

Moving towards a more sustainable future using Blockchain technology

Introduction

How can we harness blockchain technology to address the world's most critical social and environmental issues? It is evident that blockchain technology has immense, game-changing potential that extends well beyond the financial sector. Globally, people are investigating, testing, and increasingly employing technology to solve the world's most pressing issues, ranging from the refugee crisis to climate change. Blockchain technology has the potential to transform three areas of the SDGs: constructing robust and transparent supply chains, strengthening and more accountable governmental institutions, and encouraging ethical sourcing and consumption.

Social consequences have taken center stage in our collective consciousness as a result of the COVID-19 outbreak. The global community is at a crossroads in its efforts to achieve the Sustainable Development Goals (SDGs). After almost two years, millions of lives have been gone, the social and material toll has been enormous, and attempts so far have been unequal, inequitable, and inadequately directed toward sustainable construction. The present crisis jeopardizes decades of development achievement, further postponing the critical shift to more sustainable, inclusive economies, and derailing progress toward the SDGs.

Bitcoin and other cryptocurrencies have a number of noteworthy tales to share about their societal advantages. Specifically, the prospect for increased financial inclusion and the benefits to society provided by censorship-resistant transactions. Cryptocurrencies promise to enable users to move value effortlessly around the globe through a resilient, censorship-resistant monetary network that is immune to meddling by state actors and geopolitical crises. For prospective market players, the sole entrance requirement is an internet connection. According to Chainalysis, criminal behavior will account for just 0.34 per cent of bitcoin transactions in 2020, decreasing from 2.1 per cent in 2019.

<u>Blockchain analysis has been recognized</u> as a critical tool for service providers of crypto assets when dealing with assets obtained anonymously or via <u>private</u> <u>channels</u>. In light of the concerns mentioned above, market participants in the cryptocurrency industry can leverage their social impact to gain a competitive edge,

mainly by contrasting their activities to any perception that cryptocurrency is a means of evading taxes and other regulatory regimes, or a facilitator of criminal activity. However, they must also be able to show real social effects via an awareness of the measures often employed to quantify the social impact. Accepting transparent regulatory frameworks designed with social safety in mind will become a differentiating trait of bitcoin miners and other market players in the future.

Additionally, we must encourage the use of green energy in future blockchains. Each business that utilizes blockchain technology also creates its own remuneration structure for miners. New blockchains might simply give miners extra money in exchange for using green energy, therefore displacing polluting miners. Additionally, they might force all miners to demonstrate their usage of green energy and penalize those that do not. Calculating the energy consumption associated with cryptocurrency mining is a difficult endeavour. However, it is widely recognized to include the energy necessary to digitally generate cryptocurrencies and process trade transactions and the energy used by the hardware equipment that supports these activities.

Even though most cryptocurrencies stand at the forefront of financial and technological information, few of them are in line with sustainable and social causes. Therefore, there is an imperious need for blockchain technologies to adhere to SDGs and seek to fill in the gaps in today's sustainable development

GreenGoldCoin is here to serve as the circulating currency of the only ecosystem that has been developed to support, assist, and produce large amounts of microfunds for the benefit of our planet. To improve the planet's circumstances, GreenGoldCoin enables large cooperation from all over the globe, anonymously and confidentially, to promote sustainable solutions to enhance the Earth's natural circumstances.

GreenGoldCoin's ecosystem is open to anybody who desires to send or receive payments in a secure environment. Global loyalty programmes, production of redeemable "points" without the need for a physical presence in a country, direct cross-payments, and much more are all possible. Operational processes carried out inside GreenBlocks are super fast; you will not have to wait lengthy periods for confirmations; your money will be fully free, and they will be as quick and intelligent as sending an email to any location in the globe.

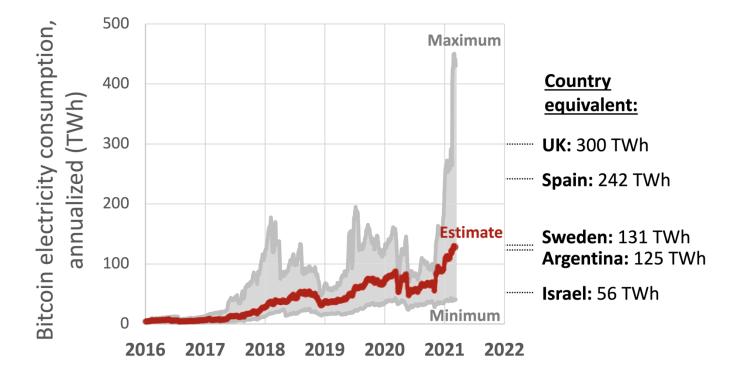
Responsible consumption patterns are critical components of the worldwide transition to sustainability, as shown by their inclusion as Sustainable Development

Goals. With recent trends in natural resource use growing, Goal 12 focuses on "doing more and doing it better with less," focusing on every stage of the supply chain from supplier to customer. Humanity consumes the equivalent of 1.6 Earths at our present pace of consumption. Consumption might be comparable to almost three planets if the world population reaches 9.6 billion by 2050. This is unsustainable, and immediate action is required.

Blockchain environmental impact



Numerous cryptocurrencies, such as Ethereum, Ripple, and Dogecoin, to mention a few, have risen to prominence as a result of the success of Bitcoin and have enjoyed tremendous development and expansion in recent years. Mining is required for these decentralized virtual currencies to function correctly. The computing equipment required to do this uses a significant amount of energy. The demand for electricity associated with bitcoin transactions has increased dramatically in recent years. Several causes have contributed to this increase in energy usage. For example, "the rising difficulty in mining" and "the vast number of new market players who have been drawn in by the increased values of this burgeoning financial asset" are both mentioned.



Source: Columbia University

In addition to energy consumption, cryptocurrency mining results in substantial electronic waste due to the rapid depreciation of hardware over time. This is especially true for Application-Specific Integrated Circuits (ASICs), specialized hardware designed specifically for mining the most popular digital currencies.

According to the BBC, Bitcoin, the most well-known cryptocurrency network, consumes 121 Terawatt-hours of power per year, which is equivalent to the overall electricity consumption of the whole nation of Argentina. According to Digiconomist, a cryptocurrency intelligence website, the Ethereum network consumes as much electricity as the whole country of Qatar.

As cryptocurrency prices rise, environmentalists are more concerned that mining will become less effective due to the decrease inefficiency. In the case of bitcoin, the mathematical riddles required to generate blocks get increasingly complex as Bitcoin's price rises, but the rate at which transactions are processed stays constant. The result is that the network will require more computing power and energy in the long term to perform the same amount of transactions as it did initially. According to the most recent computations from Cambridge

Because these circuits cannot be utilized for any other purpose, they soon become outdated compared to other computer hardware. According to the website Digiconomist, the bitcoin network creates between eight and twelve thousand tonnes of electronic garbage every year on average.

University's Bitcoin Power Consumption index, bitcoin mining uses 133.68 terawatt hours of electricity annualy – a figure that has been steadily increasing over the last five years. This puts it slightly ahead of Sweden, which will use 131.8 TWh of energy in 2020, and somewhat behind Malaysia, which will consume 147.21 TWh.

In recent months, many individuals worldwide have expressed alarm about Bitcoin mining, an energyintensive operation that entails the continuous use of powerful computers to solve complicated mathematical problems. Elon Musk, CEO of Tesla, declared that the firm would stop accepting Bitcoin due to environmental concerns. This resulted in a decline in the market value of Bitcoin, which had previously soared due to the same tech billionaire's optimism. The World Food Programme (WFP) discovered that blockchain technology might ensure

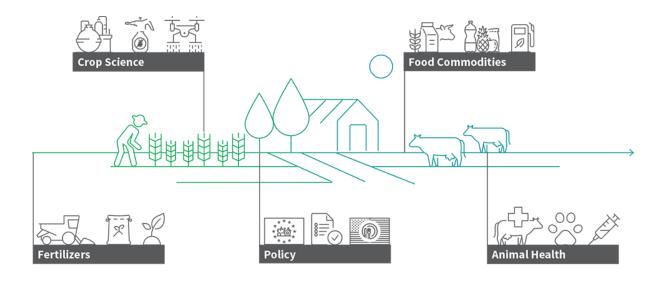
that funds reach those in greatest need.

Yet another issue is the tremendous energy required for each transaction when compared with traditional credit cards: for instance, while a single MasterCard payment may consume only 0.0006kWh (kilowatt hours), a single Bitcoin transaction may expend 980 kWh, which should be enough to generate electricity for an average Canadian home over than three weeks. A greater amount of technical research is required, as well as a greater amount of international discussion involving experts, researchers, and policymakers, if those who are most vulnerable are to benefit from the promises of distributed ledger technology and if it is to have a genuine positive impact on the climate crisis.

It is possible that failing to consider the environmental consequences of this technology and neglecting to regulate digital currency companies will harm the environment and deter potential digital currencies from significantly lowering their energy consumption and carbon emission levels. It is important to consider the environmental effect of digital currencies, particularly since their popularity is expected to grow in the future.

Agribusiness

Agribusiness is a critical industry for every economy; its potential is determined by several variables, most notably the expenditures in technology and research that may boost productivity. The agribusiness aggregate comprises a number of inputs and product supply chains that operate in a variety of natural environments. Supply chains are a collection of activities that go from product conception through manufacture and marketing of a product or service. A supply chain is defined as the activities that span the manufacture of inputs, agricultural production, transformation (industrialization), distribution, and trade processes necessary to reach the ultimate consumer. Thus, a country's agricultural supply chains may have global relevance because of their complexity, diversification, and reliance on the organization of each link in the productive system and the relationships between them. Farmers operate within a robust, participatory, and comprehensive system that is becoming progressively integrated into a vast economic and cooperation network.



Source: IHS Markit

Current agriculture supply channels are inefficient because of their susceptibility to counterfeiting. Blockchain applications provide automated control by tracking a product from the farm to the consumer's table depending on the 3P's (party, product, and premises) requirements. With this technology, the end consumer can choose the product they wish to consume with confidence in its quality. Along with

the difference in product quality, the manufacturer often receives a greater price due to the promises. Thus, blockchains may help increase traceability in agriculture, benefiting the producer and the whole supply chain. Therefore, an infrastructure that is backed by this technology may assist ensure food safety since effective tracking decreases logistical losses.

Hu et al. (2019) discuss research examining delay-tolerant payment in distant rural communities in India linked to the public internet through unstable satellite communications via a community-run station such as Nokia Kuha. Mao et al. (2018) established a credit evaluation system using blockchain technology to increase the monitoring and management of merchants in the food supply chain, where smart contracts handle the whole processing flow and logistics. Smart contracts are programmes that employ computer protocols in conjunction with the user interface to carry out the conditions of a contract. Because blockchain simplifies the whole process by eliminating the need for intermediaries in asset contracts, it also limits the damage to assets, physical or immaterial, by sharing access data

Agriculture represents one of the most vital sectors of a country's economy, since its production ensures food security, nutrition, and health for the populace and optimizes economic output. Notably, blockchain technology may be employed in logistical issues, product identification, and contract creation. They provide a more accurate depiction of transactions between buyers and sellers without the need for intermediaries. Adopting blockchain-based apps in supply chains may help ensure security and promote more uniform contract management among parties involved. With innovative decentralized designs, blockchains increase the strategy implementation of complicated supply chains and boost consumer services and transport networks.

A key worldwide trend in food is that people are becoming more engaged with their food and expecting to know more about where it came from, who produced it, and how it was produced. The topic of what is produced is becoming more significant, as seen by the rise of plant-based or lab-grown faux meat. This enhanced consumer knowledge is influencing consumption choices. Producers that can answer these questions and execute on the consumer's desires are compensated. Provenance information is provided on food labels and other marketing materials since these characteristics are not readily apparent while scrutinizing the item. Because premiums may be paid for goods that exhibit certain features (e.g., quality, safety, sustainability, or geographic origin), this creates an opportunity for food fraud).

Food Supply Chain Management

It is critical to provide information about the sources of food goods to foster consumer loyalty and trust. Essentially, blockchain technology may make any fruit or vegetable as safe to purchase as those produced locally on a neighbouring farm. Food merchants lack an efficient means of confirming that all items were cultivated according to the supplier's specifications with conventional supply chains. That is why retail behemoths such as Walmart, Unilever, and Carrefour are already using blockchain to track the origins of food goods.

Additionally, the time required to trace the origin of food is significantly reduced. Walmart, for example, spent over a week tracing the origins of its mangoes. This time is reduced to less than two seconds when using the blockchain.

Suppose a product does not meet a retailer's requirements. In that case, it is critical to lower the time required to identify the product's origin since it enables retailers to isolate the product more immediately, therefore minimizing the danger of human injury.

Transactions

Agriculture is ideally positioned to utilise transactional simplification and levelling the playing field for small-scale farmers and crop producers, particularly in impoverished countries. Globally, it is estimated that \$940 billion worth of food is wasted each year. This is partial because farmers and growers in less developed nations do not always have access to large marketplaces, making them unable to sell all of the food they produce.

AgUnity is one of the blockchain businesses addressing this problem by providing small actors with access to their own blockchain-based platform for exchanging agricultural goods and fostering market confidence. Their platform enables anyone in the market to create tiny co-operatives and collaborate. Another advantage that blockchain provides agricultural producers is the capacity to fix pricing more efficiently and effectively. This enables them to manage their production per the demand for their goods.

Insurance for Crops

In agriculture, smart contracts take on a special role by assisting farmers in insuring their crops and resolving claims with insurance providers. Typically, it is a very tedious and onerous procedure, both for the farmer and the insurance carrier.

Unpredictable weather abnormalities complicate accurately estimating and reporting the actual losses they produce. This opens the door to fraud and turns the procedure into a logistical headache. The damage claim may be initiated by changing weather patterns that satisfy particular criteria, simplifying the process for farmers and insurers.

Traceability

Demand for organic, locally sourced goods continues to grow. Consumers can now trace their product's journey from farm to table using blockchain technology. Additionally, it includes information on when and how a product was harvested and created and who produced it. This goes so far as to show customers the field their grass-fed beef, among other items, was reared in a matter of seconds. Due to the immutability of the data stored on the blockchain, it may give dependable information that is impenetrable to falsification.

Moving towards a Collaborative Economy

What is the collaborative economy, and how does it work?

The "collaborative economy" (also known as "collaborative consumption") refers to an economic model in which consumers utilize modern technology to create, purchase, sell, share, or rent products and services with one another. Because new markets are continually forming, the market is always changing and evolving. It not only provides advantages to customers, but it also encourages sustainable and conscientious consumption, which is beneficial to the environment.

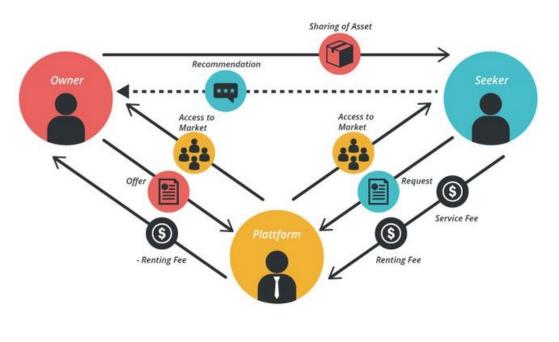
Information is the force that binds collaborative ecosystems together, and it is the source of all knowledge. The knowledge provided by individuals on SE platforms spreads to other markets, resulting in increased efficiency in other markets.

The collaborative economy is distinguished by many kinds of systems, including, but not limited to:

- Collaborative consumption occurs when users advertise their products and services on digital platforms that include a diverse range of commodities that we may purchase or trade for one another.
- Knowledge that is freely available: Non-profit platforms disseminate material that is not protected by intellectual property rights and may be accessed by anybody at any time.
- Collaboration in the manufacturing process: People collaborate in virtual or real venues to assist in managing projects, goods, and services, particularly in the design and engineering fields.

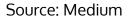
The peer-to-peer connection became simpler due to the fast development of communications technology, allowing for large communication between service providers and their clients to take place. The emergence of collaborative economy platforms coincided with recognizing the importance of mass media and its critical role in the marketplace by businesses.

Spanning from traditional financial instruments to alternative currencies, the sharing feature in this sector provides essential funds for the generation of innovations. On the other hand, it enables the sponsors to select the recipients of their loans (crowdfunding, social lending etc).



Sharing Economy

Business Model Toolbox



A more sweeping generalization is that the Sharing economy can produce employment and income by mobilizing underutilized resources while also considering its social and communal component, including its perspective of honesty and regulated use of natural resources. The sharing, lending, and renting models are spreading at a rate never previously witnessed in the history of the global economy. Nevertheless, the collaborative economy is still in its infancy in emerging nations such as Latin America. We may anticipate some disruption in traditional businesses as the collaborative economy evolves. Will existing businesses and brands regard this upheaval as a threat or an opportunity? They will be on which side of the change curve?

The catalysts for cooperation include beneficial actions to a wide variety of businesses: less purchasing, more sharing; less consuming, more creating; less working, more contracting chances; and less regulation, more risk. These actions may need a shift in perspective.

Mature firms should consider the collaborative economy's possible influence throughout their overall strategic plan. Incumbent enterprises may be able to collaborate with participants in the collaborative economy, effectively altering their business models to provide new service options to their clients.

Collaborative Production

Collaborative production is how groups or networks of people collaborate to create, manufacture, or distribute commodities. It is associated with the concept that the community determines what to produce. Two key characteristics define collaborative production: it is peer-to-peer and open. Collaborative production activities include design, manufacturing, and distribution. In contrast, the maker economy approach emphasizes initiatives and activities begun and directed by people and communities, rather than businesses.

Furthermore, collaborative production has its origins in co-creation, a process in which many parties (for example, a business and a group of consumers) collaborate to create a mutually valuable outcome4. The introduction of the Internet has only helped to extend its reach even farther, beyond the capacity of standalone partnerships (sometimes including businesses) to utilize networks to link individuals with shared interests and innovative approaches with the prospects of distributed production.

In essence, both the collaborative economy and production empower people, enabling ideas to be translated into reality and sold more quickly and readily. Affordable, powerful prototype tools combined with access to maker networks such as Hackster would allow makers to quickly validate their ideas' product-market fit and determine whether the product has a viable commercial possibility or requires more iterations. As a result, decentralizing manufacturing affects consumer culture and behavior, and may eventually result in open-source, sustainable goods being the new normal.

Collaborative production may also result in fundamental modifications to the manufacturing process — marketing leaps to the production chain's beginning (rather than the end) – by incorporating users who are both co-producers and future customers.

Examples

Established collaborative food platforms are rising in popularity across the world. For instance, Mama Bake's large batch cooking platform currently has over 100 groups enrolled worldwide, including 20 in New South Wales. Meanwhile, the group eating service Eatwith is now available in 200 locations across 50 nations, with 650 registered hosts filling 80,000 seats at their tables together. Crowd Carnivore is a crowdfunding website founded in early 2016 that connects consumers with farmers to buy huge amounts of meat. The technology circumvents the retail sector, enabling direct interaction between farmers and customers. Crowd Carnivore is now operating in New South Wales and Victoria, but is actively seeking to expand across Australia. Crowd Carnivore is one of Crowd Foundry's portfolio of crowdfunding tools for collective purchasing. Additionally, Crowd Cellars (for wine) and Farm Cart are under development (for fresh produce).

GreenBlock – GreenGold

The sustainable future of cryptocurrency

What is the GreenGold Initiative?

GreenGold Project is a unique crypto ecosystem, as it enables for the large fundraising of cash from millions of individuals worldwide to invest them in green and sustainable initiatives, the GreenGold project will be issuing various tokens to support underpinning projects that will enhance the lives of humanity and the Earth.

Its name is derived from the Avocado business, which has developed into a real gold mine for those engaged. According to the WBOC, the Avocado industry is now valued over \$10 billion and is expected to exceed \$16 billion by 2026. This one business revolutionized rural economies from Mexico to Colombia, the Dominican Republic, Peru, and Indonesia. As a result, it is often referred to as Green Gold.

Avocados' Success as a Food

The birth of GreenGold was inspired by the avocado industry's fast growth and wants to create a novel platform that streamlines the rapid creation and finance of new green projects in nations throughout the world. The GreenGold project is built on a blockchain-based ecosystem that enables the delivery of safe, sustainable, and traceable green goods via the use of innovative technology. The application of IoT and Agro4.0 technologies is critical for reducing waste, conserving natural resources, and protecting the environment. In line with the UN prediction, it is essential to double and enhance food production in the future years, and GreenGold Project permits significant investment from individuals all over the globe to do this.

Powered by the GreenBlocks Distributed Ledger Technology (Solana)

The platform is based on the GreenBlocks blockchain Decentralized Ledger Technology (DLT), a Blockchain 4.0 system that is light years ahead of the traditional 3.0 (PhS) systems now in development in the majority of the cryptocurrency market. GreenBlocks leverages the full potential and sustainability of the world's only blockchain that operates on a Proof of History (PoH) consensus algorithm. SOLANA is a protocol that eliminates power-based consensus (PoW) and provides the lowest costs and highest transactional power.

Why is the GreenGold Project Required?

Such a new approach is urgently needed. The agricultural industry often relies on decades-old technology and financing sources that are antiquated and intended to suffocate farmers and rob them of financial freedom. The GreenGold ecosystem is propelled forward by a highly efficient, dependable, and cost-effective mechanism. The transaction fees are the lowest of any such token-based fundraising mechanism now in use. Moreover, GreenGold is a truly transparent, decentralized, and open method to human improvement. Its "points without borders" strategy, better privacy features, and quick transactional capacity make it a potential investment opportunity for investors.

What is the GreenGold Project's Financial Support?

GreenGold is backed by a variety of successful tokens from various businesses. These are security tokens that are backed by real-world agricultural investments and innovation, such as Avocado Coin (AVDO), Lemon Coin, and Berry Coin. Currently, the GreenGold initiative is promoting the Avocado Coin via a first offering.

While GreenGoldCoin (GGLD) is the primary currency on the platform, numerous additional security tokens, as noted above, are also used for fundraising and other economic objectives. Avocado Coin is the enterprise's initial offering of these digital security tokens. AVDO's total supply is capped at 21 million coins, the same as Bitcoin's. If you lost out on the opportunity to become a billionaire via Bitcoin, here is an excellent alternative. AvocadoCoin is now worth \$1,000 and is predicted to exceed bitcoin's present value over the next several years.

The platform is principally responsible for the fundraising ecosystem's total supply. It is a considerably more liquid choice than AVDO due to its nature, and its total supply is fixed at 21 trillion GGLD tokens. GreenGoldCoin's current price is \$0.02. However, this is the introductory price for the new token. Price increases are projected to accelerate in the coming months as early harvest programmes are financed and implemented.

Security Tokens Offerings (STOs)

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Security tokens encompass existing investments in an underlying investment asset, like stocks, bonds, funds, or unit trusts, or an investment contract in that asset. A security is a "fungible, negotiable financial instrument that bears some kind of monetary value" that is guaranteed by a major asset such as a firm or property. A security token is a tradable electronic instrument that represents ownership rights and is stored on a blockchain. For instance, when you purchase conventional stocks, ownership data is documented on a paper or in a custodial account. For STOs, the procedure is the same, except that the token is created on the blockchain. STOs may also be seen as a combination of cryptocurrency and token offers and the more conventional initial public offering (IPO) due to its interaction with both of these ways of capital raising.

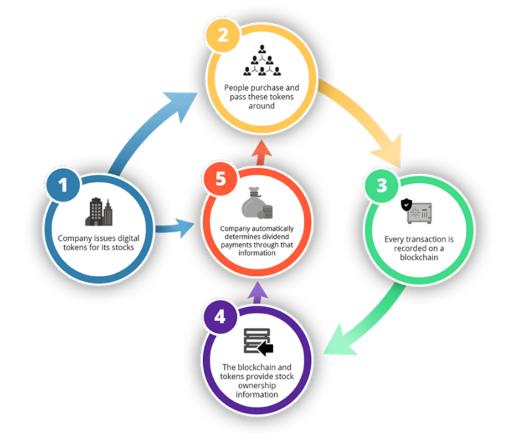
STOs are secured by assets and are governed by regulations. On the other side, the majority of initial coin offerings (ICOs) present their currencies as utility tokens that provide users with access to the native platform or decentralized apps. They believe that it is for consumption purposes rather than investment. Consequently, ICO platforms avoid some legal requirements, such as registration and compliance with regulatory bodies' stringent oversight. As a result, the entrance barrier for businesses wishing to launch an ICO is significantly reduced. It is far more difficult to start an STO, given the aim is to provide security under securities legislation. As a result, issuer platforms are responsible for ensuring compliance with applicable requirements upfront. Additionally, they would likely be limited to raising capital from authorized investors that meet specific criteria.

Small businesses have well-documented difficulties accessing development finance. Founders, family, and friends often have limited financial means. Only a handful of these enterprises have access to venture capital (VC) and private equity (PE) firms. Occasionally, angel investors may contribute small cash, but only to a chosen few. In general, banks and non-bank lenders will not support businesses that lack clearly ascertainable collateral. While private equity offers are one method of raising expansion money, they have encountered substantial regulatory hurdles.

To address these impediments, businesses, financial institutions, and regulators are investigating novel alternative funding sources. Equity crowdfunding and security token offers (STOs) are two more avenues for small businesses to raise expansion capital. Equity crowdfunding aims to mobilize the capital of individual investors interested in investing in high-growth enterprises. STOs capitalize on the blockchain's security and efficacy. Notably, both financing mechanisms rely on the internet to allow the exchange of information and funds. These alternate sources of financing may be utilized alone or in conjunction with one another.

Benefits from the developing advancements in fundraising processes can only be reaped by projects and protocols developed on (or linked to) the blockchain. Only blockchain-based projects and protocols can take advantage of the latest advancements in crowdfunding. There is a strong trend showing that, as blockchains become more ubiquitous, cheaper to run, and decentralized platforms build better user interfaces, DeFi services will progressively draw resources that were formerly allocated to Traditional Finance.

Cryptocurrencies and security tokens will also enable unbanked individuals to participate in the worldwide security token investing market." Due to various conditions, not everyone is eligible to open a bank account, an online wallet, or another fintech payment system. However, cryptocurrencies are an exception to this rule. Anyone may easily get a crypto wallet and begin trading digital currencies.



How STOs function

Source: Medium

Inaccessibility to banking and financial institutions is a significant hurdle to internet crowdfunding, regardless of its decentralized nature. Allowing cryptocurrency exchanges to provide tokenized securities enables those who lack access to or wish to forego banking services to participate in stock trading or invest in publicly listed firms. From another angle, this implies that businesses may get financing from previously unbanked investors. With STOs, tokens are linked to physical, registered financial instruments or assets that existing organizations and applicable laws control in particular regions. This eliminates the need for holders of such tokens to trust an unknown "trustless" system blindly. They acquire and sell real-world currency in the form of tokens. STOs provide a more acceptable investment vehicle for investors, corporations, and regulatory bodies. They achieve the ideal mix between decentralization, financial inclusion, and dependability.

Conclusions

Due to the increasing usage of these digital currencies, academics have begun investigating their possible environmental effect. While it may seem that a digital token saved in a virtual wallet does not have a substantial environmental impact, the process of "mining" bitcoin and other cryptocurrencies consumes more power than several nations each year.

Environmentalists are increasingly worried that mining will become less efficient as bitcoin prices increase due to the decline in its efficiency. In the case of bitcoin, the computations used to produce blocks get more complicated as the price of bitcoin increases. Still, the pace at which payments are executed remains constant. Consequently, the network will eventually demand more computing power and energy to accomplish the same number of transactions it did initially.

Agriculture constitutes one of the most crucial sectors of a nation's economic structure because its production assures food security for the populace and nutrition and health for the population and optimizing economic output. Notably, blockchain technology can be used for logistical challenges, product identification, and the establishment of contracts. They give a more realistic portrayal of transactions between buyers and sellers since they do not rely on intermediaries to facilitate the transaction. The use of blockchain-based applications in supply chains may aid in providing greater security and promoting more standard contract management among the parties participating in the process. With their novel decentralized designs, blockchains help improve the strategy execution of complex supply chains and the provision of consumer services and the operation of transportation networks.

Latin America contribute significantly to the global agricultural production, as s everal of the region's agricultural systems are among the most active in the world. They have nourished a rapidly rising population, supported economic growth, created significant exports, and contributed to the reduction of world hunger and poverty. However, many of Latin America's and the Caribbean's agri-food systems are technologically inadequate, socially inequitable, economically reckless, and ecologically unsustainable. Which approach will prevail in the future as the most effective at addressing these issues? Ecosystems like GreenGoldCoin, which has been built to support, help, and generate vast quantities of micro-funds for the good of our planet, need circulating money, and GreenGoldCoin is that currency. To improve the planet's natural conditions, GreenGoldCoin facilitates large-scale collaboration from all over the world, anonymously and privately, to promote sustainable innovations that will improve the planet's natural needs.

GreenGold was founded in response to the avocado industry's fast expansion, to develop an innovative platform that simplifies the rapid creation and financing of new green initiatives in countries worldwide. GreenGold is a blockchain-based ecosystem that facilitates the secure, sustainable, and traceable distribution of green commodities via innovative technologies. Implementing IoT and Agro4.0 technologies is crucial for waste reduction, resource conservation, and environmental protection. According to the UN, it is vital to double and expand food production in the next years, and the GreenGold Project enables major investment from people worldwide.

We strongly believe that technology represents the best way to improve people's lives without causing harm to the environment. As a result, we developed a business model for developing and applying technology that benefits everyone: producers receive a fair deal, consumers receive the product they want, and investors receive high returns on investment. GreenGold is a game-changing new blockchain technology project that allows you to invest in cryptocurrency and environmentally friendly businesses. GreenCrypto Corporation has announced the debut of its revolutionary green fundraising cryptocurrency, which is expected to become the sector's next big thing.

All of these innovations would contribute to the creation of a collaborative economy model. In essence, the "collaborative economy" (also known as "collaborative consumption") refers to an economic model in which consumers use contemporary technology to develop, acquire, sell, share, or rent items and services with one another, rather than with a business or institution. To keep up with the constant formation of new markets, the market is always altering and developing. Customer benefits are not only increased, but it also promotes environmentally friendly consumption that is both sustainable and conscientious.

Another critical component of this novel ecosystem would be the facilitation of STOs . Making it possible for cryptocurrency exchanges to provide tokenized securities allows people who do not have access to or do not choose to use banking

services to engage in stock trading or to make investments in publicly traded companies. From a different perspective, this suggests that enterprises may be able to get finance from hitherto unbanked sources. With STO, tokens are connected to tangible, registered financial instruments or assets under the jurisdiction of existing organizations and the regulations that apply in certain countries. The necessity for token holders to simply trust an unknown "trustless" system is eliminated due to this development. They buy and sell real-world cash in the form of tokens, which they acquire and exchange.

The benefits of evolving breakthroughs in fundraising procedures are available exclusively to projects and protocols built on (or connected to) the blockchain. Only schemes and protocols built on the blockchain are eligible to benefit from the newest breakthroughs in crowdfunding. There is a clear trend indicating that as blockchains grow more prevalent and less expensive to operate, and decentralized platforms improve their user interfaces, DeFi services will gradually consume resources formerly reserved for Traditional Finance.