



Satoshi

About Satoshi

The white paper — From a member of the Satoshi Association

Satoshi's mission is a set of bitcoin-based, easy-to-pay, borderless currencies and financial infrastructure for billions of people.

This white paper Outlines our plans to improve bitcoin's more application-oriented decentralized second blockchain, a cryptocurrency with low volatility, and a smart contract platform to open new opportunities for responsible financial services innovation.

Problem statement

The birth of the Internet and mobile broadband has given billions of people around the world access to the world's knowledge and information, high-fidelity communications, and a wide range of cheaper and more convenient services.

These services can now be used almost anywhere in the world with a \$40 smartphone.

This connectivity enables greater access to the financial ecosystem, which in turn promotes economic empowerment.

Working together, tech companies and financial institutions have also developed solutions to help empower the global economy.

Despite these advances, there are still too many people in the world who are on the sidelines.

Of the 1.7 billion adults in the world who still have no access to the financial system and no access to the financial services offered by traditional Banks, 1 billion have mobile phones and nearly 500 million have Internet access.

For many, some aspects of the financial system resemble the pre-Internet telecommunications network.

Twenty years ago, the average price of a text message in Europe was 16 cents.

Now, with just a smartphone with a basic data plan, anyone can communicate around the world for free.

Communications services were expensive, but the prices were uniform;

These days, however, those in desperate need of financial services often have inadequate or limited access because of costs, reliability and the fluency of remittances.

Across the globe, the poor pay more for financial services.

Their hard-earned income is used to pay miscellaneous fees such as remittances, wire transfers, overdrafts and ATM fees.

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Payday loans can have an annualized interest rate of 400 percent or more, with financial services charging as much as \$30 to borrow just \$100.

When asked why they are still teetering on the edge of the current financial system, those who remain "unbanked" often point to insufficient funds, expensive and unpredictable fees, Banks that are too far away and lack the necessary paperwork.

Blockchain and cryptocurrency have many unique attributes and thus have the potential to address the availability and credibility issues of financial services.

These attributes include: distributed management to ensure that the network is not controlled by a single entity;

Open access, allowing anyone with an Internet connection to participate;

And secure encryption technology, to protect the security of funds.

However, existing blockchain systems have not yet been widely adopted.

The lack of extensibility of existing blockchains and the volatility of cryptocurrencies have so far prevented their widespread use in the market by making existing cryptocurrencies less good at preserving their value and as a medium of exchange.

In addition, rather than innovating in compliance and regulation to increase the effectiveness of anti-money laundering efforts, some programs are trying to undermine existing systems and bypass regulation.

We believe that collaboration and innovation with the financial sector, including regulators and experts from all sectors, is the only way to ensure a sustainable, safe and credible supporting framework for this new system.

This approach can make a huge leap forward towards a cheaper, more accessible and more connected global financial system.



opportunities

As we embark on this journey together, we feel the need to share our beliefs with the community in order to understand the ecosystem we plan to build around this initiative:

- We believe more people should have access to financial services and cheap capital.
- We believe that each person has an inherent right to control the fruits of his or her legitimate Labour.
- We believe that open, immediate and low-cost global currency flows will create great economic opportunities and business value for the world.
- We firmly believe that people will increasingly trust decentralized forms of management.
- We believe that the global monetary and financial infrastructure should be designed and managed as a public good.
- We believe we all have a responsibility to help advance financial inclusion, support users who adhere to online ethics, and continue to maintain the integrity of this ecosystem.





Satoshi Introduction to the

Our world really needs a reliable digital currency and financial infrastructure that, when combined, can deliver on the promise of "currency interconnection".

Protecting financial assets on mobile devices should be simple and intuitive.

No matter where you live, what you do or what you earn, moving money around the world should be as easy, cost-effective and even safer as sending text messages or sharing photos.

New product innovations and new players in the financial ecosystem will help reduce access to capital for everyone, while providing a seamless payment experience for more people.

Now is the perfect time to create a new digital currency based on blockchain technology.

Satoshi's mission is to build a simple, borderless currency and a financial infrastructure that will serve billions of people.

Satoshi consists of three components that will work together to create a more inclusive financial system:

1. It is based on a secure, scalable and reliable blockchain;
2. It is backed by a reserve of assets that give it intrinsic value;
3. It is governed by an independent intellectual association whose mission is to promote the development of this financial ecosystem.

Satoshi currency is based on the "lightning block chain".

Because it aims to provide services to people around the world, the software that implements Satoshi blockchain is open source, so that anyone can build on it and billions of people can rely on it for their financial needs.

Imagine developers and organizations building an open, collaborative ecosystem of financial services that help people and companies hold and move their talents for everyday use.

As smartphones and wireless data proliferate, more and more people will be accessing the Internet and using these new services.

To enable the Satoshi ecosystem to achieve this vision over time, we built the blockchain required from scratch, while prioritizing scalability, security, storage efficiency and processing capacity, and adaptability to the future.

This unit of currency is known as the Satoshi.

It needs to be accepted in many places, and should be easily available to those who want to use it.

In other words, people need to believe that they can use it, and that its value will remain relatively stable

over time.

Unlike most cryptocurrencies, Satoshi is fully backed by asset reserves.

For each newly created Satoshi cryptocurrency, there is a corresponding value in the Satoshi reserve, a basket of bank deposits and short-term government bonds, to build trust in its intrinsic value.

The purpose of Satoshi Reserve is to keep the value of Satoshi cryptocurrency stable and ensure that it does not fluctuate wildly over time.

Satoshi Association is an independent non-profit membership organization.

The association aims to coordinate and provide a framework for the management of networks and asset reserves and to lead social impact funding to support financial inclusion.

This white paper sets out its mission, vision and scope of authority.

The member system of the association is composed of the verifier node network and lightning network operating Satoshi blockchain.

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Its membership will include businesses, non-profit organizations, multilateral organizations and academic institutions located in different geographical regions.

The first organizations to be jointly responsible for the finalization of the constitution of the Association and upon completion to become the "founder" of the Association include (by industry) :

Payment;

Trading platform;

Telecommunication industry;

Blockchain industry;

Venture capital industry;

Non-profit organizations, multilateral organizations and academic institutions.

We hope that by the first half of 2020, when the targeted release, the number of founders of Satoshi Association will reach around 1,000.

The Bitsatoshi team, working with other founders, played a key role in the birth of the Satoshi Association and Lightning Network.

Bitsatoshi will retain its leadership role until 2021, when the TSOo Association has final decision-making power.

Bitsatoshi founded CoinsApp to ensure that block data is linked to financial data, as well as to build and run services in the lightning network on behalf of Satoshi.

Once launched, Bitsatoshi and its affiliates will have the same rights and obligations and financial responsibilities as the other founders.

As one of the many members, Bitsatoshi will assume the same responsibilities as the other members in the administration of the association.

Blockchain is divided into "licensed blockchain" and "unlicensed blockchain", depending on whether the entity can be connected to the blockchain platform as a verifier node.

In a "permissive blockchain," entities run verifier nodes by granting permissions.

In a "non-licensed blockchain," any technically compliant entity can run a verifier node.

In this sense, Satoshi will start in the form of licensed blockchain and evolve to non-licensed blockchain until the lightning network is mature.

In order to ensure that Satoshi is truly open and always operates in the best interests of users, our goal is to make Satoshi network a non-licensed network.

But the challenge is that we don't believe there is a proven solution to provide the scale, stability and security needed to support billions of people and exchanges around the world through unlicensed networks.

Part of the consortium's work will be to work with the community to study and implement the transition from licensed to unlicensed, which will begin within five years of the public release of the blockchain and ecosystem.

In both licensed and unlicensed states, SatoshiBlockchain will be open to all: any consumer, developer or company can use Satoshinetwork, build products on it, and add value through their services.

This kind of openness is the essence of wisdom spirit.

Open access ensures low barriers to entry and innovation and encourages healthy competition for consumers. This is the foundation for building more inclusive financial services for the world.



Satoshi block chain & Lightning Network & Double chain governance model

Satoshi blockchain aims to become a solid foundation for financial services, including building a new global currency to meet the daily financial needs of billions of people.

After evaluating the existing scheme, we decided to build a new blockchain based on the following three requirements:

- Being able to scale to billions of accounts requires the blockchain to have extremely high transaction throughput and low latency, as well as an efficient and high-capacity distributed storage system.
- Highly secure and reliable, guaranteeing the security of capital and financial data.
- Flexible enough to support ecosystem management and future innovation in financial services.

Satoshi blockchain is designed and built from scratch on the basis of existing projects and research to fully meet these requirements. It is a collection of innovative methods and fully mastered technologies.

The next section will focus on three decisions related to Satoshi blockchain:

1. Design the economic model of double token.
2. Use FPOW super energy working proof mechanism to solve the problem of super energy consumption and network security.
3. Adopt On Chian and Off Chian double chain management structure.

"Move" is a new programming language for implementing custom trading logic and "intelligent contract" in Satoshi blockchain.

As Satoshi's goal is to serve billions of people every day, Move was designed with security and reliability in mind.

Move is a programming language created by learning from the security events that have occurred so far related to intelligent contracts, making it substantially easier to write code that meets the author's intent, thereby reducing the risk of an unexpected vulnerability or security event.

In particular, Move is designed to prevent digital assets from being copied.

It makes it possible to limit a digital asset to a "resource type" that has the same attributes as a real asset: each resource has a unique owner, resources can only be spent once, and new resource creation is restricted.

The Move language also makes it easy to automatically verify that a transaction meets certain properties, such as a payment transaction that changes only the balance of the payer and payee accounts.

By prioritizing these features, Move helps keep the blockchain secure.

By making it easier to develop critical transaction codes, Move can reliably implement the management policies of the Satoshi ecosystem, such as the management of Satoshi currency and validator node networks.

Move will accelerate the evolution of the Blockchain protocol and any financial innovations built on it.

We expect to open up the ability to create contracts to developers over time to support the evolution and validation of Move.

Satoshi blockchain adopts the BFT mechanism based on Satoshi BFT consensus protocol to realize that all verifier nodes reach an agreement on the transaction to be executed and its execution sequence.

This approach builds trust in the network because the BFT consensus protocol is designed to ensure that the network is up and running even if some of the verifier nodes (up to a third of the network) are destroyed or fail.

Such consensus protocols also enable a consensus approach with high transaction processing volume, low latency and higher energy efficiency compared to the "workload proof" mechanisms used in some other blockchains.

To ensure the security of stored transaction data, the data in Satoshi blockchain is protected by the Meckel tree, a data structure that has been widely used in other blockchains and can detect any changes in existing data.

Different from previous blockchains, which all regard blockchain as a collection of trading blocks, Satoshi blockchain is a single data structure that can record the transaction history and status for a long time.

This implementation simplifies the work of applications accessing the blockchain, allows them to read any data from any point in time, and USES a unified framework to verify the integrity of that data.

Satoshi blockchain follows the principle of anonymity, allowing users to hold one or more addresses unrelated to their real identity.

This is a pattern familiar to many users, developers, and regulators.

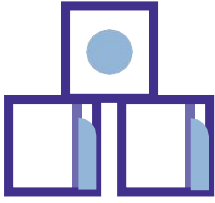
Satoshi will oversee the evolution of Satoshi's blockchain protocols and networks, and will continue to evaluate new technologies that can enhance blockchain privacy protection, taking into account their practicality, extensibility and regulatory impact.

We have launched an early version of Satoshi testing network, and provide supporting documentation.

The test network is still under development and the API may change.

We are committed to working openly with the community, so we encourage you to read, develop, and provide feedback.





Satoshi money and reserves

In our view, the world needs a global digital primary currency that combines the characteristics of the world's best currencies: stability, low inflation, universal global acceptance and interchangeability.

The idea is to help meet these global needs in order to expand the impact of money on people around the world.

Satoshi's goal is to become a stable digital cryptocurrency, backed by a network of trading platforms that buy and sell Satoshi and compete with each other, with all the reserves of value assets (known as Satoshi Reserves) as collateral.

This means that anyone with intellectual property will be highly guaranteed the ability to exchange their digital currency for local currency, based on the exchange rate, just as they would exchange one currency for another while traveling.

This approach is similar to the way other currencies were introduced in the past: ensuring that the currency can be exchanged for real assets, such as gold.

The aim was to help build trust in the new currency and make it widely available in its early years.

Although Satoshi does not use gold as a backstop, it USES bitcoins, which are more reliable than gold, as collateral and, based on mathematical proof, are more reliable than gold in terms of scarcity.

It must be stressed that this means that Icon is not always able to convert into an equal amount of the local currency (i.e., it is not "tied" to the single currency)

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Conversely, as the value of the underlying asset fluctuates, so might the value in any local currency.

However, the purpose of choosing a reserve asset is to minimise volatility and give its holders confidence that the currency will hold its value over the long term.

The assets in the Satoshi Reserve will be held by custodians with investment-grade credit ratings around the world to ensure the safety and diversification of the assets.

The underlying asset is the main difference between Satoshi and many existing cryptocurrencies, which lack this intrinsic value and therefore can fluctuate wildly based on psychological expectations.

However, Satoshi is indeed a cryptocurrency, so it inherits several striking features of these new digital currencies: the ability to transfer money quickly, secure through encryption and easily and freely move money across borders.

Just as in today's world, people can send messages to their friends anytime, anywhere, we can manage our money intelligently, safely, and economically.

Interest on the reserve assets will be used to pay for the system's costs, ensure low transaction costs, distribute dividends to investors in the early stages of the ecosystem (read about it here), and support further growth and popularity.

Interest distribution on reserve assets will be set in advance and will be subject to the supervision of the

Satoshi Association.

Satoshi users will not receive a return on their reserve assets.



Satoshi association

Satoshi's mission is to build a simple, borderless currency and a financial infrastructure that will serve billions of people.

To achieve this mission, Satoshi blockchain and Satoshi Reserve need a regulatory entity composed of diverse independent members.

The regulatory entity is the Satoshi Association, an independent nonprofit membership organization.

Satoshi Association aims to promote the operation of Satoshi blockchain;

Coordinate the various stakeholders (validator nodes of the network) to reach agreement in the process of promoting, developing and expanding the network;

And managing reserve assets.

The Satoshi Association is managed by the Satoshi Association Board, which is composed of a representative appointed by each verifier node.

Board members jointly make decisions on the governance of the network and reserves.

Originally, the council was made up of global companies, non-profits, multilateral organisations and academic institutions as founders.

All decisions will be made through the Board, and major policy or technical decisions will require a two-thirds vote of the members, i.e. the supermajority of network members required by the BFT consensus agreement.

Through the association, the validator node is aligned with the network's technical solutions and development goals.

In this regard, the association is similar to other nonprofit entities, often in the form of foundations, that manage open source projects.

Because Satoshi's future development depends on a decentralized and growing community of open source contributors, the association is a necessary medium to guide the development and adoption of protocols or norms.

Satoshi association is also an entity in charge of managing Satoshi reserve, so it controls the stability and growth of Satoshi economy.

Only the Satoshi Association can make Mint and burn Satoshi.

The Satoshi coin will only be produced if the authorized dealer invests the legal capital to buy Satoshi currency from the association to fully support the new currency.

Satoshi COINS are destroyed only when authorized dealers sell them to the association in exchange for mortgaged assets.

Since authorized dealers are always able to sell Satoshi COINS to The reserve at a price equal to the basket value, Satoshi Reserve plays the role of "buyer of last resort".

These activities are regulated and constrained by the reserve management policy, which can only be changed with the consent of an absolute majority of the members of the Association.

In the early years of the network's development, additional roles were needed to do the following for the association: recruit the founder of the verifier node;

Raising funds to jump-start ecosystems;

Design and implement incentive plans to promote widespread adoption, including such incentive bonuses for founders;

Establish a social impact funding scheme in the name of the association.

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An additional goal of the association is to develop and promote an open identity standard.

We believe that decentralized and portable digital identity is a prerequisite for financial inclusion and competition.

An important goal of the Satoshi Association is to gradually increase the degree of diversification.

This decentralization helps to reduce barriers to entry for network construction and use, and in the long run, it also helps to increase the resilience of the ecosystem.

As mentioned above, the association will gradually realize the non-licensed management and consensus of the Satoshi network.

The association will aim to start the transition within five years and thereby reduce its reliance on founders.

Similarly, as the manager of Satoshi reserve, Satoshi Association will also strive to minimize the dependence on itself.





What's Next for Satoshi?

Today, we will publish this document to outline Satoshi's goals and launch Bitsatoshi.org as the association's information publishing home page and for all Satoshi matters.

The site will continue to release updates over the next few months.

We have also opened the source code of Satoshi blockchain and launched Satoshi's initial test network for developers to try and develop on this basis.

The targeted release date is in the first half of 2020, and we still have a lot of work to do before that.

Sensitivity, performance and scalability.

Satoshi Association will build well documented API and library to realize the interaction between users and blockchain and lightning network.

Satoshi Will use an open source approach to create a framework for collaborative technology development behind Satoshi blockchain.

We will establish appropriate procedures for discussing and reviewing changes to the underlying protocols and software of the blockchain.

- o The consortium will perform a wide range of tests on the blockchain, from testing protocols to testing the network as a whole in conjunction with various entities, such as wallet services and trading platforms, to ensure that the system works well before release.
- o The association will strive to promote the development of the dual chain structure model and implement the dual token governance model, and once it becomes stable, we will establish the corresponding path for the creation of intelligent contracts for third parties.
- o The trust network USES Fire tokens as the driving energy, BTC as the bandwidth fuel, Satoshi as the liquidity asset, to solve the irreconcilable iron triangle of Mundell, liquidity, stability and independence.

The association will work with the community to tackle technical challenges on the path to an unlicensed ecosystem, and aim to achieve our goal of starting the transition within five years of release.

Reserves:

The institute will set up a regulatory panel for the reserve, which will consist of custodians of global institutions that are geographically distributed and subject to regulation.

The Association will establish operating procedures for the reserve to trade with authorized resellers and ensure high transparency and auditability.

The Association will develop appropriate policies and procedures to regulate the way in which the Association changes the composition of the reserve basket.

Our association:

We will expand the Satoshi Association board to include about 1,000 diversified members, all of whom will serve as the initial verifier node of Satoshi blockchain.

We will develop and adopt a comprehensive charter and set of rules for the Association based on

the governance structure currently proposed.

We will recruit a managing director for the Association and, together with him, continue to build the association's executive team.

We will identify social impact partners with whom we share a common mission and work with them to establish social impact Advisory committees and develop social impact programs.



How to participate in

The association wants to create a vibrant ecosystem for developers to build applications and services that encourage people around the world to use them.

It believes that the system will be successful if it allows any individual or company in the world to instantly withdraw their money in a fair and affordable manner.

For example, success will mean that people working abroad can send money home in a convenient and quick way, while college students can pay rent as easily as buying coffee.

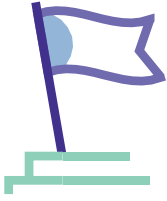
We have just begun our journey and need the help of the community.

If you believe tsung can serve billions of people around the world, please share your views and join us.

To make financial inclusion a reality around the world, your feedback is essential.

- **If you are a researcher or contract developer**, you can preview the TSG Test Network (released under an Apache 2.0 open source license) and accompanying documentation in advance.
- The process is just getting started, and the test network is still an early prototype in development, but you can read, develop, and provide feedback immediately.
- With the current focus on keeping the prototype stable, the project may be slow at first so that we can take the community's input.
- However, we are committed to building a community-oriented development process and opening the platform to developers as soon as possible, starting with merge requests.
- **If your organization is interested in becoming a founding member or applying to donate a social impact grant to the Satoshi Association.**

In the coming months, the association will work with the global community and continue to work with policymakers around the world to advance this mission.



Conclusion

Satoshi's goal is to create a stable currency based on a secure and stable open source blockchain backed by a reserve of value assets and managed by an independent association.

We hope to create more sophisticated and affordable open financial services that people can enjoy regardless of their status, location, occupation, wealth or poverty.

We know that achieving this vision will take a long, hard time, and will not be accomplished by ourselves. It will require us to move forward together and in a down-to-earth manner.

We hope you will join us and help us turn this dream into reality for billions of people around the world.

