TALENT PLUS TOKEN (TPT) WHITE PAPER

A bidirectional Smart Contract with a price sensor, self-liquidity generator, self-guarded and self-regulated deployed on the Solana Blockchain

Introducing Talent Plus Token TPT - Revolutionizing Payroll with Token-based Compensation

Are you tired of the limitations and fees associated with traditional payroll systems? Do you dream of having instant liquidity and the ability to convert your salary into additional revenue? Look no further, because Talent Plus Token TPT is here to revolutionize the way you receive and manage your compensation.

Did you know that 36% of workers want the ability to receive part or all of their paycheck in tokens? This desire reflects the growing interest in digital assets and their potential benefits. Tokenized assets are expected to be a massive US \$16 trillion business opportunity by 2030, making up 10% of global GDP. Even mainstream players like BlackRock and Goldman Sachs are exploring the possibilities of tokenization.

With Talent Plus Token TPT, you can enjoy a range of advantages that traditional payroll systems simply can't offer. Say goodbye to bank transaction fees and taxes that eat into your hard-earned money. Our token-based compensation system ensures instant liquidity and eliminates the need to wait for a company to exit via acquisition or IPO before realizing the value of your compensation.

But the benefits don't stop there. Our system enables compensation that auto-scales in real-time, allowing you to differentiate and retain global talent effectively. The tokens you receive can be easily converted into any currency internationally and instantaneously, giving you ultimate flexibility and control over your earnings. Imagine using your salary to invest further and convert it into additional revenue on top of your monthly earnings.

How does it work? Our innovative technology is a mathematical model that facilitates joining a bonding curve with a fungible interlace. This means you don't need a traditional exchange (CEX/DEX) to buy, sell, and swap tokens. Instead, we replace these processes with Mint, Burn & Swap, simplifying the entire experience for you.

The combination of our price sensor and automated market model (AMM) ensures that the token's price is set relative to other tokens and the available supply. This self-regulating system allows for fair and efficient market dynamics.

This system allows bidirectional exchanges, so participants can buy and sell their tokens at any time without submitting to the risks of volatility, speculation, and liquidity that the Cryptocurrency Exchanges have, centralized (CEX) and/or decentralized (DEX). *1

THE MODEL

This is achieved by a mathematical model that facilitates the joining of a bonding curve with a fungible interlace.

This combination creates an automated market model (AMM) that sets the price of one token relative to another and to supply.

- The weighted mathematical equation is a generalization of the constant product formula $\mathbf{x} * \mathbf{y} = \mathbf{k}$ recommended for automated market makers (AMM).
 - Generalization n ≥ 2 accounts for weights that are not a uniform division of 50/50. *2

A binding curve consists of a base token and a destination token:

- The base* token is the one with which we establish the price in relation.
- The target token is the new token created.

*In general, the base token should have a reasonably high market capitalization, USDC, for example

A simple example could be:

$$P = 0.01$$

This means that the **Price** when there is a Token in circulation is:

$$0.01 * 1 = 0.01$$

So when there are 100 Tokens in circulation the Price is:

$$0.01 * 100 = 1$$

When a destination token is purchased, the price in base tokens is left as a reserve. When a destination token is sold, it is burned, and the base tokens are returned from the reserve to the holder's wallet.

What happens if you want to establish a relationship between the target supply and the reserve that is maintained? This is called:

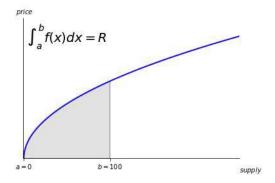
Invariable modeling, price cores, and risk aversion. *3

An example of a binding curve with price P and supply S

$$P = S^{0,5}$$

You can define R, the number of base tokens stored in the reserves, as the area under the curve up to the current supply:

Therefore, if you take the indefinite integral, you can say that the Reserve is:



 $R = 0.666667S^{1.5}$

Now, what happens when base tokens are injected into the Reserve?

This causes all holders to see an increase in the value of the token. Our previous formula does not take this possibility into account in pricing. So how is this model supported?

Given the Reserve function.

$$R = 0.666667S^{1.5}$$

It is said that the reserve is always proportional to the offer in a relationship that should never change.

Keeping this proportion unchanged, if the reserve is increased by an amount Δ *4 ΔR , the increase in supply ΔS should maintain this formula:

$$0.666667S^{1.5}/R = 0.666667(S+\Delta S)^{1.5}/R+\Delta R$$

Solving for **S**, we can say that given a certain amount of the base token of the **R** curve, the destination tokens we get should be:

$$S = S - (S^{1.5}(R + \Delta R)/R)^{0.66666666667}$$

Similarly, by solving for **R**, it can be said that our price for a certain amount of destination tokens **S** is:

$$R = R^{1,5} + R(S + \Delta S)^{1.5} / S^{1.5}$$

It is worth noting that both equations fail for R = 0 or S = 0. When this is true, it reverts to the base pricing formula of:

$$R = c0.666667S^{1.5}$$

Where c is a constant that will help to establish the slope of the initial curve and therefore the initial price.

You can trust Talent Plus TP because it is self-guarded. The smart contract automanages liquidity by creating a reserve within the contract itself, avoiding any direct contact with reserve funds. Our technology only provides an interface to a public permission-less contract, guaranteeing transparency and security.

Join the future of compensation with Talent Plus TP. Say goodbye to traditional payroll limitations and embrace a system that empowers you with instant liquidity, global currency conversion, and the ability to grow your earnings. Don't miss out on this opportunity to be at the forefront of the token-based compensation revolution.

* NOTES:

*1 https://mpost.io/what-is-a-liquidity-crisis-and-what-does-it-mean-for-crypto-investors/

*2 Weighted mathematics is designed to allow for exchanges between any asset, whether or not they have a price correlation. Prices are determined by the balances of the group, the weights of the group, and the amounts of assets that are exchanged.

*3 Invariable modeling, price cores, and risk aversion
Maria Grith, Wolfgang K. Härdle, Juhyun Park Publication: Journal of Financial Econometrics, 2013: 11
(2), 370-399 Date: November 2012 Link:
https://academic.oup.com/ifec/article-abstract/11/2/370/782499?redirectedFrom=PDF&login=false#

*4 In mathematics, delta is used in front of a variable to indicate a change in the value of that variable

Referenced Mathematical Models:

- N-dimensional surface (Balancer Model) by Vitalik Buterin
- Shape Invariant Modeling of Pricing Kernels and Risk Aversion by Maria Grith, Wolfgang K. Härdle, Juhyun Park
- A State-Space Modeling Framework. by Michael Zargham

Pablo Acebedo

https://www.toksol.io https://www.linkedin.com/in/pablo-f-acebedo/ pablofelipe@me.com