Celery

The first blockchain annuity that will replace your salary.

Abstract

This paper explains the inspiration behind Celery, how it works and what makes it unique and different from other cryptocurrencies. We also explain the token economics, strong incentives, and psychology behind Celery and why its price can appreciate exponentially fast. We go over the project goals and road map. We go over how the initial Celery tokens will be distributed and what the funds will be used for. We also mention the approach we took to making sure that the Celery smart contract is highly secure and safe before launch.

Inspiration

Celery was inspired by the simple fact that today with the power of blockchain, anyone can now create and launch their own financial instrument for the world to use. The two big cryptocurrencies that Celery learned from are Bitcoin and HEX. By understanding the economic models and incentives behind both Bitcoin and HEX, Celery was able to innovate and create something even better. Celery is built to have the best economic model ever created for a cryptocurrency. Celery did this by learning from Bitcoin and HEX and taking the idea of an annuity and putting it on steroids.

Annuities

Celery is the first blockchain annuity. But what is an annuity? An annuity is a financial instrument that pays out a series of payments over a span of time back to the owner. The most common use case for an annuity is providing yourself a predictable stream of income during retirement. Similar to an annuity, Celery provides a stream of payments back to the owner over 1 year, with the purpose that it will replace one years worth of your salary, or more!

Staking Phase

Celery gives anyone the ability to stake their Celery to earn 100% APY through the power of continuous compounding interest. Every year your staked Celery will double in size! You can stake your Celery for as long as you want. One day, one month, or even an entire decade! Using our front end website you will be able to watch your staked Celery grow in real time! To calculate the interest you can make from staking Celery we use the following continuous compounding formula.

$$P(t) \ = \ e^{\,r \bullet t} \ \bullet \ P$$

$r \ = \ LN(2) \ = \ 0.69314718...$
$t \ = \ time\ staked.\ example.\ t \ = \ 1\ after\ a\ year\ of\ staking$
$P \ = \ Amount\ of\ tokens\ staked$
$P(t) \ = \ Total\ tokens\ staked\ including\ interest\ made\ over\ time\ t$
$e \ = \ euler's\ number \ = \ 2.718...$

Here is an example. If you want to stake 3,000 tokens for 24 months. If you are unable to find e and LN() on your calculator use 2.718 and 0.693 respectively.

$$12,000 \ = \ e^{\,LN(2) \bullet 2} \ \bullet \ 3,000$$

After staking 3,000 tokens for 24 months or 2 years you would have 12,000 staked tokens, quadrupling your initial staked amount!

Payout Phase

The payout phase begins when you want to be paid back your Celery after staking. It is important to know that when you switch over to the payout phase you will no longer be earning interest on your staked Celery! During the payout phase your staked Celery slowly becomes available for you to collect. When you collect your Celery it is transferred back into your wallet. You can collect Celery as often as you want. Every month, every day, every hour, or every minute. The longer you wait between each time you collect the more of your staked Celery you will receive. Your staked Celery will be fully available to collect after one year while your account is in the payout phase. After you collect all your staked tokens the payout phase ends. You can switch your account back to staking during or after the payout phase.

For example, Continuing from the Staking example, if you have 12,000 tokens staking and switch your account to payout, and you decide to collect once per month. You will receive 1,000 tokens each time you collect for 12 months.

Token Economic Models

Celery's purpose of existence is to have the best cryptocurrency economic model ever created. To create such a superior economic model Celery had to learn from the greats, most notably Bitcoin and HEX and innovate on top of what they did. In this section we go over the economic models of Bitcoin, HEX and Celery and examine their economic incentives and why it works, and what makes Celery better.

Bitcoin Model

Every token needs an economic model that works. Ideally the best economic model is one that provides the best incentives for price appreciation and fast growth. Bitcoin's economic model relies on it being a deflationary or fixed token supply asset. A fixed token supply model works well, it is the most tried and tested economic model. It is based on the economic theories from the Austrian school of thought. Deflationary and fixed supply models work for Bitcoin, Ethereum and many other financial assets.

HEX Model

HEX takes a slightly different approach for its economic model than Bitcoin did. HEX took a look at our current financial system and how it is based on a slightly different economic model, one that follows a more Keynesian economic school of thought. HEX based itself on a popular financial instrument in traditional finance called a Certificate of Deposit also known as a CD. A CD is quite easy to understand. A CD locks up your initial deposit for a fixed period of time and gives you a fixed interest rate. CD's with longer lock ups give a higher interest rate. Once you have waited the fixed period of time, the CD is called matured and you receive your initial deposit back plus the interest that it accumulated. When HEX applied this model to its own cryptocurrency, it gave users the right incentives to lock up their HEX and be financially rewarded for doing so. The constant locking up of HEX for long periods of time constricted the supply of available HEX trading on the market, adding pressure for price appreciation. When you add hype and fomo into the mix, it becomes obvious why HEX price performance is more amazing than Bitcoin.

Celery Model

Celery takes an even better approach than HEX for its economic model. Still looking at our current financial world and following the Keynesian school of thought. Celery is based on an Annuity. An Annuity is slightly different from a CD. When an Annuity matures it does not pay you back right away. Instead the payout for an Annuity can last your entire life time in some cases. Celery took the idea of an Annuity and put it on steroids, which creates some amazing incentives for its economic model. So what are the economic incentives for Celery?

The first and most obvious incentive is the 100% APY. It is easy to understand and predictable. In order for Users to receive 100% APY on their Celery they must stake it which locks it up into the Celery smart contract. This massive incentive restricts the circulating supply of Celery that is trading on the market and is constantly applying upward pressure on the price.

The second biggest incentive for Celery which is where it differentiates itself the most from HEX is the payout period. Unlike a CD where after it matures you receive your entire deposit plus interest back right away, an Annuity does not. An Annuity slowly pays you back your initial deposit plus interest, which is exactly how Celery is programmed to do. During the payout period, Celery slowly pays you back your staked tokens over 365 days. This slow release of tokens back into the market applies little to no downward pressure on the price.

The last incentive is psychological. When users are staking they are doubling their tokens every year, and if the price is appreciating at the same time, they are very satisfied. When users are in the payout phase they are no longer receiving interest. During the payout phase they are slowly being paid out over 365 days. During this entire year, they are missing out on the opportunity of receiving 100% APY. For this very reason, users are likely to switch their account back into staking and never fully completing the payout phase. This further restricts the supply of tokens circulating on the market and applies upward pressure on the price.

Combining all three incentives plus fomo and hype and I expect Celery to have one of the best if not the best economic model we have ever seen for a cryptocurrency.

Token Distribution

The initial supply for Celery will be five billion tokens. The allocation of the initial supply is as follows.

Pre-sale: 10% (500 million) to raise 100 BCH in funding. 1 BCH = 5 million Celery. The funding raised will be initially used for providing liquidity for BCH / CLY trading pairs on one or more DEXs.

Celery Business: 70% (3.5 billion) will be used to develop and maintain the ecosystem around Celery. Examples include but not limited to the Celery.cash Website, security audits, paying developers, Telegram bots, bug bounties, community management, contests, marketing, exchange listings, and providing DEX liquidity.

Founders: 20% (1 billion) Is allocated to the founders themselves so they have plenty of skin in the game that will make them highly motivated to work hard and make Celery a big success!

Roadmap

The roadmap for Celery will remain flexible so that we can adapt to the constantly changing environment in the cryptocurrency space and find our road to success. Here is what we have so far, but check back later as this can change in the future. Some of our goals on the roadmap might already be completed when you read this.

1. Create Smart Contract
2. Launch website
3. Release white paper
4. Launch Pre-sale
5. Get exchange listings
6. Release staking & payout features on website
7. Perform marketing & growth initiatives
    …. To be continued

Security

When it comes to anything related to cryptocurrency. Security should always be a top priority. When it comes to Celery we are obsessed with security. We realize one tiny bug can cause people to lose millions or even billions of dollars. Smart contracts once released are usually permanent. So we have spent a large amount of time reviewing, testing, and following the best security practices when developing the smart contract for Celery. To give some background, the Celery smart contract was developed and tested by two highly qualified software engineers with a combined total of 10 years worth of software development experience, one of them being myself. We researched smart contract hacks in the past, most notably the DAO hack to learn from their mistakes and be sure not to repeat them when developing Celery. Before launch we will release the source code to Celery so that anyone can audit it. Bug bounties are available, if you find a bug, especially a critical one you will be rewarded. We sold 330 million Celery through a private sale in order to pay and be audited by CertiK before launching.

CertiK Audit: https://www.certik.org/projects/celery