

WHITE PAPER 1.0



Smart Contract . Smart Trade



A DECENTRALIZED NETWORK
FOR GLOBALLY TRADED
COMMODITIES AND FINISHED
GOODS WITH COMMUNITY
ENHANCED FINANCING



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Abstract

TITA means Buy-Sell in a Native African Dialect. The TITA Project is all about building a decentralised ecosystem powered by Blockchain technology for the buying and selling of locally or globally traded commodities and finished goods thereby setting up pedestals that enhance the financial systems of the communities where these commodities are produced.

A commodity is a basic good used in commerce that is interchangeable with other commodities of the same type; commodities are most often used as inputs in the production of other goods or services. Commodity may differ slightly, but it is essentially uniform across producers. When they are traded on an exchange, commodities must also meet specified minimum standards, also known as a basis grade. Some traditional examples of commodities include grains, gold, beef, oil and natural gas. More recently, the definition has expanded to include financial products, such as foreign currencies and indexes.

Technological advances have also led to new types of commodities being exchanged in the marketplace. For example, cell phone minutes and bandwidth.

This project is designed to create a solid infrastructure that solves the basic and complicated issues with the trading of commodities and end user's goods.

We are focusing on commodities as we believe they are the basic inputs to the physical environment that we have to interact with in our daily lives.

In this paper we present TITA, a system to facilitate primarily commodity trading from producers (source) to manufacturers / consumers (end users) and secondarily enhancing community financial systems.

TITA uses a blockchain-based system to provide tools for the coordination and incentivization of participants engaged in buying and selling of commodities that eventually turn into end user's goods, and to collaborate and support financial products for producing communities using the blockchain, by creating a standard token protocol which embeds defined requirements into the tokens themselves, these tokens can be purchased and traded among verified participants.

Commodity trading is one of the oldest forms of human activity. It is central to the global economy. Yet up to now there has been remarkably little research into this important area- (Trafigura)

Introduction



Commodity Transformation

Virtually all agricultural, energy, and industrial commodities must undergo a variety of processes to transform them into things that we can actually consume. These transformations can be roughly grouped into three categories: transformations in space, transformations in time, and transformations in form.

Spatial transformations: - involving the transportation of commodities from regions where they are produced (supply regions) to the places they are consumed. Transformation in space is necessary to bring commodities from where they are produced to where they are consumed.

Transformation in time: - Just as the locations of commodity production and consumption typically do not align, the timing of commodity production and consumption is often disjoint as well.

Transformation in form: - commodities often must undergo transformations in form to be suitable for final consumption, or for use as an input in a process further down the value chain. Though often overlooked, blending and mixing are important transformations in form.



Commodity Agents

Commodity trading firms are vital agents in this transformation process. The sale and purchase of commodities is usually carried out through futures contracts on exchanges that standardize the quantity and minimum quality of the commodity being traded. There are two types of traders that trade commodity futures. The first are buyers and producers of commodities that use commodity futures contracts for the hedging purposes for which they were originally intended. These traders actually make or take delivery of the actual commodity when the futures contract expires.



Commodity Speculators

These are traders who trade in the commodities markets for the sole purpose of profiting from the volatile price movements. These traders never intend to make or take delivery of the actual commodity when the futures contract expires. Many of the futures markets are very liquid and have a high degree of daily range and volatility, making them very tempting markets for intraday traders. Many of the index futures are used by brokerages and portfolio managers to offset risk. Also, since commodities do not typically trade in tandem with equity and bond markets, some commodities can also be used effectively to diversify an investment portfolio.



Smart Contracts

Over the past few years, Turing-complete programming languages have been implemented into decentralized Blockchains. These systems use “smart contracts” (software programs stored on-chain that are automatically implemented upon specific conditions being satisfied), to add and modify data algorithmically however a user designs it.

The most widely used Turing-complete blockchain, Ethereum, grew out of a frustration with trying to implement complex logic on top of Bitcoin. Ethereum simplifies the task of implementing complex financial logic on a blockchain.

With only a few lines of code, smart contracts can transfer assets or establish escrow conditions to be executed algorithmically, with all the benefits of blockchains as described earlier. There is no risk of payment on one side, and the failure to deliver on the other side. The smart contract can be designed to effect a transaction instantaneously, or can be designed to effect upon future conditions begin met.



COMMUNITY ENHANCED FINANCIAL SYSTEM

Whether they're aware of it or not, whether they care about it or not, all financial institutions have a significant impact on communities. By directing the flow of credit in our economy, they decide the shape of our world – the houses we live in; the businesses we work for and buy from; and the activities that protect or destroy our environment.

Community considerations may be addressed through corporate social responsibility statements or staff engagement programmes, but, if concern for real-world impact isn't at the heart of a bank's business model, no amount of window-dressing will outweigh the damaging effects of its core activities. RBS, Barclays and HSBC all have sustainability policies, but are also the UK's biggest bank lenders to the coal industry. HSBC also provides banking services to fracking company Cuadrilla, while Barclays is a major investor in Third Energy, which plans to frack in North Yorkshire.

With financial institutions wielding this much power to affect our lives, the democratic control offered by the mutual model is an important mechanism for accountability and influence. Unless we know and can control what our money is doing, we have no guarantee that profit is not being prioritised over people or planet.

Thankfully, a growing number of alternative finance options offer not just disintermediation, but the opportunity to join a community of investors with the same vision, such as a democratically owned renewable energy system. Similarly, Ecology Building Society is not a geographical community, but a community of shared value: our members believe in the power of money to build a more sustainable future, funding homes that respect the environment, low-impact lifestyles and resilient local economies.

The existence of these national communities of interest suggests we also need to think about community impact on a larger scale. In a world of global financial interconnections and systemic environmental threats, it's no longer credible to argue that a bank should only consider its impact within a fixed geographical boundary

Problems

Here, we address some of the basic and pressing challenges of global commodity trade and how it affects the end products that we see today. These are the problems the TITA project is built to provide solutions to.



1. Cash Settlement

The main drawback in cash settlement is that the commodities spot wholesale market is not an organised one (globally). Commodity prices vary from location to location and also in accordance with their quality characteristics, variety and preferred end-uses in different locations. There is no single unique cash price quotation for a commodity valid throughout the country at any given time.



2. Credit Lines

Access to international markets becoming more constrained as a result of tighter credit lines of intermediaries in developed markets.



3. Logistics

Commodity traders know that a typical metals shipment is not just from mine to smelter or refiner to purchaser; rather, it can involve ships, trains, warehouses, and factories along the way. And even when that shipment sits in on a barge or vessel for a month or in a factory for a year, its ownership can change multiple times.



4. Technology

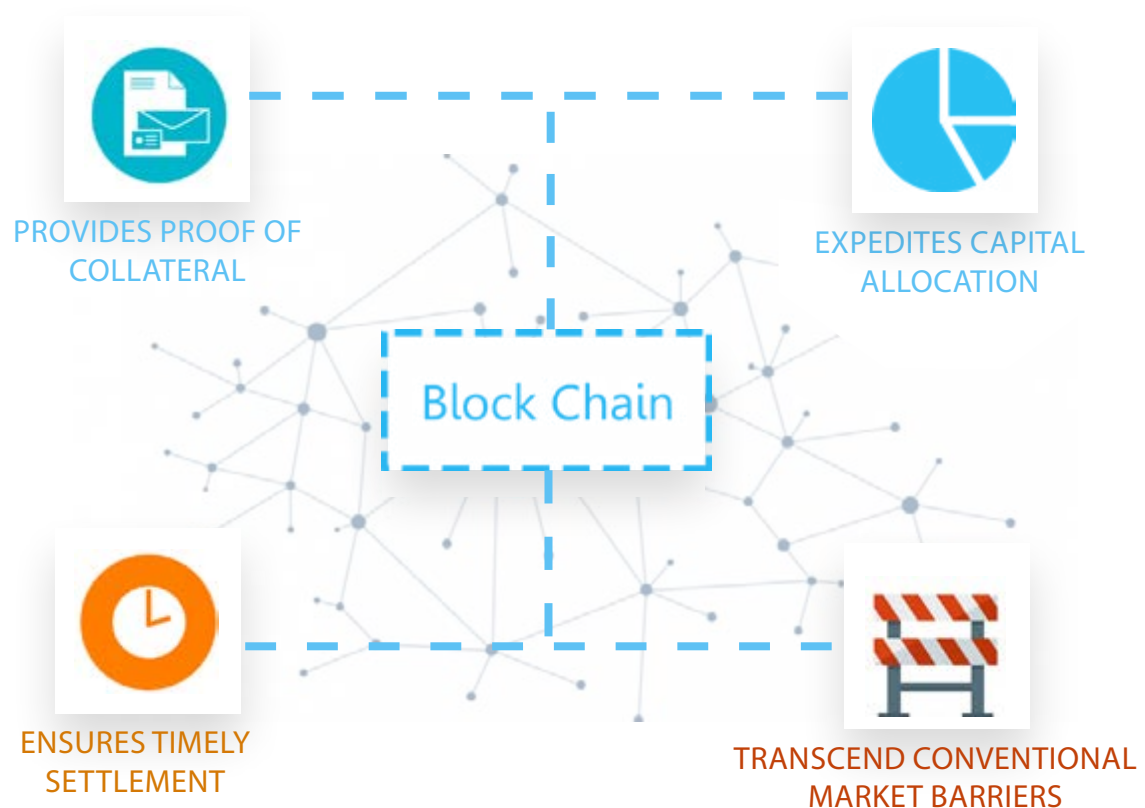
The commodities markets have often been laggard when it comes to innovative and cutting-edge technology. Many commodities traders have invested heavily in their Commodities Trading and Risk Management (CTRM) technology. However, Many companies and individuals are not satisfied that they are unlocking the full benefits of their investment.

Effects

OF BLOCKCHAIN TECHNOLOGY ON COMMODITY TRADING

A Blockchain is a decentralized, distributed and public digital ledger that is used to record transactions across many computers so that the record cannot be altered retroactively without the alteration of all subsequent blocks and the collusion of the network.

While it may or may not necessarily boost commodity prices, the innovation could offer a secure means of exchange of raw materials, open up channels of trade among buyers and sellers that had until now have been perceived as credit risks, and provide more transparency and liquidity to a market that has slowly lost favour among financial institutions. Blockchain could help commodity traders transcend conventional market barriers. It also ensures timely settlement, expedites capital allocation and provides proof of collateral.



Why TITA Model?

The public ledger technology has begun to show promising solutions to financial transactions and services in a lot of industries and we have decided to apply this into the trading of commodities and finished goods. For example, what is the need of clearing houses if we can have the chance of automated post-trade “smart contracts”? Because, trading hard or soft commodities requires besides market volatility, also management of supply chain and counterparty risk. So how best can all these processes be handled in a way that shows transparency, provides security, and brings the ease of doing business?

The TITA ecosystems are powered by the the Ethereum Blockchain due to its uniqueness of the “Smart contract”. This is because we have uniquely designed features linked by addresses which serve as activities within the ecosystem and are mapped out at the back end with series of smart contract codes which automatically come into function or terminate when certain conditions during transaction between two parties are met.

The TITA Token is the common entity which moves between these addresses (Activities) and triggers the desired functions to automatically come into play or be terminated. The concept design has made it possible for the TITA Tokens to be built in a unique way and designed with functions to fit for tracking physical commodities and goods along the supply chain, where a lot of transnational procedures are still recorded on paper. On the TITA network you have the benefit of managing all the title transfers electronically through a distributed public ledger, certified by any counterparty of the supply chain, which would eventually increase trust between the market players (and reduce counterparty risk) and ease hedging processes due to elimination of clearing.

The TITA Project has a strong value proposition to logistic companies, security companies providing services for commodity trade, clearing houses, agents, buyers and sellers who are not only incentivised for participating but have a trusted platform. We will create a unique space for our users by creating a multifunctional platform and that connects these markets, makes trading easier and gives them the ability to access a wide range of services not limited to logistics, tracking and security services.

We have employed data analysis from surveys based on geographical locations to provide real time solutions to address particular trade problems and give traders access to enhanced financial systems like credit lines after extensive verification to boost production and trade.

Applications

1

Michael, a Coffee brewer in Singapore initiates a transaction on TITA Center to buy 100 MT of Coffee from Blue Stone Ltd in Kenya. Blue Stone likes the offer, accepts it and an amount of Tita tokens are from Micheals personal account address on the Tita Network through a series of addresses guided by smart contract codes that serve as activities for verification for the necessary paper work and then is validated by parties on the network. Maersk; a shipping and Logistics company handling the warehousing and transportation are also initiated in the transaction chain through the use the tita tokens and smart contract addresses acting as a tracker for both Michael and Blue Stone. As soon as goods reach Michael at the physical destination address, the entire transaction begins to terminate automatically, thereby initiating settlement of funds to the parties involved in the entire transaction. Blue stone receives Tita Token in their address as payment for goods sold which can be converted to fiat currency or offered in exchange for services such as micro-credit in the purchase of materials to boost their next production at discounted rates etc.

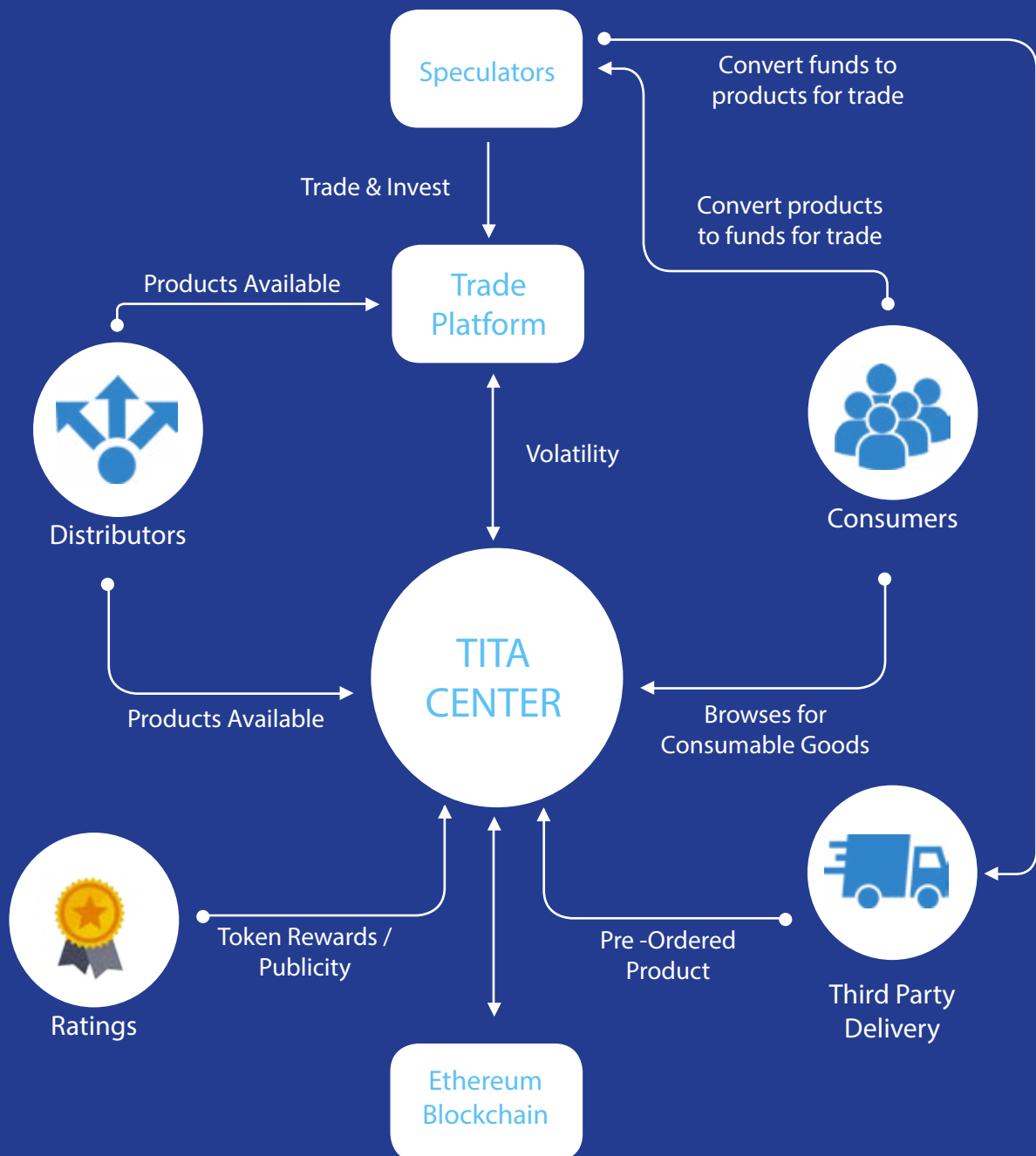
2

Sam is an agent who is an intermediary for a big deal he found on the Tita Center Platform. He brings both parties to the Tita network where he initiates an agent contract, this enables him to provide privacy for both the buyer and the seller. All the necessary paper work will be eliminated using our trade compliance algorithm which requires the Tita Token for validation. The goods will have to be verified, insured and transported to the buyer before the smart contract where the funds - represented by the Tita Token - have been sent will payout his percentage seamlessly to him and he can convert it to fiat currency on an independent external exchange or purchase goods and services within the ecosystem.

The TITA Ecosystem

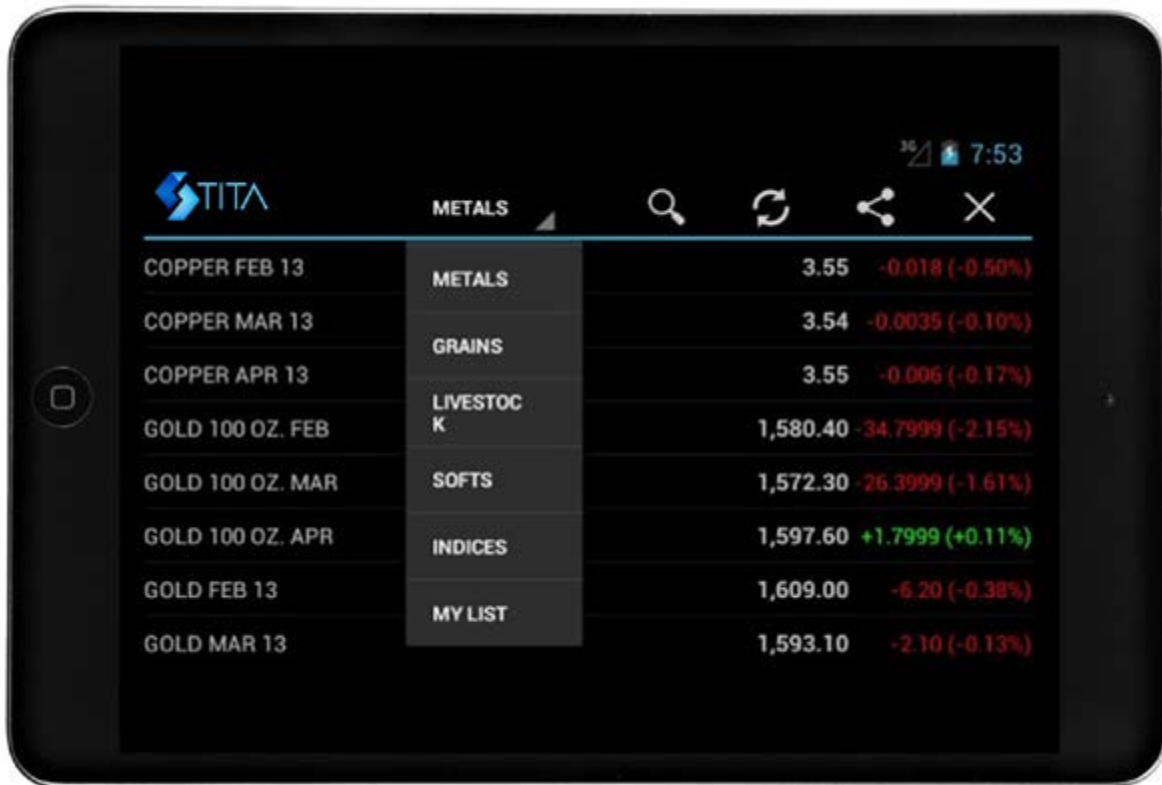
The TITA center

A decentralized network designed to operate like an e-commerce marketplace where Raw Materials and their finished products intersect with their respective producers, buyers, sellers, suppliers, distributors, and other agents of trade. This will give users good product visibility and ensuring that high quality standards, transparency, and transaction ease are met with the use of smart contracts and the power of the blockchain technology.



The TITA Exchange

A decentralised commodity trading exchange designed to provide robust trading services due to real time connections with various commodity global trading floors around the world thus giving best possible prices and user experience for trading futures contract. The use of robotic API's is implemented to enable automatic and semi-automatic trade executions for users.



The TITA Token

The TITA token will be referred to as “TITA” and will be issued to serve as fuel for the ecosystem and as a form of exchanging on the platform to give incentives to users, to encourage trade and to build a trust less platform (escrow) to facilitate market activities, Provide database for Producers, Manufacturers, Supplies and other Agents in the Supply Chain Circle. It will also be used as the staking unit for selecting block producers, as well as a single medium to pay for costs incurred by the TITA Network.

Holding TITA equates to having a role in the TITA project.

The TITA which works on the Decentralised database Platform for commodities exchange has also been designed for tracking goods globally, information storage services and act as a financial agent to provide Micro credit services.

Token consistency will be ensured as new tokens would not be minted after the smart contract has been published.

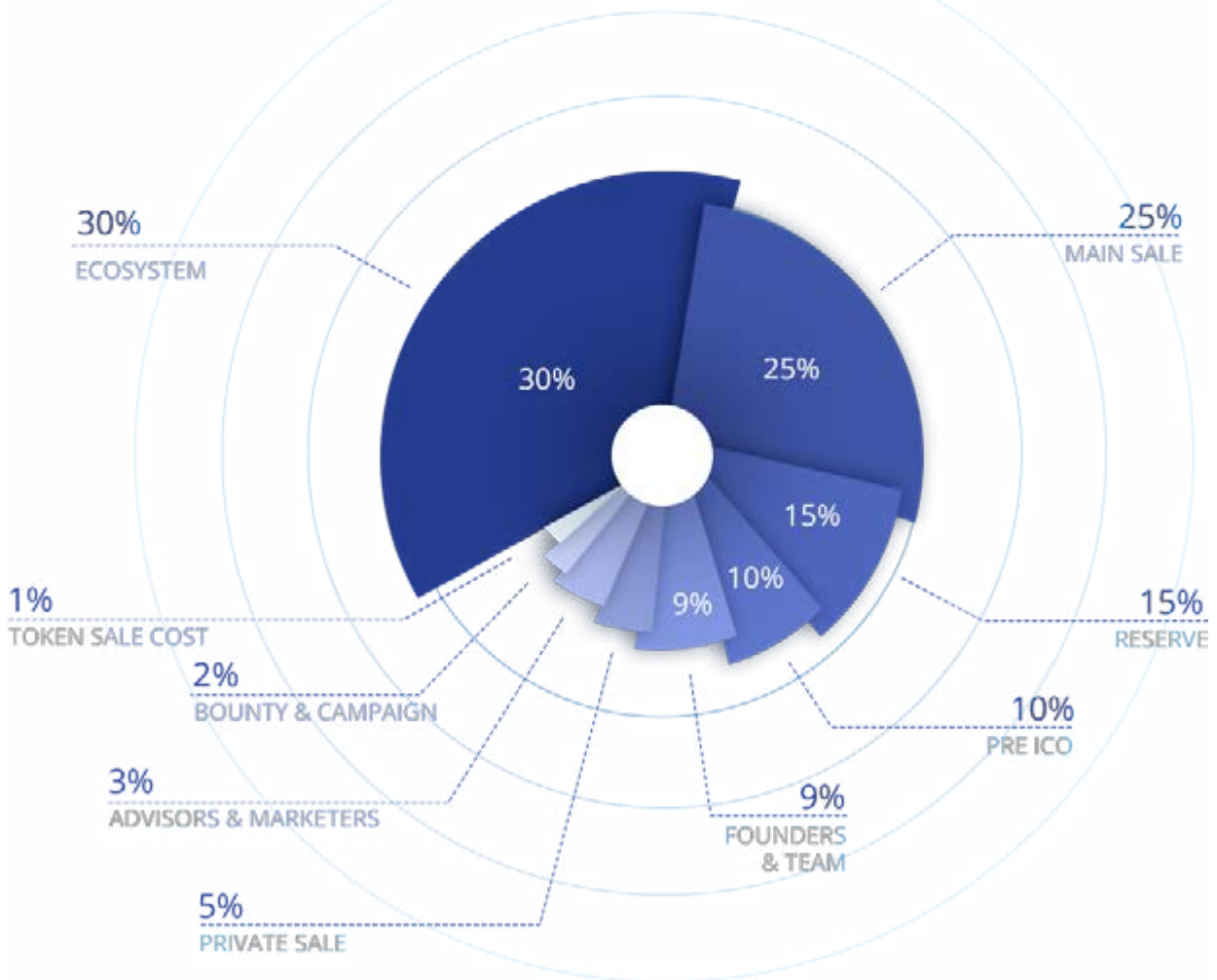
The TITA network token “TITA” will be built on the Ethereum block chain which is designed to execute smart contracts. Tokens in the Ethereum ecosystem can represent any fungible tradable good: coins, loyalty points, gold certificates, IOUs, in-game items, etc. Since all tokens implement some basic features in a standard way, this also means that your token will be instantly compatible with the Ethereum wallet and any other client or contract that uses the same standards.

Using Ethereum, you can create a contract that will hold a contributor’s money until any given date or goal is reached. Depending on the outcome, the funds will either be released to the project owners or safely returned back to the contributors.

All of this is possible without requiring a centralized arbitrator, clearing house or having to trust anyone.

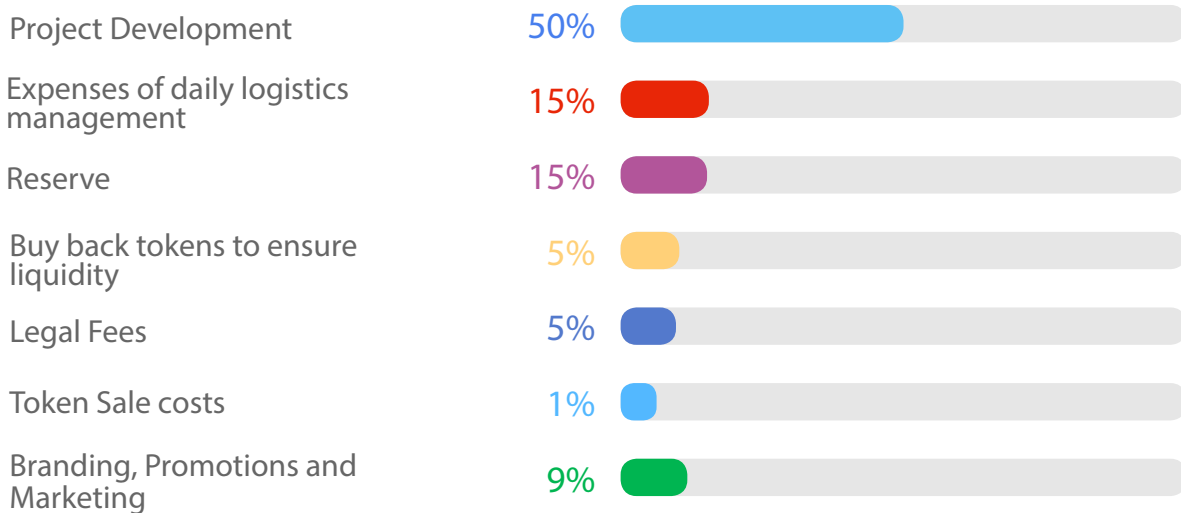
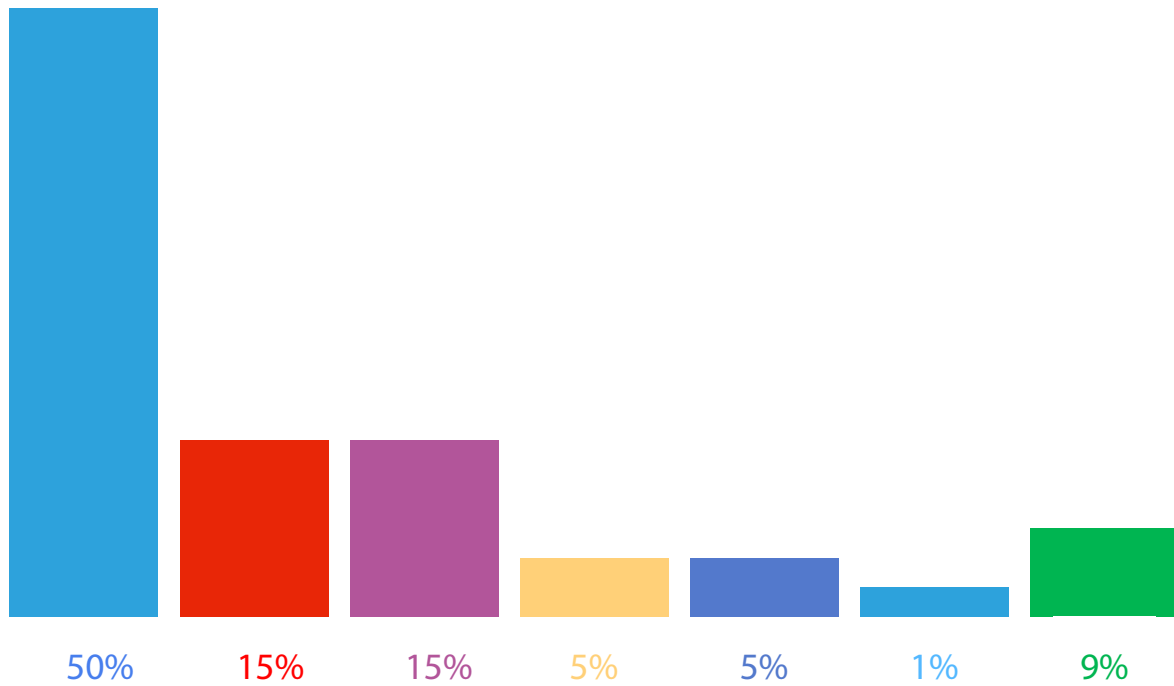
TOKEN DISTRIBUTION

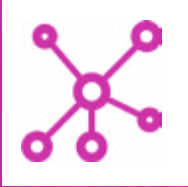
250,000,000



Main Sale	25%	<div style="width: 25%;"></div>	62,500,000
Pre ICO	10%	<div style="width: 10%;"></div>	25,000,000
Private Sale	5%	<div style="width: 5%;"></div>	12,500,000
Founders & Team	9%	<div style="width: 9%;"></div>	22,500,000
Ecosystem	30%	<div style="width: 30%;"></div>	75,000,000
Advisors & Marketers	3%	<div style="width: 3%;"></div>	7,500,000
Reserve	15%	<div style="width: 15%;"></div>	37,500,000
Bounty & Campaign	2%	<div style="width: 2%;"></div>	5,000,000
Token Sale Cost	1%	<div style="width: 1%;"></div>	2,500,000

Use of Funds





COMMUNITY NETWORK EMPOWERMENT

Every member of our community is not bound by geographical location and is given an equal opportunity to benefit from the ecosystem we are creating to create. Thus the TITA project will:-

- Identify obstacles which prevent information technology and particularly information from achieving its potential impact
- Provide our basic and grassroots models in incorporating the producing communities into our ecosystem.
- Stabilize the telecentre
- Developed points of expertise within communities
- Develop relationships with successful and innovative organization within the region.
- Keep driving to achieve self-reliance.



HOW WE WILL DRIVE ADOPTION

With a keen focus on items that are used by the average man, our ecosystems will attract a daily experience in trade and transactions by individuals; thus fostering partnership with various established companies, trading floors, and agents within the value chain right down to end consumers. Partnerships are strategic in boosting adoption and we have tailored made synergy programs during the course of every fiscal year that will bring a lot of people and groups on board the network.

We are building from the ground up and taking into cognisance every level of production and distribution and tokenized asset class will be beneficial and incentivised to ensure continuous use by all the agents within the ecosystem thus driving the market price on the global cryptocurrency capitalisation markets.

Road Map





References

<https://www.risk.net/commodities/2387096/the-role-of-technology-in-commodities-trading-and-risk-management>

<https://www.bloomberg.com/view/articles/2017-12-22/how-block-chain-could-revolutionize-commodity-markets>

<https://www.ethereum.org/token>

<https://en.wikipedia.org/wiki/Blockchain>

<https://www.trafigura.com/media/1785/the-economics-of-commodity-trading-firms-professor-pirrong-section-ii.pdf>

<https://www.quora.com/What-is-tokenization-in-a-blockchain-context>

<http://www.nasdaq.com/article/how-tokenization-is-putting-real-world-assets-on-blockchains-cm767952>



Legal Disclaimer

This document is for information purposes only and is not an offer or a call to sell stocks or securities.

TITA tokens are not securities

User acknowledges, understands, and agrees that TITA tokens are not securities and are not registered with any government entity as a security, and shall not be considered as such.

Absence of guarantees of income or profit

There is no guarantee that TITA tokens will grow in value. There are no guarantees that the price of TITA tokens will not decrease, including significantly, due to some unforeseen events, or events over which the developers have no control, or because of force majeure circumstances.

Risks associated with Ethereum

TITA tokens will be issued on the Ethereum Blockchain. Therefore, any failure or malfunctioning of the Ethereum protocol may lead to the trading network of TITA tokens not working as expected.

Regulatory uncertainty

Blockchain technologies are subject to supervision and control by various regulatory bodies around the world. TITA tokens may fall under one or more requests or actions on their part, including but not limited to restrictions imposed on the use or possession of digital tokens such as TITA tokens, which may slow or limit the functionality or repurchase of TITA tokens in the future.

Risks of using new technologies

TITA tokens are a new and relatively untested technology. In addition to the risks mentioned in this document, there are certain additional risks that the team of the TITA token cannot foresee. These risks may manifest themselves in other forms of risk than those specified herein.