United DAO

WHITEPAPER

Version March 2022

Disclaimer

PLEASE READ THIS SECTION CAREFULLY. IF YOU ARE IN ANY DOUBT AS TO THE ACTION YOU SHOULD TAKE, YOU SHOULD CONSULT YOUR LEGAL, FINANCIAL, TAX OR OTHER PROFESSIONAL ADVISOR(S).

This Whitepaper does not constitute a prospectus or offer document of any sort and is not intended to constitute an offer of securities or a solicitation for investment in securities in any jurisdiction.

This Whitepaper does not constitute or form part of any opinion on any advice to sell, or any solicitation of any offer by United DAO to use their services (as specified in the whitepaper) or to purchase any tokens nor shall it or any part of it, nor the fact of its presentation form the basis of, or be relied upon in connection with, any contract or investment decision.

No person is bound to enter into any contract or binding legal commitment in relation to the services offered by United DAO and the respective businesses and operations (each as referred to in this Whitepaper).

This Whitepaper, any part thereof and any copy thereof must not be taken or transmitted to any country where distribution or dissemination of this Whitepaper is prohibited or restricted. No part of this Whitepaper is to be reproduced, distributed or disseminated without including this disclaimer.

Disclaimer of Liability

To the maximum extent permitted by the applicable laws, regulations, and rules, United DAO shall not be liable for any indirect, special, incidental, consequential or other losses of any kind, in tort, contract or otherwise (including, but not limited to, loss of revenue, income or profits, and loss of use or data), arising out of or in connection with any acceptance of or reliance on this Whitepaper or any part thereof by you. Understand that all information pertaining to the services offered by United DAO (as specified in the Whitepaper) is contained in the Whitepaper and on this website. All information provided by a referral source is not authorized by United DAO and should not be relied upon.

No Advice

No information in this Whitepaper should be considered to be business, legal, financial or tax advice regarding United DAO. You should consult your own legal, financial, tax or other professional advisor(s) regarding United DAO.

No Representations and Warranties

United DAO does not make or purport to make, and hereby disclaims, any representation, warranty or undertaking in any form whatsoever to any entity or person, including any representation, warranty or undertaking in relation to the truth, accuracy and completeness of any of the information set out in this Whitepaper. United DAO does not guarantee or warrant the site will be uninterrupted, without delay, error-free, omission-free, or free of viruses. Therefore, the information is provided "as is" without warranties of any kind, express or implied, including accuracy, timeliness and completeness.

No Further Information of Update

No person has been or is authorized to give any information or representation not contained in this Whitepaper in connection with United DAO and their respective businesses and operations (each as referred to in the Whitepaper) and, if given, such information or representation must not be relied upon as having been authorized by or on behalf of United DAO.

The services (as specified in the whitepaper) shall not, under any circumstances, constitute a continuing representation or create any suggestion or implication that there has been no change, or development reasonably likely to involve a material change in the affairs, conditions and prospects of United DAO or in any statement of fact or information contained in this Whitepaper.

Restrictions on Distribution and Dissemination

The distribution or dissemination of this Whitepaper or any part thereof may be prohibited or restricted by the laws, regulatory requirements, and rules of any jurisdiction. In the case where any restriction applies, you are to inform yourself about and to observe, any restrictions which apply to your possession of this Whitepaper or such part thereof (as the case may be) at your own expense and without liability to United DAO. Persons to whom a copy of this Whitepaper has been distributed or disseminated, provided access to or who otherwise have the Whitepaper in their possession shall not circulate it to any other persons, reproduce or otherwise distribute this Whitepaper or any information contained herein for any purpose whatsoever nor permit or cause the same to occur.

Risk and Uncertainties

Prospective users of United DAO (as referred to in this Whitepaper) should carefully consider and evaluate all risks and uncertainties associated with United DAO and their respective businesses and operations (each as referred to in the Whitepaper), all information set out in this Whitepaper and the T&Cs. If any of such risks and uncertainties develops into actual events, the business, financial condition, results of operations and prospects of United DAO could be materially and adversely affected. In such cases, you may lose all or part of the value of the tokens.

Foreword

The invention of decentralized ledger technology and smart contract blockchains such as Ethereum has opened a whole new world of opportunities that made the recent DeFi (decentralized finance) boom possible.

DeFi takes the key components of the tasks done by banks, centralized exchanges and insurers in the traditional finance sectors (TradFi), such as loans, trading and margin — and puts it directly under the control of the owners' themselves, eradicating the lack of transparency, high transaction fees and slow flow of capital.

Many problems exist with the current billion-dollar DeFi industry. Crypto yield farmers actively seek double-digit interest rates but risk having their digital wealth being stolen by scammers who can do so under the cover of anonymity because of the nature of the decentralized space. Also, because of the relatively low liquidity in DeFi markets as compared to TradFi markets, the volatility that can be experienced in DeFi markets correspondingly is higher, leading to large price fluctuations which can disincentivize investors in a project. Traditional DeFi projects seek to solve this problem through the process of incentivizing the market to provide liquidity to decentralized exchanges. Due to the current market environment with limited liquidity, projects have to incentivize liquidity providers to provide liquidity for their project over their others in the space, and to retain such liquidity in these liquidity pools.

The DeFi 2.0 solution was that of protocol owned liquidity, where DeFi projects would own their own liquidity instead of relying on external providers, and this resolved the need to compete with other projects to retain liquidity from external providers. This process occurs via the bonding mechanism, where the protocol sells its native token (e.g. UTD) in exchange for an established cryptocurrency (e.g. BTC/ETH/stablecoins) or a liquidity pool token (e.g. UTD/USDC pair). The buyer is incentivized to buy these tokens from the protocol as they are typically priced at a discount to the current market price. However, these bonds are usually vested over a period of time. All these inflows from bonding then flow into the DeFi project's treasury, which will primarily serve the goal of backing tokens, so that these tokens have an intrinsic value and thus a level of support for the price of the token on the market.

Shortcomings of preceding DeFi 2.0 projects can stem from the underlying protocol tokens losing value due to poor treasury management or having non-doxxed founding members who may not have had the relevant experience to manage such large projects, nor the responsibility to protect the treasury due to the veil of anonymity in this space. This has

led to prior advocates of anonymity in the blockchain world to switch their stance, and now demand for DAO project founders and committee members to be doxxed and held accountable for credibility, especially when large treasury values are at stake.

United DAO seeks to usher in the next generation of DeFi 3.0 via its core protocol, which is underpinned by three unique propositions - the Allies Program, Rewards & Utility Program, and Treasury management – along with strong enablers. With this, United DAO aims to overcome the shortcomings of its predecessors, and build a long-term, sustainable protocol.

United DAO was founded by an experienced, versatile team with wide-ranging experiences - spanning blockchain, economics, finance, and more. This provides a strong foundation for the protocol's build, while maintaining an end vision of having a completely DAO-led protocol.

We also seek to overcome the large price volatility in the prices of the native tokens, by introducing innovative new tokenomics to our native token model, which would incentivize token holders to voluntarily pledge their tokens to our protocol, and a burning mechanism for our tokens in order to reduce the overall token supply.

During the current time of unprecedented uncertainty and volatility in both the DeFi and TradFi markets, we believe that the way forward is through the sustainable growth of a DeFi community where the stakeholders are held equally accountable. Over the long run, we envision that all stakeholders will benefit from this model of prudent on-chain governance and decentralized ownership.

Content

What is DeFi?

DeFi is Decentralized Finance in short. This refers to financial products and services powered by decentralized blockchain technologies. Unlike the traditional financial world, banks, brokerages and other financial intermediaries are not needed to facilitate transactions in DeFi ecosystems.

TRADITIONAL FINANCIAL SYSTEM:

YOU (SENDER)   **YOUR BANK**   **BANK OF RECEIVER**   **RECEIVER**
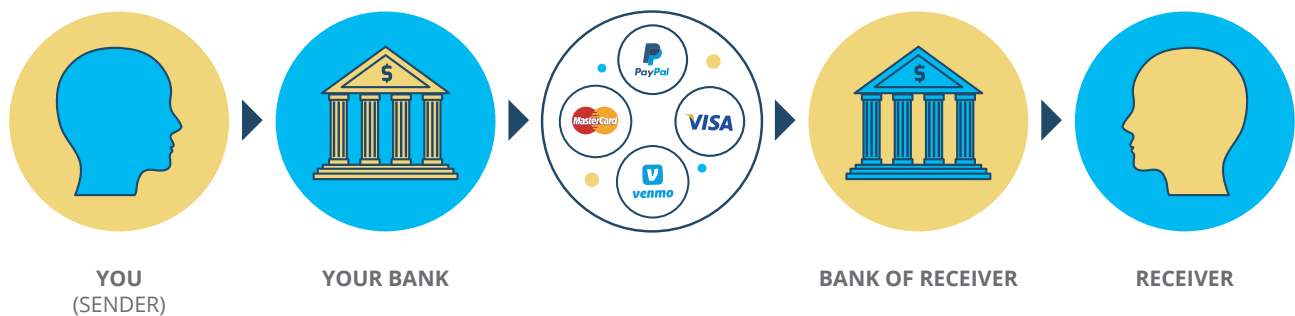
DECENTRALIZED FINANCIAL SYSTEM:

YOU (SENDER)   **RECEIVER**
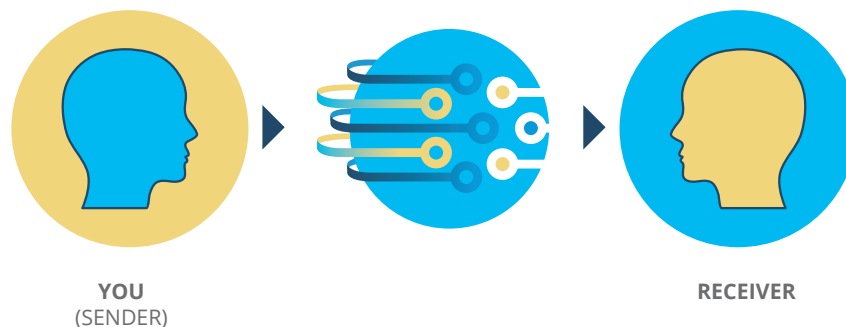
DeFi can be considered as the most practical application of blockchain because it adopts the advantages of this technology, including:

Eliminate third parties: The traditional finance system is run by third party intermediaries that facilitate money movement between parties, and charge fees for their services. For example, when you make a purchase with your credit card, the charge goes from the merchant to an intermediary, which forwards the card details to the credit card network. The network clears the charge and requests a fee from your bank. Your bank then approves the charge and sends the approval to the network, through a financial intermediary , back to the merchant. Each intermediary in the chain receives a fee for its services, which increases the cost between the original parties, and results in a loss in efficiency for the overall system.

Security: A secure method of eliminating third parties relies on the immutable and trustless nature of the blockchain network, which is triggered via smart contracts, instead of relying on financial intermediaries or third parties. These blockchain facilitated ledgers are accessible to all parties regardless of who they are, opening up access globally for all parties to access this system.

Automation: Use of Smart Contracts for automation of each process while preserving the terms and accuracy of each contract.

Cost savings: Cost reduction of intermediaries such as banks, agents, and brokers that charge fees to execute financial transactions, as blockchain technology can achieve the same effect almost instantaneously at a fraction of the cost.

These are some examples of the different DeFi application types.

DEFI APPLICATION TYPES

Decentralized Exchanges

Derivatives Trading

Lending Platforms

Stablecoins

Prediction market
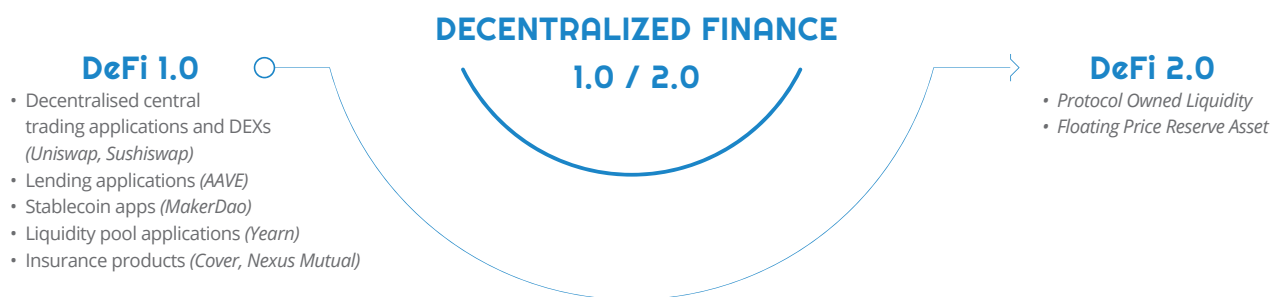
Yield Farming

Liquidity Mining

DeFi 2.0

DeFi 2.0 is a movement of projects improving on the problems of DeFi 1.0. DeFi was targeted at opening up access to traditional financial products without financial intermediaries, but has struggled with scalability, security, centralization, liquidity, and accessibility to resources. As mentioned above, liquidity is a common problem for all DeFi protocols, due to the discordance in size of the DeFi market and the TradFi market.

Due to the current market environment with limited liquidity, projects have to incentivize liquidity providers to provide liquidity for their projects over other projects in the space, and to retain such liquidity in these liquidity pools.

This can lead DeFi projects to compete in a 'race to the bottom' scenario, where the bottom is defined as the value of the token plummeting. This often occurs due to transaction fees, incurred from providing liquidity to decentralized exchanges, being insufficient to incentivise liquidity providers to lock liquidity. Fluctuations in token prices can lead to providers suffering impermanent loss, and DeFi projects typically have to offer their native tokens as incentives to such providers.

However, as the rewards for liquidity providers increase due to competition between such DeFi projects, the price of such tokens fall due to the increase in supply of such tokens in the market, leading to a corresponding increase in selling pressure. The DeFi 2.0 solution was that of protocol owned liquidity, where DeFi projects would own their own liquidity instead of relying on external providers, and this resolved the need to compete with other projects to retain liquidity from external providers.

This process occurs via the bonding mechanism, where the protocol sells its native token (i.e UTD) in exchange for an established cryptocurrency (i.e BTC/ETH/ stablecoins) or a liquidity pool token (i.e UTD/USDC pair). The buyer is incentivised to buy these tokens from the protocol as they are typically priced at a discount to the current market price. However, these bonds are usually vested over a period of time, such as typical TradFi short term bonds. All these inflows from bonding then flow into the DeFi project's treasury, which will primarily serve the goal of backing tokens, so that these tokens have an intrinsic value and thus a level of support for the price of the token on the market.

DECENTRALIZED FINANCE

1.0 / 2.0

DeFi 1.0
- Decentralised central trading applications and DEXs *(Uniswap, Sushiswap)*
- Lending applications *(AAVE)*
- Stablecoin apps *(MakerDao)*
- Liquidity pool applications *(Yearn)*
- Insurance products *(Cover, Nexus Mutual)*

DeFi 2.0
- *Protocol Owned Liquidity*
- *Floating Price Reserve Asset*

Market Outlook and Potential
AMOUNT OF CRYPTOCURRENCY HELD IN DEFI, WORLDWIDE FROM AUGUST 2017 TO OCTOBER 15, 2021

The TradFi market has grown from a size of $20.4 trillion in 2020 to $22.5 trillion in 2021 at a compound annual growth rate (CAGR) of 9.9%, and is expected to further grow to $28.5 trillion by 2025. In comparison to that, the amount of money invested in DeFi or what we call it, Total Value Locked (TVL) has increased to over $245 billion in January 2022, from $20 billion in January 2021 and from $690 million from January 2020, showing tremendous growth over the last 3 years.

The DeFi market is expected to reach a size of $800 billion by 2024, and given that the size of the DeFi market is only a fraction of the TradFi market, with increasing adoption, we believe that DeFi has an enormous potential for growth, and will see a large inflow of funds as the current yields on low-volatility stablecoin deposits exceed the expected return in most traditional finance products. DeFi is a red-hot segment in the current blockchain space, and at United DAO, we aim to utilize the collaborative power of our DAO community to keep our protocol innovative and streamlined, in order to bring value to our community.
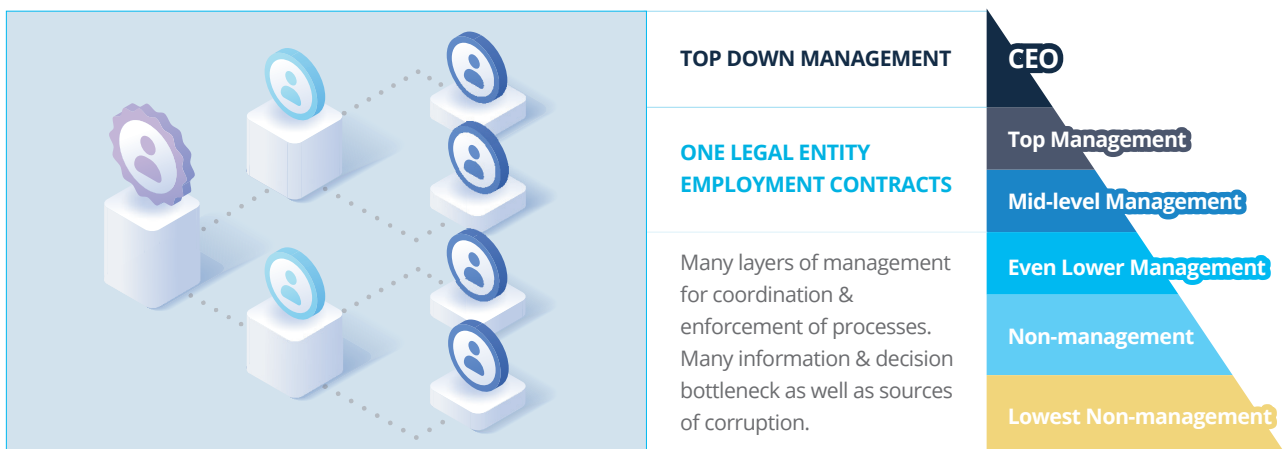
What is DAO?

A decentralized autonomous organization (DAO) is a decentralized entity with no central government. Decisions are made bottom-up, governed by a community organized around a specific set of rules enforced on a blockchain.
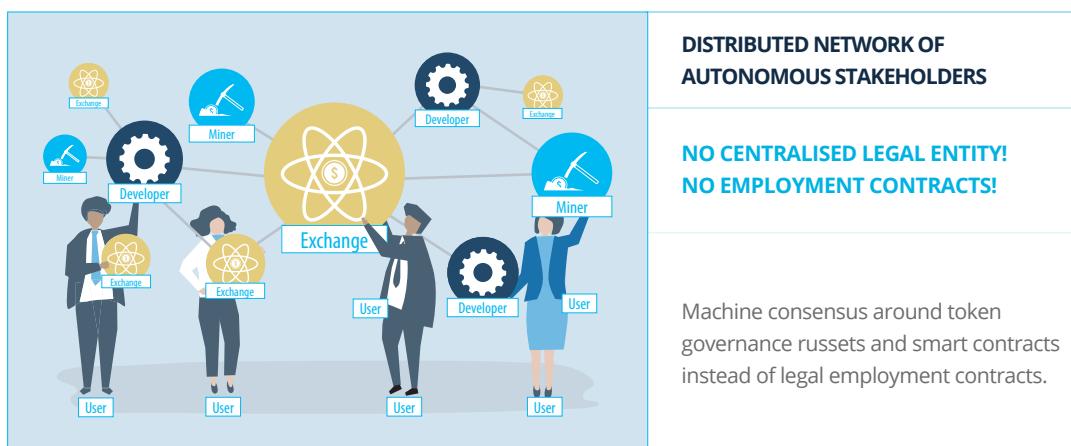
DAOs are internet-native organizations collectively owned and managed by their members. They have built-in treasuries that can only be utilized with the approval of their members. Decisions are made via proposals, of which the group votes on during a specified period. This system would allow harnessing of the community hivemind for process development and idea generation, and reduce human error or manipulation of funds.

A DAO works without hierarchical management and can have a large number of purposes. DAOs can be used for multiple purposes such as investments, borrowing, lending, fundraising, payments, all without any intermediaries.
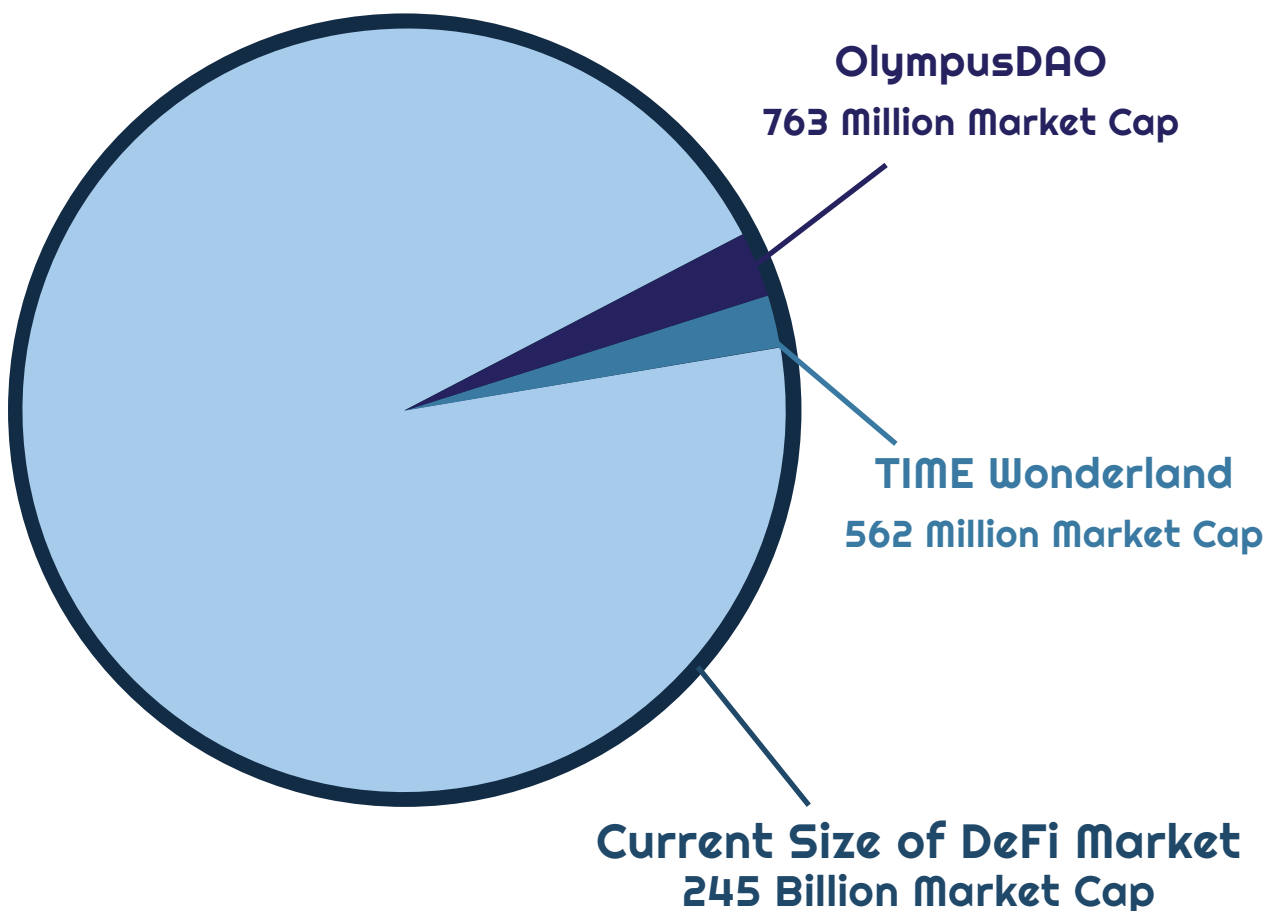
TRADITIONAL TOP DOWN ORGANISATIONS

TOP DOWN MANAGEMENT	**CEO**
ONE LEGAL ENTITY EMPLOYMENT CONTRACTS	Top Management
	Mid-level Management
	Even Lower Management
Many layers of management for coordination & enforcement of processes. Many information & decision bottleneck as well as sources of corruption.	Non-management
	Lowest Non-management

DECENTRALIZED AUTONOMOUS ORGANISATIONS

	DISTRIBUTED NETWORK OF AUTONOMOUS STAKEHOLDERS
	NO CENTRALISED LEGAL ENTITY! NO EMPLOYMENT CONTRACTS!
	Machine consensus around token governance russets and smart contracts instead of legal employment contracts.

To be fully operational, a DAO needs a set of rules according to which it will operate. Those rules are encoded in a smart contract, which permits trusted transactions and agreements to be carried out among disparate, anonymous parties without the need for a central authority, legal system, or external enforcement mechanism. At its early stage, United DAO still would require central management and execution, but as the protocol approaches maturity and stability, the final vision would be for an autonomous organization led by the community. In this early stage, United DAO plans to have an executive team of experienced, capable individuals helming the project, while taking the communal input of its community for direction of the project.

When a DAO is fully operational, the decisions on how the protocol develops and how the treasury is used are made via an autonomous crowdsourced approach.. DAO stakeholders can write proposals regarding implementations and stakeholders would then vote on the proposal. For a proposal to be passed, the majority of stakeholders needs to vote in favor of it.

Total Addressable Market

OlympusDAO
763 Million Market Cap

TIME Wonderland
562 Million Market Cap

Current Size of DeFi Market
245 Billion Market Cap

Currently, DeFi 2.0 projects backed by a DAO-governed treasury of unique DeFi assets has a market share at around 1% of the entire DeFi market capitalization. As we expect both the DAO and DeFi dominance in the crypto space to grow tremendously in the near future, there is a sizable addressable market for United DAO to capture market share.

The current DeFi 2.0 DAO projects have been plagued with problems, such as the underlying assets losing value due to poor treasury management, or 'rug pulls' initiated by anonymous founders and developers. **United DAO aims the next step towards DeFi 3.0, achieving both asset-backed stability and purchasing power through Establishing True Credibility, Strong On-chain Governance and Active Risk Management for our stakeholders.**

United DAO

Stablecoins like USDT and USDC have become a commonly used medium of exchange in day-to-day usage. Unfortunately, it is pegged to the US Dollar, which is a remarkable financial instrument, but is still subjected to Federal Reserve monetary policies, which control the minting of the US Dollar, as well as its fiscal policies that have recently driven the real value of the US Dollar down amid decades-high inflation levels. We believe that a decentralized store of value should be backed by a diversified basket of currencies and assets, so that this store of value would not be vulnerable to the policies of a single entity.

Learning and building from the previous experiences of earlier protocols, such as Olympus, and TIME-Wonderland, the UTD Protocol has built a free-floating currency reserve protocol that is backed by a basket of digital assets. By focusing on growing the supply of the treasury rather than emphasizing on the native token's price appreciation, the protocol can function as a store of value that is able to maintain its purchasing power regardless of market volatility.

Our protocol will be based on the Ethereum main network, for security reasons, as compared to using a Proof-of-Stake side chain, but will develop bridges in the future to these side-chains or L2 ethereum layers in order to achieve cheaper gas fees and faster transaction speeds for smaller transactions.

In the long term, our protocol aims to bring about optimal levels of stability and consistency, so that UTD can function as a global unit-of-account and medium-of-exchange. As the protocol matures and staking yields stabilize, we would then aim to achieve sustainable treasury growth in line with our yields, so as to be accepted as a store of value for institutional investors. In the short term, we intend to optimize the system for treasury growth and wealth creation for early investors to develop the protocol and its initiatives.

Our Vision

To build a DAO-led decentralized protocol that is accessible to all as a store of value.

Our Mission

United DAO is a next generation protocol based on the native token - UTD. It aims to become a truly decentralized currency, backed by yield-generating digital and growth assets, governed on the blockchain and led by industry leading experts. Coupled with our strategic partners, we aim to provide early-stage access to exclusive blockchain projects, as well as private equity projects in order to provide growth for the treasury.

Our Model

The United DAO protocol uses its treasury reserves to back all outstanding UTD tokens. This means that every UTD is backed by 1 USDC, not pegged to it. Because the treasury backs every UTD with at least 1 USDC, the protocol would buy back and burn UTD when it trades below 1 USDC. This has the effect of always pushing the UTD price back up to 1 USDC. 1 UTD can always trade above 1 USDC because there is no upper limit imposed by the protocol.

You might say that the intrinsic value of 1 UTD will always be at least 1 USDC, and this amount can be increased by DAO vote in the future, in order to bring UTD back up to its treasury backed, or 'book value'. The extrinsic value or market price of UTD minus 1 USDC, is the premium the market decides to pay based on the value it determines UTD to hold. This value could be the early investor opportunity to have the highest staking yields at protocol implementation, which would ensure that the intrinsic value, or risk-free value of the initial investment can compound at a more rapid pace, or the value the market assigns to upcoming initiatives as well as the value of the treasury.

As an overview, United DAO consists of its protocol managed treasury reserves, Protocol-Owned-Liquidity (POL), staking mechanism and bonding mechanism which are designed to control supply. POL refers to the amount that the treasury owns and controls. A higher POL is better for the protocol and its users as the protocol is incentivized to reduce selling pressure in order to generate higher inflows for the treasury.

For United DAO, in order to maximize treasury inflows, our tokenomics have evolved from the current DeFi 2.0 mechanism, to incentivize voluntary pledging as well as burn mechanics, in order to reduce selling pressure and to increase the value of each UTD token.

Market Participants and Benefits

There are two main strategies for market participants: staking and bonding. Stakers stake their UTD tokens in return for more UTD tokens, while bonders provide LP or USDC tokens in exchange for discounted UTD tokens after a fixed vesting period.

The main benefit for stakers comes from supply growth. When the protocol mints new UTD tokens from the treasury from bonding inflows, majority are distributed to the stakers. Thus, the capital gain for stakers will come from their compounding balances, though price exposure remains an important consideration. That is, if the increase in token balance outpaces the potential drop in price (due to the increase in token supply), stakers would make a profit.

The main benefit for bonders comes from price consistency. Bonders commit a capital upfront and are promised a fixed return at a pre-determined point of time. This fixed return is in UTD and thus the bonder's profit would depend on the UTD price when the bond matures. Bonders benefit from a rising or static UTD price due to this arbitrage opportunity.

Staking

Staking is the primary value accrual strategy of the United Dao Protocol which generates passive income via auto-compounding. The rebase rewards come from the proceeds of bond sales and can vary based on the number of UTD staked in the protocol and the reward rate set by the monetary policy.

By staking your UTD with United DAO, you receive an equal amount of sUTD which then earns you rebasing rewards automatically at the end of every 8 hour epoch based on the current APY.

When you unstake, you burn sUTD and receive and equal amount of UTD, thereby forfeiting the upcoming rebase rewards.

The forfeited reward is only applicable to the unstaked amount, and all remaining staked UTD will continue to reap rebase rewards.

Bonding

Bonding is another way that token holders can accrue rewards. By swapping stable coins like USDC or Liquidity Provision (LP) token pairs directly with the United DAO Protocol in exchange for discounted UTD tokens, the protocol is able to build up a liquidity reserve of stablecoins.

The protocol quotes the bonder with terms such as the bond price, the amount of UTD tokens entitled to the bonder, and the vesting term. In return, bonders receive discounted UTD tokens at regular intervals as they vest, and at the end of the vesting term, the full amount is claimable. Bonds will be vested at a linear rate, which can be claimed at any point in time during the bonding period.

Bonding allows us to accumulate our own liquidity. We call our own liquidity Protocol-Owned-Liquidity (POL). More POL ensures there is always sufficient liquidity in our trading pools to facilitate market operations and protect token holders. Since United DAO becomes its very own market, on top of additional certainty for UTD investors, the protocol accrues more and more revenue from LP rewards bolstering our treasury.

Protocol-Owned-Liquidity (POL)

POL refers to the amount of Liquidity Provisions (LP) that the treasury reserve owns and controls. The higher the POL, the more benefits there are to the protocol and its users. United DAO does not have to pay out high farming rewards to incentivize liquidity.

United DAO guarantees the market that liquidity is always there to facilitate buying

and selling. By being the largest liquidity provider (LP), it earns the bulk of the LP fees, which represents another source of income to the treasury reserve. All POL can be used to back UTD. The LP tokens are marked down to their risk-free value for this purpose.

Our Unique Value Proposition

On top of the **Core Protocol** - that establishes the staking, bonding, and LP mechanisms -United DAO introduces three unique value propositions differentiate and provide token holders with additional utility – United Allies Program, Rewards & Utility Program, and Treasury Management:

United Allies Program

The United Allies Program is designed to enable growing and building the community and the Treasury. Core features of the Program include a unique pledging mechanism, along with an innovative affiliate program.

More details on the Program and its Tokenomics can be found in the next section (Tokenomics – aUTD).

Rewards & Utility Program

The Rewards & Utility Program introduces an exclusive token "mUTD" (mini UTD), which aims to provide further utility to token holders. It will be used in the protocol's very own reward shop to redeem rewards such as NFTs and more.

mUTD can be earned through either "pledge" or "burn" mechanisms.

More details on the Program and its Tokenomics can be found in the next section (Tokenomics – mUTD).

Treasury Management

The protocol aims to take an active management strategy for the treasury funds to ensure its resources are effectively utilized. Initial management principles have been laid out to align with different growth phases of United DAO's treasury.

Onboarded and future advisors, and partners, will provide access and expertise for such strategies, in what will ultimately be determined and finalized by the DAO

More details on the Program and its objective can be found in the "Treasury Management" section

Tokenomics

There are multiple native tokens of the United DAO platform. Namely, UTD, sUTD, aUTD and mUTD. Unlike the previous tokens of DeFi 2.0 and its forks, our tokens were created with value provision in mind, as well as deflationary mechanics to increase the value of our native tokens. We believe that our protocol is the next evolution of DeFi 2.0 protocols and seek to consistently evolve and improve our tokenomics to achieve those aims.

UTD

UTD is the currency token of the platform, and will be the main medium of exchange, especially because all protocol owned liquidity pools would be in UTD.

Each UTD token will have a protocol buyback value of 1 USDC, to give each UTD token an intrinsic value, so that the overall 'risk-free' value of a user's holdings will increase with time.

We believe however, that each UTD token will trade at a higher price, due to the 'book value' of each UTD token. This is because each UTD token is backed by the United DAO's treasury reserve and can be visualized as a fraction of that reserve. We believe that this 'book value' will be the price floor of each UTD token. However, we believe that the UTD token can be priced at a higher premium by the market, and this would be the extrinsic value of each UTD token, which is a price multiple paid by the market in exchange for high staking yields or the value paid by the market in return for other utilities from holding the aUTD token.

Unlike earlier generations of DeFi protocols, we aim to provide value to justify these multiples in order to sustain the market price of UTD, which will add to the positive feedback loop for treasury growth. We also have adopted the business model of successful offchain companies, such as Amazon, and developed our United Allies Program. This would incentivize token holders to grow our United DAO community and reach its goal in becoming the world's next generation decentralized protocol. This also has the benefit of rewarding our Allies for growing the DAO and gives them an additional stream of income as we know that our community members have real world bills to pay as well.
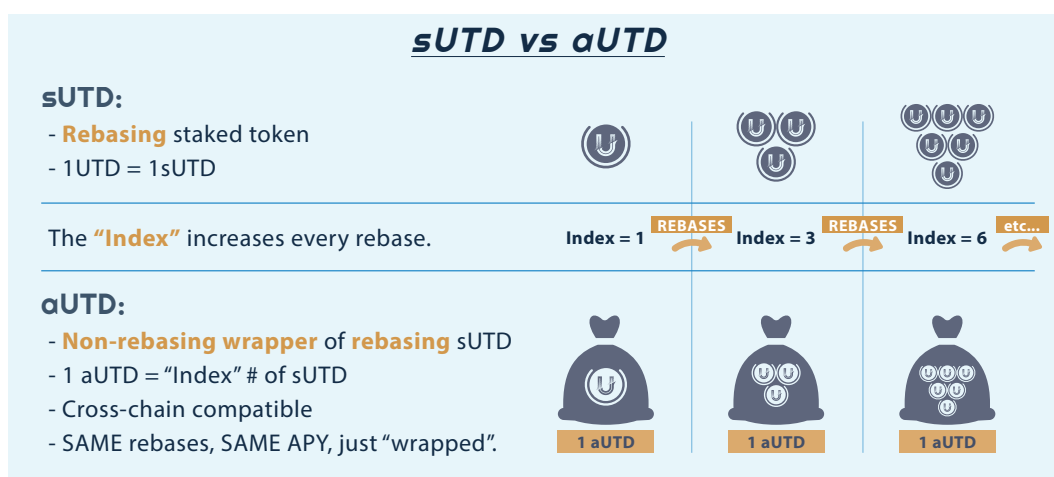
sUTD

Our sUTD token is our rebasing token, and it is the main value accrual strategy of United DAO. United allies can stake their UTD into sUTD to earn rebase rewards. The rebase rewards come from the proceeds from bond sales and can vary based on the number of UTD staked in the protocol and the reward rate set by the monetary policy.

By staking, users can gain steady long term passive income. Users will be profitable even if the price of UTD drops below its initial purchase price, as the value of the increase in UTD staked balance can outweigh the fall in token price.

As such, we believe that our Allies would be vested in growing our bond sales as this would increase their staking rewards and bring our treasury towards the income generation or capital expansion phase, to further increase the book value of their tokens.

aUTD

aUTD is the wrapped version of UTD and is a self-rebasing token. It is also the utility token of our protocol and will be the future governance token of the protocol. What this means is that each aUTD can be unwrapped into a number of UTD tokens as determined by the Index and this value of aUTD is calculated by how many sUTDs you would have if you had staked 1 UTD token the very moment rebasing first began.

sUTD vs aUTD

sUTD:
- **Rebasing** staked token
- 1 UTD = 1 sUTD

The **"Index"** increases every rebase.

Index = 1   REBASES   Index = 3   REBASES   Index = 6   etc...

aUTD:
- **Non-rebasing wrapper** of **rebasing** sUTD
- 1 aUTD = "Index" # of sUTD
- Cross-chain compatible
- SAME rebases, SAME APY, just "wrapped".

1 aUTD   1 aUTD   1 aUTD

Each aUTD has an active and inactive state, where each aUTD is 'activated' by pledging the aUTD to the protocol. This pledging locks up that aUTD token for a time period of 90 days and is seen as your commitment to helping the protocol grow. In a game theory point of view, you benefit the protocol as you commit to reducing selling pressure on the UTD token, while still gaining rewards as your self-rebasing token grows in value.

In exchange for your commitment to the protocol, the protocol rewards you in tiers according to the amount of aUTD that you have pledged, and this will allow you to have an increased amount of mUTD generated, as well as to allow you to lead our own group in the United Allies Program. As our protocol develops, we look forward into growing the Allies Program even further, to foster a sense of ownership within our community.

United Allies Program

	TIER **Ambassador**	TIER **Associate**	TIER **Partner**
aUTD pledged (3 Months)	0	10	25
mUTD reward per aUTD pledged	10	12	15
Referral base commission	0.25%	1%	2.5%
Referral perks	0	Personal URL link	Vanity URL link
Discord perks	-	Exclusive subchannel access	Subchannel management
Sponsorship programme	-	-	Yes

mUTD

Finally, mUTD (mini UTD) is our reward token of the protocol. It is given out to Allies who pledge their aUTD, as a form of dividend in addition to their capital accumulation of UTD. mUTD is also termed as mini UTD, because each UTD can be burned to be fractionalized into a certain amount of mUTD, based on the protocol's current exchange rate.

It will be used in our very own reward shop, where we will allow committed Allies to redeem rewards, such as NFTs, pre-IDO token allocations, merchandise, and vanity perks. As our protocol grows bigger, we understand that each token allocations and project whitelists within the blockchain space may not be enough for every ally, and thus we have developed an allocation system where you can use your mUTD to bid for allocations for such projects.

Treasury Management

The ultimate goal for United DAO is to create a next generation decentralized currency that is backed by a community governed treasury.

DAO Treasuries have the key objectives of (1) financing critical developments and operations, (2) providing a reserve backing should an underlying protocol fail, and (3) funding user growth and acquisition.

In order to meet these goals, DAOs need to manage treasuries in a way that fulfils certain key performance indicators. Some examples of KPIs include: "What is the maximum drawdown in asset prices of which the treasury can handle?" or "How much treasury should be allocated for investment purposes if we want to continue generating X% interest rate on our holdings?" These KPIs are dynamic and alter according to market conditions, size of the treasury, and changing values / objectives of the respective DAOs. If managed well, the treasury can serve as a strategic asset that improves the protocol's market position.

We emphasize 3 key Treasury Management principles to adhere to:

1. **Maintain an infinite time horizon:** DAO Treasuries should be structured to exist and support the DAOs' protocols in perpetuity.
2. **Inflows must exceed outflows:** Operational revenues from the DAOs' protocols and non-operational income generated from the treasuries should exceed expenses on the balance sheets.
3. **Diversification is key:** DAO Treasuries should be invested in a way that critical operating expenses can be funded even if the DAOs' protocols face a significant drawdown. We believe that a decentralized protocol must have a diversified treasury and provide a cushion for the DAO.

Asset Allocation

With regards to investing United DAO's treasury assets, we strongly believe **asset allocation is key to building an all-weather portfolio to preserve the reserve value of our tokens.** Markets are subject to shocks every once in a while, triggering mark to market volatility in portfolios.

A thoroughly thought-out and effectively-managed asset allocation strategy should be well-equipped to maintain United DAO's protocol, even during bear markets

(which we see as frequent, at least at the dawn of this industry), as well as maximize capital on hand, thereby creating a competitive advantage.

United DAO's treasury asset allocation should be a function of the amount of risk the United DAO community is willing to take. And the return generated overtime will in turn be a function of this risk. Other than the values / objectives set by the community, the size of treasury's assets is also another crucial factor determining the amount of risk the community is willing to accept.

As a proposed asset allocation plan, we have constructed the following **3 investment profiles / objectives, dynamically aligned to the different growth phases of United DAO's treasury assets:**

> ### Treasury Preservation (< USDC 100mn):
> In the initial phase of United DAO, due to the size of our treasury and holdings of our own native token, it is highly likely a significant portion of income will be from bond inflows, at least until the treasury assets reach a critical size, moving away from just backing the UTD token to growing our treasury. Hence at this stage, treasury preservation should be the primary investment objective. The treasury reserves should therefore be **highly liquid and stable in nature, in order to maintain protocol function in the event of a significant market drawdown.**
>
> ### Income Generation (USDC 100 - 500mn):
> As United DAO's treasury grows in size, investment objectives change as well - one that now **seeks a balance between capital preservation and growth.** Hence, treasury assets can start diversifying into investments that **generate a steady income supplement with potential for some capital appreciation.** Risk tolerance levels tend to be higher at this investment stage.
>
> ### Capital Expansion (> USDC 500mn):
> Once United DAO's protocol reaches a mature stage of growth, treasury assets can then **focus on growing its capital** rather than merely preserving it. This could entail **allocating a larger portion of the treasury to higher risk assets,** which targets capital appreciation over the medium to long term. The DAO community must be **able to withstand medium term fluctuations** in the capital value of treasury assets invested.

Proposed Asset Allocation
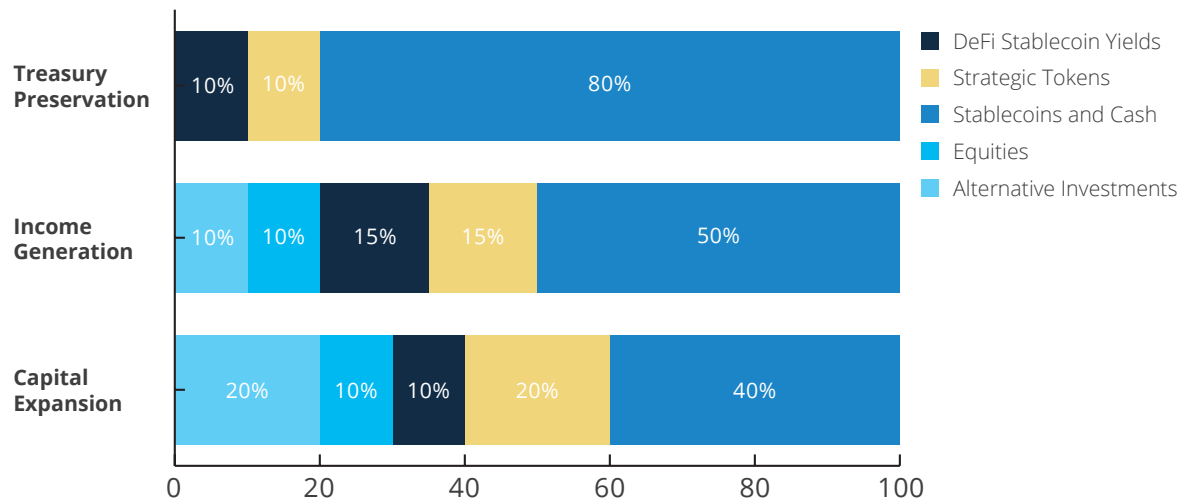
All allocations are arbitrary and derived based on the capital market assumptions modelled by our analysts. Eventual allocations should be determined and finalized by the DAO community.

In determining these asset allocations, the community should note to always strive for **a balance between liquidity, growth and risk management, in line with their investment objectives and risk tolerance levels.** Treasury management is a dynamic process that requires an active approach to combat volatility.

Asset Classes

Stablecoins and Cash

With liquidity and stability as key priorities, assets in this category tend to have the lowest risks and volatility. We believe that a decentralized treasury should hold a diversified basket of reverses, be the reserves stablecoin or cash. As stablecoins are largely pegged to the US Dollar, we propose that a certain percentage of our reserve can be held in Safe Haven Currencies, to reduce our Treasury's exposure to any one country's monetary policy.

DeFi Stablecoin Yields

Similar to a traditional bond or dividend paying stock, yield on DeFi tokens offer a source of income but fluctuate depending on how respective projects and exchanges roll out, i.e. fundamentals is of great importance. We will take caution on investing in DeFi tokens purely based on the high yields offered as there are also downside risks to the tokens' values.

Hence, we aim to generate returns farming stablecoins specifically, so as to limit the risks involved in attaining DeFi yields. Stablecoins have a much lower volatility, best suited for risk averse profiles. Stablecoin yields can easily reach double-digit APY, especially using auto-compound.

Strategic Tokens

Strategic tokens have the main objective of enhancing returns within the portfolio. Examples of such investments include: Blue-chip crypto assets like BTC and ETH, altcoins that perform different functions in the crypto economy and offer further potential capital upside, security tokens that resemble traditional stocks in terms of its risk-reward profile, etc. As of now, most strategic tokens are correlated and tend to be of higher risk, given the speculative and nascent stage they are in. Based on expert guidance and analysis, we will work with the DAO community to decide the eventual allocation and actual investments within this asset class.

Equities

Equities are situated on the higher end of the risk spectrum and generate returns via capital growth through an increase in share price, or receipt of income in the form of dividends. Neither is guaranteed and there is a risk of capital loss. Similarly, different equities offer different risk exposures, depending on the sector, region and style of investing.

The community can also consider some allocation into derivatives as a form of hedge or protection. For example, purchasing short-dated put options as insurance could help cushion the protocol during Black Swan events and market drawdowns.

Alternative Investments

Allocations to alternative investments are believed to increase a portfolio's risk-adjusted returns, given their lower correlation to traditional investments. Some examples include: launchpads for blockchain and NFT projects, private equity, venture capital, real estate, art and antiques, rare watches and alcohols, commodities, etc.

In a rising rate and slowing growth environment, we are wary of the increasing lack of income-generating and high growth traditional assets. As such, we are comfortable venturing into the alternative investments space, and allocating a higher-than-average portion to this category, especially in the capital expansion phase.
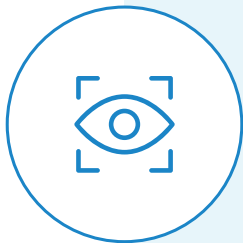
Particularly, the United DAO community should capitalize on the founder and advisors' network and expertise in accessing such off-market opportunities inaccessible to the public.
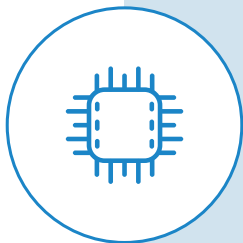
Competitive Edge

Access

Networks and partners to give participants and the treasury exposure to exclusive opportunities

Expertise

Strong founding team intersecting the world of traditional and decentralized finance, start-ups and Corporates

Robust Technology

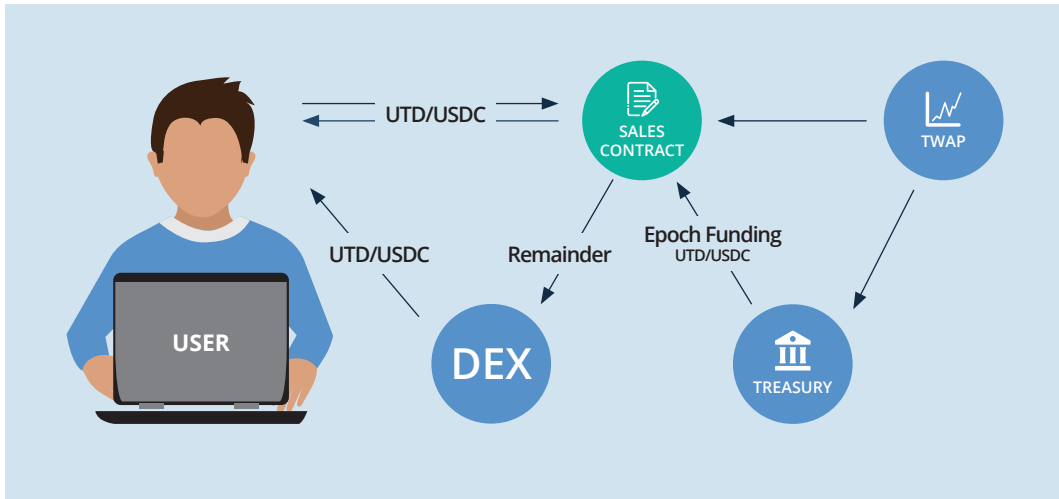Experts blockchain engineers with experience successfully launching both decentralized and Corporate projects
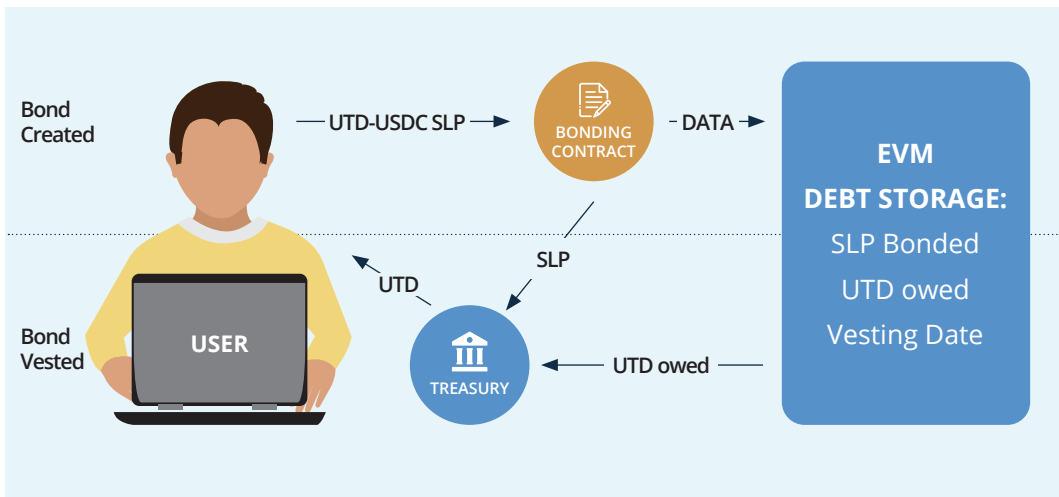
Transparency

A doxxed leadership team, promoting a protocol founded on trust and transparency

Architecture

Sales

USER ← UTD/USDC → SALES CONTRACT ← TWAP

UTD/USDC

Remainder → DEX

Epoch Funding UTD/USDC

TREASURY

Bonds

Bond Created

UTD-USDC SLP → BONDING CONTRACT — DATA →

EVM
DEBT STORAGE:
SLP Bonded
UTD owed
Vesting Date

Bond Vested

USER

UTD / SLP

TREASURY ← UTD owed

Staking

TREASURY

UTD + REBASE

STAKING CONTRACT

USER — 1 UTD → / ← 1 sUTD

1 SUTD → / 1 UTD → USER

Roadmap

Legend
- Core Protocol
- United Allies Program
- Rewards & Utility Program
- Treasury Management

Pre-Launch

Community Building

Marketing

Internal Audit and Security Testing

Q1 Mid

Q1 End

United DAO Official Launch – Staking, Bonding, LP

United Allies Program Launch

mUTD Token Launch

Rewards Shop Phase 1 Target Launch

mUTD Giveaway Promotion

Q2 End

Q3 End

Rewards Shop Phase 2 Target Launch

DAO Proposition and Vote:
Treasury Management Allocation Phase 1

Treasury Early Allocation Commencement

DAO Proposition and Vote: Internal Product Strategy

DAO Proposition and Vote: Affiliate Program '23 Strategy

Q4 End

2023

Full Treasury Allocation to Proposed Range

Launch of Internal Product(s)
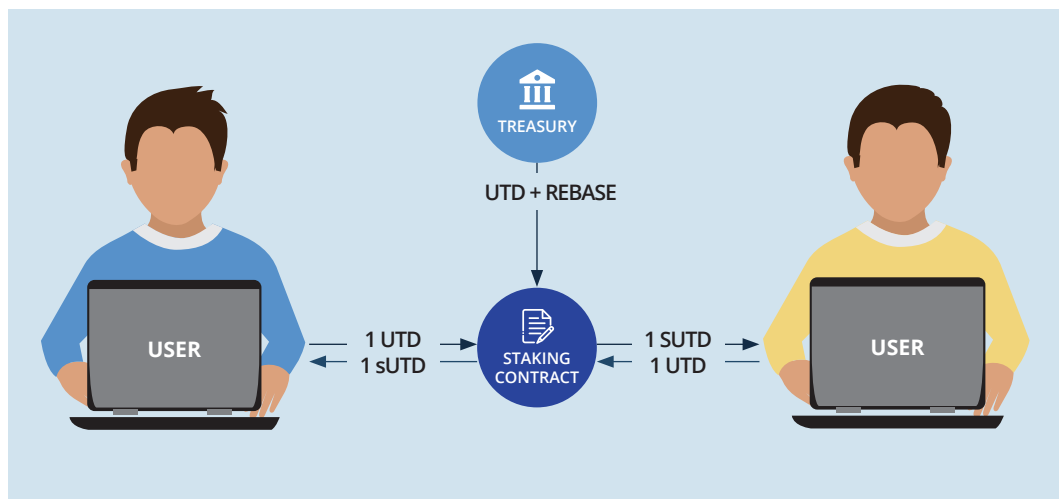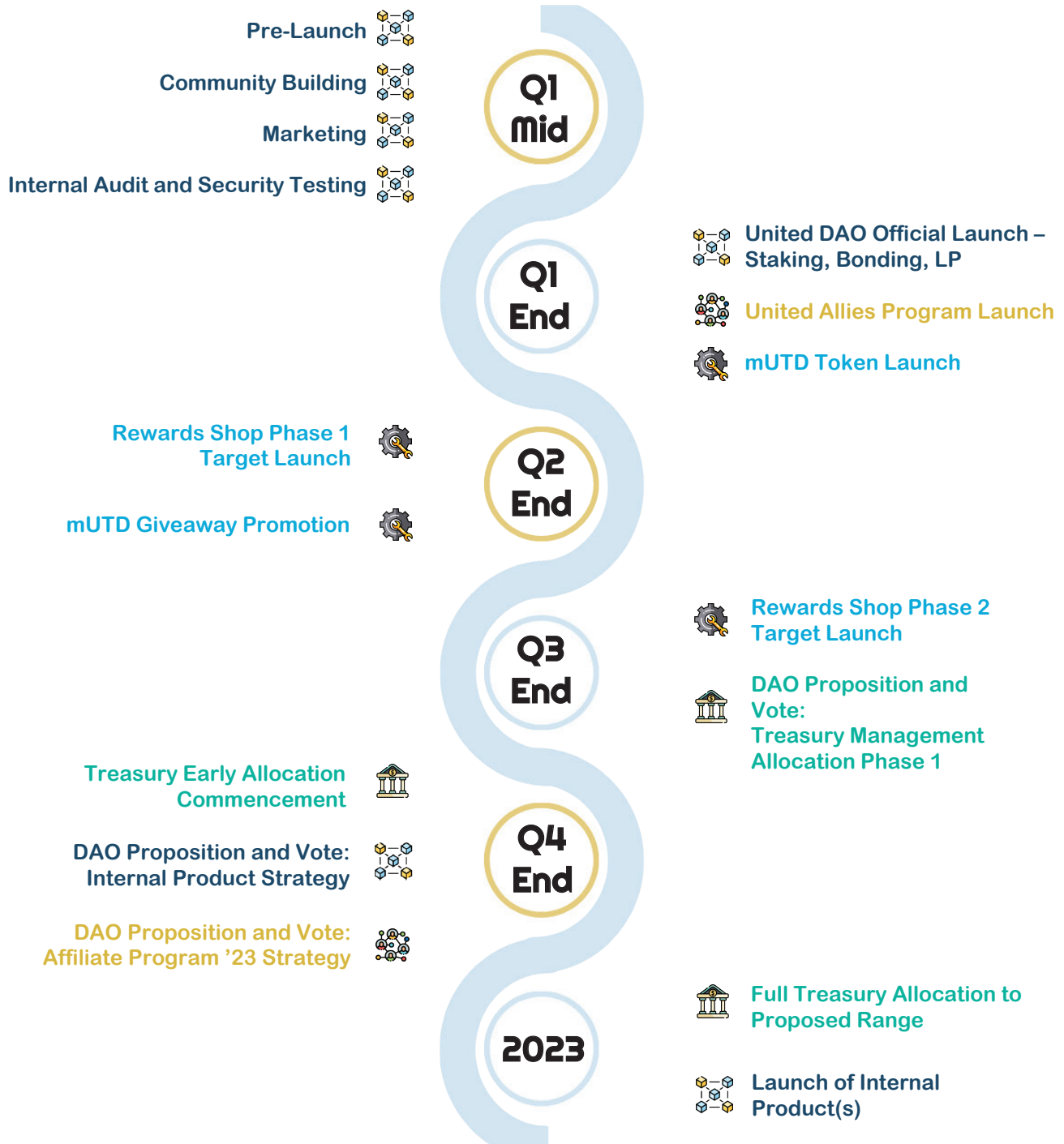
Risks and Mitigations

The success of United DAO depends on the Governance taking necessary steps to mitigate risks. Some of these risks are identified below, each followed by a mitigation plan.

Malicious Attack On The Smart Contract Infrastructure

One of the greatest risks to the Protocol is cybersecurity—a hacker, for example, who discovers a vulnerability in the deployed smart contracts, uses it to break the Protocol or steal from it. In the worst-case scenario, all decentralized digital assets held as collateral in the Protocol are stolen, and recovery is impossible.

Security is the highest priority of the protocol. Our in-house development team has years of experience with blockchain development from IBM and the team will be contracting security audits by the best security organizations in the blockchain industry, third-party (independent) audits, and bug bounties are also part of the development roadmap.

These security measures provide a strong defence system and greatly reduce the risk of malicious attacks on the protocol.

Market collapse

In extreme conditions, a general panic in the cryptocurrency space may cause the value of all blockchain tokens including UTD to dramatically plummet. However because UTD is not rigidly pegged to a target price, we expect the tokens to have a strong support level close to their 'book' value, and as the treasury continues growth,, the United DAO token should increase in price with this intrinsic value, and will regain an extrinsic premium when the overall market recovers from its drawdown.

Non-ideal control parameters

Control parameters that are set at the Protocol launch may not be ideal due to differences in the field compared to simulated scenarios. We have implemented blockchain data analytics for monitoring, and real time dynamic adjustment to our developed scenario models to compensate for this. These parameters will be guided in the future by Governance votes.

Founder

Richard Yap
Founder

With over 10 years of experience in the financial services industry, Richard has built an organization with over 200 wealth managers under him. Serving over 30,000 clients across different professions, he created various digital platforms to ensure his managers are well-equipped with professional tools to realize their full potential in a digitalized economy.

In addition to his entrepreneurial work, Richard has established himself as an advisor to company boards, CEOs, and executive teams on Strategy, Business Transformation, and Digital Innovation.

In 2016, he started to recognize the potential of blockchain technology and use cases for cryptocurrency. He believes there will be an eventual shift to DeFi and Web 3.0 to create value in the financial sector for the next generation.

Advisors

YC Lau
Advisor – Strategic Growth

A Strategic Advisor to C-level executives, start-ups and boards in tackling complex people challenges, YC connects them with relevant partners, and encourages them to realize their full potential in a digital/Web 3.0 economy of possibilities.

YC has 20 years of experience in MNC, start-up, & Government HR & OD leadership experience in Hi-Tech, Telecommunications, Hospitality, Transportation, and Supply Chain Management sectors across Asia Pacific, Europe & North America.

He held senior HR & OD leadership positions at ComfortDelGro Corporation, Singtel, Ascott Group, IDA, SembCorp, Ministry of Manpower, often driving major transformation efforts.

He is also an early crypto/blockchain enthusiast and is involved in a number of projects, covering NFT, gaming, and metaverse that aims to make a positive impact on the world and humanity.

Advisors

Edward Tay
Advisor – Treasury & Investment

Edward Tay is the CEO and Board Member of Sistema Asia Capital and a member of the Investment committee.

Sistema Asia Capital is a MAS regulated venture capital/private equity fund that invests in innovative APAC technology companies.

Sistema Asia Capital's notable investment includes food tech Rebel Food, valued at $1.4 billion. It also recently partnered with deep tech unicorns such as Infra Market, a built environment e-commerce, valued at $2.5 billion.

Edward Tay is also the founder of Asia Sustainability Forum, a platform for stakeholders to build strong connections and share thought leadership on sustainability efforts. ASF is a sponsor to 9th World Sustainability Forum and organized events with partners such as Enterprise Singapore, National Library Board & Singapore Management University.

He also served as Honorary Treasurer in SG Tech Singapore Enterprise Chapter 2021/22, Co-Chairman for Huawei Sparks Advisory Council Asia Pacific, Advisor for Singapore Deep Tech Alliance and Fellow for Singapore Centre for Social Enterprises.

Edward regularly speaks at tech forums and judges in startup competitions such as TechBlazer, SlingShot, Lee Kuan Yew Global Business Case Competition and BRICs Business Competition.

Advisors

Jonathan Asherson
Advisor – Corporate Governance & Strategy

Jonathan Asherson spent 15 years with Siemens AG working in Germany, the USA, China and SE Asia. Following this, he spent 20 years with the aerospace, marine and defence company Rolls-Royce, retiring in 2017 as Non-Exec Chairman of Asia Pacific based in Singapore. Under his tenure, the company grew from a handful of staff in SE Asia to become a leading contributor of technology acquisitions for the company and one of its largest service centres. It also became the regional HQ for many of its businesses and a major manufacturing centre.

Jonathan is an independent non-executive director of the public listed company Genting Singapore LTD. and Chairman of Sembcorp UK LTD, a subsidiary of Singapore-based Sembcorp Industries LTD. He is also an independent director of Singapore SME Tru-Marine Pte Ltd. He is a Senior Adviser to two tech-based growth companies headquartered in the USA and UK and also advises a performance improvement consultant company based in Australia.

He has served on many Singapore and regional stat boards and councils including the Singapore Economic Development Board (EDB), Singapore Business Federation (SBF), Singapore National Employers Federation Council (SNEF) and chaired both the British and Singapore International chambers of commerce.

When driving the enterprises he has led, Jonathan applied his expertise to growth strategies, organizational structure and governance to ensure sustainable profitability while establishing long term partnerships across the stakeholder community.

Advisors

Mike Chiam
Advisor – Blockchain
Legal & Compliance

Mike Chiam of PDLegal LLC is recognised as a notable practitioner by IFLR1000 for Mergers & Acquisitions in 2019/2020 and a fintech specialist by the Legal 500. Mike advises asset managers and family offices on fund formation, structuring, regulatory compliance, VCC structures, licensing of fund management companies, series and seed investments, offering rules for offers of interests of private and retail collective investment schemes, share disclosure requirements, and other issues pertinent to the fund management industry.

Mike also advises fund managers, venture capital firms on cryptocurrency investment funds and regulatory issues arising from digital token offerings.

Glossary

The glossary below provides different types of terminologies and key concepts of the digital asset domain and serves as a reference to the terms introduced in our report. The terms are grouped into four categories: Basics, technology, ecosystem of digital assets and crypto slang terms that are most used by people engaging in crypto discussion on social networks.

Basics

Altcoin
Any crypto alternative to Bitcoin.

Cryptography
Techniques for secure communication without third parties.

Decentralized application (Dapp)
Applications that run on a P2P network of computers rather than one central computer, with no single controlling entity.

Decentralized autonomous organization "DAO"
A form of business organization relying on a smart contract with no conventional management structure.

Governance token
A token that is used to govern the operations and influence the direction of a project.

Initial coin offering (ICO)
ICOs are a way of raising capital to fund the development of a crypto asset. An investor can buy into an ICO by investing in the crypto offered by the issuing entity.

Mining
The process by which transactions are verified and added to the public ledger known as the blockchain, which is often the means through which new units of a crypto are created (e.g., Bitcoin).

Satoshi Nakamoto
The pseudonym of the creator or creators of the Bitcoin protocol and whitepaper.

Smart contract
Smart contracts are computer programs stored on a block- chain that are executed automatically once a set of predeter- mined conditions are met.

Stablecoin
A type of crypto that is designed to maintain a stable value by pegging itself to a reserve asset like the US dollar.

Utility token
Tokens designed specifically for a pre-defined use case.

(Wallet) Address
An alphanumeric character string used to send and receive transactions on a blockchain network.

Whitepaper
Document released by a crypto project that gives investors technical information about its concept, and roadmap for how it plans to grow and succeed.

Technology

51% attack
When one or a group of miners control more than 50% of the network's mining hash rate or computational power, thereby compromising the integrity of the system.

Difficulty
A measure of how hard it is to validate a new block on a blockchain.

Fork
Forks create an alternate version of the blockchain. Soft forks allow some form of compatibility between the two chains, whereas hard forks create an entirely new crypto on a new blockchain.

Gas
A term used on the Ethereum platform that refers to a unit measuring the computational effort associated with calculating the costs of smart contracts operations and transactions on the blockchain.

Gas price
A term used on the Ethereum platform that refers to the price you are willing to pay for a transaction.

Genesis block
First ever block recorded on its respective blockchain network, also referred to as Block 0 or Block 1.

Halving
An event in which the total rewarded bitcoins per confirmed block halves, happening every 210,000 blocks mined.

Hash
A function that takes an input and then outputs an alphanumeric string known as the hash value. Hashes confirm transactions on the blockchain.

Immutability
The inability to change or be changed. One of the core features behind Bitcoin and blockchain technology.

Interoperability
Concept of allowing blockchains to be compatible with each other and build upon each other's features and use cases.

Immutability
The inability to change or be changed. One of the core fea- tures behind Bitcoin and blockchain technology.

Interoperability
Concept of allowing blockchains to be compatible with each other and build upon each other's features and use-cases.

Node
A node is a computer that is connected to a blockchain network that serves a variety of purposes, including validating transactions.

Off-chain
Transactions that occur off a given blockchain network that may be later reported or batched together before they are submitted to the main chain.

On-chain
Transactions that occur on a given blockchain network, reflected on the public ledger.

Oracle
Oracles are third-party information service providers that send secure and reliable external real-world data to a smart contract, thereby bridging the real world with the blockchain.

Phishing
A phishing attack is a computer-based attack method that is used to gain sensitive information to access accounts. These attacks are confidence tricks carried out by malicious third par- ties posing as trustworthy entities to gain access to accounts.

Proof of stake
Consensus mechanism that rewards block validators according to the amount of coins they have at stake.

Proof of work
Consensus mechanism involving solving computationally intensive puzzles to validate transactions and create new blocks.

Transaction block
A collection of transactions on a blockchain network, gathered into a block that can then be hashed and added to the blockchain.

Transaction fee
A small fee imposed on some transactions sent across a blockchain network. The transaction fee is awarded to the miner that successfully hashes the block containing the relevant transactions.

Trustless
Blockchain is called a trustless system where consensus is achieved between participants who do not have to trust each other.

Ecosystem

Consensus protocol
A process by which computers in a network, called nodes, reach an agreement about a set of data.

Digital signature
Mathematical scheme for verifying digital messages or documents which satisfy two requirements: have authenticity (from a known sender) and integrity (not altered in transit).

Howey test
Test used to determine whether or not an asset is a security.

Ledger
A physical book or a digital computer file where monetary and financial transactions are tracked and recorded.

Mining farm
Collection of many miners, often in a warehouse or large data center devoted to mining cryptocurrencies.

Online storage/hot wallet
Storing cryptocurrencies in devices or systems connected to the internet.

Offline Storage/cold storage/cold wallet
Storing cryptocurrencies in devices or systems not connected to the internet.

Permissioned blockchain
A blockchain in which the network owner(s) decides who can join the network and issue credentials necessary to access the network. Opposite to a permission less network.

Permissionless blockchain
Permissionless means that users and developers do not need any permission to transact and use the blockchain.

Private blockchain
A blockchain or distributed ledger that has a closed network where participants are controlled by a single entity.

Protocol
Set of rules that define interactions on a network, usually involving consensus, transaction validation, and network participation on a blockchain.

Public address
Cryptographic hash of a public key, allowing the user to use it as an address to request for payment.

Public blockchain
Globally open network where anyone can participate in transactions, execute consensus protocol to help determine which blocks get added to the chain and maintain the shared ledger.

Public key and private key
Public keys represent a wallet address that can be sent out to other people on the network. Private keys, on the other hand, are an alphanumeric string of data only known to the owner that grants access to the funds. Private keys can be thought of as a password that enables an individual to access their crypto wallet.

Qualified custodian
A regulated custodian who provides clients with segregated accounts and often places coins or tokens in cold storage (see above).

Staking
Process through which users lock their crypto assets on a network as part of a consensus mechanism and are financially rewarded to do so.

Tokenization
Process where real-world assets are turned into something of digital value called a token.

Vanity address
Cryptocurrency public address with custom letters and numbers, picked by its owner.

Validator
Participant on a proof-of-stake blockchain involved in validating blocks for rewards.

Yield farming
Earning interest by investing crypto in decentralized finance markets.

Slang

Diamond hands
Strong holders that 'hodl' a crypto for the end goal, despite all the risks that lie ahead.

FUD
Anything intended to instill 'fear, uncertainty or doubt'

HODL
A term originating in a misspelling of 'hold' in a drunken post on a Bitcoin forum in 2013 that turned into a meme. It is used to indicate when a person holds on to their crypto rather than selling it.

Lambo
The car that people often refer to in their excitement over getting rich from cryptos.

Moonboy
Someone who invested a tiny amount in a micro-cap crypto, usually with no great future prospects, and thinks they will be driving a 'lambo' in a few days.

Mooning/going to the moon
When a crypto price is rising rapidly, it is 'going to the moon' or 'mooning.'

Paper hands
Weak holders that sell their crypto the minute fear sets in the market.

Pump and dump
To pump up the price of a random crypto and then sell out a position (dump), causing the price to tank and wiping out accounts that bought into their pump.

Rugpull
An ill-natured maneuver where developers of a crypto project abandon the project and run away with investors' funds.

Shill
To energetically promote a crypto project with the goal of creating more demand for the it, thereby increasing the price for personal gain.

UnitedDAO