TFLOW
value generator

WHITEPAPER

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Abstract

Trade Flow is creating a Crypto Services Ecosystem that will be powered by the TFLOW Token. As the Crypto Industry evolves the opportunities that this market offers change constantly. No one can predict which is the next crypto services sector that will offer the best returns in the upcoming bull run. Furthermore, simplicity and accessibility remain two factors that can unlock a serious value inflow to the Crypto Market by people who now struggle to figure out how the crypto economy works.

Trade Flow will offer a series of services such as: Copy Trading, Security Token Offerings, DeFi Platform, Crypto Lending, NFT's DAO, Metaverse DAO and Staking. The scope is to unify all these services under one roof so the TFLOW Holders can easily navigate and select the services that they wish to interact with. The range of services cover all crypto sectors so the users will be able to benefit from any of the services that booms during the next bull run.

Trade Flow is powered by its internal cryptocurrency, the Trade Flow Token (TFLOW), which functions as a utility token and a requirement for entry to the platform. Users of the platform need to hold and stake for 360 days at least 20% of the value of their investment in TFLOW to participate in any of the services offered on the Trade Flow platform.

The platform charges a 20% success fee for all profits that are generated using the services. The participation in membership means that the users of the platform have interests that are aligned with the platform developers, creating a community of shared interest in maintaining the platform and the token value. The Trade Flow Token will be the first Token that will be connected to the generation of value in both the Crypto and Traditional Economy.

Background

Blockchain is revolutionizing the financial world, and it's becoming mainstream with the large financial institutions. The approval of Bitcoin ETFs and the anticipation of spot ETFs has top financial news outlets such as Bloomberg saying that "Bitcoin is eating gold[1]. Bitcoin has created new wealth for many early adopters and technologists. Yet, as usual, a very small minority of people are benefiting from this tremendous opportunity. As of March 2021, 70 million bitcoin wallets were open, which represents less than 1% of the world's population. In the United States, approximately 23% hold cryptocurrencies[2]. This low market penetration means that most of the population is simply not benefiting from this investment opportunity.

The cryptocurrency market capitalization surpassed $3 trillion in 2021. By comparison, in the fourth quarter of 2020 the total value of global equity trading worldwide was 34.8 trillion U.S. dollars[3]. Physical money (notes and coins) and the money deposited in savings and checking accounts reaches approximately $37 trillion. In other words, cryptocurrencies now represent a large and growing portion of the capital in the world.

Crypto Trading

The cryptocurrency industry, like any investment industry, requires knowledge to invest properly[4]. While there are many opportunities, it's hard to tell the difference between short term pump-and-dump schemes and legitimate projects[5]. Furthermore, automation has swept through the industry, with algorithmic trading and bots that simply can out-trade the average person[6]. As with any type of investment, investing in cryptocurrency has become a profession. To avoid mistakes and actually make money in the industry, people either need to invest a lot of time, or they need a system or follow the experts. For that reason, copy trading has become a popular way for new investors to get into the crypto markets[7]. Not only does it allow people to get great returns, they can also learn by watching what the experts do, if they are so inclined.

Security Tokens

Security Tokens Market Cap currently is at **824M** (December 2022). A lot of Crypto Investors prefer to deposit their crypto at specific crypto platforms that provide a **5-12% ROI annually** (under specific circumstances). Over **1T USDT** are deposited in such platforms.

World Economic Forum predicts that **10%** of the global GDP ($7.8 trillion) will be stored on the blockchain by 2027[8]. According to BNY Mellon CEO Robin Vince, a poll commissioned by the bank found that 91% of institutional investors were interested in investing in tokenized assets in the following years[9].

Limitations of traditional fundraising methods

Crowdfunding Platforms
- Limited to a single country.
- Shares cannot be traded. High risk for investors to never receive returns.
- Businesses prefer their own investment platform.

Commercial Banks
- No possibility to raise capital without sufficient collateral.
- High interest rates.
- The debt should be repaid depriving the company of cash.

Venture Capital
- Limited number of potential investors.
- Investors interfere in the business.
- Investors demand shares and discounts in project.

Stock Exchanges
- Extremely expensive listing.
- Requires becoming a public company.
- Huge reporting burden.

Decentralized Finance

The Global Decentralized Finance Market Size was valued at 14.10 billion in 2022 and is predicted to reach 398.77 billion by the year 2031 at a 45.16% CAGR during the forecast period for 2023-2031[10]. Decentralized Finance platforms were employed to boost productivity, contributing to the industry's success. Despite this growth, the DeFi space remains fragmented, with a lack of interoperability between different protocols and financial primitives. This fragmentation presents a significant obstacle to the mainstream adoption of DeFi, as users are forced to navigate a complex and confusing ecosystem of different apps and platforms.

NFT's and Metaverse

The metaverse and NFT boom have been making headlines for the past year or so, as investors and consumers alike have been caught up in the excitement of a new virtual world and the potential for NFTs (non-fungible tokens) to revolutionize the world of art and collectibles[11]. However, despite all the hype, there are many signs that this boom may be about to come crashing down, and it's important to understand why this is the case.

First, let's take a closer look at what the metaverse is and how it's being promoted. The metaverse is essentially a virtual world, or a collection of virtual worlds, that exist online and allow users to interact with each other and engage in various activities. This can range from playing games and participating in virtual events to buying and selling virtual assets and creating digital art. The metaverse is being promoted as the next big thing in the tech world, and as a way to escape the limitations of the real world and experience new and exciting possibilities.

However, there are many problems with the metaverse as it is currently being promoted. For one thing, it's still in its early stages, and there are many technical and logistical issues that need to be addressed before it can truly become the virtual world of the future.

Additionally, there are serious concerns about the security and privacy of users in the metaverse, as well as the potential for exploitation and abuse. These are all major obstacles that need to be overcome if the metaverse is going to become a viable and attractive option for users. Another issue with the metaverse is that it's being driven by corporate interests rather than by the needs and desires of users. This means that the metaverse is being developed and shaped by large corporations, rather than by the users themselves.

This creates a power imbalance that is likely to have negative consequences for users in the long run, as these corporations will be able to control the metaverse and shape it to their own interests.

NFTs are digital tokens that represent unique, one-of-a-kind assets, such as digital art or collectibles. They have become incredibly popular in recent months, as investors and collectors have flocked to the market in search of the next big thing. However, there are many reasons to believe that the NFT market is about to go bust. One major problem with NFTs is that they are incredibly difficult to value. Unlike traditional assets, such as stocks or real estate, there is no standard way to determine the value of an NFT.

This makes it incredibly difficult for investors to make informed decisions about whether or not to buy a particular NFT. Additionally, the NFT market is highly speculative, which means that prices can be driven up by hype and speculation rather than by any real value. Another issue with NFTs is that they are highly susceptible to fraud and manipulation. Because they are digital tokens, they can be easily copied or altered, which means that there is a high risk of fraud and counterfeiting.

Additionally, because the market is largely unregulated, there is a high risk of market manipulation, which can drive prices up artificially and create a bubble that is likely to eventually burst.

Crypto Lending

Leading crypto lending firms and hedge funds have run into trouble due to the market turmoil, but more so because of their unchecked reckless decision-making process[12].

The crypto market has entered a bearish phase as prices of major cryptocurrencies have fallen to a four-year low. The current downturn in the crypto market has driven several crypto firms to go out of business, while many have made severe job cuts to remain afloat.

The crypto market crisis began with the Terra debacle that saw $40 billion in investors' money vanish from the market. At the time, the crypto market showed good resistance against such a massive collapse. However, the after-effects of the collapse had a greater impact on the crypto market, especially crypto lending firms, which many believe are responsible for the current bearish phase.

The lending crisis began in the second week of June 2022 when top lending firms started to move their funds to avoid liquidations on overleveraged positions, but the heavy selling that put bearish pressure on prices led to a further downfall.

The main issue for all current and defaulted crypto lenders was the fact that they lent out capital and held volatile assets as collateral. The sharp price drop of these assets led to a weakness to be able to hold their positions and pay back their clients.

1   Bitcoin Bulls See "Trillions" of Inflows when Spot ETF Wins Approval, Vildana Harjic and Katherine Greifeld, Bloomberg, November 2021.

2   A Rising Number of Americans Own Crypto, Richard Laycock and Catherine Choi, Finder, June 2021.

3   Crypto Markets Tag $3T Combined Market Cap for First Time, Samuel Haig, Cointelegraph, November 2021.

4   Getting Rich off Cryptocurrency Isn't as Easy as Internet Millionaires Make It Look, Mallika Mitra, Money.com, May 2021.

5   Common Mistakes that Cryptocurrency Investment Mistakes that Novices Make, Priya Dialani, July 2021, Analytics Insight.

6   What Is the Role of Bots in Crypto Trading? Nathan Reiff, Investopedia, July 2021.

7   Why Is Copy Trading So Popular? Eurotrader, July 2021.

8   10% of the world's wealth set to be stored on blockchain by 2027: Cisco

9   Major client demand the tipping point for BNY Mellon crypto services, Cointelegraph

10   Decentralized Finance Market Size insightaceanalytic.com

11   The Rise and Fall of the Metaverse and NFT Mania Medium.com

12   Crisis in crypto lending shines light on industry vulnerabilities

Solution

The Trade Flow Team has prepared a series of solutions to address each specific problem in the Crypto and Traditional Economy Space that was previously described in this paper. Each solution is a single business unit of the Trade Flow Ecosystem. All services are directly connected to the TFLOW Token and interact with each other.

Copy Trading

Security Token Offerings

Decentralized Finance

NFT's and Metaverse

Crypto Lending

Trade Flow Wallet

The Trade Flow Foundation

Trading Engine

The Trade Flow has completed the design and coding of the **TFLOW Trading Engine.**

The Trading Engine is an algorithmic mechanism that consists of 34 parameters that can produce over 1000 trading strategies combinations. The Trading Engine can adjust to any cryptocurrency trading pair in any exchange and in any time frame. It analyzes the trading data and then produces the best strategy script to power a specific trading bot.

Below are the back testing results for BTC/USDT Trading Pair on the 4H chart for Futures Trading in Binance for the trading period August 2017 to May 2023.

Back Testing Parameters: Initial 10000 USDT, 70% Lot Ratio, Leverage X2

**Back Testing Results:** 1044.69%ROI, 39.16% Profitability, 27.75 Max Drawdown
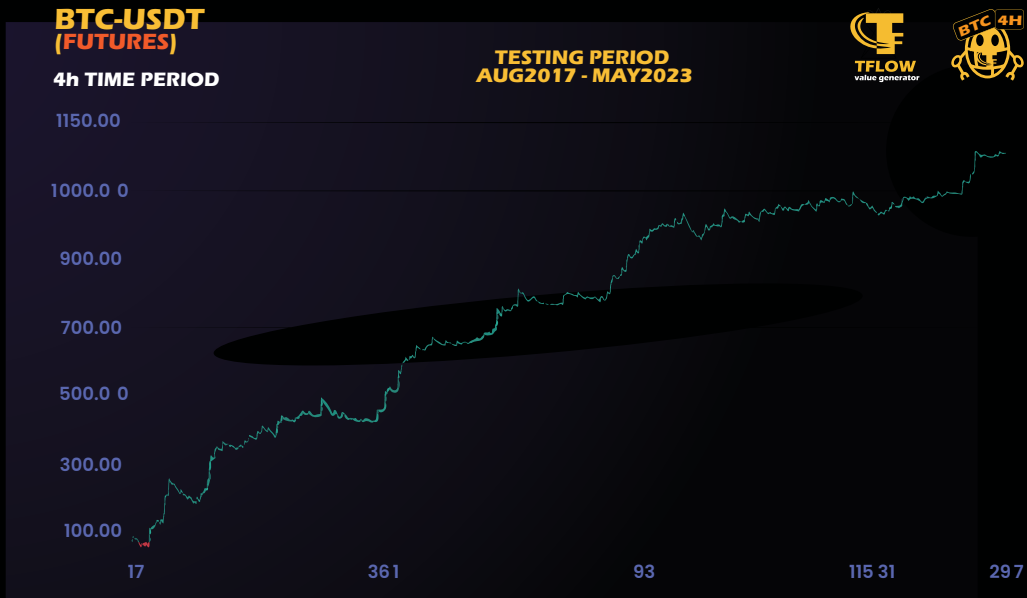
Below are the back testing results for ETH/USDT Trading Pair on the 4H chart for Futures Trading in Binance for the trading period August 2017 to May 2023.

Back Testing Parameters: Initial Capital 10000 USDT, 70% Lot Ratio, Leverage X2

Back Testing Results: 1407.38% ROI, 40.94% Profitability, 27.76 Max Drawdown
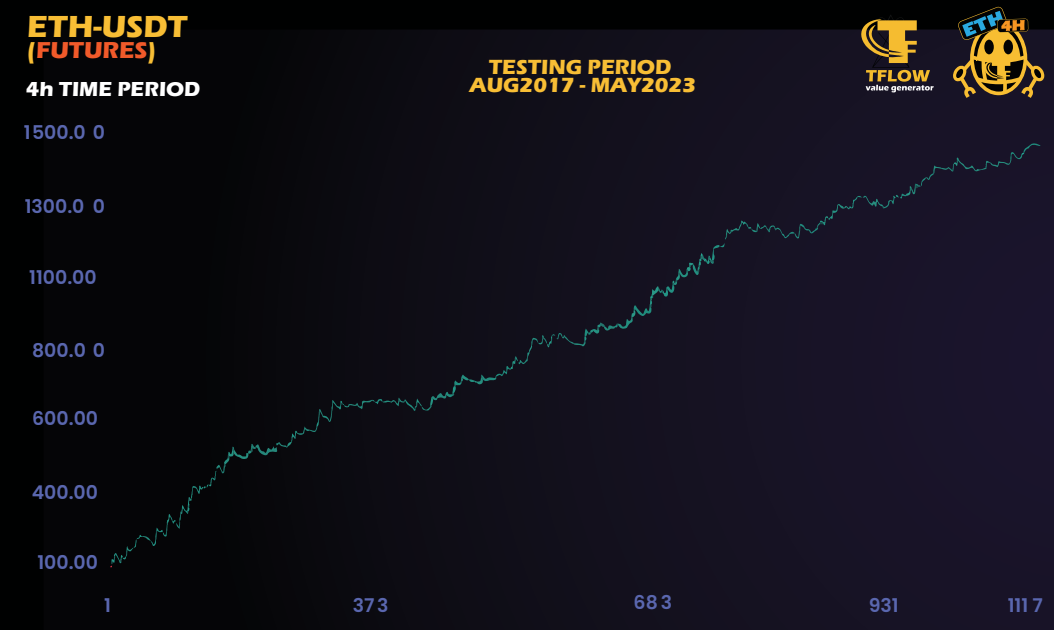
Based on these Bots Trade Flow has created a copy trading platform where the users can register, connect their exchange accounts and follow the two TFLOW Bots. To be eligible to connect to the service the users must invest a minimum of 1300 USDT in the service and purchase and stake 20% of the amount their wish to invest in the service in TFLOW tokens. These tokens must remain in their hot wallet (MetaMask) and must be deposited to the staking contract of TFLOW.

There is also a 20% success fee for the profits generated by the service. The users receive an invoice they must pay in USDT otherwise they get disconnected from the service.

Currently the copy trading platform is compatible with Binance and OKEX. There are also two trading Bots available. Soon the copy trading platform will offer connectivity to more exchanges and offer a wider variety of Bots for other altcoins.

Security Token Offerings

This Business Unit is called Investment Pools. Each Security Token is called Traditional Economy Token. There are two types of users for this service. The Investors who purchase the Security Tokens and the Token Issuers who work with the Trade Flow Team to design and launch their security tokens.

Types of Security Tokens

Equity Token: Equity Tokens represent the value of shares issued by a company on the blockchain. The difference between an equity token and a traditional stock lies in its method of recording ownership.

Debt Token: Debt-based security tokens represent debt instruments such as real estate mortgages and corporate bonds. The prices of these tokens are dictated by two factors risk and dividend.

Revenue Share Token: Revenue Sharing tokens confer their owners a right to a portion of revenues or fees generated on or by the host platform. This could refer to on-chain transactions. Whenever the network performs an action, a small fee is extracted and ultimately distributed to token holders.

Who are Security Token Investors

Institutional Investors: Family Offices, Wealthy Families, Pension Funds. Investment Period: Long Term.

Modern Individual Investors: People between 25 and 45 digital natives who are looking to let their money work and bring profit. Investment Period: Medium or Long Term.

Crypto Investors: Experienced people who have invested in crypto projects and may have lost money due to high risks of such projects. Investment Period: Short or medium term.

Trade Flow has secured all licenses necessary to be able to host security token offerings on its platform. All Investors pass through the KYC/AML procedures before being able to purchase a Traditional Economy Token issued on the TFLOW Pools Platform.

The Investors apart from passing the required KYC/AML procedure must also purchase and stake 10% of the value they wish to invest in the Investment Pools in TFLOW tokens. Otherwise, they are not able to complete any transaction on the TFLOW Pools Platform.

There are going to be several Investment Pools each one for a specific Company that comes from a different business sector of the traditional economy. Such sectors are Trade Finance, Yachting, Real Estate, Shipping, Supply Chain, Technology, Energy etc.

Each Traditional Economy Token will offer an annual ROI and the Investors will be able to receive their payments in stable coins or wire transfers to their bank account.

The TFLOW Pools platform supports three main processes:

The issuance process where tokenized securities are issued to fund-raise a project. For the issuance process, we support a customized on-boarding process where KYC and AML options can be adjusted to the specific jurisdiction of issuer and investors. The investor has his own dashboard where he can view his token holdings, communicate with the issuer, and vote on relevant issues. The issuer has a dashboard where he can verify investor provided KYC documentation (not recommended-better outsource to third party) and approve investors to participate in the STO. Once the investor is approved, he/she can buy tokens with various payment options. The solution has an e-signature module such that the contract workflow can be automated and digitized as much as possible.

The longer-term corporate management of a group of investors who are holding tokens to document their ownership of securities within the project. For the management of token holders over the long term, many functions are provided to ensure communication with investors, to conduct token holder (shareholder) meetings, to conduct votes, pay out dividends (possibly with stable coins), register etc. in addition the solution supports various corporate actions giving the administrator (normally a top executive of the issuer) the right to forcefully transfer tokens from one investor to another, or back to the company- and to reissue tokens in case an investor has lost access to them.

Internal trading among the investors in a single project, fund, or company in order to create additional liquidity. The platform also provides an internal OTC-like (Over the Counter) trading exchange that works within a single project ("internal exchange"). This means that existing investors within a project can trade tokens with each other. They can issue buy and sell orders and can match these in their own in a manual manner. It is also possible for new investors to be white-listed and invited into the exchange so that they can buy tokens from the old investors. This function provided increased liquidity within a single project and will provide an extra value for investors.

All Security Tokens that will be issued on the Trade Flow Pools Platform will be connected to Companies withs goods and services covered by insurance. This is a prerequisite for any token issuer that is going to work with the Trade Flow Team and become part of the TFLOW Traditional Economy Tokens ecosystem.

These Security Tokens are going to function as Stable Coins that will be backed by real assets that will be insured and offer an annual ROI. We cannot guarantee the performance of any Traditional Economy Token, but we will make sure that the investors initial capital is insured in any case.

Decentralized Finance

Using colored Petri nets (CPNs) as an abstraction layer to connect protocols and financial primitives

In order to address the issue of fragmentation and lack of interoperability in the DeFi space, this white paper proposes a solution that utilizes colored Petri nets (CPNs) as an abstraction layer to connect protocols and financial primitives. By using CPNs to model an abstraction layer, we can enable users to access and interact with different DeFi apps through a single interface, and also enable interoperability between different protocols and financial primitives.

What are Colored Petri Nets (CPNs)?

A.   Definition and explanation of CPNs

Colored Petri nets (CPNs) are a type of Petri net that allows for the modeling of systems with multiple data types, known as "colors." These colors can be used to represent different types of data, such as financial assets, parties involved in a transaction, or access permissions. CPNs are a powerful tool for modeling complex systems, as they allow for the representation of multiple interacting components and the modeling of concurrent and asynchronous behavior.

CPNs are a graphical formalism, with places and transitions represented as circles and rectangles respectively. In addition, CPNs also have the capability of providing different types of data, called colors, to the places and transitions. This makes it possible to model systems with multiple data types and allows for the modeling of systems with multiple interacting components.

CPNs are widely used in various fields such as computer science, engineering, and system design. In recent years, CPNs have been applied to the field of blockchain and DeFi to provide modeling solutions for decentralized systems.

B. How CPNs can be used to model complex systems with multiple interacting components

CPNs are a powerful tool for modeling complex systems because they allow for the representation of multiple interacting components and the modeling of concurrent and asynchronous behavior. The use of colors in CPNs allows for the representation of different types of data, such as financial assets, parties involved in a transaction, or access permissions, making it possible to model systems with multiple data types.

In the context of the DeFi space, CPNs can be used to model the interactions and transactions between different protocols and financial primitives. The colors in the CPN can represent different types of assets or actions, and the transitions between places in the net can represent the various interactions or transactions that take place between the different protocols and financial primitives. This allows for a clear and concise representation of the system, making it easier to understand and analyze.

CPNs can also be used to model the smart contracts and the business logic that govern the interactions between the different protocols and financial primitives. This allows for the modeling of complex and dynamic systems in a way that is easy to understand and analyze.

Overall, CPNs can be used to model complex systems with multiple interacting components, and can be useful in representing the interactions between different protocols and financial primitives in the DeFi space.

C. Advantages of using CPNs in the DeFi space

There are several advantages of using CPNs in the DeFi space:

<u>**Clarity and conciseness:**</u> CPNs provide a clear and concise representation of the system, making it easier to understand and analyze.

<u>**Flexibility:**</u> The use of colors in CPNs allows for the representation of different types of data, such as financial assets, parties involved in a transaction, or access permissions, making it possible to model a wide range of different systems.

<u>**Interoperability:**</u> CPNs can be used to model an abstraction layer that allows for the access and interaction with different DeFi apps. This can enable interoperability between different protocols and financial primitives, making it easier for users to access and interact with the full range of DeFi services and products.

<u>**Smart contract modeling:**</u> CPNs can also be used to model the smart contracts and the business logic that govern the interactions between the different protocols and financial primitives. This can help in understanding and analyzing the complex and dynamic systems in DeFi space.

<u>**Formal verification:**</u> CPNs provide formal verification capabilities, allowing for the analysis of properties and behavior of the modeled system. This can help to ensure the security and reliability of the system.

Overall, the use of CPNs in the DeFi space can provide a powerful tool for modeling and understanding the interactions between different protocols and financial primitives, enabling interoperability and promoting the mainstream adoption of DeFi.

Using CPNs as an Abstraction Layer in the DeFi Space

A. Explanation of how CPNs can be used to model an abstraction layer for accessing DeFi apps

One of the main advantages of CPNs is their ability to model an abstraction layer that allows for the access and interaction with different DeFi apps through a single interface. By using colors to represent different types of assets and actions, and transitions to represent the various interactions or transactions that take place between the different DeFi apps, CPNs can provide a clear and concise representation of the system.

The abstraction layer modeled by CPNs can also enable interoperability between different protocols and financial primitives, making it easier for users to access and interact with the full range of DeFi services and products. This can help to address the issue of fragmentation and lack of interoperability in the DeFi space, and promote the mainstream adoption of DeFi.

By modeling the smart contracts and the business logic that govern the interactions between the different protocols and financial primitives, CPNs can also provide a way to understand the complex and dynamic systems in the DeFi space. This can help in ensuring the security and reliability of the system, and also in identifying and addressing potential issues in the system.

Overall, CPNs can be used to model an abstraction layer for accessing DeFi apps, which can enable interoperability between different protocols and financial primitives, and provide a tool for understanding the complex and dynamic systems in the DeFi space.

B. Examples of how CPNs can be used to represent different types of assets and actions in the DeFi space

Representing different types of assets: CPNs can be used to represent different types of assets, such as ether, bitcoin, and stablecoins. The colors in the CPN can be used to represent the different assets, and the transitions between places in the net can represent the various interactions or transactions that take place between the assets. This can provide a clear and concise representation of the system, making it easier to understand and analyze.

Representing actions: CPNs can be used to represent the different actions that can be taken in the DeFi space, such as exchanging one asset for another, or borrowing against an asset. The colors in the CPN can be used to represent the different actions, and the transitions between places in the net can represent the various interactions or transactions that take place as a result of the actions.

Representing Permissions: CPNs can be used to represent the different types of permissions that are required to access or interact with certain DeFi apps, such as the need for a specific type of wallet or the need for a certain level of access. The colors in the CPN can be used to represent the different types of permissions, and the transitions between places in the net can represent the various interactions or transactions that take place as a result of the permissions. Representing smart contracts: CPNs can be used to represent the smart contracts and the business logic that govern the interactions between the different protocols and financial primitives. This can help in understanding and analyzing the complex and dynamic systems in the DeFi space and can also help in ensuring the security and reliability of the system.

These are some examples of how CPNs can be used to represent different types of assets and actions in the DeFi space, providing a clear and concise representation of the system and enabling interoperability between different protocols and financial primitives.

C. Discussion of how CPNs can be used to enable interoperability between different protocols and financial primitives

CPNs can be used to enable interoperability between different protocols and financial primitives in the DeFi space by providing a clear and concise representation of the system and by modeling an abstraction layer that allows for the access and interaction with different DeFi apps through a single interface.

The use of colors in CPNs to represent different types of assets and actions, and transitions to represent the various interactions or transactions that take place between the different DeFi apps, makes it possible to model the interactions and transactions between different protocols and financial primitives. This can enable interoperability between different protocols and financial primitives, making it easier for users to access and interact with the full range of DeFi services and products.

Additionally, by modeling the smart contracts and the business logic that govern the interactions between the different protocols and financial primitives, CPNs can also provide a way to understand the complex and dynamic systems in the DeFi space. This can help in identifying and addressing potential issues in the system and in ensuring the security and reliability of the system.

Overall, the use of CPNs as an abstraction layer can enable interoperability between different protocols and financial primitives in the DeFi space, by providing a clear and concise representation of the system and by modeling an abstraction layer that allows for the access and interaction with different DeFi apps through a single interface.

Technical Implementation

A. Overview of the technical architecture for the CPN-based abstraction layer solution

The technical architecture for the CPN-based abstraction layer solution would consist of several key components, including:

CPN model: The core of the solution would be a CPN model that represents the interactions and transactions between different protocols and financial primitives, as well as the smart contracts and business logic that govern these interactions.

API: An API would be provided to enable access to the CPN model, allowing users to interact with the different DeFi apps through a single interface.

Blockchain: A blockchain platform would be used to store and secure the CPN model and associated data, such as the smart contract code and transaction data.

User interface: A user interface would be provided to enable users to interact with the CPN model and the different DeFi apps through the API.

Formal verification tool: A formal verification tool would be used to analyze the properties and behavior of the modeled system, ensuring the security and reliability of the system.

The overall architecture would be designed to be modular and flexible, allowing for the integration of new protocols and financial primitives as they are developed.

It's important to note that this is a high-level overview, and the implementation would require further research and development in order to fully define and detail all the components, interfaces and protocols needed for the solution.

B. Description of the key components and features of the system

CPN model: The core of the solution would be a CPN model that represents the interactions and transactions between different protocols and financial primitives, as well as the smart contracts and business logic that govern these interactions. The CPN model would be designed to be flexible and extensible, allowing for the integration of new protocols and financial primitives as they are developed.

API: The API would provide a standard interface for interacting with the CPN model and the different DeFi apps. It would enable users to access the full range of DeFi services and products through a single interface, and also enable interoperability between different protocols and financial primitives.

Blockchain: The blockchain platform would be used to store and secure the CPN model and associated data, such as the smart contract code and transaction data. This would ensure the immutability and security of the CPN model and the associated data.

User interface: The user interface would be designed to be user-friendly and easy to navigate. It would provide a simple and intuitive way for users to interact with the CPN model and the different DeFi apps through the API.

Formal verification tool: The formal verification tool would be used to analyze the properties and behavior of the modeled system, ensuring the security and reliability of the system. This would involve the use of mathematical methods and techniques to formally prove the correctness of the system and identify potential issues.

The key components and features of the system have been designed with scalability and flexibility in mind to accommodate the rapidly evolving DeFi space.

C. Discussion of the challenges and considerations for implementation

Complexity: The implementation of a CPN-based abstraction layer solution for the DeFi space would involve a significant amount of complexity, both in terms of the CPN model itself and the associated technical infrastructure. This would require a significant amount of research and development to ensure that the solution is robust and reliable.

Interoperability: Ensuring interoperability between different protocols and financial primitives in the DeFi space would be a major challenge. It would require a thorough understanding of the different protocols and financial primitives, as well as the interactions and transactions that take place between them.

Security: Security is a critical concern in the DeFi space, and the CPN-based abstraction layer solution would need to be designed with security in mind. This would involve the use of formal verification techniques to ensure the correctness and security of the system, as well as the use of secure protocols for data storage and transmission.

Scalability: The DeFi space is rapidly evolving, and the CPN-based abstraction layer solution would need to be designed with scalability in mind to accommodate new protocols and financial primitives as they are developed.

Adoption: The success of the CPN-based abstraction layer solution would depend on its ability to gain broad adoption in the DeFi space. This would require a high level of user-friendliness, as well as effective marketing and communication strategies to educate users about the benefits of the solution.

It's important to consider these challenges and considerations when implementing the CPN-based abstraction layer solution, as they will play a critical role in the success of the system. It is also important to note that some of these challenges may require additional research and development to find effective solutions, such as designing a secure and scalable infrastructure that can handle a large number of transactions, or developing methods to ensure interoperability between different protocols and financial primitives. Furthermore, it's important to have a clear understanding of the regulatory landscape, ensuring compliance with legal and regulatory requirements in the relevant jurisdictions.

Trade Flow will offer a DeFi Platform to the TFLOW Holders for them to participate in yield investing and DeFi Vaults. Each Investor must hold and stake for 360 days 20% of the value they wish to invest in the Decentralized Platform.

NFT's and Metaverse

Before the NFT and Metaverse crash we realized that it is super expensive for an individual retail investor to buy a good NFT or an asset on the Metaverse. For this reason, we want to change this model and be able to collectively purchase such NFT's and Metaverse Projects on behalf of our Investors and create tokens for each asset. In this way we will fragment this market and it will be easier for retail investors to own parts of such assets.

We will be creating two DAO's which will use the collective purchase power of the TFLOW Holders to purchase and manage NFT's and Metaverse assets. The community will vote on what to do with the assets. Furthermore, we are going to explore the minting of NFT's as a loyalty reward towards our TFLOW Holders.

Crypto Lending

Trade Flow will combine the Decentralized Finance Platform and the Investment Pools Platform to offer a state-of-the-art innovative Crypto Lending service. All Investors that will purchase and hold Traditional Economy Tokens will be able to deposit them in specific vaults as collateral to lend stable coins. By this way the Lender will hold tokens that are 100% backed by insured real assets while the Investors will be able to lend capital and have the option to reinvest it in other Trade Flow services such as the TFLOW Bots.

Trade Flow Wallet

On our current phase our Ecosystem supports connection to the MetaMask wallet. In the next phase we will create the TFLOW Wallet which will be part of the platform.
All participants in the Trade Flow network will operate through the Trade Flow crypto wallet, which will allow Followers to subscribe to all of the services of the platform. The wallet offers two base cryptocurrencies: the native TFLOW and USDT (Tether). At least 20% of the funds need to be held in TFLOW to participate in any of the services. Some services on the platform may have different minimum holdings of TFLOW for participation in the future. The wallet will not initially support fiat currency trading.

All of the following functions will be available on the Trade Flow Wallet:

- **Connection with the Investment Pools.**
- **Connection with the Decentralized Finance Platform.**
- **Connection with the Metaverse DAO Vault.**
- **Connection with the NFT's DAO Vault.**
- **Connection with the TFLOW Bots happens through an API connection so the TFLOW Wallet is not involved in this function currently**

The next phase of the Trade Flow Platform will combine the wallet function with a cryptocurrency exchange, while retaining all the initial services. Trade Flow will also integrate a crypto-based debit card to allow members to spend cryptocurrency at regular retail outlets and have the retailer paid in fiat currency. The system will also add functionality for purchase of cryptocurrency from fiat currency.

The Trade Flow Foundation

The Trade Flow Foundation will make contributions to positive social good causes with a portion of the revenues.

TFLOW is the cryptographic token that powers the Trade Flow network. It will be minted as a BEP-20 token for maximum fungibility and wallet support. TFLOW token holders enjoy certain utility functionality on the Trade Flow platform which is described in this document.

Token Topology

Account Tiers

SILVER	GOLD	PLATINUM
50,000*	**100,000***	**250,000***
TFLOW	**TFLOW**	**TFLOW**
25% Discount on trading fees	50% Discount on trading fees	90% Discount on trading fees

*average balance over 3 months

Trade Flow will feature account tiers that will enable users on the platform the ability to gain access to special discounts on trading fees.

Users will be required to hold a minimum balance of Trade Flow token (TFLOW) in their platform wallets in order to receive the discounts.

There are three tiers, Silver, Gold and Platinum as per the above graphic. The minimum holdings will be calculated as an average balance over the course of three (3) months.

Account Funding

Trade Flow begins when a user funds their account. Users fund in fiat or stablecoin and have the choice of participating in the platform's services. For each amount contributed, 20% of the value must be through TFLOW tokens.

For example, if a user adds USD 1,000 to his or her copy trading account, they must also add USD 200 in TFLOW tokens. Upon deposit of stablecoins to fund a user's account, an instant conversion representing 20% of the wallet balance will occur, converting that balance into TFLOW. The balance of a user's account must always remain at 20% TFLOW. These tokens will be directed towards the Direct Staking Contract where they will earn a return of 20% APY.

These tokens must be locked for as long as the deposited funds are held. The value of TFLOW may fluctuate during this time – no top-up is required should the balance drop below 20% of the deposited fiat or stablecoin amount, however staked funds cannot be withdrawn even if they exceed their original contribution.
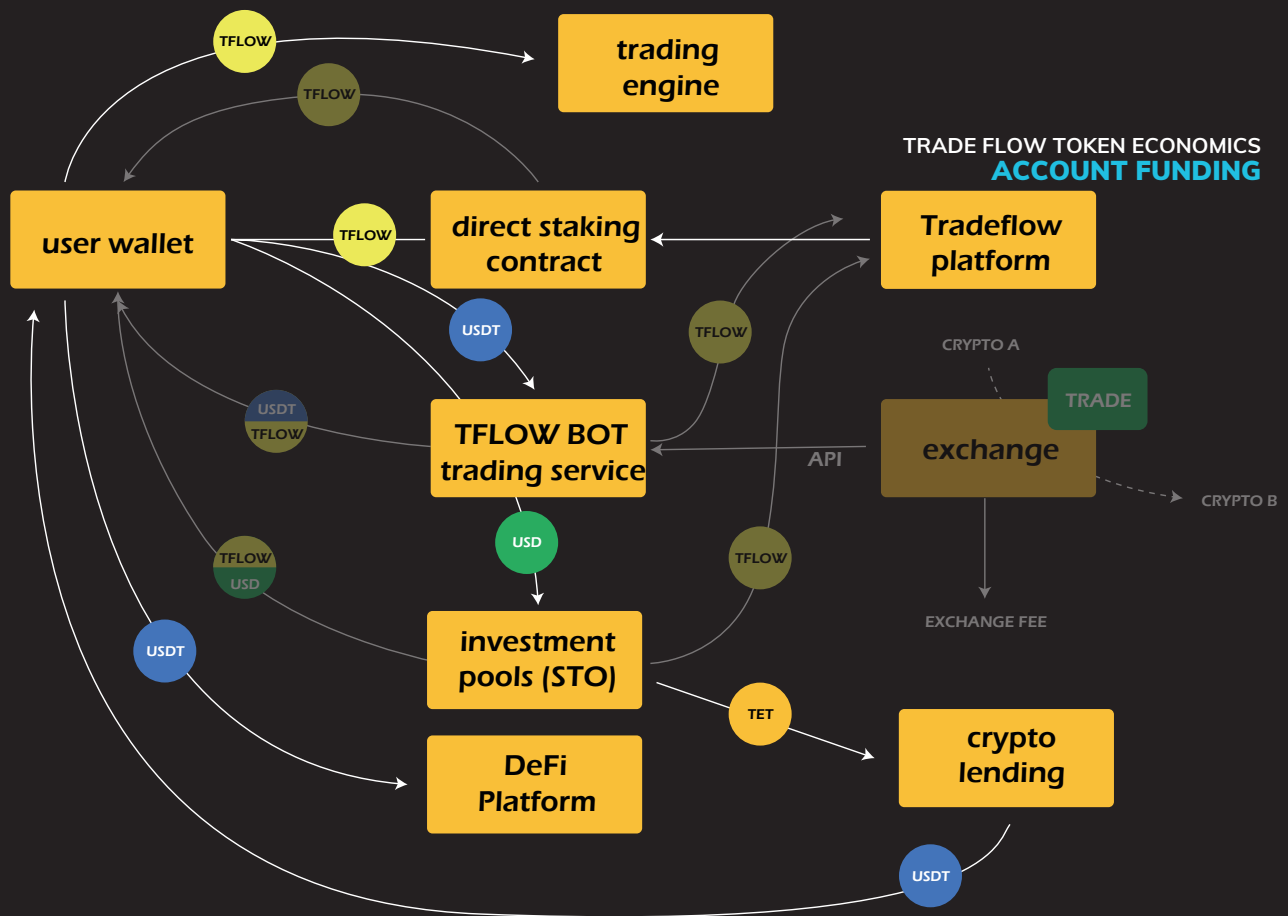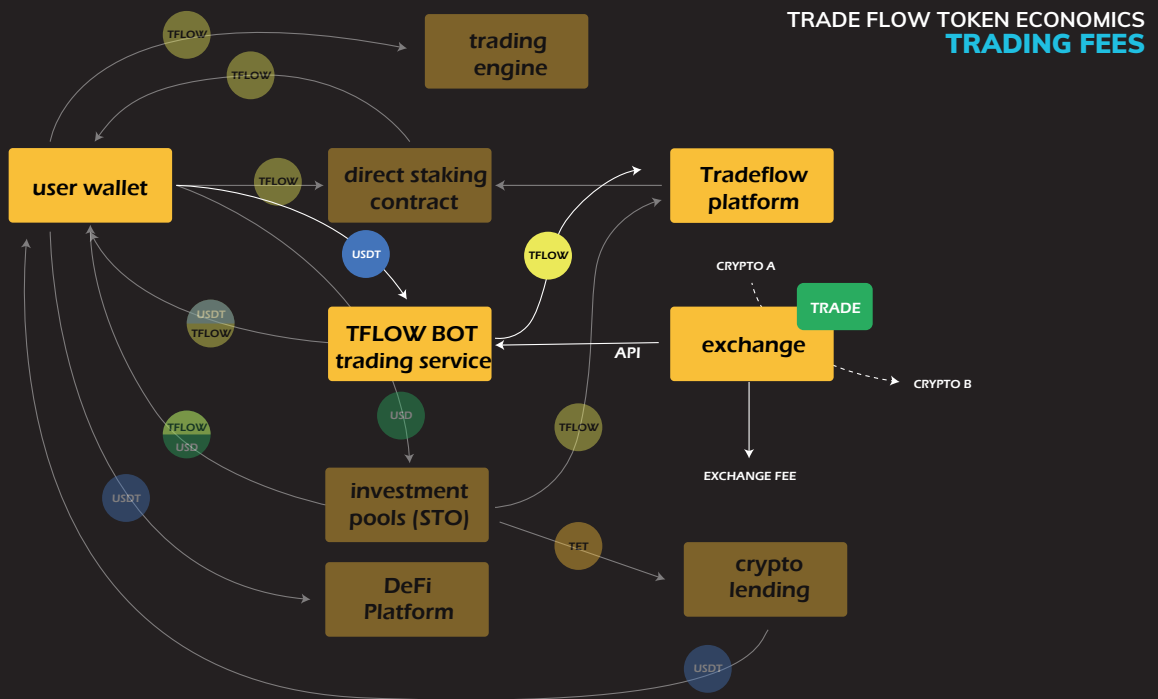
Trading Fees

Trade Flow charges a 0.10% trading fee to automatically execute trades via API to third-party exchanges that manage customer accounts. This enables the platform to automate trades recommended by its Copy Trading Service.

This fee is in addition to the exchange fee charged directly to account holders, currently estimated at approximately 0.50% but may decrease as trade volume goes up. This trading fee enables Trade Flow to pay for the cost to manage and maintain the user interface as well as the backend system to integrate with a multitude of different exchanges.

However, for users who hold the minimum number of tokens based on the aforementioned account tiers, special discounting is provided. All trading fees are payable in TFLOW token exclusively and will be deducted from the user's TFLOW token balance held on the platform.


TRADE FLOW TOKEN ECONOMICS
TRADING FEES

The discount rate will decrease after each one-year period as defined in the schedule below:

	SILVER TIER	GOLD TIER	PLATINUM TIER
Year 1	25% trading fee discount	50% trading fee discount	90% trading fee discount
Year 2	15% trading fee discount	35% trading fee discount	75% trading fee discount
Year 3	10% trading fee discount	20% trading fee discoun	50% trading fee discount

Staking

Trade Flow utilizes two types of staking mechanisms to reward and incentivize users on the platform. They are explained in greater detail below.
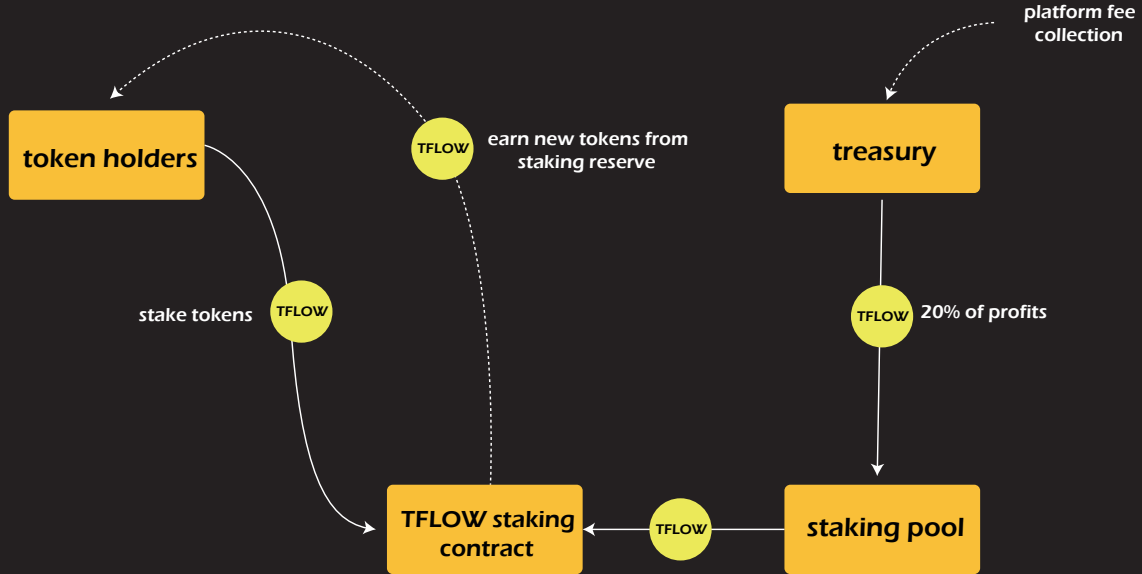
Direct Staking
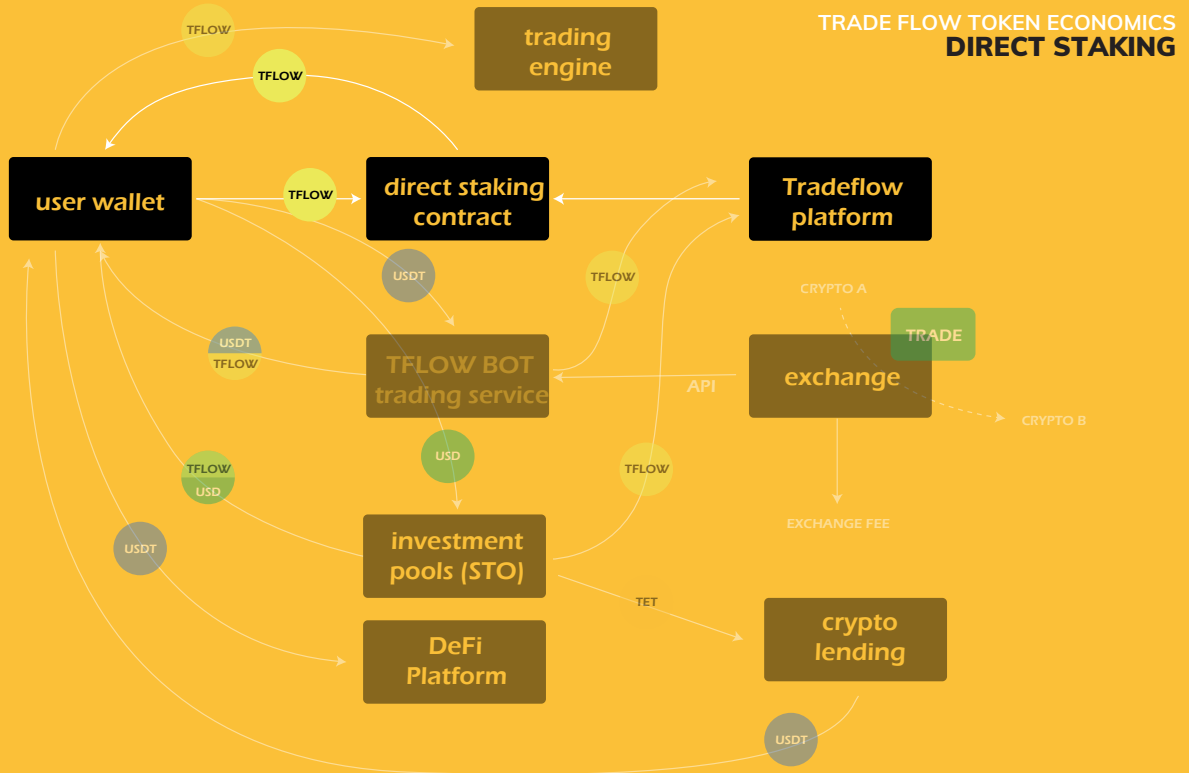
Exclusively for TFLOW account holders, TFLOW can also be earned by directly staking TFLOW tokens into the token staking pool as required for any new deposits. Users earn a fixed fee of 20% annually from the staking pool. The staking pool is replenished by profits sharing fees, and trading fees earned by the platform.

Direct staking accomplishes the act of locking TFLOW and thereby preventing it from being sold, however direct staking does not add to liquidity. Direct staking, however, has the potential to reduce exposure and risks to participants, such as impermanent loss, changes in ratio of supplied liquidity, as well as the market risk of holding two tokens.

Where the LP staking pool is a finite resource and exhaustible, the direct staking pool is intended to be replenished by platform fee collections providing a mechanism for token holders to continue to earn additional TFLOW well after LP staking has ended.
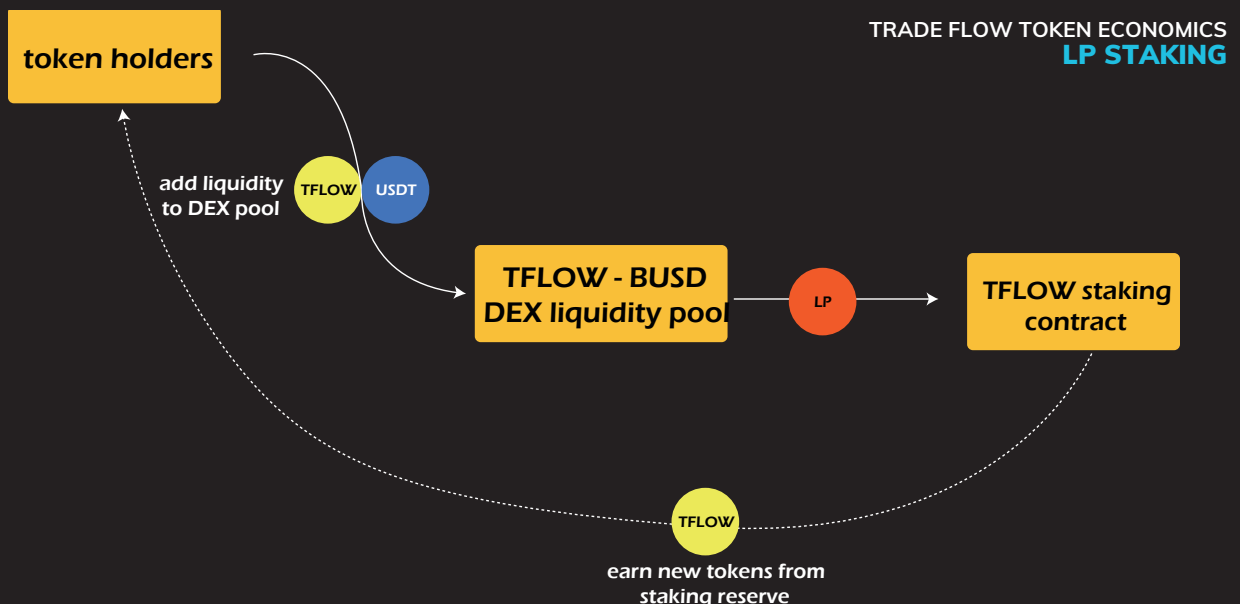
The yield provided through direct staking shall be variable and dependent on fee collections and the number of TFLOW staking participants.

platform fee
collection

token holders

TFLOW — earn new tokens from
staking reserve

treasury

stake tokens — TFLOW

TFLOW — 20% of profits

TFLOW staking
contract

TFLOW

staking pool

LP Staking

TFLOW can be earned when participants add liquidity to Trade Flow's DEX liquidity pool. Trade Flow will create a staking contract that is activated when LP shares generated from liquidity providers are deposited into the Trade Flow staking contract. TFLOW is paid into the staking pool and earned by LP miners based on their pro-rata share in the staking pool.

Staking is designed to reward participants who lock their TFLOW tokens while providing much needed liquidity to the DEX pool. In return they are given TFLOW from the staking reserve. The staking reserve is a finite and exhaustible resource which is expected to incentivize early participants and reduce the circulating supply.

token holders

TRADE FLOW TOKEN ECONOMICS
LP STAKING

add liquidity
to DEX pool — TFLOW USDT

TFLOW - BUSD
DEX liquidity pool — LP → TFLOW staking
contract

TFLOW

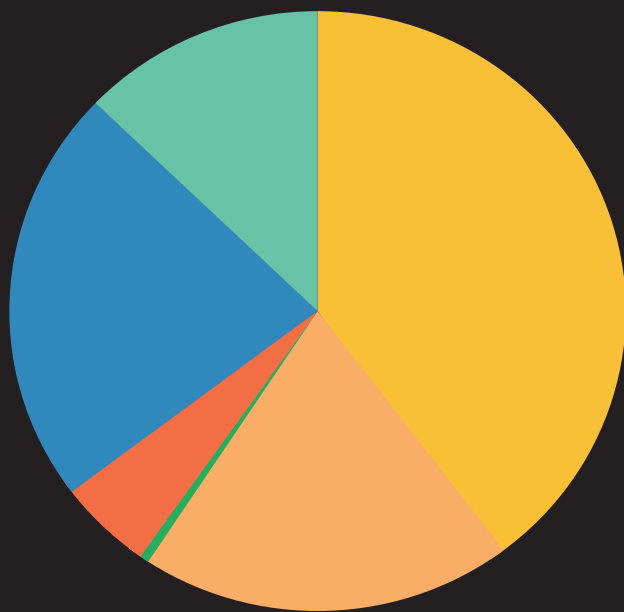earn new tokens from
staking reserve

Tokens Allocation

TFLOW is listed in CoinMarketCap and CoinGecko.

It is traded on BitMart, P2B and Pancake Swap.

There are 250,000,000 (250 Million) total TFLOW distributed according to the following chart:

TFLOW
TOKEN DISTRIBUTION

- **31.76%** — Circulating Supply: 64.900.000
- **16%** — Team Tokens locked till 15/8/2023: 40.000.000
- **4%** — Marketing: 10.000.000
- **18%** — Staking: 45.000.000
- **10%** — Reserve Wallet Locked Tokens 125.000.000
- **0,24%** — LP Tokens: 600.000

Team

John Aslanis
Founder

Karen Kokabi
Chief Sales Officer

Despoina Tsirogianni
Crypto Analyst

Socrates Papaspyrou
Operations & Design

Advisors

Tony Vamvakidi
Yachting Advisor

Aston Bailey
U.S. Market Advisor

Kyriakos Papazoglou
Real Estate Advisor

Rajat Jain
Shipping Advisor

Roadmap

Oct 2021
Creation and launch of the
concept of the TFlow project

Jan 2022
Launch of Private
sale

Nov 2021
Creation of the Trading
Algorithm

Q1 2022
Completion of the Private
Sale Listing in DEX & CEX

Q3 2022
Completion of
TFLOW Pools
of the platform

Q4 2022
Launch of new
TFLOW MTF Algorithm

Q2 2022
Completion of
the Beta Version

Q1 2023
Launch of first
Investment Pools

Q3 2023
Launch of
BETA Metaverse
and NFT DAO

Q1 2024
Launch of the
Full Version of
TFLOW Platform

Q2 2023
Listing in new
Centralized Exchange
(Tier 2)

Q4 2023
Listing in new
Centralized Exchange
(Tier 1)

Disclaimer

In consideration of Trade Flow (the "Company") providing this Whitepaper to the recipient, the recipient acknowledges that the contents of this Whitepaper are confidential to the Company and the recipient agrees not to disclose, distribute or permit to be communicated verbally, directly or indirectly or otherwise, or to otherwise publish the contents of this Whitepaper except with the prior written consent of the Company. For the purposes of this acknowledgement "recipient" includes, without limitation, any principal, employee or agent of the recipient.

This Whitepaper, and any offers made within it, is solely for Participants. This Whitepaper provides a summary of the main features of the Company. It contains general advice only and has been prepared without taking into account any participant's objectives, financial situation or needs. Participants should read the Whitepaper carefully and assess whether the information is appropriate for them in respect of their objectives, financial situation and needs.

This Whitepaper does not purport to contain all the information that a prospective participant may require. In all cases, interested parties should conduct their own investigation and analysis of the Company and the data contained in this Whitepaper.

The Company does not make any representation or warranty as to the accuracy or completeness of the information contained in this Whitepaper. Furthermore, the Company shall not have any liability to the recipient or any person resulting from the reliance upon this Whitepaper in determining to make an application to apply for shares in the Company.

The Company considers that the financial and non-financial information contained in this Whitepaper has been prepared to the best of its reasonable knowledge and ability. However, recipients must rely on their own investigation of all financial information and no representations or warranties are or will be made by the Company as to the accuracy or completeness of such information.

The Company makes no representation about the underlying value of the tokens on offer. Prospective participants must make their own assessment about whether the price of the tokens being offered represents fair value.

Participant Warning

Participation in a token sale carries high risks. It is highly speculative and before participating in any project about which information is given, prospective participants are strongly advised to seek appropriate professional advice;

The information contained in this Whitepaper has been prepared by or on behalf of the Company. Trade Flow has not undertaken an independent review of the information contained in this Whitepaper.

Prominent Statements

The information contained in this Whitepaper about the proposed business opportunity is not intended to be the only information on which a decision is to be made and is not a substitute for a disclosure document, or any other notice that may be required under law. Detailed information may be needed to make a token participation decision;

Prospective participants should be aware that no established market exists for the trading of any tokens that may be offered.

Future Statements

Except for historical information, there may be matters in this Whitepaper that are forward-looking statements. Such statements are only predictions and are subject to inherent risks and uncertainty. Forward-looking statements, which are based on assumptions and estimates and describe the Company's future plans, strategies, and expectations are generally identifiable by the use of the words 'anticipate', 'will', 'believe', 'estimate', 'plan', 'expect', 'intend', 'seek', or similar expressions. Participants are cautioned not to place undue reliance on forward-looking statements. By its nature, forward-looking information involves numerous assumptions, inherent risks and uncertainties both general and specific that contribute to the possibility those predictions, forecasts, projections and other forward-looking statements will not occur. Those risks and uncertainties include factors and risks specific to the industry in which the Company operates as well as general economic conditions. Actual performance or events may be materially different from those expressed or implied in those statements.

All forward-looking statements attributable to the Company or persons acting on behalf of the Company are expressly qualified in their entirety by the cautionary statements in this section. Except as expressly required by law, the Company undertakes no obligation

to publicly update or revise any forward-looking statements provided in this Whitepaper whether as a result of new information, future events or otherwise, or the risks affecting this information.

None of the Company, its officers or any person named in this Whitepaper with their consent, or any person involved in the preparation of this Whitepaper, makes any representation or warranty (express or implied) as to the accuracy or likelihood of fulfilment of any forward-looking statement except to the extent required by law. The forward-looking statements reflect the views held only as at the date of this Whitepaper.

Value Risks

Tokens issued by Trade Flow may drop substantially in value, or may remain illiquid for long periods of time or indefinitely. Trade Flow cannot guarantee an active secondary market for the exchange of tokens purchased in the token sale. Not all disclosures or statements are being made in this disclaimer section. Participants should review the token sale agreement in its entirety and seek the professional advice of legal counsel and investment professionals.

Trade Flow tokens may change in value based on a number of factors that are outside our control. There is no guarantee or expectation that Trade Flow tokens will increase in value, provide a return, or have sufficient adoption and liquidity on exchanges. Owning these tokens does not constitute a share of equity or ownership in the company. The token economy is new and exciting. Regulatory circumstances may require that token mechanics be changed or altered.

Trade Flow tokens do not have any rights, uses, purpose, attributes, functionalities or features, express or implied, including, without limitation, any uses, purpose, attributes, functionalities or features on the Trade Flow platform. Company does not guarantee and is not representing in any way to buyer that the Trade Flow tokens have any rights, uses, purpose, attributes, functionalities or features. TFLOW tokens may have no value. The company reserves the right to refuse or cancel TFLOW token purchase requests at any time at its sole discretion.