## AUTOBET LOTTERY ECOSYSTEM



Version 3.0

## LOTTERY INDUSTRY

Winning the lottery is something everyone dreams of but only a few will experience in their lifetime. A lottery is a form of gambling that involves drawing numbers randomly for a prize. Many people consider it as a gaming product, but it is a high-volume industry that can also be called a commodity. Lottery players risk a small amount of money against very long odds to win a large prize. Lotteries can be used in decision-making situations, such as sports team drafts and the allocation of scarce medical treatment.

The lottery industry carries a $23.2 \%$ share of the global Online Lottery market.The global market for Online Lottery estimated at US\$7.1 Billion in the year 2020, is projected to reach a revised size of US\$11.1 Billion by 2027, growing at a CAGR of $6.6 \%$ over the analysis period 2020-2027. After an early analysis of the business implications of the pandemic and its induced economic crisis, growth in the Online Sports Lotteries segment is readjusted to a revised 7.4\% CAGR for the next 7-year period.Lotteries are the most rapidly growing sector of online gambling and generate tremendous revenue for companies and governments around the world.

Many factors like easy access to casino gaming platforms, Increasing adoption of smartphones, and easy availability of cost-effective mobile applications for online betting are expected to contribute to lottery market growth. The industry is further expected to gain momentum over the forecast period encouraging the use of digital currency and websites provided by companies for betting and gambling.

Electronic Gambling Devices (EGDs) are inexpensive to run and easily available. These devices have built-in software that mimics the experience of a local casino. For instance, a Video Lottery Terminal (VLT) uses advancing technology and can also be customized to electronic slot machines, spinning reel slot machines, video slot machines, and electronic poker games.

## CURRENT SYSTEM

Current lottery systems enable users to participate in a lottery through an online/offline medium.

The offline lottery system is an old-school method that was the only available option to take part in the lottery years before, still, it is present but the online system has made things easier and faster. To participate in offline lotteries an individual has to go through long tiring queues, and if the jackpot is big then even long queues are expected which can be frustrating and uncomfortable especially if it's a hot sunny day. Even if the individual reaches the deck to pick the number, the chaos around you will make it very difficult to select your lucky number, and you won't have peace of mind to make sure the entries are correct. Using pen and paper in such a crowded place to fill in the entries can be quite tedious and most importantly an individual should make sure that his lottery ticket is safely preserved as the chances of the ticket being lost are high, so that it can be claimed in case of winning.

The online lottery system has become stress-free and an easy way to participate in a lottery. To participate in an online lottery all you need is a computer or a smartphone with internet access. The bets can be placed from anywhere around the world with just a few clicks making the system more adaptable and time-saving. Online lottery systems made playing the lottery quite simple by eliminating huge queues, use of pen and paper, and allowing users to fill their entries instantly with peace of mind. Online lottery platform enables users to save their ticket on the platform which completely excludes the risk of losing the ticket.

## CHALLENGES

## 1. Transparency and Trust

The lottery system needs to maintain the integrity of the system by avoiding fraudulent manipulations. The traditional lottery system was not easy to trust and always had these questions from the users.

## Am I buying a genuine ticket?

Is the winning number picked randomly?
Is the announced winner a valid participant?
Is the accumulated money used for social causes?

Since the traditional lottery system fails to answer these questions, it leads to a lack of trust and transparency in the system.

Here are two real and famous cases of manipulation in the lottery system

## The Pennsylvania Lottery Scandal-1980

The scandal in Pennsylvania was a plot to rig the Daily Number, a three-digit number. Except for the balls numbered 4 and 6 , all the balls in the three machines were weighted. Therefore, it was sure the drawn number could be a combination of 4 s and 6 s . The planned scheme was successful as 666, one of the eight combinations of 6 s and 4 s , was drawn on April 24, 1980. The fix led to a significant change for the lotteries. The illicit winnings were never paid out while the chief conspirators were imprisoned.

## Hot Lotto Fraud Scandal

Eddie Raymond Tipton, former information security director of the American Multi-State Lottery Association, affirmed rigging RNG that he and two others used in various cases of state lotteries frauds.
He installed a software code that enabled him to modify RNG and guess winning numbers on specific dates of the year. Because of the altered RNG, he won a $\$ 14.3$ million jackpot in 2010.

As a result, Tipton was convicted and sentenced to ten years imprisonment in 2015

## 2. Centralised System

The centralized nature of the system can be the most considerable disadvantage as it provides the authority to the organizing team or owner the authority to tamper with the random number-generating code and even this privilege can lead to an unbiased decision. It is practically possible for a centralized entity to tamper with results as well as a timeline of the lottery

## 3. Complex Process

Participating in the lottery can be very stressful when it comes to standing in a long queue
for the tickets and handling those tickets till the results and even sometimes getting fewer options to select the ticket.

Generally, the online lottery system tends to have a complex system due to the involvement of third parties. In an Electronics lottery system sometimes the registered user's data will be managed by a third party and even the involvement of the bank for the cash flow.

## 4. Regulations

In some countries, lotteries are not legal, and in most other countries only governments and affiliated organizations can obtain a license to operate a commercial lottery business. Corruption schemes that can affect the distribution of funds may take place in different regions.

## 5. Availability

Users from other countries cannot easily participate in some of the biggest lotteries in the world such as Euromillions or some of the lotteries in the United States. Users are limited to playing smaller, local lotteries due to the smaller size of their domestic market, underdevelopment of the lottery industry at home, or strict regulation. New online solutions that allow such players to buy worldwide or U.S. lottery tickets have recently gained some popularity, but the service charges, as well as risks of fraud and mismanagement, remain high.

Currently, lotteries are controlled by the state and regulated by law in most parts of the world. On average, no more than $50 \%$ of all funds collected from ticket sales are allocated to the prize pool. It should be noted that lottery participants have no control over how much money is collected from ticket sales, and the average value mentioned above is a rough estimate. In addition, lottery winnings are taxed, and in some countries (for example, the U.S.) as much as $60 \%$ can be withheld.

The average price of a lottery ticket is about USD 2.00. Lottery machines are used to draw the winning numbers for a lottery at different intervals. It is believed that the winning numbers are drawn randomly, but there are ways to influence the results. To make their lottery look more credible, organizers arrange live television broadcasts and set up lottery commissions. However, it is easy to make the process non-random by putting radio frequency identification (RFID) tags on lottery balls (even a child could do this).
We can draw a firm conclusion that any lottery is a source of government revenue earned at the expense of citizens through the unequal distribution of funds collected from lottery ticket sales.

## DECENTRALIZED SOLUTION

Blockchain platform possessing the power of decentralization helps to strike out all the limitations of a centralized system. Blockchain is a decentralized, open-distributed ledger that records the source of digital assets. Blockchain is a chain of blocks that contains transactions/information. The blocks are linked to each other using cryptographic hash which makes it immutable, reliable, and secure. The cryptographic Hash algorithm is used to maintain the integrity and security of the block. SHA-256 algorithm is used which returns a fixed 256 -bit hash irrespective of the input. It relies over, in the form of 2 powers of 256 which would be 256 times of 2 . The hash is represented as a 64 -digit hexadecimal number. Each block contains the cryptographic hash of the previous block, timestamp \& data. The timestamp is used as proof of the process's existence, any sort of modification can be detected easily. Blockchain is resistant to modification of data, once the data is recorded it cannot be altered subsequently.

Decentralized lottery platforms bring transparency to the platform as compared to the traditional lottery platform which was having major trust issues in multiple aspects. Stakeholders and human involvement in the winning number generation process made it difficult for the common people to trust and accept. AutoBET platforms overcome such issues using the power of decentralization to bring transparency and trust to the system. No human involvement in the winning number draw makes the platform fair enough for every participant. The adoption of smart contracts helps to overcome some of the critical problems of fairness in the system. A smart contract is a digital contract/agreement signed between two parties that is reflected on blockchain and can be seen by anyone which brings transparency to the transaction. Using smart contracts helps to flush out the central authority to regulate funds to the winning participants, all the funds go directly into the contract, and after the draw directly reaches the concerned person.

As the digital economy matures, Blockchain's power of decentralization is helping to revolutionize the gambling industry and the way we do business by bringing transparency to the system,

## AutoBET LOTTERY ECOSYSTEM

AutoBET is an innovative web3 fundraising platform that leverages the power of decentralized blockchain technology to provide a novel and entertaining way for individuals and organizations to raise funds. Built on the Ethereum network, AutoBET utilizes decentralized lottery and gaming mechanisms to create a unique fundraising experience. With the initial introduction of the decentralized lottery, the project has a broader vision to build a decentralized gaming ecosystem with DeFi Integrations.
The unique aspect of AutoBET is, that it not only provides players with a better platform with more benefits but also enables organizations such as Casinos and lottery organizations to host decentralized lotteries and games. It creates an ecosystem of multiple stakeholders with mutual benefits.

## Roadmap

## Lottery on Mainnet

Lottery Module will be launched on mainnet an will be fully functional with core lottery features. This platform will use governance token of network as currency

LotteryHub
Different variations and different type of lotteries will be introduced including single player draw, Multiplayer draw and scheduled automated draw.

Cryptogames
Followed by lottery various cryptogames will be launched including cambling and casino games.


## Lottery Pilot on Testnet

Lottery pilot with core features will be launched on testnets for community to try and give feedbacks. This Pilot will be semi automated

## Tokenization

Platform token(BET) will be made available as currency for Lottery module. The token will be also backed by it's own swapping and liquidity pool modules. Also Different assets on the platform will be available as NFT

## DeFi Ecosystem

BET token will be connected to various existing Defi platforms to provide investment opportunities for community. Ecosystem will provide opportunity to each rewards and passive income through BET as well as NFT

The Platform will have multiple stakeholders

## Stakeholders

## - Admin

The owner of the platform assigned when a contract is deployed will have control to manage and carry out the smooth execution of processes. The admin will also have details of all lotteries, creators, gift cards, and the specifics of each fee.

## - Partner

Partners are Admin-verified entities. The prize money is allocated to the partner according to the percentage specified by the creator during the lottery's creation, with an additional $10 \%$ deducted as platform tax. Creators add partners during the creation of the lottery. An eligible partner must meet AutoBET's criteria and should hold $>$ or $=1 \%$ total BET supply.

## - Operators/Creators

Operators or Creators are registered users on the AutoBET platform that meet the platform's requirements. Creators will create a lottery within the minimum and maximum price amount range and will deposit a winning amount of their lotteries.

## - Players

Users who play and win the lotteries will be called players.

## Core Platform Workflow

In the mainnet release lottery pilot will be made live \& will operate as below.

## 1. Registering New Creator

To create a lottery, a creator has to do a one-off registration on the platform with its unique identifiable ETH address after paying a small platform fee. Once the registration is done the creator gets access to the creator portal.

## 2. Creating a New Lottery

Once the creator/Operator successfully registers with a one-off registration fee, the Creator is ready to create lotteries within the permissible range of prize amount by filling in different custom parameters such as Start date, Rollover/Result date, Ticket Price, Winning Prize amount, Total Number, Number to pick, Rollover percent, Select partner, Rollover in days, Unlock code length, Wallet address.
The creator will specify the total prize amount and according to that deposit the funds to the contract.

## 3. Buy New Lottery Ticket

Once the lottery is created It will appear on the website, users can click to see details and buy tickets, Select ticket numbers from given numbers, choose code combinations, and pay the amount. The same user can buy multiple tickets too. Users can see the list of lotteries bought in their profile.

## 4. Creating a Gift Card

Once the creator/operator successfully registers, they can create two types of gift cards on the platform: "Donate" and "Sell." For the "Sell" gift card, buyers need to pay in ethers to receive BET tokens, while the "Donate" gift card can be redeemed directly by entering the correct voucher code.

## 5. Buy a Gift card

Platform users can purchase or redeem gift cards published by platform creators. They can acquire BET tokens by paying in ethers or redeem tokens by entering the correct voucher code.

## 6. Result Announcement

Based on the end date and minimum player condition, one of two scenarios will occur: either a rollover will take place or the results will be announced. Rollovers can occur in two ways: either based on a specified number of days or a specified percentage.
The system will announce the result on the draw date.
The result will have winning numbers.
Winning numbers will be generated in a decentralized way with proof of randomness

## PLATFORM WORKFLOW



## Ecosystem

In this second mainnet release Ecosystem is built. Below are modules for the ecosystem.

## Tokenization

The introduction of the BET utility token is done on the platform in this second mainnet
release. BET token will not only serve as a platform token but also will provide certain passive income opportunities for token holders through various ways.

## LotteryHub

Lotteryhub consists of various Single-player, multiplayer, and automated lotteries for rewarding entities in the ecosystem. Such lotteries will run according to scheduled algorithms and will incentivize players, creators, and token holders.

## TOKENOMICS

The BET token is the native token for the AutoBET Gaming Network. BET token is an ERC20 token on the Ethereum blockchain. BET token will be the governance token for the AutoBET platform. A governance token is simply a way of providing rules, direction, stability, boundaries, and order in an ecosystem. A governance token is a token that represents the power to vote on decisions that can influence a system and distribute powers and rights to users to remain decentralized.

The total supply of tokens is 10 billion and the below pie chart describes the distribution of tokens:

## TOKENOMICS



## REFERENCES

- https://cointelegraph.com/news/how-blockchain-tech-is-revolutionizing-tr aditional-lotteries
- https://www.businesswire.com/news/home/20200916005407/en/Global Online-Lottery-Industry-2020-to-2027---Market-Trajectory-Analytics---Re searchAndMarkets.com
- https://www.businesswire.com/news/home/20201119006098/en/Lottery Market-to-grow-by-220.52-bn-during-2020-2024-Industry-Analysis-Mark et-Trends-Market-Growth-Opportunities-and-Forecast-2024-Technavio

