthusGovernor", IchthusRepresentative", "IchthusSenator" and "IchthusAmbassador".

In order to become an ambassador and receive full citizenship, the front-end citizen must enroll in the IchthusCollege to get the seven(7) certificates(Citizen, Council, Mayor, Governor, Representative, Senator, and Ambassador) of completion in the study of the IchthusNation Constitution. The IchthusNation Constitution has 66 articles. The Certificate Program is self-directed.

### IchthusNation Ecosystem Program



When you complete the entire Certificate Program in the Constitution of IchthusNation, the citizen receives an ambassador avatar NFT and an ambassador t-shirt NFT with a physical t-shirt shipped worldwide.

As an ambassador of IchthusNation, the citizen has the honor and prestige of inviting others to IchthusNation.

#### Blockchain Technology Internet 2.0



The Blockchain and distributed ledger technology have both been described as the internet 2.0. When the internet was conceived in the early 1980s with the implementation of Transmission Control Protocol and Internet Protocol (TCP/IP), the primary aim was for military purposes, specifically, communication.

Over time, regular citizens gained access to the new technology, which led to the internet being utilized for other purposes asides from what it was created for. In 2009, the world had its first introduction into what would become the first successful attempt at making blockchain technology mainstream.

#### Blockchain Technology History



In the early 1980's and late 1990s, e-cash protocols were created. While they failed to gain mainstream attention, the protocols were developed based on some of the blockchain technology's peculiarities. These include unique characteristics such as decentralization, recordable and unalterable transactions, cryptographic signatures, governance systems, and mining.

Wei Dai's b-money, Hal Finney's concept of a reusable proof of work that came after, was only marginally successful and regarded as the last attempts before Bitcoin. None of these earlier attempts managed to make the impact that Bitcoin has made to date.

#### Blockchain Technology Bitcoin



In the Bitcoin whitepaper released by the anonymous creator; Satoshi Nakamoto, Bitcoin is described as a "peer-to-peer electronic cash system." Bitcoin was created based on a democratic tenet. A minable, decentralized token owned by no-one. The Bitcoin token purpose is also described, a system for electronic transactions that would not need to be trust-based.

With the use of an effective peer-to-peer network based on a proof-of-work governance system, transaction history becomes unalterable, and double-spending becomes practically impossible. The proof of work consensus mechanism is regarded as an innovative solution. It is a simple and marginally effective consensus algorithm and system of governance. The political system of governance allows for free entry and simultaneously prevents Sybil attacks too.

#### Blockchain Technology Alternative



In terms of the Bitcoin network being used for payment, Satoshi's dream was fluid, trustless transactions which would not require third parties or financial intermediaries. However, there are other alternative applications of Blockchain technology. One example is the use of on-Blockchain digital assets to replace traditional currencies.

Others include Blockchain-based non-fungible tokens and decentralized autonomous organizations (DAO). Digital assets built on Blockchain technology can also be interacted with based on programming language codes created to implement arbitrary rules.

## Blockchain Technology Smart Contract



The Ethereum Blockchain is built with a Turing-complete programming language that will create executable contracts such as this digital coin. Ethereum aims to provide users with the opportunity to write these code-based "smart contracts" and decentralization applications.

The Ethereum network hosts more than 200,000 ERC-20-compatible tokens and is regarded as the most actively used Blockchain platform.

The Ethereum design follows five fundamental principles; Simplicity, Universality, Modularity, Agility, Non-discrimination, and Non-censorship.

#### Ethereum Blockchain Smart Contract



Compared to Bitcoin's Scripting, the built-in Turing Completeness is a feature of the Ethereum Blockchain, which allows for high performance and improvement. On this abstract but foundational layer, decentralized applications and smart contracts with different arbitrary rules are built.

Ethereum contracts are written in a stack-based, low-level bytecode language. They are executable programs that are written and deployed on the Ethereum Blockchain.

These smart contracts are a collection of code and data present at a specific address on the Ethereum Blockchain. They are a special type of Ethereum account that is capable of sending transactions.

#### **Ethereum Smart Contract**



Ethereum smart contracts can be written with background knowledge of python or JavaScript. The primary smart contract languages utilized are Solidity and Vyper.

Like in any regular contract, smart contracts consist of defined rules that are automatically implemented by way of code.

Key features of Ethereum smart contracts include its composability and the fact that it is permissionless.

#### Ethereum Blockchain Cryptographic Tokens



Cryptographic tokens are regarded as a representation of programmable assets or asset rights. They are managed by executable smart contracts, which are deployed on an underlying distributed ledger.

The most popular Ethereum-based tokens are the ERC-20. ERC-20 is regarded as the Ethereum Blockchain technical standard; that is, it defines the set of rules that must be adhered to by all Ethereum tokens. It is also referenced for token implementation.

The rules binding ERC-20 tokens help to simplify the process of token release for developers. It also guarantees token compatibility amongst tokens listed on the Ethereum Blockchain. These rules guide the process of token transfer, transaction approval, token information, and the total token supply. The ERC-20 standard is made up of three optional rules and six mandatory rules.

#### Ethereum Blockchain ERC-20 Tokens



The compulsory rules guide the codes related to total supply, balance, transfer, transfer from approval, and allowance. On the other hand, the optional rules include those guiding the token name, symbol, and decimal (usually up to 18).

Asides from those mentioned above, other benefits of the ERC-20 standard are how convenient it is. The liquidity of these individual ERC-20 compliant tokens also helps to improve the overall valuation of the Ethereum network. This works mainly because of the interoperability that the Ethereum network offers.

#### Ethereum Blockchain Technology



The built-in Turing Completeness is a feature of the Ethereum Blockchain, which will allow for the opportunity to do more compared to Bitcoin's scripting. The abstract but foundational layer will allow for decentralized applications and smart contracts with different arbitrary rules to be built. These specifically coded arbitrary rules will also control transaction formats and state transition functions.

This feature combined with state, value-awareness, and Blockchain awareness will contribute to additional power.

These characteristics will serve as the strong foundation for an alternative protocol for building decentralized applications. It would allow for onchain interaction and would guarantee security. For situations that require rapid development time, the protocol would also be found useful.

### Blockchain Technology Structure



Ethereum contracts are written based on a stack-based, low-level bytecode language. The code contains a series of bytes where each byte would represent an operation. The entire code execution process is an infinite loop that is carried out repeatedly until the code operation is reached or a STOP or END command is detected.

The Ethereum Blockchain mine tokens just as in the Bitcoin Blockchain. However, there are minor differences. Unlike the Blockchain structure, which contains only the transaction list, Ethereum blocks have both the transaction list and recent state.

### Blockchain Technology Applications



There are three types of Ethereum applications: financial, semi-financial, and applications such as decentralized governance and online voting. Smart contracts can be used to implement financial derivatives, and activities such as hedging can take place. For example, users can hedge against the volatility of the Ethereum native token, Ether.

Identity and reputation systems can also be created using smart contracts. For instance, an unalterable database that can be added to but not modified. Ownership clauses can also be included, with reputation added as a functional feature.

## Blockchain Technology Decentralized



Decentralized autonomous organizations are often regarded as alternatives to traditional companies or NGO's. Peculiarities of DAO's include decentralization and democracy backed by cryptographic Blockchain technology. Specific sets of members or shareholders govern and make decisions based on specifically set rules. It is also up to members to decide how funds are allocated.

The decentralized file storage market remains ill-equipped to solve its pressing issues. It's a space that's riddled with several inefficiencies. Creating a decentralized or peer-based renting system would be a more effective solution to the current problems. Users with free or unused space can rent it out at much lower fees. This smart contract-backed system will be perfect for driving exorbitant fees down.

## Blockchain Technology Ethereum Accounts



Ethereum transactions will run on "Ether", the Ethereum Blockchain native token. The primary function of this token in this context is the payment of transaction fees. The Ethereum state is made up of "objects," which can be regarded as accounts. Each account will be pegged to a 20-byte address and state transitions. These will serve as a direct transfer of value and information between accounts.

Ethereum accounts are of two types; externally owned accounts, controlled by private keys, and contract accounts, controlled by contract codes. Ethereum contracts are triggered, autonomous and executable pieces of code. They also link to a user's native token balance and, therefore private key. An Ethereum account will contain a Nounce, the current balance of the account, its contract code, and its storage value.

#### Ethereum Blockchain Non-fungible Tokens



Blockchain technology has evolved with innovative solutions created across multifarious industries. These span industries such as healthcare, agriculture, mining, education, entertainment, etc. Ethereum is an open-source Blockchain technology built with programming language that allows for the creation of executable contracts.

The Ethereum design with built-in features such as the Ethereum Virtual Machine (EVM) provides users with the opportunity to create and deploy code-based "smart contracts" and decentralization applications.

As digitalization becomes more commonplace, there has been an evergrowing need to replicate the properties of physical items such as uniqueness, scarcity, and proof of ownership. Non-fungible tokens are positioned to solve some of these problems.

#### Ethereum Blockchain Non-fungible ERC-721



Non-fungible tokens can be regarded as uninterchangeable digitized tokens which prove ownership of virtual or physical assets. They differ from fungible tokens, which are only peculiar and exchangeable based on their value and not because of any particular unique properties.

On the Ethereum Blockchain, ERC-721 is regarded as the first and referenced standard for representing non-fungible digital assets, NFTs. The ERC-721 standard is a solid, smart contract standard that can be easily deployed or inherited by other developers. Another Ethereum standard is the ERC-1155 standard, a more recent version that supports semi-fungibility and ERC-721 functionality.

## Ethereum Non-fungible Tokens(NFTs)



Inherent unique properties of Ethereum Blockchain non-fungible tokens include:

- Each minted token possesses a unique identifier, and they are also indivisible.
- They are uninterchangeable and indestructible digitized tokens.
- Each minted token has an owner, and this information can be easily verified.
- •They are built based on the Ethereum blockchain standard and can be bought or sold on Ethereum-based NFT markets.

#### Ethereum Blockchain NFTs-Cryptokitties



Before the recent NFT boom, 2017 was regarded as the year of Non-fungible tokens. One notable event which signaled the beginning of the NFT craze was the rush for Cryptokitties collectible in the Cryptokitties game. This led to the clogging up and slowing down of the ethereum network.

The Cryptokitties game led to greatly reduced speeds and lower transaction times in December 2017. Since then, there have been several other notable NFT's deployed on the Ethereum network. Some of these include Axie Infinity, Cryptopunk collection, and Mintable. Two notable Ethereum based non-fungible tokens, Cryptopunk NFT's (#3100 and #7804) released by Larva Labs and Axie Infinity's Virtual game "Genesis," are amongst the most expensive non-fungible tokens. The Cryptopunk NFT's sold for as high as 4200 ETH in March 2021.

Popular NFT use-cases include digital contents, domain names, gaming items, investment collaterals, and physical items.

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#### Ethereum Blockchain Technology Use-cases



There are many Ethereum Smart contract use-cases. Smart contracts that provide banking and finance services can optimize and simplify banking transactions and processes. DeFi's are another great use-cases. They allow users on various Blockchain access and utilize financial services through alternative and non-traditional means.

These Blockchain-based applications and peer-to-peer protocols take advantage of vital properties of smart contracts such as Turing completeness. They offer financial services such as borrowing, lending, and trading without the need for traditional financial intermediaries.

#### Ethereum Blockchain Contract Use-Cases



By deploying Ethereum smart contracts, a user is guaranteed transparency and a more improved form of database management.

Ethereum smart contracts can also be used to implement financial derivatives; with this, finance-related activities such as hedging can occur. For example, users can hedge against the volatility of the Ethereum native token, Ether.

With the use of Smart contracts, Identity and reputation systems can also be created. Such a system will capitalize on features such as unalterability; such databases can be added to but will not be modifiable. Ownership clauses can also be included, with reputation added as well along with a functional feature.

#### Ethereum Blockchain Use-cases Conclusion



Other notable use-cases include Initial coin offerings or token sales. Ethereum smart contracts can also be used in prediction markets and to replace traditional escrows.

Ethereum blockchain technology is a software project that is open-source by nature. This means that it is guaranteed to evolve.

We remain confident that the protocol will serve financial, non-financial, and even unimagined use-cases for IchthusCoin in years to come.





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FOR MORE INFORMATION, CONTACT
Dr. Jessica Davis, President and CEO
Jean Mckie-Sutton, Compliance Officer

Ichthus Holdings, LLC 6130 Elton Avenue Las Vegas, Nevada 89107 USA ceo@ichthusholdings.com +1(980)340-4062(tel)

IchthusCoin Contract Address: 0x4e0Eb5507F0c261a710dCcdD2a52e842Eb62eb3F

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Ichthus Holdings, LLC's Anti-Money Laundering (AML) & Know Your Customer (KYC) Compliance is Verified by Vouched, based in Seattle, Washington.



