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The Token Classification Framework: A multi-dimensional tool for understanding and classifying crypto tokens.

January 18, 2018 by Thomas Euler

The development of the framework presented in here was a collaborative effort between me and several of my Untitled INC fellows. Peter Trapp was heavily involved in all aspects of the creation, including lending his surprising design prowess to it. Prof. Dr. Andranik Tumasjan of the University of Mainz (and formerly Technical University Munich) provided very valuable feedback and ideas, as did Dr. Oliver Krause, Dr. Karl-Michael Henneking and Daniel Pichler.

About

Untitled INC is a network organization dedicated to the distributed economy and blockchain. Our Blog is the hub for publications by our

Blockchain, ICOs and bitcoin's wild ride have been some of the hottest tech topics in 2017. Yet, while people spent billions of dollars on cryptographic tokens, the understanding of the different token types out there is still limited. Even among regular investors and long-standing members of the blockchain community.

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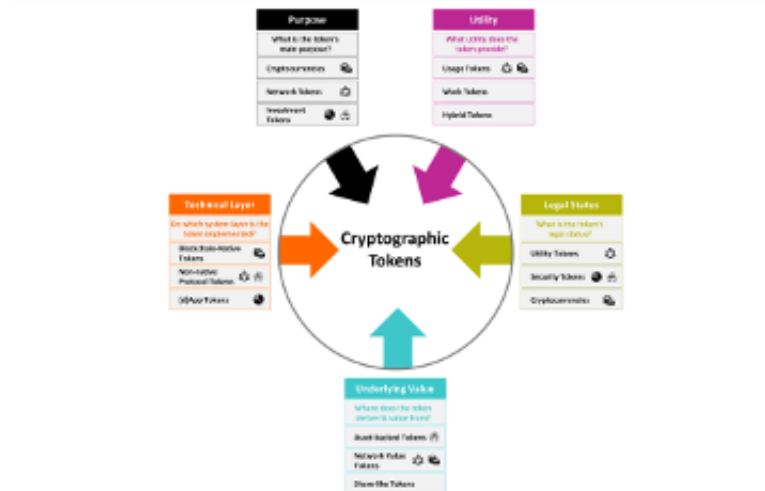
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TOKEN CLASSIFICATION FRAMEWORK

FIVE DIMENSIONS OF TOKENS



MAIN TOKEN TYPES PER DIMENSION

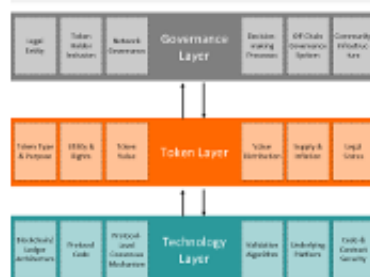
Technical Layer	Purpose	Underlying Value	Utility	Legal Status*
Blockchain-Native Tokens Description: A token that is implemented on the blockchain or the production of blockchain. Characteristics: <ul style="list-style-type: none"> Must be native to the blockchain Integer component of the blockchain's consensus mechanism Part of the blockchain's ledger mechanism for block validation/other nodes Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.	Cryptocurrencies Description: A token that is intended to be a "peer" cryptocurrency. Characteristics: <ul style="list-style-type: none"> Intended as a digital medium of exchange Medium of exchange Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.	Asset-backed Tokens Description: A token that functions as a substitute for underlying asset. Characteristics: <ul style="list-style-type: none"> Asset backing due to underlying asset Ability to redeem for underlying asset The token is responsible for the underlying asset Redeemable counterparty risk Examples: VTC (Vouch Token), etc.	Usage Tokens Description: A token that provides access to a digital service, similar to a paid API key. Characteristics: <ul style="list-style-type: none"> Access to digital service Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.	Utility Tokens Description: A token offering access to a digital service, similar to a paid API key. Characteristics: <ul style="list-style-type: none"> Access to digital service Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.
Non-native Protocol Tokens Description: A token that is implemented on a blockchain or the production of blockchain. Characteristics: <ul style="list-style-type: none"> Integer component of the blockchain's consensus mechanism Part of the blockchain's ledger mechanism for block validation/other nodes Part of the blockchain's ledger mechanism for block validation/other nodes Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.	Network Tokens Description: A token that is intended to be used within a specific system (e.g., network, application). Characteristics: <ul style="list-style-type: none"> Intended for use within the system Not intended as a medium of exchange Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.	Network Value Tokens Description: A token that is used to represent the value of a network or application. Characteristics: <ul style="list-style-type: none"> Intended for use within the system Not intended as a medium of exchange Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.	Work Tokens Description: A token that provides the right to contribute to a system. Characteristics: <ul style="list-style-type: none"> Intended for use within the system Not intended as a medium of exchange Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.	Security Tokens Description: A token that represents the right to own a security. Characteristics: <ul style="list-style-type: none"> Intended for use within the system Not intended as a medium of exchange Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.
dApp Tokens Description: A token that is implemented on the application layer, using the blockchain for the production of blockchain. Characteristics: <ul style="list-style-type: none"> Intended for use within the system Not intended as a medium of exchange Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.	Investment Tokens Description: A token that is intended to be used within a specific system (e.g., network, application). Characteristics: <ul style="list-style-type: none"> Intended for use within the system Not intended as a medium of exchange Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.	Share-like Tokens Description: A token that is used to represent the value of a network or application. Characteristics: <ul style="list-style-type: none"> Intended for use within the system Not intended as a medium of exchange Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.	Hybrid Tokens Description: A token that provides the right to contribute to a system. Characteristics: <ul style="list-style-type: none"> Intended for use within the system Not intended as a medium of exchange Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.	Cryptocurrencies Description: A token that is intended to be used within a specific system (e.g., network, application). Characteristics: <ul style="list-style-type: none"> Intended for use within the system Not intended as a medium of exchange Examples: BTC (Bitcoin), ETH (Ether), DASH (Digital Asset), etc.

*Legal status depends on jurisdiction

TOKEN ARCHETYPES

Crypto-currency • Used as a medium of exchange or investment (payment, unit of account) • Not issued by a central authority • Can be mined or generated	Tokenized Asset • Asset backed by assets like gold, when in a secure transaction • The underlying asset needs to be held by the issuing party • The underlying counterparty risk, contrary to cryptocurrency	Tokenized Platform • Platform-like network, not owned & operated by a single entity • Before users had limited roles in a platform, now roles are distributed and available to every network participant • No fee (financially) flows freely through the network	Token-as-a-share • A tokenized instrument to invest in companies (though it is currently not regulated based on the characteristics of stock and currency (e.g., SEC regulation, IPO)) • Shares or tokens: flexible, programmatic via smart contract • Currently a highly volatile market in the US, as regulatory frameworks are only beginning to emerge
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DLT SYSTEM LAYERS



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The Token Classification Framework: A multi-dimensional tool for understanding and classifying crypto tokens.

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One reason for it — a quite common one in emerging domains — is the lack of clear, generally agreed upon

2018

terminology and definitions. For instance, I regularly come across people who refer to all tokens as “cryptocurrencies”. Which, as we are going to see in a minute, isn’t precise. Which is somewhat problematic because precision in language and terminology is the basis for an informed, nuanced dialogue and good analysis.

Whether you want to develop a token or evaluate one, it’s critical to understand the nuances of the subject. Moreover, the blockchain community is growing and maturing. As a result, it is increasingly getting in touch with “the real world” (aka people who are new to the subject). Investors, regulators, politicians and decision-makers in businesses are all taking the space increasingly serious. Many are in the process of formulating their positions and strategies for dealing with the subject. Clarity and accessibility of relevant knowledge are key to allowing those actors to make good, informed decisions.

This is why we, the Untitled INC team, set out to develop a framework that a) reflects the various existing token types, b) allows to classify and analyze tokens in various relevant dimensions, and c) fosters a better, nuanced understanding of crypto tokens. Today, we are presenting the first iteration of the Token Classification Framework, the result of our effort. In this post, I’m going to walk you through the framework and explain the work and thinking that went into it.



Introductory Remarks

Before we get into the framework, some technical and procedural remarks.

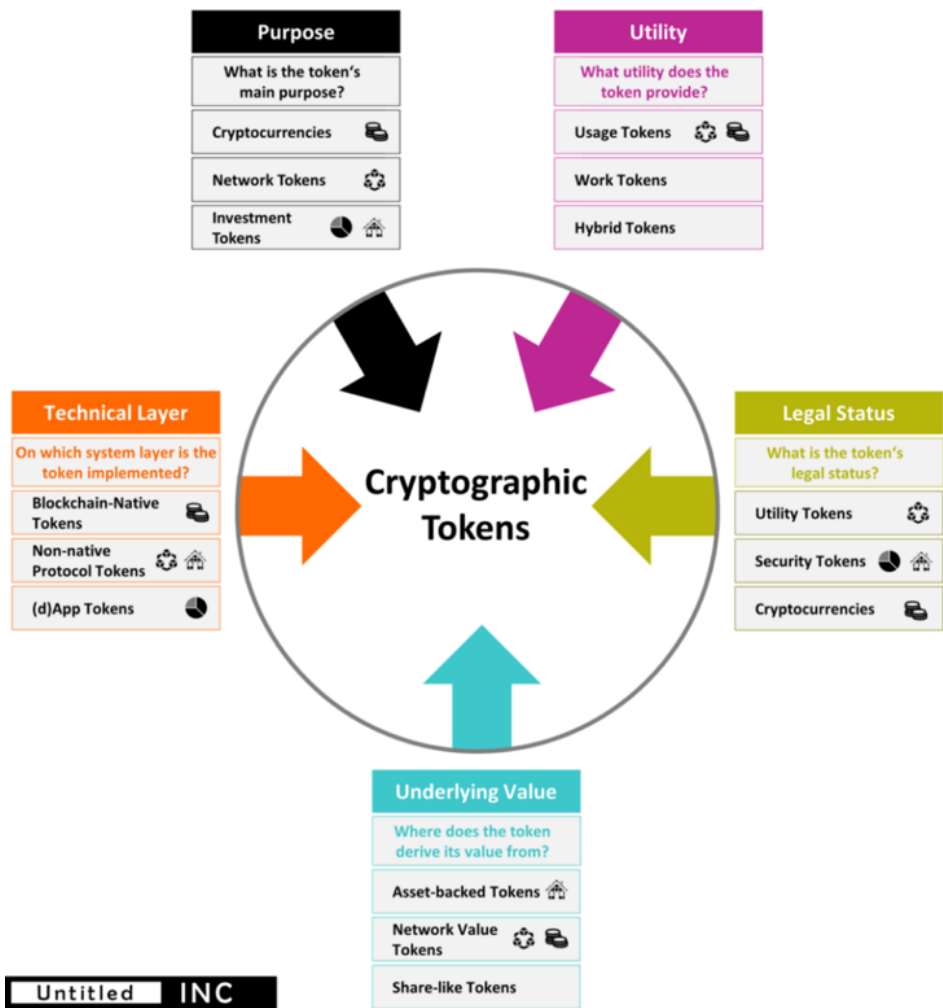
To develop the framework, we reviewed a lot of work on tokens that had already been put out there. Many smart people published very helpful thoughts and ideas which influenced our thinking and chosen terminology. You'll find a list of references at the end of this article.

The version of the framework in this article is version 1.0 of the Token Classification Framework (TCF). The crypto space is moving at a rapid pace, so we expect to see new developments and innovative approaches to tokens quite frequently. Thus, we regard the framework as a living document. The version in this article shall serve as a point-of-reference going forward, so we won't update the TCF in here. Instead, we'll host and maintain the most current version [on our website](#).

Last but not least, we decided to turn the future development of the framework into a collaborative endeavor. Which is why we are releasing the framework under a [Creative Commons BY-NC-SA](#) license. This allows the community to iterate on the framework and contribute to its development. Also, your feedback is highly welcome so please leave your feedback in the comments below.



Classifying Tokens in Five Dimensions



There are multiple angles from which you can look at tokens. Back when we began working on the framework, we quickly realized that it would have to cover multiple perspectives in order for it to be useful. After reviewing the current literature and analyzing dozens of whitepapers, we distilled five major dimensions which we wanted to reflect in the framework: a token's purpose, utility, legal status, it's underlying value and the technical layer it's implemented on.

Purpose. What is the token's main purpose? What is it designed to do? This dimension illustrates why the people who call any token a cryptocurrency err. Tokens *can* certainly be intended as a *cryptocurrency*. But often

they are meant to enable a specific network and catalyze its growth (*network tokens*) or merely present a way to invest in an entity or asset (*investment token*).

Utility. The term “utility token” has become commonplace¹ but there are various types. When looking at different tokens, you’ll find many approaches to creating utility for token owners. But on an abstract level, there are two major ways to provide utility: by giving access to network or service features (*usage tokens*) or by allowing token holders to actively contribute work to the system (*work tokens*). Some tokens do both (*hybrid tokens*) and some tokens don’t provide any utility at all².

Legal Status. The legal perspective is extremely relevant as of now, so it is reflected in the framework. The category’s content, however, is expected to change quite a bit in the upcoming months as it is a volatile environment and more regulation is expected to emerge. Moreover, every jurisdiction can differ. The general outline of the current state in multiple countries is that tokens which aren’t clearly a utility token — i.e. a means to access features of a network/service — or which aren’t a pure *cryptocurrency* can easily be classified as a *security token* by regulators. In some jurisdictions, such as Germany, there is some definition by regulators as to what constitutes a *cryptocurrency*. Several cases we found hover between two types, due to fact that current legal frameworks have been created before tokens existed and most haven’t been updated so far. (This isn’t legal advice.)

Underlying Value. Most tokens are created to have a monetary value. But the sources of their value differ

considerably. Some basically work as IOUs to a real-world asset which they are tied to (*asset-backed tokens*). Others showcase stock-like properties as they are linked to the commercial success of the issuing entity. Those *share-like tokens* would be regarded as securities in most jurisdictions (actual enforcement by the regulator is a different subject). Finally, there are tokens which are tied to the value of a network, not a central entity (*network value tokens*). The latter might be the hardest to wrap one's head around and the most interesting value source at the same time.

Technical Layer. Tokens can be implemented on different technical layers of blockchain-based systems: on the blockchain level as the chain's native token (*blockchain-native tokens*), as part of a cryptoeconomic protocol that sits on top of the blockchain (*non-native protocol tokens*), or on the application level (*(d)App tokens*).

It's important to note that the dimensions are complementary. Most tokens can be assessed in all dimensions and, as we'll see when looking at the archetypes, there are strong correlations between some types in different categories.



Main Token Types per Dimension

In any dimension, we identified various token types, summarized their main characteristics and included relevant examples. You can find the result in the graphic

below.

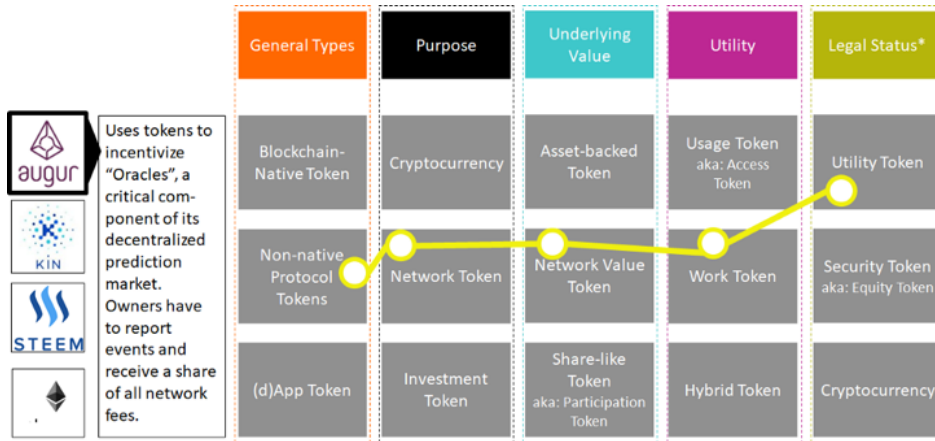
MAIN TOKEN TYPES PER DIMENSION				
Technical Layer	Purpose	Underlying Value	Utility	Legal Status*
Blockchain-Native Tokens Description: A token that is implemented on the protocol-level of a blockchain Characteristics: <ul style="list-style-type: none">Critical to operate the blockchainIntegral component of the blockchain's consensus mechanismPart of the blockchain's incentive mechanism for block validators/other nodes Examples: BTC (Bitcoin, Bitcoin); ETH (Ether, Ethereum); STEEM (Steem, Steem)	Cryptocurrencies Description: A token that is intended to be a "pure" cryptocurrency Characteristics: <ul style="list-style-type: none">Intended as a global medium of exchangeFunctions as a store of value Examples: BTC (Bitcoin), ZEC (Zcash), KIN (Kin, KIN)	Asset-backed Tokens Description: A token that functions as a claim on an underlying asset Characteristics: <ul style="list-style-type: none">Allows trading via IOUs without actually having to move the underlying assetThe issuer is responsible to hold the underlying assetIntroduces counterparty risk Examples: USDT (Tether USD, Tether), GOLD (GOLD, GoldMine), Ripple IOUs (Ripple)	Usage Tokens Description: A token that provides access to a digital service, similar to a paid API key Characteristics: <ul style="list-style-type: none">Grants holders access to exclusive functionality of the service Examples: BTC (Bitcoin), STX (Stacks, Blockstack)	Utility Tokens Description: A token offering owners clearly defined utility within a network or (decentralized) application Characteristics: <ul style="list-style-type: none">Closely tied to the functionality of the issuing network or applicationInternal network/app currency but not necessarily attempting to be a currencyGrants owners the right to actively contribute to the system vs. passive investor roleAvoids security-like features Examples: GNO (Gnosis), STEEM (Steem)
Non-native Protocol Tokens Description: A token that is implemented in a cryptoeconomic protocol on top of a blockchain Characteristics: <ul style="list-style-type: none">Integral component of the protocol's consensus mechanismPart of the protocol's incentive mechanism for nodesTracked on an underlying blockchain to which it is not integral (e.g. ERC20 Tokens on Ethereum) Examples: REP (Decentralized Oracle Protocol, Augur)	Network Tokens Description: A token that is primarily intended to be used within a specific system (e.g. network, application) Characteristics: <ul style="list-style-type: none">Token has functionality within the issuers systemNot intended as a general cryptocurrency Examples: GNO (Gnosis), STX (Stacks, Blockstack)	Network Value Tokens Description: A token that is tied to the value and development of a network Characteristics: <ul style="list-style-type: none">Tied to the value generated and exchanged on the network (e.g. transaction fee volume)Closely intertwined with key interactions of network participants Examples: ETH (Ether, Ethereum) STEEM (Steem)	Work Tokens Description: A token that provides the right to contribute to a system Characteristics: <ul style="list-style-type: none">Owning Tokens is the precondition for contributing to the systemContributions are either incentivized with a rewards system or holders get utility from the system/decentralized organization Examples: REP (Reputation, Augur), MKR (Maker, Maker DAO)	Security Tokens Description: A token that behaves like a security Characteristics: <ul style="list-style-type: none">Showcases security-like features, e.g. voting on decisions regarding the issuing entity, dividends, or profit sharesHolders are regarded as ownersLittle or insufficient utility Examples: SPICE (SPICE VC), Bitwala (Itba)
(d)App Tokens Description: A token that is implemented on the application-level on top of a blockchain (and potentially protocol) Characteristics: <ul style="list-style-type: none">Integrated within the applicationPart of the app's incentive mechanism for nodes and/or usersTracked on an underlying blockchain to which it is not integral (e.g. ERC20 Tokens on Ethereum) Examples: WIZ (Wisdom, Gnosis), SAFE (Safecoin, SAFE Network)	Investment Tokens Description: A token that is primarily intended as a way to passively invest in the issuing entity or underlying asset Characteristics: <ul style="list-style-type: none">Promises owners a share of asset value or in (future) success of the issuing entityNo or little significant functionality Examples: Neufund Equity Tokens (Neufund), DGX (Digix Gold, DigixDAO)	Share-like Tokens Description: A token with share-like properties Characteristics: <ul style="list-style-type: none">The issuer promises token owners a share in the success of the issuing entity (e.g. dividends, profit-shares)May or may not come with voting-rightsMostly on no/weak legal basis Examples: DGD (DigixDAO), LKK (Lykke) <i>Likely to be classified as a security token</i>	Hybrid Tokens Description: A token featuring traits of both usage and work tokens Characteristics: <ul style="list-style-type: none">Grants access to system functionalitiesAllows owners to contribute to the system Examples: ETH (Ether, Ethereum, after Casper), DASH (Dash)	Cryptocurrencies Description: A token that is a pure cryptocurrency Characteristics: <ul style="list-style-type: none">Acts as a store of value and medium of exchangeNot emitted by a central authority against which owners have claimsIn Germany (according to BaFin): currently not regarded as lawful, functional currencynot regulated by e-money laws Examples: BTC (Bitcoin), ZEC (Zcash), LTC (Litecoin)

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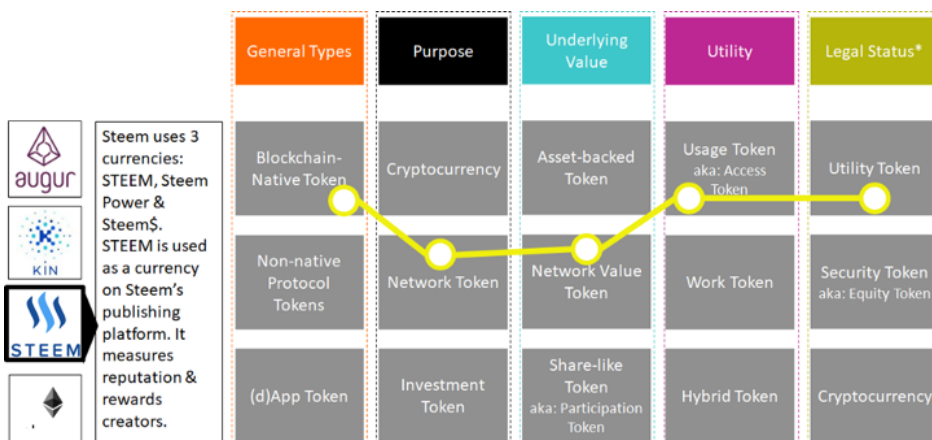
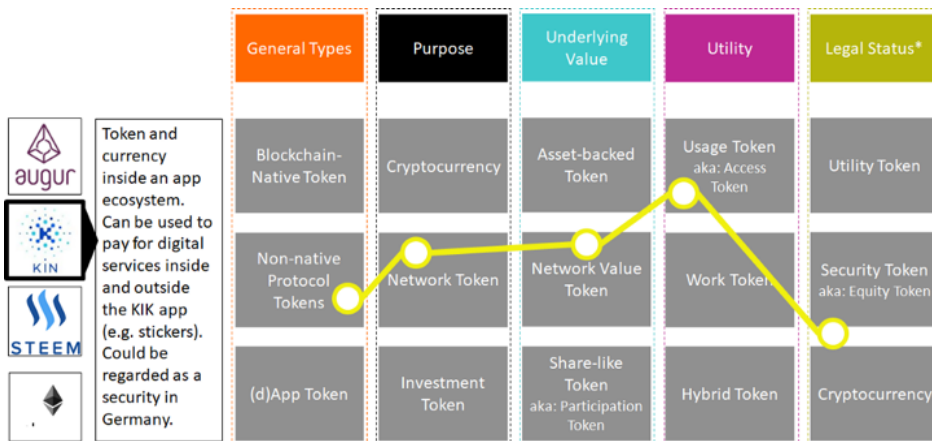
*Details dependent on respective jurisdiction

Putting the TCF to the Test

A granular framework like this allows us to understand a given token with a higher degree of precision. In order to put the framework to practice, we looked at several tokens and classified them. You'll find some examples from a recent workshop we held below:



As the first chart shows, you could call Augur's REP a *Non-native-protocol-Network-Network-value-Work token* that would likely classify as a *utility token*.



Let's stop here. If you are interested in playing around with the framework, you might want to start with

Ethereum and classify it yourself.



Archetypes

After using the framework to classify a fair number of tokens, some patterns emerged (unsurprisingly). As I said before, there are some rather obvious correlations between different token types. For instance, many *network tokens* (by *purpose*) will also be *network value* tokens, i.e. their value is tied to the value of the network they are used within. Similarly, an *investment token* will basically never be a *network value token* but either *asset-backed* or *share-like*. We looked at those patterns and derived some archetypes.

Each archetype is represented by an icon. The icons are also included in the main table above, next to the token typology usually associated with a respective archetype. A description of each archetype is included in the graphic below:



ARCHETYPES



Crypto-currency

- Used as store-of-value or means-of-payment; unit of account
- Not issued by a central authority
- Can be mineable or pre-mined



Tokenized Asset

- Gives access to assets like gold, even in a micro transaction scale
- The underlying asset needs to be held by the issuing party
- Thus introduces counterparty risk, contrary to cryptocurrency



Tokenized Platform

- Platform-like network, not owned & operated by a single entity
- Before users had limited roles in a platform, now roles are distributed and available to every network participant
- Value (financial/utility) flows freely through the network



Token-as-a-share

- A tokenized instrument to invest in companies (though currently on no regulated basis) that has characteristics of stock and currency (e.g. ICO replacing IPO)
- Shares on steroids: flexible, programmable via smart contract
- Currently a highly uncertain token class as regulatory frameworks are only beginning to emerge

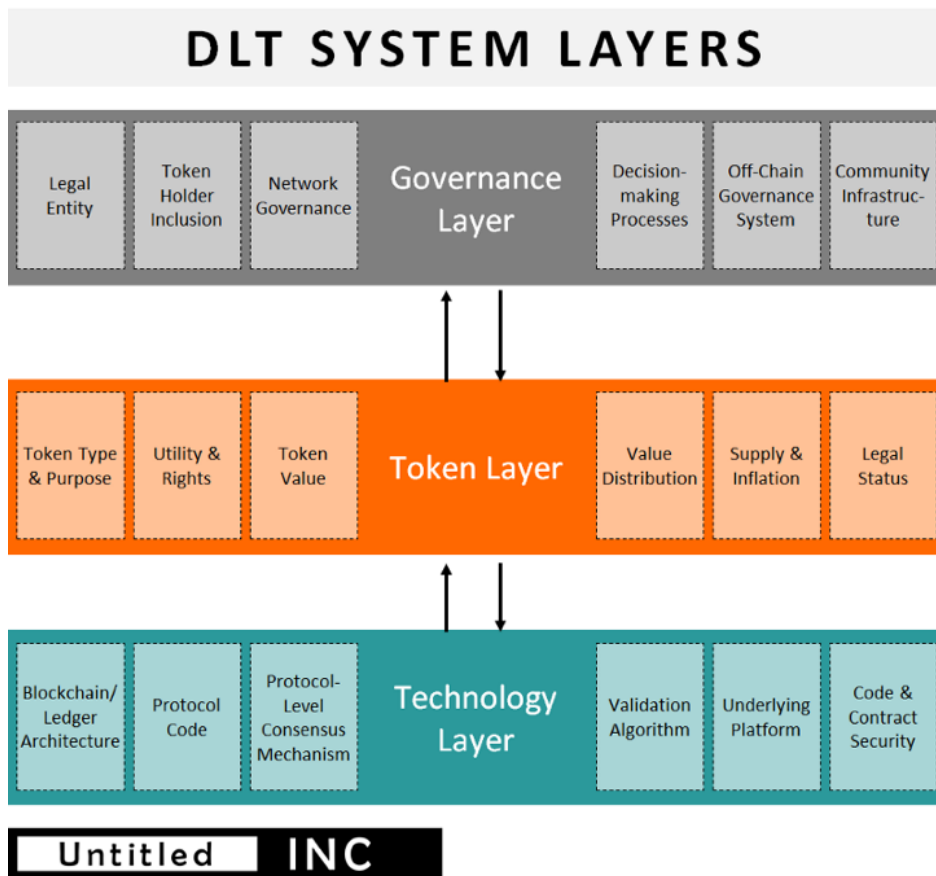


The Wider Context

We think the TCF is useful to classify and create more clarity around the various token types you can find today. Still, it is important to note that it isn't enough to merely analyze a token.

Crypto tokens don't exist in isolation but are only one component of a distributed ledger system. While tokens are an integral component of the system — as they are critical to establishing a cryptoeconomic dynamic — the *token layer* is only one of three system layers. The others are the *governance* and *technology layer*, which are connected by the token. I won't go into detail on the model below, as it merits its own post in the future. For

now, it's enough if you keep in mind that any assessment of a DLT project shouldn't exclusively focus on the token but look at the entire system.



The Complete Token Classification Framework

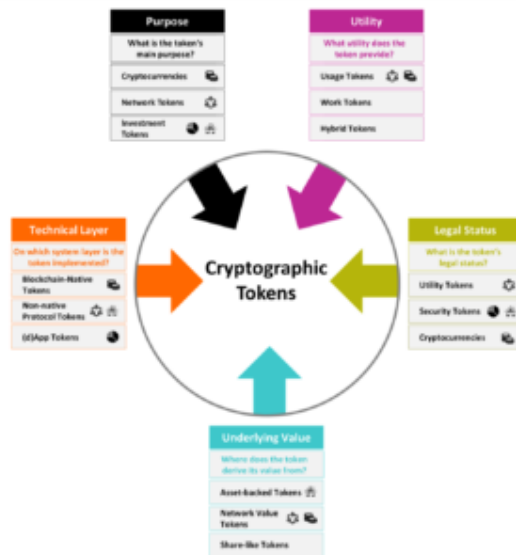
Now that you are familiar with the different components of the TCF, you can find the complete framework below in high resolution. As it is published under Creative Commons, feel free to share and iterate on it. Just don't forget to link back to us. And if you have comments or suggestions for further improvements to the framework, please let us know. The best place to do so is our Reddit

thread or the comments below.

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TOKEN CLASSIFICATION FRAMEWORK

FIVE DIMENSIONS OF TOKENS



MAIN TOKEN TYPES PER DIMENSION

Technical Layer	Purpose	Underlying Value	Utility	Legal Status*
Blockchain-Native Tokens Description: A token that is implemented on the protocol level of a blockchain. Characteristics: <ul style="list-style-type: none"> • Critical to operate the blockchain • Integral component of the blockchain's consensus mechanism • Part of the blockchain's incentive mechanism for block validation/other nodes Examples: BTC (Bitcoin, Bitcoin), ETH (Ether, Ethereum), STEEM (Steem, Steem)	Cryptocurrencies Description: A token that is intended to be a "pure" cryptocurrency. Characteristics: <ul style="list-style-type: none"> • Intended as a global medium of exchange • Functions as a store of value Examples: BTC (Bitcoin), ZEC (Zcash), XIN (Xin, Xin)	Asset-backed Tokens Description: A token that functions as a claim on an underlying asset. Characteristics: <ul style="list-style-type: none"> • Allows trading via KDS without actually having to move the underlying asset • The issuer is responsible to hold the underlying asset • Introduces counterparty risk Examples: UNBT (Twitter UNBT, Twitter), GUSD (GUSD, Gemini), HYPE KDS (Hype)	Usage Tokens Description: A token that provides access to a digital service, similar to a paid API key. Characteristics: <ul style="list-style-type: none"> • Grants holders access to exclusive functionality of the service Examples: BTC (Bitcoin), XIN (Xin, Xin), Bitcoin	Utility Tokens Description: A token offering owners clearly defined utility within a network or (decentralized) application. Characteristics: <ul style="list-style-type: none"> • Closely tied to the functionality of the issuing network or application • Internal network/application currency but not necessarily attempting to be a currency • Grants owners the right to actively contribute to the system vs. passive founder role • Avoids security-like features Examples: UNBT (Twitter), STEEM (Steem)
Non-native Protocol Tokens Description: A token that is implemented as a cryptocurrency protocol on top of a blockchain. Characteristics: <ul style="list-style-type: none"> • Integral component of the protocol's consensus mechanism • Part of the protocol's incentive mechanism for nodes • Tied to an underlying blockchain to which it is not integral (e.g. ERC20 tokens on Ethereum) Examples: REP (Decentralized Oracle Protocol, Augur)	Network Tokens Description: A token that is primarily intended to be used within a specific system (e.g. network, application). Characteristics: <ul style="list-style-type: none"> • Token has functionality within the system • Not intended as a general cryptocurrency Examples: UNBT (Twitter), XIN (Xin, Xin), Bitcoin	Network Value Tokens Description: A token that is tied to the value and development of a network. Characteristics: <ul style="list-style-type: none"> • Tied to the value generated and exchanged on the network (e.g. transaction fee reward) • Closely intertwined with key interactions of network participants Examples: ETH (Ether, Ethereum), STEEM (Steem)	Work Tokens Description: A token that provides the right to contribute to a system. Characteristics: <ul style="list-style-type: none"> • Holding tokens is the precondition for contributing to the system • Contributions are either incentivized with a reward system or holders get utility from the system/decentralized organization Examples: REP (Decentralized Oracle Protocol, Augur), XIN (Xin, Xin), Bitcoin	Security Tokens Description: A token that behaves like a security. Characteristics: <ul style="list-style-type: none"> • Shows security-like features, e.g. voting on decisions regarding the issuing entity, dividends, or profit shares • Holders are regarded as owners • Little or insufficient utility Examples: SPX (SPX VC), Bitcoin (BTC)
dApp Tokens Description: A token that is implemented on the application level on top of a blockchain (and potentially private). Characteristics: <ul style="list-style-type: none"> • Integrated within the application • Part of the app's incentive mechanism for nodes and/or users • Tied to an underlying blockchain to which it is not integral (e.g. ERC20 tokens on Ethereum) Examples: WIZ (Wizards, Wizards), SAFE (Safe, Safe)	Investment Tokens Description: A token that is primarily intended as a way to passively invest in the issuing entity or underlying asset. Characteristics: <ul style="list-style-type: none"> • Provides owners a share of asset value or in-future success of the issuing entity • No or little significant functionality Examples: HYPE (Hype, Hype), DCR (Digital Coin, Digital Coin)	Share-like Tokens Description: A token with share-like properties. Characteristics: <ul style="list-style-type: none"> • The token primarily token owners a share in the success of the issuing entity (e.g. dividends, profit shares) • May or may not come with voting rights • Mostly on regulatory legal basis Examples: DCR (Digital Coin, Digital Coin), LSK (LSK)	Hybrid Tokens Description: A token featuring traits of both usage and work tokens. Characteristics: <ul style="list-style-type: none"> • Grants access to system functionalities • Allows owners to contribute to the system Examples: ETH (Ether, Ethereum), after Corgi, DASH (Dash)	Cryptocurrencies Description: A token that is a pure cryptocurrency. Characteristics: <ul style="list-style-type: none"> • Acts as a store of value and medium of exchange • Not controlled by a central authority against which owners have claims (debt/claim according to holding) • Currently not regarded as legal, functional currency • Not regulated by monetary laws Examples: BTC (Bitcoin), ZEC (Zcash), LTC (Litecoin)

*Status dependent on respective jurisdiction

TOKEN ARCHETYPES

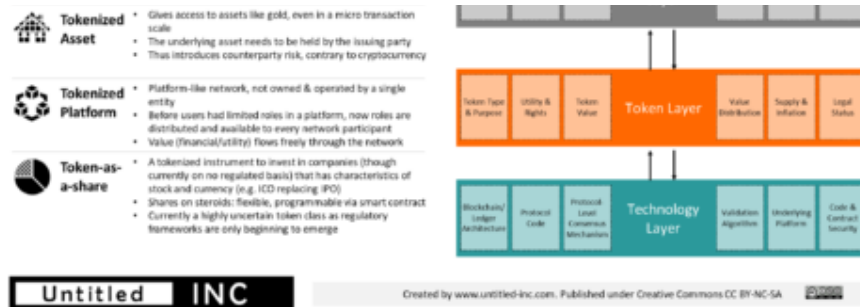


Crypto-currency

- Used as store-of-value or means-of-payment; unit of account
- Not issued by a central authority
- Can be mineable or pre-mined

DLT SYSTEM LAYERS





Final Remarks and Sources

As the blockchain space matures, clarity and a precise terminology become increasingly important. With the TCF, we hope to have created a valuable resource that contributes to a better, more nuanced understanding of tokens. As it is now part of the commons, everybody is invited to further improve it.

What's not in there

There are two potential dimensions which we thought about but eventually didn't include in the framework: the *Issuance Approach* and *Supply Structure*. In the case of issuance (ICO, airdrop etc.) it's only a one-off event that we didn't regard as a fundamental characteristic of the token. It doesn't influence how the token behaves long-term. Thus, we eventually decided against including it.

In the case of supply (fixed, inflated with cap, inflated without cap), it's dicier. On the one hand, it is very relevant when it comes to investment decisions. On the other hand, it's not a characteristic of the token itself but rather a property of the overall system (which is why it's

part if the *token layer* in the DLT system layers model but not a token dimension). Depending on your feedback, we might rethink our decision, though.

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¹ Mostly because everybody who performs an ICO emphasizes that the issued token is a utility token in order to avoid being regarded as a security.

² While tokens which don't provide any utility are often frowned upon, that thinking shouldn't be generalized. While its often a characteristic of scams, an asset-backed token doesn't necessarily *need* any further utility to be legitimate.




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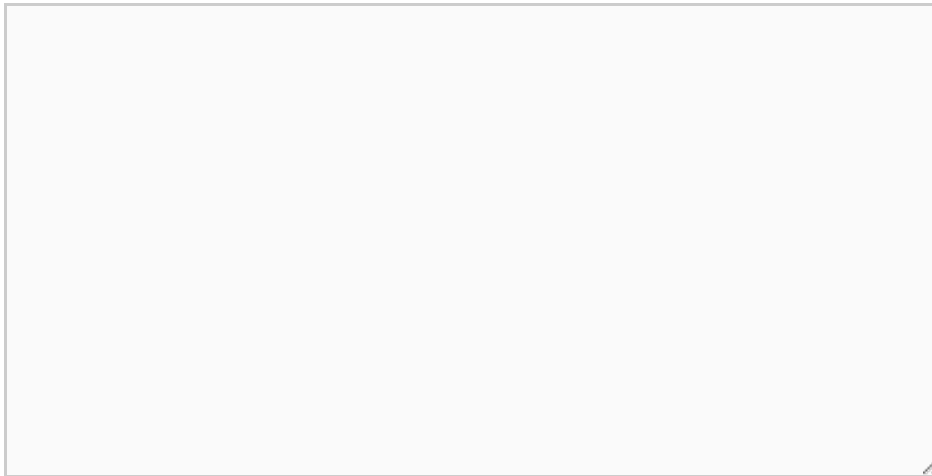
Thomas is an experienced consultant, analyst, and writer at the intersection of tech, business, and the digital economy. He has been researching and regularly covering the blockchain space for several years now as he has long been interested in decentralized systems and new types of organizations.

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