

Dual Utility Tokenomics

Fixing Broken Single Utility Tokenomics

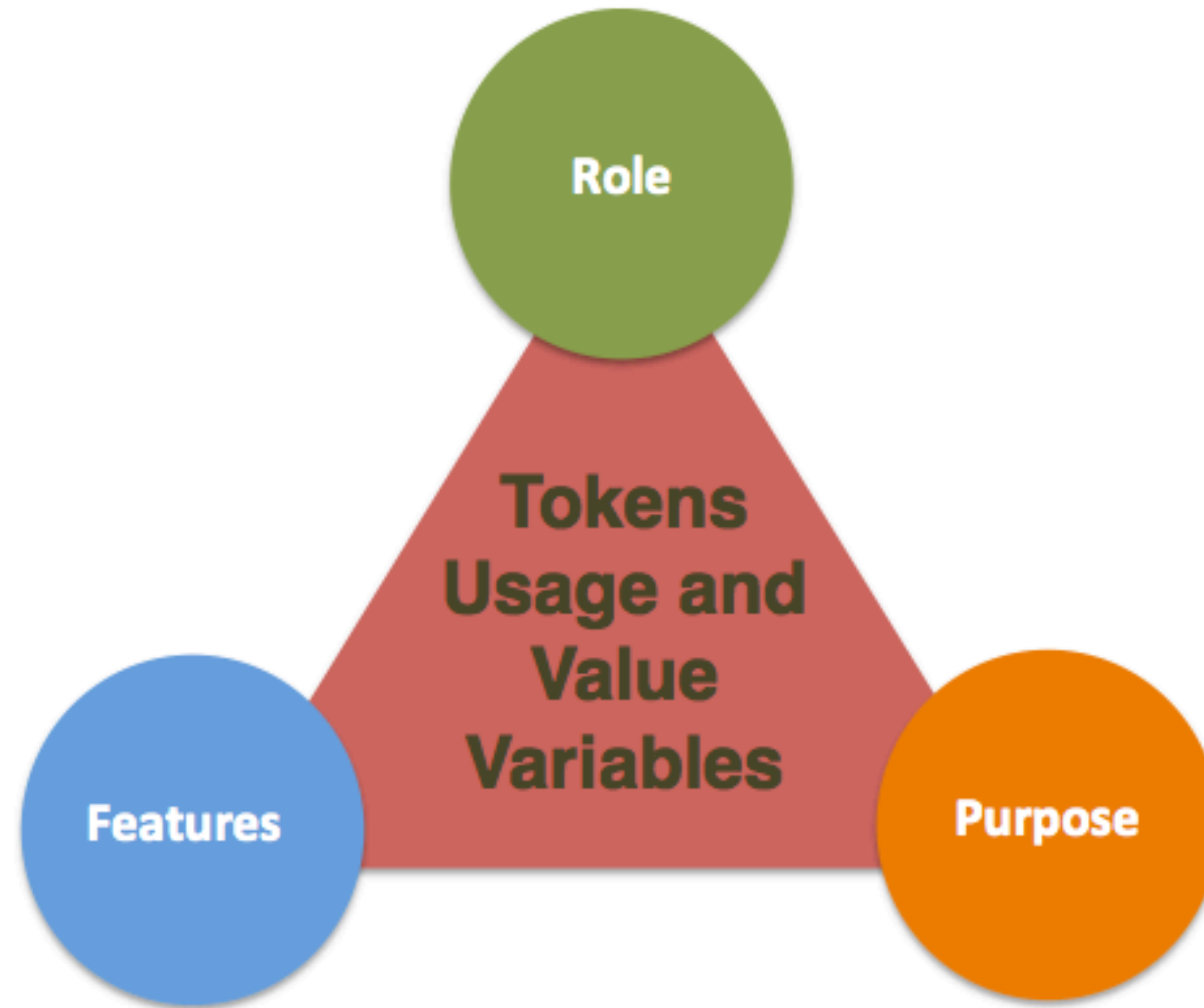
Samuel M. Smith Ph.D.
Internet Identity Workshop
2018.10.25
sam@samuelsmith.org

Background

Difuon Dual Token Fundamentals

https://github.com/Difuon/Papers/blob/master/papers/DifuonTokenomicsWP_0.9.pdf

Utility Tokens



© 2017 William Mougayar

Checking off Too-Many Boxes

Here is a proposed set of questions to ask. If you are an ICO-based organization, give yourself 1 point for each yes answer, totalling a maximum of 20 points:

1. Is the token tied to a product usage, i.e. does it give the user exclusive access to it, or provide interaction rights to the product?
2. Does the token grant a governance action, like voting on a consensus related or other decision-making factor?
3. Does the token enable the user to contribute to a value-adding action for the network or market that is being built?
4. Does the token grant an ownership of sorts, whether it is real or a proxy to a value?
5. Does the token result in a monetizable reward based on an action by the user (active work)?
6. Does the token grant the user a value based on sharing or disclosing some data about them (passive work)?
7. Is buying something part of the business model?
8. Is selling something part of the business model?
9. Can users create a new product or service?
10. Is the token required to run a smart contract or to fund an oracle? (an oracle is a source of information or data that other a smart contract can use)
11. Is the token required as a security deposit to secure some aspect of the blockchain's operation?
12. Is the token (or a derivative of it, like a stable coin or gas unit) used to pay for some usage?
13. Is the token required to join a network or other related entity?
14. Does the token enable a real connection between users?
15. Is the token given away or offered at a discount, as an incentive to encourage product trial or usage?
16. Is the token your principal payment unit, essentially functioning as an internal currency?
17. Is the token (or derivative of it) the principal accounting unit for all internal transactions?
18. Does your blockchain autonomously distribute profits to token holders?
19. Does your blockchain autonomously distribute other benefits to token holders?
20. Is there a related benefit to your users, resulting from built-in currency inflation?

W. Mougayar, "Tokenomics – A Business Guide to Token Usage, Utility and Value," *StartupManagement*, 2017/06/10
<http://startupmanagement.org/2017/06/10/tokenomics-a-business-guide-to-token-usage-utility-and-value>

Problem Confusion of Concerns

Medium-of-exchange/Unit of Account

Store-of-value

Pump-n-Dump Investment

Market Cap value of network

Fixed cap on tokens issued

Value of token = $\text{Market Cap} / \text{Tokens Issued}$

Issue tokens to investors at discount value

Hype the future value of token

Investors liquidate their positions by selling to secondary buyers

Rinse and repeat

EOS

EOS Charts

Linear Scale Log Scale

Zoom 1d 7d 1m 3m 1y YTD ALL

From Jul 1, 2017 To Oct 25, 2018



Tezos

Tezos Charts

Linear Scale Log Scale  

Zoom 1d 7d 1m 3m 1y YTD **ALL**

From Oct 2, 2017 To Oct 24, 2018



Quantstamp

Quantstamp Charts



HoDling Powers

- (1) **Redemption:** Gift Card Program
- (2) **Promotion:** Loyalty Program
- (3) **Rewards:** Spending Rewards Program
- (4) **Staking:** Membership Program

Redemption

(1) Redemption: Like a gift card SoV tokens can be redeemed at the rate specified by the MoE tokens for items on the platform's products and services menu.

The menu is two-sided with one side priced in the SoV token and the other side in a MoV token which is pegged to fiat.

This provides a composite floor value of the SoV in fiat that is equal to the consumptive weighted average of the fiat value of the items in the menu.

This is designed to minimize downward volatility and help ensure purchaser's of SoV tokens who purchase at a discount realize positive returns and also virtuously ensures that later purchasers of SoV tokens are protected from downward volatility.

The redemptive value is effectively a worst-case value for the SoV token once the network is live.

Promotion

(2) Promotion: Like the points in a loyalty program, SoV tokens may be redeemed for MoE Tokens for products and services at promotional prices provided only to members of the program.

This allows conversion at better than retail rates and allows for anti-Moore's Law appreciation as service classes through the Menu are upgraded over time in response to technological advancements.

This drives early adoption by users of the Project and enables repeated adoption acceleration as new products and services are introduced to the network through the menu at promotional pricing.

Rewards

(3)Rewards: Like a rewards membership, holders of the SoV may earn MoE tokens as of function of both their holdings of SoV and their spending in MoE on the platform.

These earned MoE Tokens may then be redeemed in exchange for Fiat at the rate specified in the Menu or used to purchase additional products or services on the platform.

The earning rate of MoE per expenditure of MoE is an inverse nonlinear function of the number of SoV they hold. For example, a holder of 10,000 SoV would earn MoV at a higher rate (but less than 10x) for the same expenditure of MoE than a holder of 1,000 SoV.

The exact nonlinear function and parameters is tuned to the market dynamics. An example would be an inverse quadratic function. This incentivizes large users of the platform to hold increasingly large numbers of SoV in order to obtain larger rewards in MoE.

The amount of SoV held increases as a function of the market cap of the network in services provided.

Staking

(4) **Staking:** Like membership in a club, participation in several activities within the network require the staking (holding) of SoV. These include, either directly or as a delegate, the hosting of support nodes, the voting on the use of community tokens for bounties, or the voting on features and upgrades to the network protocol.

This staking rewards good participant behavior by providing the opportunity to share in the revenue generated from fees associated with supporting the network and dis-incentivizes bad behavior as participants would lose their stake as a result.

The participation strength is an inverse nonlinear function of the amount staked. This also greatly incentivizes the holding of large numbers of SoV that increases as a function of the size of the network infrastructure.

SoV Phased Drivers of Value and Behavior

