Vidya Generator Proposal
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Purpose:
To present, demonstrate and clarify a system of profit distribution to investors.

Description:
The proposed system is modeled after a yield farm. Where instead of having a constant amount of tokens per block, the value will change over time. Investors will provide a LP token chosen by the dev team. Investors can deposit their tokens to receive their earned VIDYA overtime or gain a minor advantise by committing for a selected amount of time. If an investor fails to follow through on their commitment then half of the bonus applied will be removed from their LP tokens provider. Investors can claim their rewards as a yield farm whenever they choose to but the APY is based on the amount of profits collected and others in the pool.

Contract(s): (Better Names can be chosen)
-Vault: Is where all the profits from the platform get deposited, and then distributed to the farms.
-Teller: Is where the investor deposit(s), claim(s), withdraw(s), and commit(s).

Vault/Teller Interactions: (Needs to be defined a little better)
-Vault is responsible for distributing VIDYA to the different Tellers and informing the Tellers at what rate to dispense VIDYA to the investors.

-Teller tells the vault it's out of VIDYA and requests more when needed. Also, ensure the Vault calculates the distribution every week.

-Each Teller has a weight adjusted by the Vault(admin), to determine how much it gets in comparison to the other Tellers

Token(s):
-1 teller contract is for 1 LP token, VIDYA/DAI , VIDYA/ETH…
-New tellers can be launched to release liquidity on different exchanges, and can aid in launching on new networks as well.

Investor(s):
-Deposit LP into the Teller, to be able to claim VIDYA
-Commit LP to gain a % bonus on the committed LP for claiming
-Claim VIDYA can happen at any time by a provider and is based on their LP deposit, commit and time since last claim. (happens with any action taken with the teller if the investor is owed VIDYA)
-Withdraw:
--(No penalty) Automatically claims any unclaimed VIDYA and withdraws LP.
--(Penalty) If withdrawn prior to commitment finished, then half of the bonus received is removed from the LP token provided. I.e. If committed for a year and gained 50% bonus over others they

would lose 25% of their committed LP token. (Penalty should be harsh enough to prevent any removal with minor bumps in price.)

Teller Fees:
-No entrance or exit fee
-Just the afraid of commitment penalty

Admin:
-Can add, activate, inactivate any teller.
-Adding a teller is a new contract and should be matched with a different LP address
-Activating a teller tells the vault that the teller is allowed to request payments
-inactivating a teller turns off any penalties and prevents the Vault from distributing any more vidya, outside what is owed to the current investors

Clarification:
-Early removal Penalty, I went with half of the bonus gained since the investor is earning VIDYA from the bonus over time.
--Penalty relocation options
---1.) To current investors (Would require more equations)
---2.) To devs for locking, breaking, or more easter egg hunts
---3.) Split 50/50 between investors and Devs
---4.) Other

-The distribution is calculated at most once a week, and it assumes distribution payout over 30 days, to help prevent over distributing funds.
--It is automatically checked when investors request payments, if it's time to recalculate it will pay the current investor prior to readjustments.
--Can the recalculation time be constant or do admins want to be able to adjust?

-Deposit/commits
--If an investor wants to add to an already committed amount how to adjust.
---1.) Just add it in (Keep old time commit)
---2.) new commit needed (Array heavy)
---3.) Reset start time to new time. (easiest but not really fair)
---4.) Reset start time to average time. (Little more fair)
---5.) Reset start time to weighted average time(Position would be closer to the larger commit amount)

Suggested Multipliers:

	One Time	Spammed for a year
7 days	1.004	1.231
14 days	1.01	1.295
1 month	1.029	1.409
3 months	1.099	1.459
6 months	1.22	1.488
1 year	1.5	1.500