

Project Brief

A raffle powered by blockchain and smart contracts which increases transparency, privacy and lowers the house edge thus increasing the overall benefits to the players. Lower cost of entry enables higher participation rate and mechanism to prevent ticket hoarding to promote higher level of equal chance of winning.

Competition

Pool Together (Lossless lottery)
Lottery Token (Crypto Lottery using house token)

Competitor Analysis

Favors big players

A counterargument against this game could be that statistically, it's making the rich richer. By design, a player who buys 1000 tickets will always have a higher chance of winning than one who buys only 10 tickets. In this case, the "richer" player essentially leverages its advantage by earning interest on not just their own, but the "poorer" player's funds. As such, players who never win ultimately would have been better off if they sent their funds to a lending platform themselves.

To solve this problem, CR simplified the game dynamics to a minimal loss model so it decentivize big players to flood the game. With Pool Together the winner can keep the winning in the pool and keep increasing his odds over the smaller player since he will not lose anything therefore it creates a constant loop to exploit the smaller player. The smaller player might think that they do not lose anything but actually they're participating in an act of futility since their odds of winning are so minimal; instead of participating in pool together they can instead deposit their money directly into compound finance protocols and earn the return themselves therefore becoming truly lossless and even slightly profitable.

The game mechanism to deleverage players decentivize players to hoard tickets to increase their odds of winning. Because the ticket is deleverage up to 50X when a person wants to increase his odds of winning he has to exponentially commit more funds into the game. The price per ticket is 10BUSD and the actual cost of the ticket is 0.20BUSD after each draw 9.8BUSD is returned to the players automatically. Even when the players know that they're getting the funds back after the draw but because of it's

deleveraging nature a player wanting to hoard tickets needs an exponentially larger sum (50X) to commit to the game.

Transaction fees

Another issue that users are currently facing is the high price paid for transaction fees. When the Ethereum network is too busy, transaction fees skyrocket. And they are particularly higher when making deposits or withdrawals on PoolTogether due to multiple smart contract interactions. Lottery Token charges you 6% transaction fees before you even commit to playing the game and locks you in the token ecosystem rendering you with a token with no value other than to play the game therefore players incur a high cost for holding on to the token even before participating in the game.

To solve this problem CR uses the BSC(Binance Smart Chain) instead of ETH which has lower gas fees.

Smart contracts

As of February 2021, there were no security issues on PoolTogether. According to the team, the smart contract powering the game has been audited by multiple independent auditing firms. Even so, it's always worth considering that smart contracts are relatively new and experimental technology that is prone to bugs and vulnerabilities.

Locking your funds in a smart contract is always riskier than keeping them in your own wallet, for example. You are at your own responsibility when entering PoolTogether.

To solve this problem, CR doesn't send your tokens to earn interest using other protocols and since this reduces the movement of your funds from your wallet to the game and to the yield farming then back again and since there's no lock in period the risk is significantly reduced. It doesn't matter if you join the pool in the morning or 1 hours before the draw time you have the same chances of winning compared to everyone. Should you wish to stop playing you can remove your token from the game without any penalty fees for early withdrawal.

Closing thoughts

While Pool Together is a great concept of a no loss game in reality the payout is low and the lock in period is long meaning you lose liquidity to your funds. Also the payout is

based upon yields made from external protocols which do not necessarily have a guarantee that it is always profitable.

Therefore we believe that CR is a better alternative of a blockchain raffle as it provides an alternative solution to the problems of other blockchain based lottery.

Unlike kickstarter or gofundme we aim to change the lives of people by giving them a chance to do things differently. They can either splurge or reinvent themselves no question asked, no judgement made.

Someone might have never been on a beach vacation, someone has been wanting to adopt a dog, someone's dream is to pay off their student loan, another to buy their parents their dream home. Not everyone's dream is to start a business and that's ok what we're trying to do is to give everyone an opportunity to achieve that dream or help someone else achieve their dream via collective power without judgement.

And for the participant in the draw they don't lose much since it's only 20 cents/day. For 20 cents a day they might have an opportunity to change their own life or someone else's forever.

Why is one ticket 10busd? To reduce the financial leverage and discourage ticket hoarding for the purpose of increasing winning probability. This is to try to create an equitable environment from the smallest to the largest participants.

The game logic also caps the payout to 100k and increase the amount of people winning instead of the amount of winning by one individual to desensitize ticket hoarding and to increase the amount of participant that benefit from this "social experiment"

Game Play Logic

Regular Gameplay

1% transaction fees to fund the decentralized lottery

1% winning pool

100 Cust: BUSD 10 (1 Ticket each)

Total Pool = 1000
Winning Pool = 10
Transaction Fees = 10
After draw
10 Winner = 1 BUSD each
Customers = 9.8

10,000 Cust: BUSD 10

Total Pool = 100,000
Winning Pool = 1000
Transaction Fees = 1000
After draw
10 Winner = 100 BUSD each
Customers = 9.8

1,000,000 Cust: BUSD 10

Total Pool = 10,000,000
Winning Pool = 100,000
Transaction Fees = 100,000
After draw
10 Winner = 10,000 BUSD each
Customers = 9.8

10,000,000 Cust: BUSD 10

Total Pool = 100,000,000
Winning Pool = 1,000,000
Transaction Fees = 1,000,000
After draw
10 Winner = 100,000 BUSD each
Customers = 9.8

When total pool exceeds 100,000,000 BUSD an additional pool is added and the total number of pool is split evenly

12,000,000 Cust: BUSD 10

Total Pool = 120,000,000

Pool A = 60,000,000

Pool B = 60,000,000

Winning Pool = 1,200,000

Transaction Fees = 1,200,000

After draw

Pool A - 10 Winner = 60,000 BUSD each

Pool B - 10 Winner = 60,000 BUSD each

Customers = 9.8

21,000,000 Cust: BUSD 10

Total Pool = 210,000,000

Pool A = 70,000,000

Pool B = 70,000,000

Pool C = 70,000,000

Winning Pool = 2,100,000

Transaction Fees = 2,100,000

After draw

Pool A - 10 Winner = 70,000 BUSD each

Pool B - 10 Winner = 70,000 BUSD each

Pool C - 10 Winner = 70,000 BUSD each

Customers = 9.8

Autoplay

The tickets are added into the pool immediately after the last draw

Autoplay Buy-in	Tickets	Days	Daily Cost	Total Autoplay Cost	Total Refund
15.80	1	30	0.2	6	9.80

Specification

- Website UI/UX (Similar to pancake swap, clean and user friendly)
- Game Logic
- Smart Contract
- Web3 Wallet Integration (Facilitate Onboarding)
- Swap Exchange (Facilitate Onboarding)
- Winner History
- Multiple Language Support
- Game Play explanation
- Source Code
- Blockchain Upload
- Website Upload

Project Milestone

- Test Game (14 Days)
 - Website
 - Game Logic
 - Onboarding Process
 - Swap Exchange
 - Winning Pool
 - Winning History
- Game Trial (7 Days)
 - Debugging
 - Improving onboarding process
- Project Handover (7 Days)
 - Final UI/UX Design
 - Hosting Website
 - Uploading Blockchain
 - Multiple Language Support
 - Game Play explanation