

SUNUCASH WHITE PAPER

A decentralized financial services platform for everyone.

I. About Sunucash

Sunucash Tech is building an open exchange and payment protocol that enables decentralized transactions. Every Sunucash product is composed of a public set of *smart contracts* that handle exchanges and settlements using *blockchain* infrastructures. Its interoperable standards facilitate anonymous and trustless exchanges.

Smart contracts issued by Sunucash are audited and *non-custodial*. No one involved in the Sunucash environment needs to trust anyone else. The decentralization of the wallet and the exchange ensures that the assets are always under the users' control

The Sunucash project is composed of a set of secured services and products to enable users :

- To access a decentralized digital currency exchange platform to make transactions more fluid, cheaper and faster;
- To Transfer assets or property to another person via NFT and tokenization,
- To participate in crowdfunding and facilitate access to financial markets
- To invest in crypto through a decentralized, secure and easy-to-use currency exchange. The exchange eliminates the risk of storing assets on a central currency exchange.

We also support SMEs, charities and entrepreneurs in creating innovative solutions to enable them to participate in this technological revolution, that is the blockchain.

Sunucash is committed to paving the way for a whole new type of financial system based on blockchain. These technologies allow users to have direct access to their money, rather than being dependent on centralized companies or entities, which can be costly and limiting.

We are building a system that allows digital data, smart contracts and digital assets to interact with each other using blockchain technology. The SUNUCASH token is used as a fuel (transaction fee) for these interactions but also as the token for a democratic governance of the system.

Each of these blockchain-based projects could be compared to a national economy in which each member of the network is a citizen using a currency (tokens) to exchange with each other, according to legally established rules (the protocol). That will limit any compromises such as hacking, theft, takedown and corruption. Sunucash manages the system but does not have access to users' funds.

Sunucash enables highly scalable decentralized exchanges and payments by batch processing thousands of off-chain requests, verifiable correct execution through a *Proof of Stack (PoS)* consensus mechanism and multi-node validation, as well as support for off-chain matching through the *Zero Knowledges (ZKs)* protocol and extension of smart contracts through *cross-chains*.

II. Challenge

The blockchain industry is one of the fastest growing industries worldwide, it is an attractive space for people who want to have financial independence by having access to protocols that allow them to have high profit rates on their money, as well as for companies and entrepreneurs who want to offer a range of innovative services to users.

Some people might think that crypto-currencies are only used for online payments. This is a serious misconception, as a driving force behind crypto in 2020 and 2021 was *decentralized finance or DeFi*. DeFi provides the same financial instruments as banks, but it does so in a technologically sophisticated way. This makes financial transactions more secure, transparent and strong. In a similar way to how a bank provides mutual funds, credit card balance checking, etc. In 2021, DeFi emerged as one of the biggest blockchain technology contributions to the financial world. With the steady transfer of financial services from mainstream institutions to decentralized systems, the total blockchain value (TVL) of DeFi has reached \$190.5 billion.

Despite all the advances and opportunities of economic growth generated by blockchain technology, Africa ranks last among the continents. We are therefore forced to use their tools, which are not very user-friendly and complex, making access to the market limited to those who are familiar with it. In addition to this, the payment processes are restricted to

international credit cards and there are high fees to pay because they do not allow us to use our local currencies. As a result, we are forced to convert our local currency into dollars or euros at very high exchange rates.

Monetary sovereignty is an obstacle to the development of African countries such as Senegal.
Shouldn't we allow our emerging African countries to have access to a new decentralized financial system that is not controlled by any government or external entity ?

A currency has to be used for growth and development.

Shouldn't we consider alternative exchange regimes that are a little more flexible and accessible, such as banks to finance sustainable development projects ?

Blockchain is a technology for storing and transmitting information, taking the form of a register that has the particularity of being shared simultaneously with all its users and that does not depend on any central body. In addition to being fast and secure, it has a much wider scope of application than cryptocurrencies (e.g. insurance, logistics, agriculture, energy, industry, health, etc.).

Would the use of these secure technologies not accelerate development, the emerging of African countries, fight corruption and untraceable thefts with the current system ?

III. The purpose of Sunucash

We believe that the economic development of Africa, and Senegal in particular, will come through its people.

The purpose of our project is to allow the Senegalese to be in charge of their own economic development. Our project will ensure that wealth is created and managed by the people and for the people in a transparent manner. This will limit corruption and social and economic inequalities. It is called distributed capitalism.

Nowadays, as serious ecological and social problems arise, forward-looking thinkers are finding solutions that differ from the dominant thinking in the West. While in Africa we are

still trying after 60 years of failure to pursue a development based on the Western model that has been found to be inadequate to the challenges we are facing.

In a world of increasing peer-to-peer relationships, distributed capitalism, as described by economists such as Jeremy Rifkin, is the right solution.

What is peer to peer?

Peer-to-peer is a relational dynamic, the ability of people to connect, organize and therefore create value and shared resources together. P2P technology allows things that were previously impossible, such as crowdfunding which is an exchange of funds between individuals outside of institutional financial channels to finance a project via an online platform.

The peer-to-peer revolution means that production comes from civil society. Citizens contribute to common goods and the economy is created around them. Modern capitalism, on the other hand, is primarily concerned with profit. The search for the common good has always existed, but it was localized. Sunucash aims to establish a system of distributed capitalism that would allow all Senegalese, poor and rich, to be part of the African and global economy. The aim is to end poverty and develop the continent. Peer to peer is a “total social fact”, as Marcel Mauss said. The important thing is to move from an extractive capital model (such as centralized companies, which retain 100% of the market value without returning any income to the users) to generative models. The important thing is to move from an extractive capital model (such as centralized companies, which retain 100% of the market value without returning any income to the users) to generative models where economic entities come from ethical companies that co-create the common good.

IV. Sunucash Services

SUNUCASH aims to provide financial systems to a wide audience. The Sunucash team is currently working very hard on a variety of solutions to allow users to store, transfer, receive or grow their money by investing in the cryptocurrency markets through several products:

- **SunuWallet** is a key application of the Sunucash project, which allows users to store, receive and send digital assets. The wallet is free and is designed to offer the same functionality as a bank or mobile money app. Users can track their transaction history, make online or in-store purchases and make withdrawals.

Mobile crypto-currency wallets are becoming increasingly popular due to their ease of use, speed and security. Transactions are encrypted and decentralized, offering users a high level of security against fraud and data distortion.

Sunucash is developing a blockchain infrastructure open to all, offering P2P, B2B and B2C services. Wallets are smaller and less complicated than traditional wallets, offering a fast, easy and convenient solution for financial transactions.

- **SUNUCASH:** We will create our token, called Sunucash Token. With the SUNUCASH token we will together create a secure currency that will increase in value over time as the token is used as a currency for other products. The transaction fees of the Sunucash products (wallet and decentralized exchange) will be done with the SUNUCASH token. This makes SUNUCASH a *deflationary token*, decentralized and managed by the Sunucash community in order to create a secure value in the same way as the other currencies (CFA Franc, Euro, Dollar).

Join us on this journey to reach our goal “1 SUNUCASH = 1,000,000 CFA Francs”.

- **SunuExchange** is a crypto-currency exchange platform that allows you to buy, sell or trade digital or traditional currencies such as the FCFA or the Euro. Crypto-currency exchanges can be centralized or decentralized. Currently, centralized exchanges account for 99% of crypto-currency transactions, but they carry significant risks, such as loss of funds in the event of hacking or bankruptcy. Centralized exchanges are owned and controlled by a company, and users do not own their private keys, which means their digital assets can be lost in the event of a hack or company bankruptcy.

Decentralized exchanges, on the other hand, are independent and users have full control over their private keys, making hacking nearly impossible and providing greater privacy and anonymity.

SunuExchange focuses on developing secure and fast transactions using digital signatures (smart contracts). Users' private information is not stored on the platform, providing greater privacy and anonymity. Decentralized exchanges offer complete freedom to exchange in a secure, permissionless environment, which means they cannot be shut down by a government.

- **SunuChain** is a blockchain designed to allow all SMEs, entrepreneurs and associations to use its products and services to create innovative solutions or issue tokens. The blockchain is similar to a Google shared spreadsheet, but it is not hosted by a single server, but rather by multiple computers at the same time. Blockchains use "consensus mechanisms" to ensure that information cannot be unilaterally inserted without community agreement or changed once it is entered. It is important to note that there are many different blockchains, each containing different types of information, but all of them have the goal of allowing many people to have a common, secure database and agree on the same version of the truth. Blockchains are used to build trust, make important decisions based on verifiable information, record sensitive information immutably in a secure collective record, all without the need for an intermediary. SunuChain's blockchain will allow its users to enjoy all these benefits and create innovative solutions on this platform.

V. Sunucash security

The Sunucash team cares about security around its services and is implementing a security policy on authentication. Indeed we will have a Multi-factor authentication on all our services. Multi-factor authentication, MFA or 2FA is an electronic authentication method in which a user can only access a website or application after successfully presenting two or more pieces of evidence to an authentication mechanism.

Transactions will be secured and encrypted end-to-end with high-level cryptographic algorithms to securely validate batches of transactions - a non-custodial wallet at its most efficient, with enhanced performance and user experience. The user will not have to worry about the funds they hold, want to transfer or wish to exchange.

VI. Sunucash innovation

Sunucash offers several innovative services and products that will allow the African market, in particular Senegal, to be at the core of blockchain technology. In Senegal, the rate of banking is nearly 23%. A relatively low level compared to Togo 25%, Benin 24% or Burkina 23%. This is also a contradiction in terms since Senegal has the largest number of banking institutions in the UEMOA region after Côte d'Ivoire. We notice the increase of mobile money. This system allows people who do not have a bank account to transfer money, pay their bills, recover cash or keep it online, from their phone. In other words, the phone number is the account number. This is why our services integrate these mobile payment methods to allow Africans without bank accounts to have an alternative to the bank cards used on all crypto-currency trading, buying and selling platforms. Sunucash remains committed to building intuitive and transparent financial instruments for crypto traders of all backgrounds, it also recognizes the importance of creating an ecosystem that will allow more Africans to enter the world of DeFi with ease and participate smoothly in a decentralized trading network.

- **Smart Wallet**

This wallet architecture introduces a significant innovation in blockchain interaction by implementing account abstraction. Unlike traditional wallets that require users to manage private keys and pay gas fees in the native cryptocurrency, this system allows for a more user-friendly and flexible approach. The key innovation lies in the use of smart contract wallets, created and managed by a factory contract. These wallets can execute transactions on behalf of users, potentially abstracting away complexities like gas management and allowing for advanced features such as transaction batching, gas sponsorship, and customizable security rules. By separating the account logic from user authentication, this architecture enables diverse authentication methods and paves the way for improved user experiences, such as social recovery options and seamless integration with various applications. Ultimately, this approach brings blockchain interactions closer to traditional web experiences, potentially accelerating mainstream adoption of blockchain technology.

- **Service token and Tokenization**

Nowadays, the “Token” is stirring up the world of start-ups and innovation by being positioned as an alternative to standard financing systems.

Based on blockchain, *tokenization* allows real assets to be valued and materialized in the digital world. By registering an asset and its rights directly on a token, tokenization facilitates management and exchange with a peer, instantly and securely.

We have created a service token called SUNUCASH, which allows a company to pre-sell its products or services and for any transaction fees. Its value fluctuates according to supply, demand and the number of transactions on our products.

Although *crowdfunding* has grown significantly in recent years, investment is still the domain of banks, business angels and other venture capitalists. Tokenization is therefore a model of investment open to all, and particularly to all the parties who cannot use mainstream financing methods (banks, private or public funds).

- **Enhanced multi-channel support**

At Sunucash, we have integrated a decentralized cross-chain solution to provide users with the most efficient, affordable and comprehensive transfer provider, providing an excellent all-in-one ecosystem with a comprehensive governance mechanism to invite users from any

blockchain to join. Each member chain remains independent in terms of governance, which greatly reduces the degree of coupling between chains. This is the spirit of Web3.0: to establish a decentralized and trustless network facility.

Open to tokens from the Ethereum and Polygon networks as well as Bitcoin, inter-chain deposits and withdrawals are supported on the SunuWallet. Investors have access to a wider variety of preferred assets and trading pair options to diversify their wallet.

- **Lower fees and instant settlement**

Thanks to increased scalability on the Polygon chain, Sunucash reduces common problems such as exorbitant gas charges and extended settlement times. In addition to this, amplified gains are now possible as users can store their tokens for a period of time for higher returns, at the lowest costs with a smaller starting capital - optimized trade sizes and speed for the growing trader.

VII. Projection

The developed blockchain infrastructure will allow users to invest in high profit projects in different areas, for example agriculture, real estate and supply chains. We will build projects in the framework of sustainable development allowing the community to join in via crowdfunding and earn profits. At the same time, these projects will allow the SUNUCASH token to increase in value because investments and all transactions (cash flow) will be done with the SUNUCASH token.

The SunuChain blockchain will have a governance token to allow the community to take part in the management of the network by voting. Governance tokens give holders the right to vote on matters that govern the development and operations of a blockchain project. This is a method for projects to distribute decision-making power to their communities.

A decentralized autonomous organization (DAO) is an emerging form of legal structure that has no central governance body and whose members share a common purpose: to operate in the best interests of the entity.

DAOs rely heavily on smart contracts. These logically coded agreements determine decision

making based on the underlying activity on a blockchain. For example, depending on the outcome of a decision, some code may be implemented to increase the outstanding supply, burn a certain number of reserve tokens or issue certain rewards to existing token holders.

The Sunucash DAO will select innovative projects to be developed based on votes and users will be able to invest in these projects to earn passive income.

VIII. Blockchain utility

Unified Data Management and Operations for Multinational Corporations

- **Use Case:** Blockchain can be used to create a shared, decentralized ledger that all offices in different locations can access and update in real-time.
- **Impact:** This would allow for the seamless integration of operations, from inventory management to financial transactions, ensuring that all data is synchronized and consistent across the entire corporation. It can also streamline internal communications and decision-making processes, reducing delays and errors caused by data discrepancies.
- **Example:** A multinational retail corporation could use a blockchain-based system to manage inventory levels across all its stores globally. When a product is sold in one location, the blockchain updates instantly, reflecting the change in stock levels everywhere, allowing for automatic reordering and efficient supply chain management.

Additional Benefits:

- **Security:** Sensitive corporate data, such as financial transactions, employee records, and intellectual property, can be securely stored on the blockchain, accessible only by authorized personnel.
- **Auditability:** Blockchain's immutable nature ensures that all transactions and data entries are permanently recorded, making it easier for auditors to verify compliance across multiple jurisdictions.
- **Cost Efficiency:** Reducing the need for intermediaries and manual data reconciliation between offices can lead to significant cost savings in both operations and IT infrastructure.

Intellectual Property Protection for Artists

- **Use Case:** Blockchain allows artists to register their work in a decentralized ledger, providing undeniable proof of ownership and origin.
- **Impact:** Artists can securely sell their work digitally, receive royalties automatically through smart contracts, and protect their creations from unauthorized use. This democratizes access to global markets, ensuring they get fair compensation for their work.
- **Example:** A musician can release a new song on a blockchain platform, where fans can purchase and stream it, ensuring that the artist receives direct payments without intermediaries.

General Population Impact

- **Financial Inclusion:** Blockchain can offer access to banking services through decentralized finance (DeFi) platforms, allowing people without traditional bank accounts to save, borrow, and invest securely.
- **Example:** A farmer in a remote area could access a microloan through a DeFi platform to invest in better seeds, leading to improved crop yields and higher income.

Remittances with Lower Fees

- **Use Case:** Blockchain can facilitate cross-border payments and remittances with significantly lower fees compared to traditional methods.
- **Impact:** Migrant workers sending money back home can do so with minimal transaction costs, ensuring that more of their earnings reach their families. This can lead to improved living conditions, better education, and access to healthcare for their relatives.
- **Example:** A worker in the United States could send money to their family in Nigeria using a blockchain-based remittance service. The transaction would be fast, secure, and cost a fraction of what traditional money transfer services charge.

Microloans and Crowdfunding

- **Use Case:** Blockchain can enable peer-to-peer lending platforms where individuals can apply for microloans or raise funds for projects directly from global investors.
- **Impact:** Small entrepreneurs, particularly women and rural inhabitants, can access capital to start or expand businesses without relying on local moneylenders who often charge exorbitant interest rates. This can lead to increased entrepreneurship, job creation, and overall economic growth.
- **Example:** A farmer in Ghana could use a blockchain-based crowdfunding platform to raise funds for purchasing modern farming equipment. Investors from around the

world could contribute, with the blockchain ensuring transparency and accountability for how the funds are used.

Secure Savings and Investment Opportunities

- **Use Case:** Blockchain can provide secure and transparent platforms for savings and investments, allowing people to grow their wealth over time.
- **Impact:** Individuals can participate in savings plans, insurance, and investment opportunities without fear of fraud or mismanagement. This helps build financial security and resilience, particularly in communities that are vulnerable to economic shocks.
- **Example:** In a region prone to natural disasters, residents could use a blockchain-based savings platform to pool resources for emergency funds. The transparency and security of the blockchain ensure that the funds are available when needed and are not misappropriated.

Transparent and Efficient Welfare Distribution

- **Use Case:** Governments and NGO can use blockchain to distribute welfare benefits, subsidies, and social assistance directly to citizens, ensuring that funds reach the intended recipients without leakage.
- **Impact:** This reduces corruption, ensures timely payments, and improves the efficiency of social safety nets. It also allows beneficiaries to receive their funds even in remote areas.
- **Example:** A government in Africa could implement a blockchain-based system to distribute agricultural subsidies to farmers. The system ensures that each farmer receives the correct amount and that the funds are used for their intended purpose, such as purchasing seeds or fertilizers.

Education and Awareness through Blockchain

- **Use Case:** Blockchain platforms can be used to deliver financial education and training, helping people understand how to manage their money, invest wisely, and avoid scams.
- **Impact:** By increasing financial literacy, people are better equipped to make informed decisions about their finances, leading to greater financial stability and independence.
- **Example:** Sunu-Academy offers courses in local languages on topics such as budgeting, saving, and investing. Users could earn tokens or certificates as they complete courses, incentivizing learning and engagement.